Welcome to *The Current*, the North Central Region Water Network’s Speed Networking Webinar Series

**From Research and Innovation to Implementation: Examples of Conservation Finance in Action: 2PM CT**

1. Submit your questions for presenters via the Q&A panel. There will be a dedicated Q & A session following the last presentation. The Q&A panel can be found via the Q&A icon at the bottom of the webinar screen.

2. If you are experiencing technical issues or have questions about the North Central Region Water Network or *The Current* Webinar Series, please use the chat feature. The chat feature is accessible via chat icon at the bottom of the webinar screen.

3. A phone-in option can be accessed by clicking the up arrow on the mute icon and clicking ‘Switch to Phone Audio’.

This session will be recorded and available at northcentralwater.org.

Follow us: [Twitter](#) [Facebook](#)

Join our Listserv: [join-ncrwater@lists.wisc.edu](mailto:join-ncrwater@lists.wisc.edu)
Today’s Presenters:

• **Ricardo Costa**, Field Crops Educator and 4R Nutrient Management Specialist, Michigan State Extension

• **Alejandro Plastina**, Associate Professor and Extension Economist, Iowa State University

• **Keegan Kult**, Executive Director, Agricultural Drainage Management Coalition

Follow @northcentralh2o and #TheCurrent on Twitter for live tweets!

Follow us:  
Join our Listserv: join-ncrwater@lists.wisc.edu  
northcentralwater.org
Ricardo Costa

Ricardo Costa joined MSU Extension in January of 2018 as a Field Crops Educator. Hailing from Brazil, Ricardo studied Agronomy at the Federal University of Mato Grosso and earned a master's degree in Plant Sciences at the University of Missouri. Based in Lenawee County, he works with growers and provides programming in 6 Michigan counties. He is part of the Cover Crops, Forage, Soybean, and Wheat teams. He also works closely with Michigan State University faculty on multiple research projects. As an FAA-Certified UAV pilot, Ricardo uses drone imagery to help growers make better farm management decisions. Ricardo holds 4R Nutrient Management Specialist and Certified Crop Advisor Certifications and teaches Plant Pathology at The Institute of Agricultural Technology (IAT) at Michigan State University. For the past few years, Ricardo has collaborated on multiple grants focused on expanding conservation practices to improve water quality in Lake Erie by reducing nutrient runoff and sediment loss from farm fields.
Ag focused efforts on reducing P losses in the WLEB

Ricardo Costa
MSUE Field Crops Educator
4R Nutrient Mgmt. Specialist
Accelerating Conservation Adoption in the River Raisin

About the Project
IVR is working with producers and a variety of conservation partners to improve water quality in Lake Erie by reducing nutrient runoff and sediment loss from farm fields. This two-year program offers online tools to farmers and conservation technicians to optimize soil health and retain sediment and nutrients in the field. Participating farmers are eligible to receive reimbursement for conservation practices through the Lake Erie Conservation District. Computer models help track the cumulative benefits that farmers activities are making toward improving water quality in the Western Lake Erie Basin. The program is working with the Farmer-led Watershed Conservation group, local conservation districts, MSU Extension and others. This program is funded through the Great Lakes Restoration Initiative.

Applications & Enrollment
Applications are accepted on a rolling basis, due the last Friday of the month, through September 27, 2019. Meet with a local conservation professional to submit an application. Applications will be reviewed within 15 business days of the application deadline. See project website – Enrollment Tools for details.

Conservation Practices
1. Conservation Crop Rotation
2. Residue and Tillage Management – No-Till
3. Residue and Tillage Management – Reduced-Till
4. Filter Strips
5. Nutrient Management
6. Phosphorus Management

Eligibility Requirements
1. Practice must be implemented within River Raisin Watershed
2. Farming may not support practices already under contract
3. Applicants must have control of land for duration of contract

Conservation Program Process
1. Submit an application by enrollment deadline
2. Within 15 business days of enrollment deadline, applications will be selected
3. Finalize contract
4. Implement practice(s)
5. Verify practice(s) [may occur in spring]
6. Receive reimbursement through the Lake Erie Conservation District

Project website
Visit www.r Back to page 1

Do I Qualify?
CREP priority areas in Macatawa, River Raisin, and Watersheds. Eligible is a cropping history of four years (1996-2001).

Contact us:
Conservation District
Phone:
Email:
Any additional information/logo can go down here.
What have we been focused on?

- Education
- Nutrient Management
- Conservation Practices
<table>
<thead>
<tr>
<th>Practices</th>
<th>Payment (S/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid/Zone sampling</td>
<td>$7</td>
</tr>
<tr>
<td>VRT</td>
<td>$10</td>
</tr>
<tr>
<td>Yield Monitor Calibration</td>
<td>$5</td>
</tr>
<tr>
<td>Cover crop</td>
<td>$56</td>
</tr>
<tr>
<td>No-till</td>
<td>$15.63</td>
</tr>
<tr>
<td>P management</td>
<td>$2-10</td>
</tr>
</tbody>
</table>
What have we learned so far?

1. It’s difficult to predict adoption rates
What have we learned so far?

2. Some practices more successful than others
What have we learned so far?

3. Reaching out to new prospects can be challenging
What have we learned so far?

4. Partnership is KEY
Thank You!!!
Alejandro Plastina

Dr. Plastina is an Associate Professor/Extension Economist in the Department of Economics at Iowa State University (ISU). His area of specialization is agricultural production and technology, with an emphasis on farm business and financial management. He enjoys collaborating with farmers, agronomists, lenders, rural appraisers, and others on a personal level while creating economic tools to help producers address real-life problems in the agricultural sector. His recent publications address the economics of conservation practices and agricultural productivity. He has been selected as the first Agricultural Economics Fellow by the Farm Foundation in 2021, and has received the Agricultural & Applied Economics Association Distinguished Extension Program Award in 2019; the ISU Office of the President Excellence in Remote Instruction Award in 2021; the ISU Extension and Outreach Creativity in Service to All Iowans Award in 2020; the ISU ANR Programming Innovation Award in 2018; and the ISU Extension and Outreach Impacting Iowa Award in 2014.
Incorporating conservation practices into farmland leases

Disclosure: This presentation is not intended to constitute legal advice, and each landowner and operator is encouraged to obtain advice of counsel regarding operation of farm leases.

Alejandro Plastina
Associate Professor of Economics

North Central Region Water Network
Why is leasing relevant to the conservation discussion?

- In the U.S., 31% of the farms and 65% of the farmland are operated by farmers who rent all or part of the land they operate.
- In Iowa, 53% of the farmland is leased:
  - Fixed cash rent 35%
  - Flexible cash rent 9%
  - Crop share 9%
  - Other 1%

69% of all Cash Rented Acres use Written Leases.

Sources:
- 2017 Census of Agriculture
- 2018 Ag Decision Maker File C2-15
How to add conservation practices to a farm lease?

1. Create New Lease. Terminate current lease and sign new one. Follow your state provisions: termination notice deadline, statutory termination language, etc.; or

2. Modify Existing Lease. Sign Lease Addendum or Insert
Before creating or modifying a lease...

- What conservation practice works for you and the farm?
- Communicate with your Landlord/Tenant. Evaluate:
  - Expectations (agronomic, easements, contract length, rights and duties)
  - Monetary and non-monetary incentives
  - Sharing risks → flex lease?
  - Contingency plan (early termination, death, bankruptcy, ...)
- File a Conservation Plan with the Farm Service Agency (FSA)
- Put the new lease or addendum in writing and have it signed by all parties

Tidgren, K. 2017. “IOWA FARM LEASES: A LEGAL REVIEW”
Operator agrees to:

a. **Farm the land in an efficient and steward-like manner.** Land planted to corn, soybeans or other row crops shall not exceed _______ acres each year, unless by mutual agreement.

b. Furnish to the Owner by December 15 an **annual report including 1) a summary of fertilizer, lime, and pesticide application records and 2) production or yield information about harvested crops** each year, such as may be required for participation in Farm Service Agency programs or for setting crop insurance actual production history yields, and to use measurement methods acceptable for these purposes.

c. Do what is reasonably necessary to **control soil erosion** including, but not limited to, providing labor and normal farm equipment for the **maintenance of existing watercourses, waterways, ditches, drainage areas, terraces and tile drains, and abstaining from any practice which will cause damage to the Real Estate.** The Operator’s responsibility does not include major reconstruction of such improvements made necessary by normal wear and tear or other natural causes.
Operator agrees to:

d. Protect all desirable vegetation, such as grass field borders, grassed waterways, wildlife cover, shrubs and trees. **Refrain from the following practices** as they relate to the disturbance of permanent vegetation: ___________

e. Follow a **mutually acceptable tillage program** for each of the crops planted. Such plan shall meet soil conservation and surface residue requirements as prescribed by the Natural Resources and Conservation Service (NRCS) conservation plan and include the following additional crop management practices: ___________

f. At least every 4 years, conduct **soil tests** and provide copies of all soil test results to the Owner as follows: ___________

g. Comply with all local, state, and federal laws and **regulations governing all activities related to the application of pesticides, livestock manure and commercial fertilizers, and the cultivation of crops**. Follow label directions in the handling and application of all chemicals used on the Real Estate, and follow all applicator’s licensing requirements. Comply with local, state, and federal laws and regulations pertaining to groundwater contamination, manure disposal, and hazardous waste storage or disposal.
Example of an Addendum

Include:
✓ Agronomic details
✓ Specify Acres
✓ Specify dates
✓ Describe any cost-share
✓ Length of addendum validity
✓ Signatures
✓ Who pays for what?
  o Owner compensates operator
  o Lower rental rate
  o Longer lease
  o Operator bears all costs

Cover Crop Lease Insertion

Use this sample Cover Crop Lease Insertion to work with your farm operator and/or farm manager to incorporate cover crops into your lease.

The Owner and Operator agree to utilize a cover crop. Operator shall use best efforts to plant a cover crop by ______________________ (date) on _________ acres or _________ % of the leased acres. Specifics such as species composition, planting method, termination method and date will be determined by (Owner/Operator/Jointly), and/or with the input of a conservation professional, crop consultant, agronomist or other professional knowledgeable on local best practices for cover crops. [Optional: These methods shall be set forth in a written Cover Crop Plan.]

The cost to purchase seed, plant, manage and terminate cover crops is estimated at $______/acre. The parties may pursue cost-share from USDA, state government or other program to offset costs. Expenditures incurred by Operator related to the use of cover crops will be accommodated through:

______ Compensate the Operator at $______/acre for the purchase of seed, planting, management and termination of cover crops. Payment from Owner shall be made within 120 days after cover crops are established.

______ Reduce the per acre rental rate set forth above by $______/acre in year(s) ______ of the lease agreement to compensate for the cost of cover crop implementation. Final lease rental rate is $______/acre for the year(s) identified above.

______ The Operator shall bear all costs.

Owner ___________________________ Date ___________________________

Operator ___________________________ Date ___________________________
Lease Addendum for conservation practices, improvements

• Description of Farm: County _____ Township ___ Section _______ Acres ________

• In consideration of the agreements herein contained, the signers agree that the improvements listed in Section A (below) will be completed on the above-described farm on or before the date listed in Section B.

• It is agreed that the signers will share contributions and costs necessary to the completion of these improvements as set forth in Sections C-E.

• It is agreed that the estimated cost borne by the tenant will be listed in Section F.

• The years of amortization will be listed in Section G.

• The annual amortization will be listed in Section H.

• The year when the amortization begins will be listed in Section I.

• If for any reason the tenant leaves the farm before the estimated cost borne by the tenant is fully recovered through annual use, then the owner will pay the tenant for the remaining value of the tenant’s investment (Section M) by the date the lease terminates.
Lease Addendum for conservation practices, improvements

Source: AgDM Files C2-08

<table>
<thead>
<tr>
<th>A. Type and location of improvement</th>
<th>B. Date to be completed</th>
<th>C. Materials</th>
<th>D. Machine Work</th>
<th>E. Labor</th>
<th>F. Total cost borne by tenant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>C1. Total cost</td>
<td>D1. Total cost</td>
<td>E1. Total cost</td>
<td>C1 x C2 + D1 x D2 + E1 x E2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C2. % - Tenant share</td>
<td>D2. % - Tenant share</td>
<td>E2. % - Tenant share</td>
<td></td>
</tr>
</tbody>
</table>

Net of cost-share

<table>
<thead>
<tr>
<th>G. Years over which improvement will be amortized</th>
<th>H. Annual amortization (F / G)</th>
<th>I. Year amortization begins</th>
<th>J. Signatures</th>
<th>K. Year lease ends</th>
<th>L. Total cost to deduct</th>
<th>M. Remaining value to be repaid to tenant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>I hereby accept the indicated values and depreciation rates.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Use to calculate remainder after lease has ended.
Example of Early Termination of Farm Lease with Long-Term Conservation Practice

<table>
<thead>
<tr>
<th>A. Type and location of improvement</th>
<th>B. Date to be completed</th>
<th>C. Materials</th>
<th>D. Machine Work</th>
<th>E. Labor</th>
<th>F. Total cost borne by tenant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioreactor (100’x30’) in Home Farm (FSA#00001), draining 40 acres into Green Creek</td>
<td>12/1/2021</td>
<td>$10,000</td>
<td>25%</td>
<td></td>
<td>$2,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G. Years over which improvement will be amortized</th>
<th>H. Annual amortization (F / G)</th>
<th>I. Year amortization begins</th>
<th>J. Signatures I hereby accept the indicated values and depreciation rates.</th>
<th>Use to calculate remainder after lease has ended.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>$250</td>
<td>2022</td>
<td>Landowner</td>
<td>Tenant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Thank you for your attention!

What questions do you have?

plastina@iastate.edu
https://www2.econ.iastate.edu/faculty/plastina/
Additional Information

- https://www.extension.iastate.edu/agdm/wdleasing.html
- https://store.extension.iastate.edu/product/6492
- https://store.extension.iastate.edu/product/15823
- https://www.extension.iastate.edu/agdm/articles/plastina/PlaOct18.html
- https://www.extension.iastate.edu/AgDM/articles/others/SawSep20.html
- https://www.calt.iastate.edu/article/iowa-farm-leases-legal-review
Keegan Kult

Keegan was hired as the Executive Director of the Agricultural Drainage Management Coalition in the fall of 2018 with the goal of speeding the implementation of conservation drainage practices throughout the Midwest. ADMC is an industry led organization which has contributed to the development of best management practices such as drainage water management, saturated buffers, and bioreactors.Keegan has been a part of 30+ bioreactor or saturated buffer installations. Drainage practice research that Keegan has contributed to the science has led to the development of NRCS conservation practice standards and the inclusions of the practices in state nutrient reduction strategies. Prior to joining ADMC, Keegan spent the previous 10 years with the Iowa Soybean Association as an Environmental Scientist where he focused on the development of conservation drainage practices.
Polk County Saturated Buffer Project

Keegan Kult
Executive Director
Agricultural Drainage Management Coalition
Treating Tile Outlets in Polk County

- Water Quality Initiative Funding
- NRCS-EQIP Funding

- Traditional Cost-Share Model
  - Conservation Planning
  - Opportunity Based

- 6 Outlets Treated 2015-2019
Polk County Barriers

- Outlets lost in the conversation around other practices
- “Hassle Factor”
- Working within CRP program
- Lack of interest from contractors
- Tax issues
- Not reaching local goals
Polk County (IA) Project

Agency/Non-profit partnership to increase the rate of adoption to a rate of 25+ saturated buffer sites a year.

Framework

• Group and prioritize ACPF identified saturated buffer sites
• Direct outreach campaign
• Create demand by incentivizing participation & streamlining the process
• Recruit landowners/farmers to install multiple saturated buffers
• Utilize innovative fiscal agent model to bundle multiple sites
Bringing Conservation Drainage to Scale in Polk County

Project details
The Iowa Water Quality Initiative has had successful pilot projects that have demonstrated effective practices. Within the WQI, saturated buffers have been identified as one of the most cost-effective methods to improve water quality. Project partners have come together to secure funding as well as technical expertise in order to see saturated buffers installed at a scale large enough to have an impact. The Polk County project has an aggressive goal of installing a minimum of 25 saturated buffers by December of 2020.

Practice basics
Saturated buffers modify the outlet of a tile system to distribute the water below ground, through the soil profile of a buffer or grass filter strip. A tile line, typically 500-1,000 feet long, distributes the water in a buffer that is at least 30 feet wide.

```
Landowner overview:
- 100% Cost share available for saturated buffers
- Project $1,000 incentive payment
- Assistance with working through program sign-up
- Establish Polk County as a national leader in conservation drainage
- Be a champion in Iowa’s nutrient reduction strategy
```

```
Saturated buffer schematic
```

Project partners
Agricultural Drainage Management Coalition
Farm Services Agency
Iowa Department of Agriculture and Land Stewardship
Natural Resource Conservation Service
Polk County
```

```
Polk Soil & Water Conservation District
```

Dear (Mr/MS) [Blank],

The Polk Soil & Water Conservation District and local partners are currently scaling up effort to implement the Iowa Nutrient Reduction Strategy. We are focusing on practices that reduce nitrates by treating tile outlets near streams, our primary practice is saturated buffers. We are reaching out to you because we have identified a potential site on your property at [Blank] based on soil types and proximity to the stream.

Through efforts of our partners, funding has been secured to provide 100% cost share for the construction of these saturated buffers. For your participation, we are offering a $1000 incentive per tile outlet treated.

This letter includes a map showing fields that contain potential saturated buffer sites. We have also included a document providing a brief overview of saturated buffers and the project itself.

Lead project staff:
Tanner Polk - Watershed Coordinator
Polk Soil & Water Conservation District
515-964-1881 ext. 3
tanner.polk@usda.gov

In a few days a project lead will be following up with you at [Blank] to discuss this opportunity further.

Best regards
Conventional financial assistance model
Fiscal agent model

- Payment
- Invoice
- Contract
Status

• 41 saturated buffers
• 10 bioreactors
• Access to 105 tile outlets
• Working with 15 landowners
• Bids were due April 1
Major Takeaways

- Direct outreach model worked - surveyed over 120 outlets

- Survey Tactics
  - Tile Maverick, two stream cross sections, topo survey, soils sample and documentation

- Had to develop new organization tools
  - Outlet Code System, spreadsheets, soil documentation

- Coordination between designer and survey crew is crucial
  - 120 preliminary designs completed in 6 weeks

- Flexibility from funding programs was key

- New Mindset “Let’s treat every suitable outlet in each field”
Project Partners

- ADMC
- FSA
- IDALS
- NRCS
- Polk County
- Polk SWCD
Interact with ADMC

- Email kkult@admcoalition.com
- @admcoalition
- Become a member https://admcoalition.com/join-admc/
- Visit our website www.admcoalition.com
- Sign-up for the Conservation Drainage Weekly
- Thank you!
Question and Answer Session

We will draw initial questions and comments from those submitted via the chat box during the presentations.

Today’s Speakers

Ricardo Costa – costasil@msu.edu
Alejandro Plastina – plastina@iastate.edu
Keegan Kult – kkult@admcoalition.com
Thank you for participating in today’s *The Current*!

Visit our website, northcentralwater.org, to access the recording and our webinar archive!

Upcoming webinar from our soil health team, The Soil Health Nexus:

**Pathway to Resilient Soils to Achieve Optimum Productivity and Environmental Quality featuring Dr. Jerry Hatfield**

Next Wednesday, May 19 at 2pm CT

[https://soilhealthnexus.org/](https://soilhealthnexus.org/)