



# Metrics Committee March 2021 Meeting



**Field to Market™**

The Alliance for Sustainable Agriculture





# Agenda – Tuesday March 16<sup>th</sup>

- 2:00 pm: Welcome and Introductions
- 2:10 pm: Pest Management Subcommittee Report (Eric Coronel)
- 3:00 pm: Fieldprint Platform 4.0 Overview (Paul Hishmeh)
- 3:30 pm: Field to Market Strategic Planning Discussion (Rod Snyder and Betsy Hickman)
- 4:30 pm: Adjourn

## Committee Members 2020-2021

Name	Organization	Sector	Term ends
Steve Linscombe	USA Rice Federation	Grower	2021
Joe McMahan	Innovation Center for US Dairy	Grower	2021
<i>TBD</i>	Soil Health Partnership	Grower	2022
Jesse Daystar	Cotton Inc	Grower	2022
Jeff Seale	Bayer	Agribusiness	2021
Adam Herges	The Mosaic Company	Agribusiness	2021
Lara Moody	The Fertilizer Institute	Agribusiness	2022
Andy Greenlee	John Deere	Agribusiness	2022
Jay Watson	General Mills	Brands & Retail	2021
<i>VACANT</i>		Brands & Retail	2021
Ben Johnson	J.M. Smucker Company	Brands & Retail	2022
Juan Calle-Bellido	Mondelēz	Brands & Retail	2022
Amy Hughes	Environmental Defense Fund	Civil Society	2021
Michelle Perez	American Farmland Trust	Civil Society	2021
Heidi Peterson	Sand County Foundation	Civil Society	2022
Monica McBride	World Wildlife Fund	Civil Society	2022
Eric Cummings	University of Arkansas	Affiliate	2021
Sarah Sexton-Bowser	Kansas State University	Affiliate	2021
Evelyn Steglich	USDA-NRCS	Affiliate	2022
Nothabo Dube	Texas A&M Agrilife research	Affiliate	2022

# Metric Review Schedule

	Last year Metric review/revision completed	Review/Revision Schedule				
Metric		2020	2021	2022	2023	2024
Land Use	2019	#			X	
Energy Use	2018		X			
GHG	2020	*		X		
Irrigation	2019			X		
Water Quality	2021					X
Soil Conservation	2018			X		
Soil Carbon	2011	X	X			
Biodiversity	2020	*	X			
<i>Pest Management</i>	2020	X				

***\* Indicates partial metric update***

***# Indicates review only***



# Report on Pest Management Subcommittee

March 16, 2021





# Background

- In 2017, members expressed concern about pest management questions from stakeholders
- A task force convened during 2018 and gave recommendations in 2019, of relevance to the Metrics Committee included:
  - Create a pesticide-focused report for U.S. commodity crop production (released in February 2020)
  - The Metrics Committee should explore an IPM-focused metric that can be used to show measurable improvement



# Subcommittee Charge

- Make recommendations to the Metrics Committee determining **if and how** Field to Market should define and measure pest management
- Three potential outcomes:
  - **Creating a new metric** based on pest management practices and tied to a ninth environmental outcome
  - **Modifying an existing metric** to include more questions related to pest management to evaluate impact on one or more of the eight environmental outcomes
  - Taking **no action**



# Subcommittee Members

## Metrics Committee Volunteers

- Monica McBride/Clay Bolt (WWF)
- Steve Linscombe (USA Rice)
- Ben Johnson (Smucker)
- John Stewart (Soil Health Partnership, NCGA)
- Heidi Peterson (Sand County Foundation, Metrics Committee co-chair)

## External Members

- Ed Spevak (Saint Louis Zoo)
- Tom Green (IPM Institute)
- John Tooker (Penn State)
- Clint Pilcher (Corteva)





# Timeline of Activities

Date	Speakers	Topics to discuss
<b>August 2020</b>	Christy Wright (Corteva), Daniel Glas (Bayer)	Field to Market efforts, industry perspectives and initiatives
<b>September 2020</b>	Tom Green (IPM Institute), John Tooker (Penn State)	Environmental outcomes of IPM
<b>October 2020</b>	Ben Johnson (Smucker)	Value of a pest management metric to Brands & Retail and farmers
<b>December 2020</b>	Sarah Lewis (TSC)	Past and current pest management initiatives
<b>February 2021</b>	-	Recommendations to Metrics Committee
<b>March 2021</b>	-	Recommendations to Metrics Committee



# Summary of Main Recommendations

- Subcommittee members showed no inclination towards adopting a ninth Field to Market Metric associated with a new environmental outcome for pest management
- Subcommittee members supported the modification of an existing metric, the Biodiversity Metric, to incorporate more pest management material:
  - For the Biodiversity Metric, members stated that the question about Integrated Pest Management should be improved to include more details, and other pest management questions should be included as well
  - One suggested approach is to use The Sustainability Consortium (TSC) Responsible Pest Management framework to guide potential new questions or modifications



## Summary of Main Recommendations - continued

- Following Field to Market Metrics revision schedule, all relevant Metrics should be evaluated for incorporation of pest management material. If promising tools or models related to pest management are presented to Field to Market, it is recommended to review them and potentially incorporate them into relevant metrics
- Assess the feasibility of incorporating a qualitative pest management module to the STEP Water Quality Metric that reflects a score based on water quality impact of pest management operations or practices



## Other Recommendations

- It is recommended to conduct a gap analysis between what Field to Market offers and what other organizations, such as Sustainable Agriculture Initiative (SAI), Stewardship Index for Specialty Crops (SISC), Cool Farm Tool (CFT), TSC, and others are doing in the pest management space to find opportunities for alignment and/or harmonization, with the goal of avoiding duplication of efforts
- It is recommended that TSC Responsible Pest Management framework be reviewed once it is finalized to look for alignment or harmonization, and that Field to Market members participating in pilots with TSC be surveyed about their experiences with the framework



## Other Recommendations

- It was suggested to survey the Brands & Retail Sector members that placed the original request about pest management in the Field to Market Plenary of 2017 about their current positions and efforts on pest management, along with several other Field to Market members that expressed similar concerns during the 2019 Cross Sector Dialogue
- It was recommended that Field to Market develops guidance for projects that may wish to use any of these external frameworks (SAI, TSC, SISC, etc.) to track improvements in pest management



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# Fieldprint Platform

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## Version 4.0 Updates

(as of March 16, 2021)

# Release Planning

## Approach to Platform release naming and timing

### Format for releases

- Major.Minor.Patch - Format examples: 3.1.6 or 4.0

### The release types indicate impact

- **Major:** Significant changes including changes to metric models. Most likely introduces input requirement changes. Triggers need to recalculate data.
- **Minor:** Changes to metrics, integrations, etc. that cause a change in metric results. May introduce a change to input requirements. Triggers need to recalculate data.
- **Patch:** Most often new features, fixes, or other modifications that do not impact metric calculations.

### Timing of Releases

- **Yearly Science Release:** Scheduled for June of each year. Typically for major Platform changes. Offers members, users and QDMPs a predictable schedule for major and some minor releases.
- **Continuous Release :** Ongoing release of features and functionality – typically minor or patch level. Releases occur as often as needed throughout the year.

# Release Planning

## Metric Version Checks

### Example of notification on Project Admin Page

#### Metrics Version Check



Prior to any reporting, it is important to confirm all project data has been calculated against the most recent metrics engine version [3.1]. It is possible that project data sets have a mixture of metric versions. Confirm below that all data is current and, if not, recalculate the project data.

**!** This project data set has 8 of 43 crop years calculated on an older metric version (or not at all). Please refresh the data set prior to reporting. Note that this may update individual grower Fieldprint results, including for provisional crop years. Recalculating data can take anywhere from a few minutes to an hour, depending on the size of the data set. The system will send you an email notification when calculations are complete.

Recalculate Data

The screenshot shows the Field to Market Project Admin interface. At the top, the logo and 'FIELDPRINT PLATFORM' are visible on the left, and the user name 'Hi, FTM Project Admin' is on the right. Below the header, there is a dropdown menu for selecting a crop and irrigation type. A red dashed box highlights a notification titled 'Metrics Version Check'. The notification text reads: 'Prior to any reporting, it is important to confirm all project data has been calculated against the most recent metrics engine version [3.1]. It is possible that project data sets have a mixture of metric versions. Confirm below that all data is current and, if not, recalculate the project data.' Below this text is a red warning icon and a message: 'This project data set has 8 of 43 crop years calculated on an older metric version (or not at all). Please refresh the data set prior to reporting. Note that this may update individual grower Fieldprint results, including for provisional crop years. Recalculating data can take anywhere from a few minutes to an hour, depending on the size of the data set. The system will send you an email notification when calculations are complete.' A green 'Recalculate Data' button is positioned at the bottom of the notification. Below the notification, there are three expandable menu items: 'Project Statistics', 'Project Overview', and 'Project Crop Management Systems'. At the bottom of the page, there is a footer with 'Data and Privacy Policy | Terms of Use' on the left and 'support@fieldtomarket.org | www.fieldtomarket.org' on the right.



# Release Planning

## Metric Version Checks

### Example of notification on Farmer Data Export Page

Farm	Field	Year	Crop	Data Status	Metric Status ↑	Metric Version	Project	Select
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
Farm A	Field B	2018	Corn (grain)	Provisional	Calculated	3.0		<input type="checkbox"/>

The screenshot shows the 'Export Data' page in the Field to Market platform. The page includes a header with the logo and 'Hi, FTM Support', a navigation sidebar, and a main content area. The main content area has a title 'Export Data' and a section 'Data Export' with instructions on how to use the data export function. Below the instructions, it states 'The current Metric Version is [3.1]'. A table of data is displayed, with a red dashed box highlighting the 'Metric Version' column. The table has the following data:

Farm	Field	Year	Crop	Data Status	Metric Status ↑	Metric Version	Project	Select
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
Farm A	Field B	2018	Corn (grain)	Provisional	Calculated	3.0		<input type="checkbox"/>
Farm A	Field G	2018	Soybeans	Provisional	Calculated	3.0		<input type="checkbox"/>
Farm A	Cotton	2019	Cotton	Provisional	Calculated	3.0		<input type="checkbox"/>
Farm C	Field 1	2017	Corn (grain)	Provisional	Calculated	3.1		<input type="checkbox"/>
Farm D	Corn (Irrigated)	2018	Corn (grain)	Final	Calculated	3.0		<input type="checkbox"/>

# Version 4.0 Enhancements

## Version 4.0 will be released as part of the June 2021 Science Release

- **Update to the Water Quality Metric:** replacing the NRCS Water Quality Index (WQI) tool with STEP (Stewardship Tool for Environmental Performance), also developed by NRCS. Key Platform impacts from the STEP migration:
  - Change to how water quality results are reported – raw scores now comprised of four pathways (a single score will be used on the spidergram - representing how many of the pathways are above the threshold). STEP requires a modification to data inputs – 11 new, 3 modified, and 4 removed. New and modified inputs have default values (producing a worst-case score).
- **Enforcing WEPS Calibration Mode:** enforcing use of crop calibration mode for USDA Wind Erosion Prediction System (WEPS) model calls.
  - Now an optional parameter, NRCS recommends operating in crop calibration mode to produce more accurate wind erosion results. In calibration mode, the model uses the actual yield versus a simulated yield. This helps compensate for environmental factors and ensure the erosion simulation accounts for the actual level of biomass and residue on the field. In most cases, erosion values will be lower.
- **Adopting CR-LMOD 4:** adopting USDA NRCS Conservation Resources Land Management and Operations Database (CR-LMOD) Version 4.
  - Incorporates recent NRCS crop-specific parameter changes that have the potential to impact cotton, potato and alfalfa crops under certain conditions. Erosion results likely to be the same or lower.

# Version 4.0 Enhancements

## Some important reminders for Users and Projects

- **As general requirement, all Fieldprint data must be generated on the same platform version when used in any form of analysis including comparisons, reporting, benchmarking, or claims. As major and minor versions of the Platform are released, it is necessary to recalculate data generated on prior Platform versions. This may include having to address new data input requirements.**
- **With an underlying metric model change, water quality metric results generated in Version 4.0 using STEP are not compatible or cannot be compared with water quality metric results generated in earlier versions using WQI. This is of particular importance for Continuous Improvement Projects focused on water quality. Recalculation of data from earlier Platform versions is required prior to use in analysis. For STEP, this also requires addressing new and modified data inputs. While defaults for inputs are available, they result in a worse-case water quality metric score.**
- **The Version 4.0 minor enhancements for WEPS calibration mode and CR-LMOD introduce the potential for changes in Soil Conservation and Soil Carbon metric results, adding to the requirement to that users and Projects recalculate data from prior Platform versions before use in analysis.**

# Version 4.0 Technical Progress

## Key activities leading up to the Version 4.0 release in June 2021

- **Discovery and Analysis Activities:** This has been an ongoing process beginning back in the Fall of 2020. This is a detailed, iterative and collaborative process involving Field to Market Staff, Houston Engineering (HEI), USDA NRCS and CSU.
- **Technical Progress:** Implementation of Version 4 is focuses in the following areas:
  - We have been working with CSU OMS Lab on the availability of backend STEP CSIP services. These CSIP services will be online this month (March 2021).
  - HEI is working on standing up Phase 1 of the Fieldprint API. The goal is to make the API available to QDMPs for discovery and analysis. Phase 1 will be online by the end of March 2021.
  - The Calculator updates are part of Phase 2. This involves updating all aspects of the Calculator – data inputs, interfaces, reporting, and support artifacts. Phase 2 is underway with the goal of having a beta version available for internal testing by mid May.
  - The Version 4.0 of the Fieldprint API and Calculator will be released at the end of June 2021. We will be tightening up the schedule to include communicating outages during release.

# Version 4.0 Support

## Field to Market staff are working on various support artifacts in anticipation of Version 4.0 release

- **Version 4.0 Release Guides:** We are working on a Version 4 Release Overview that outlines each enhancement to include a breakdown of the STEP input changes. We are also developing guides for farmers and Continuous Improvement Projects.
- **Fieldprint Calculator Support Portal:** We are working on standing up a WordPress-based knowledge portal to consolidate and organization support materials for user of the Calculator. The portal will include demonstration videos and knowledgebase articles. First release is scheduled for May 2021.
- **Demonstration Videos:** Building on materials and videos developed for the Learning Academy, staff are working on several other demonstration videos including Calculator Overview and Crop Rotation Library demonstration videos. The videos will be added to the Support Portal.
- **Updating other Materials:** Various other Field to Market documents will be updated to reflect the Version 4.0 release (e.g. metrics documentation).
- **Platform Roadmap:** To improve communication with membership at large, we are adding a Fieldprint Platform and Digital Properties Roadmap to the member portal. The roadmap will outline upcoming and recently released enhancements.

# Qualified Data Management Partners

## QDMPs are required to update integrations per DMLA

- All seven of our QDMPs are committed to migrating their integrations to Version 4.0.
- We have held multiple QDMP Network calls to share updates and gather input. A QDMP STEP migration guide was distributed in late 2020.
- We are planning for a lag period between the June 2021 Calculator release and release of each QDMP integration.
- We expect QDMPs to complete the Version 4.0 migration by the end of October 2021.
- We will maintain a parallel Version 3.x Fieldprint API version to support QDMPs during this interim period.
- QDMPs are expected to collect, generate and report 2021 data on Version 4.0.



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# 2022-2024 Strategic Plan Development







## Process and Timeline

- **January 26th** | Board call to explore preliminary themes
- **March 5th** | Staff workshop
- **March 12th** | Board follow-up call
- **March 16th-17th** | Spring Standing Committee meetings
- **Week of April 5th** | Kickoff calls with Sectors
- **April-May** | One-on-one interviews and member survey
- **June plenary** | Updates for FTM membership
- **August** | Board approval of 2022-2024 strategic plan
- **September 7th-8th** | Fall Standing Committee meetings
- **Week of October 4th** | Board retreat to focus on operationalizing plan w/ 2022-2024 KPIs
- **November plenary** | Final release to FTM membership



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## Calibrating Our Strategy | 2022-2024

Field to Market's Board began this process exploring the following overarching questions:

- **Where is the greatest unmet need in the sustainable agriculture landscape?**
- **From your vantage point, if Field to Market could only deliver three strategic outcomes by the end of 2024, what are they?**
- **How successful do you feel Field to Market has been over the last three years in achieving the stated outcomes of our existing strategy – to deliver sustainable outcomes at scale and strengthen trust in food and agriculture through increased transparency?**



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## Calibrating Our Strategy | 2022-2024

Field to Market's Board began this process exploring the following overarching questions:

- What is either missing or needs better revised in our existing strategy to accelerate Field to Market's vision to harness the collective action of the value chain to support resilient ecosystems and enhance farmer livelihoods?
- What has evolved in the landscape over the past three years that needs to be reflected in how Field to Market responds to changes in external influence factors on our ability to successfully deliver against this vision?



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## What we've heard: Challenges Identified by Board and Staff

- Lack of a unified demand signal for sustainability in U.S. agriculture – competition between members to differentiate approaches to sustainability limits overall impact. Scale depends on pre-competitive collaboration.
- Outside of a few ambitious projects, we are not seeing action at scale, and we need to better understand the barriers for growers and supply chains.
- Concerns raised that Field to Market's approach is perceived as an expensive intermediary if members are not looking for credible validation from a trusted third-party.
- CPG strategies are constantly evolving to keep up consumer trends and Field to Market needs to evolve to remain relevant – regenerative ag, Scope 3 commitments, etc. Challenge of long-standing members moving away from our approach and reducing investment (Associate membership).



## What we've heard: Challenges Identified by Board and Staff

- Our current strategy relies on scaling access to sustainability metrics through integration with existing software. It does not address the reality that only 35% of growers utilize software. Compounding the challenge that data entry is the biggest barrier to scaling Continuous Improvement Projects. It's difficult to train staff, and there's often not enough enthusiasm for the work.
- An assumed member role in our current strategy is that members would utilize Field to Market's program to make credible public claims and seek streamlined recognition from aligned standards. Outside of B2B measurement/reporting, members are not pursuing claims and public mentions of our program have waned in the past twelve months.
- Concern that ecosystem services markets and more competitors have fragmented the landscape, increasing confusion and potentially diluting Field to Market's value proposition.



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## What we've heard: Opportunities Identified by Board and Staff

- Newer members are engaging with Field to Market to start projects and participate in the program at scale, motivated by validating progress against science-based targets.
- Potential value in cultivating strategic partnerships where upstream companies/organizations who can help identify farmers with room for improvement (rather than only enrolling early adopters/performers).
- Existing strategy relies on member-led projects. What value, if any, could be created by Field to Market developing and leading projects to address critical natural resource concerns in priority regions?
- Ability to combine innovative finance, technical assistance and learning networks can position Field to Market at the center of solutions. Need to strengthen offerings in these dimensions.



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## What we've heard: Opportunities Identified by Board and Staff

- Better utilize trust built across the industry to take on controversial issues and push collective thinking forward through thought leadership.
- How can Field to Market bolster credible claims and avoid double counting – where can we lead in setting the rules of the road for how voluntary, market-driven sustainability initiatives intersect and collaborate with ecosystem service markets.
- Leverage the power of Field to Market to connect different nodes of the value chain that would not normally collaborate.
- Improved execution through clarifying who we serve and why. Questions raised by Board and staff: What is Field to Market's audience? Who is our ultimate "customer?" (Growers/PUSH vs Downstream/PULL)





# Where We've Been & Where We're Going

Aligning on a Vision for Field to Market's  
Next Chapter

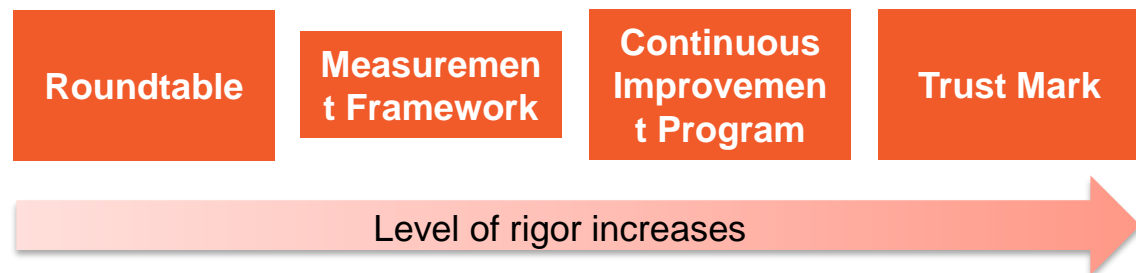






## Program Scenarios Explored in 2018

- Field to Market evaluated the kind of program and standard we wanted to operate moving forward – “Can’t be all things to all people”
- Four options presented based upon level of rigor & investment
- Prior to current strategic plan, operated between options two and three
- Listening and discovery in 2018 led us to option three, although questions remain from Board and staff on the role that we are best suited to play



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## Existing strategic priorities

*Our strategic priorities for 2019-2021 reflect Field to Market's commitment to delivering sustainable outcomes at scale. And because trust in food and agriculture has never been more important, we are prioritizing transparency in our approach.*

- **Convene Diverse Stakeholders** - Convene diverse stakeholders to facilitate multi-sector collaboration, advance shared learning, and drive collective action.
- **Provide Science-Based Leadership** - Develop and strengthen Field to Market's science- and outcomes-based resources for measuring sustainability performance and assessing opportunities for improvement.
- **Scale Impact Through Partnerships** - Establish a flexible program framework, facilitate partnerships, and leverage capacity to support farmers in delivering improved environmental outcomes at the field and landscape levels.
- **Enable Credible Communications** - Enable credible stakeholder communications that facilitate and improve supply chain and industry reporting, showcase leaders in sustainability, and strengthen public confidence in the food and agriculture system.



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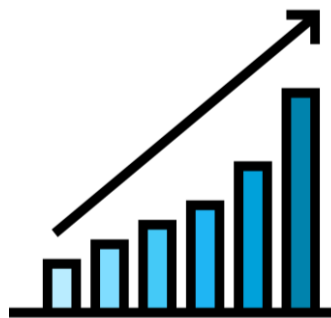


## Thought exercise: New strategies for consideration

*If we presume that the four pillars of our existing Strategic Plan remain relevant for the next three years, what are new strategies, activities or focus areas that should be pursued to maximize impact and value for our members? A non-exhaustive list of options includes:*



Supply-side  
Approach



Expand  
Applicability of  
Metrics



Principles  
& Criteria



Learning  
Laboratory



Data & Tech  
as a Solution



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# Potential Strategies for Consideration

- 1. BUILD A SUPPLY-SIDE APPROACH:** Field to Market could shift its focus to support upstream entities in creating sustainability projects/programs to strengthen a supply-side approach that focuses most on grower needs and secondarily on standards for downstream brands and retailers. Growing regions could be selected based on priority natural resource concerns.
  - **KEY COLLABORATORS:** Grower groups, farmer cooperatives, ag retailers, conservation districts, etc. that have direct grower relationships.
  - **KEY VALUE:** This enables agricultural organizations to truly own and drive sustainability strategies while demonstrating impact and scalability of projects in key geographies. Meanwhile, Field to Market would spend fewer resources attempting to align a fragmented Brands & Retail sector.



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# Potential Strategies for Consideration

2. **EXPAND APPLICABILITY OF OUR METRICS:** Ensure ubiquity and relevance of Field to Market metrics by aligning with standards that have demonstrated value for growers and the supply chain. Under this scenario, Field to Market would provide the measurement framework alongside other sustainability programs that offer market access, outcomes-based payments, etc.
  - **KEY COLLABORATORS:** Other standards bodies (e.g. Soil & Water Outcomes Fund, US Cotton Trust Protocol, Sustainable Rice Platform, SAI Platform, ESMC)
  - **KEY VALUE:** This solidifies Field to Market’s leadership position in developing/maintaining science-based, outcomes-based metrics while leaving other elements of value generation to aligned programs and standards.



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# Potential Strategies for Consideration

- 3. ESTABLISH CLEAR CRITERIA OR MINIMUM STANDARDS FOR SUSTAINABILITY:** In addition to offering metrics, Field to Market could establish its own minimum standards, performance thresholds or other criteria to provide clearer guidance to the supply chain for sustainable sourcing decisions and public claims.
- **KEY COLLABORATORS:** Field to Market members would need to achieve strong consensus before adopting principles and criteria for US commodity crops. Experts in social compliance might also need to be involved, which is not currently a strength within the organization.
  - **KEY VALUE:** Avoids relying on other standards for defining “sustainably sourced” and provides more comprehensive approach for the supply chain to measure impact AND to “de-risk” sourcing.



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# Potential Strategies for Consideration

4. **CREATE A LEARNING LABORATORY:** Field to Market could play a more proactive role in convening smaller groups of members and project partners to pilot specific strategies, interventions, incentive mechanisms, etc. where the learnings could be more broadly published for the industry.
- **KEY COLLABORATORS:** Willing project partners and funders would need to be identified to pilot specific approaches in targeted geographies.
  - **KEY VALUE:** Field to Market could have a more direct hand in project design, and member companies could demonstrate leadership by piloting new project approaches and sharing learnings in a pre-competitive fashion.



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# Potential Strategies for Consideration

- 5. PROMOTE DATA & TECHNOLOGY AS A SOLUTION:** Acknowledging that low technology adoption on the farm continues is a barrier to sustainability measurement, Field to market could work with the value chain to increase digital recordkeeping and advance more automated approaches to sustainability measurement and verification.
- **KEY COLLABORATORS:** Work with ag tech companies and the broader IT community to provide more digital access to farmers and to advance the role of automation, remote sensing, etc. as a core sustainability strategy.
  - **KEY VALUE:** This activity would leverage Field to Market’s historical role in data and technology by further advancing a Theory of Change that measurement ultimately improves management (i.e. accelerating technology adoption will lead to improved outcomes and verifiability).



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## Discussion | Q&A

- Where do you see the greatest unmet need in the sustainable agriculture landscape? What is Field to Market's role in addressing it?
- Which of these five concepts resonate most with you? What other creative ideas and approaches are we missing?
- What do you value most from Field to Market's 2019-2021 strategies that you hope we carry forward?



## Discussion | Q&A

- What is either missing or needs better revised in our existing strategy to accelerate Field to Market's vision to harness the collective action of the value chain to support resilient ecosystems and enhance farmer livelihoods?
- From your vantage point, if Field to Market could only deliver three strategic outcomes by the end of 2024, what are they?

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# Field to Market Updates





# Program In Development

- Field to Market staff is working to develop a Data Analyst Training to help people working in projects and fill the gap between data collection and claims
- Training will cover:
  - What data outputs are given by the Fieldprint Platform, and how to use them all
  - Using historical or baseline data to set project goals
  - Data quality review, identifying and fixing errors and outliers
  - Recalculating scores when Metrics are updated
  - Interpreting results, ideas for project reports and analysis
- Still deciding on training length, other details

## UPCOMING MEETINGS

### Upcoming Meetings

**March 24, 1:00 – 3:30  
pm ET | Cross-Sector  
Dialogue**

**Racial Justice, Equity  
and Inclusion:  
Dismantling Legacy  
Barriers and Biases  
in U.S. Agriculture**

Field to Market | **Awards & Recognition Committee**



**Ebony Webber**  
Chief Operating Officer  
*MANRRS*



**Dr. Marcus Bernard**  
Associate Professor  
*Kentucky State University*



**Dr. Veronica Womack**  
Executive Director, Rural Studies  
Institute  
*Georgia College and State University*



**Rodrigo Cala**  
Agricultural Trainer  
*Minnesota Latino Economic  
Development Corporation*



**Kari Jo Lawrence**  
Executive Director  
*Intertribal Agriculture Council*



**Phillip (P.J.) Haynie III**  
Chairman of the Board  
*National Black Growers Council*

## UPCOMING MEETINGS



### Upcoming Meetings

- **Webinar on March 30, 2021 | 1PM ET**
- **Learn the basics of how Continuous Improvement Projects are designed and implemented; what makes them successful, and the unique roles that member organizations play to drive progress and generate impact;**

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## UPCOMING MEETINGS



### Upcoming Meetings

- **April 13—22 for four interactive sessions on Tuesday and Thursday 22 from 1:00 - 3:30pm ET**
- **Immersive virtual course designed to explore how engaging in Field to Market's Continuous Improvement Accelerator can advance your organization's sustainability goals and objectives.**

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## UPCOMING MEETINGS

### Summer Internships

- **Communications Internship**
- **Sustainable Agriculture Internship**
- **Paid, Full-Time, Remote positions. Please share with your networks!**

[www.fieldtomarket.org/careers](http://www.fieldtomarket.org/careers)



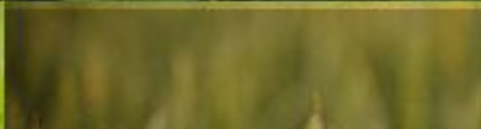


# Events Calendar for 2021

Cross Sector Dialogue on Racial Justice	March 24	Virtual
Continuous Improvement Academy	April 13/15/20/22	Virtual
Sector Calls	Week of June 7	Virtual
Plenary and General Assembly	June 23-24	Raleigh, NC*
Cross Sector Dialogue on Regenerative Agriculture	<i>TBD</i>	
Standing Committee Meetings	September 7-8	Washington, DC*
<i>Cross Sector Dialogue (Topic TBD)</i>	<i>TBD</i>	
Sector Calls	Week of Nov 1	Virtual
Plenary, General Assembly, and Sustainable Ag Summit	November 16-18	Las Vegas, NV*



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# Adjourn





# Agenda – Wednesday March 17<sup>th</sup>



Happy St. Patrick's Day!

- 10:00 am: Soil Carbon Discussion
- 11:00 am: Upcoming Metric Reviews (Lexi Clark and Allison Thomson)
  - Soil Carbon metric plans and needs
  - Sub-committee on sediment filtration for water quality
- 11:45 pm: Adjourn



# Soil Carbon Discussion





# Is Field to Market missing out?

- Currently active at the high level, not at the field level
- FFAR-USFRA Ag-Climate Partnership
  - Active in stakeholder engagement
  - Research database project funded under this program
  - Planning co-convening on how to scale climate smart ag practice adoption
  - On Advisory Council for the effort
- On WRI GHG Protocol land sector guidance development team, writing soil C guidance section
- Active in ESMC (MOU); discussions with other markets around pilot projects or collaborations (NORI, Indigo, Soil & Water Outcomes fund)
- Individual companies with carbon payment strategies are members: CiBO, Bayer, Land O'Lakes, Nutrien, etc.



# Current Soil C Metric Status

- SCI as primary metric – annual feedback on how carbon is being impacted by current practices
- COMET-Planner as scenario tool – for farmers and projects to assess how practice changes could impact SOC
- Do we work to replace SCI with some other tool?



# Strategic Considerations

- Fieldprint Platform is not intended to be a market tool but would like to offer opportunities to users to evaluate their market potential and connect to partners with markets.
  - Markets are currently very fluid and getting a great deal of attention; uncertainty about eventual landscape
- Fieldprint Platform can best achieve scale and impact when reaching past early adopters to the vast majority of farmers who are not already engaged in conservation/sustainability/regenerative practices.
  - A primary barrier to their participation is data collection
- Stay the course vs. chase the shiny object? How do we achieve balance?



# Tools for carbon estimation

Tool	Science based	Ease of data entry	Useful for farmers?	Useful to projects?	Useful for markets?	Effort to deploy?
SCI	Yes	very easy	yes	somewhat	No	low
COMET-Planner	Yes	easy	yes	yes	somewhat	low
COMET-FARM	Yes	moderately difficult	yes	yes	yes	moderate
DNDC meta-model	Yes	moderate	yes	yes	yes	high
DNDC/DayCent	Yes	difficult	depends on uncertainty	depends on uncertainty	yes	very high



## Metric Considerations for COMET-Planner

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Practice adoption		adopt reduced tillage			adopt no-till			planning a cover crop								
CT to RT Soil C		0.22	0.22	0.22												
RT to NT soil C					0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56		
cover crop soil C								0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Carbon seq (tCO <sub>2</sub> eq/ac/yr)	0	0.22	0.22	0.22	0.56	0.56	0.56	1.02	1.02	1.02	1.02	1.02	1.02	1.02	0.46	0.46
								Projected								

1. Requires a **change in practice** to produce a result

- Requires more than one year of information
- In this example, what would the metric score be in 2015?

2. Options **only include adoption of conservation** practices – for example, stopping a cover crop, or going from no till to reduced till are not available practice change options

- Would not capture the full suite of operational changes farmers may make
- Could be overly optimistic if only score options are 0 or positive for sequestration as would not indicate where loss of soil C may be occurring.

## Metric Considerations – Alternatives to current SCI

- Consider a 2-part metric?
  - All users receive the SCI score automatically
  - Ask users whether they have recently adopted a conservation practice; provide COMET Planner sequestration estimate for that practice as a supplemental metric.
- Moving to a more complex model (e.g. COMET Farm, DNDC): Will involve some of the same limitations (COMET) and/or extensive development (DNDC) and/or will require multiple years of data entry to establish a record of a practice change (both)
- Work with COMET team to enable reverse and additional practices in COMET-Planner (R&D required).
- Move to an emissions factor approach based on literature (similar to Cool Farm Tool) (R&D required)



# Upcoming Metric Review





# Metric Review Overview

- Each metric reviewed at least once every 3 years
- Consider three key elements:
  - New scientific findings or tool development that is relevant
  - Value of existing metric to farmers and agronomic advisors
  - Value of existing metric to value chain project partners
- What is the best way to capture this information?
- Project Administrators Network
- Standard review/feedback forms?



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# Collecting feedback on optional features

- 2021 Work Plan:
- *Finalize piloting and evaluation of existing Habitat Potential Index. Initiate and initiate review of biodiversity metric.*
- *Coordinate on a more concentrated effort to pilot the beta tool for calculating nitrous oxide emissions reductions from use of 4R fertilizer management practices.*



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# HPI – Full farm version

- HPI will be up for review beginning this fall
- Revisions regarding the practices assessed and weighting factors will be discussed (e.g. IPM)
- One key question is should the full farm assessment become a requirement



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# 4R N Management Survey - GHG Metric

- GHG Metric will be up for review in 2022 (following Energy Use)
- One major question will be how to handle N<sub>2</sub>O emissions:
  - Require more detail on practices like these surveys (requires some R&D to develop for other regions/crops)
  - Other approaches following on from soil C model/metric discussions
  - Etc.



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# Meeting Outcomes







# Meeting Outcomes

- Pest Management Subcommittee
  - Committee: Will include feedback in HPI review later in 2021
  - Committee: Will include consideration of pesticide use/pest management in all future metric revisions
  - Staff: Strategic planning interviews with Brands will inquire about evolving needs in this space
  - Staff: Will continue monitoring pest management related program development activities at TSC and other aligned groups



# Soil Carbon

- Staff: Will discuss with HEI adding features to enable eventual “automatic” COMET Planner calculation (as supplement to SCI)
- Staff/Committee: Will discuss with NRCS the potential for differentiating crops and adding practices to COMET-Planner
- Staff: Develop some examples of the new capability, potentially using projects with several prior years of data, for use in communications to members to demonstrate value in this area



# Metric Review

- Staff: Develop standard, generic feedback form to capture insights from Project Administrators continuously
- Staff: Reach out to projects for piloting biodiversity full farm option:
  - potentially targeting agribusiness members to use on their projects that involve testing products and/or
  - companies with interest in Science Based Targets to frame HPI as a way to begin to assess their opportunities in the space in anticipation of new SBTN guidance (expected by early 2022) and/or
  - Incubation projects with biodiversity focus to offer the option of using the HPI for a selection of their farmers, and without using the rest of the Platform
- Staff: Work with TFI on an example of the potential GHG savings from achieving the intermediate/advanced 4R practice level to use in a communication to members to call for pilots of that feature.



# Resources from chat in Strategic Plan discussion

- 2018 Alpha Brown study cited by USFRA comparing Farm Management Software uptake with that of precision ag technologies (variable rate applicators, yield mapping, autosteer, etc.) which log crop protection or fertility applications:
- <https://www.alphabrown.com/product-page/farm-management-software-fms-market-potential>
  - 16.5% of farmers are currently using a Farm Management Software solution while 69% of farmers rely on pen, paper, and non-digital tools. In contrast, 50-75% of growers utilize precision agriculture technologies in commodity row cropping.
- This matches the same findings Field to Market and TSC have seen in research last year:
- Field to Market/Trust in Food: <https://fieldtomarket.org/new-report-highlights-farmers-perception-of-sustainability-and-extent-of-conservation-adoption/>
  - 65% of farmers currently do not use farm management software solutions and 84% do not use sustainability reporting platforms, which demonstrates significant room for growth in data-driven management decisions and supply chain reporting.
- TSC/Trust in Food: [https://www.trustinfood.com/wp-content/uploads/2020/05/Farmer-Data-Perspectives-Research\\_final.pdf](https://www.trustinfood.com/wp-content/uploads/2020/05/Farmer-Data-Perspectives-Research_final.pdf)
  - Low Software Usage & Digitization: 62% did not use farm-level data software in 2019; 46% store and manage their data primarily on paper records