

#5 Organics & Fibers

Subcommittee Meeting #5 Summary – Organics & Fibers March 28, 2022 9AM-12PM

Subcommittee meeting #5 of the Organics & Fibers Subcommittee (#5-Organics & Fibers) was convened virtually via Zoom on March 28, 2022 from 9AM-12PM, CST. Attendance for #5-Organics & Fibers is provided in Table 1.

Table 1. #5 Organics & Fibers Subcommittee Membership and Attendance

| Name | Company | Attended 3/28/22 |
|-------------------------|---|------------------|
| Karen Rodekamp | ISU Dining, Iowa State University | Present |
| Michelle Hurd | Iowa Grocery Industry Association | Absent |
| Beth MacKenzie | University of Iowa | Absent |
| Rich Stephens | Archer Daniels Midland Company | Present |
| Jennifer Trent | Iowa Waste Reduction Center | Present |
| Aubrey Alvarez | Eat Greater Des Moines | Present |
| Jennifer Jordan | City of Iowa City Landfill and Recycling Center | Present |
| Jon Koch | City of Muscatine | Present |
| Scott Amendt | GreenRU, LLC & Chamness Technology, Inc. | Absent |
| Kathy Morris | Waste Commission of Scott County | Present |
| Doyle Smith | City of Cedar Falls | Absent |
| Alan Schumacher | Quincy Recycle Paper/Iowa Recycling Association | Absent |
| Aaron Holt | Sysco Foods | Absent |
| Brian Sievers | Sievers Family Farm | Absent |
| Christine Crow | Iowa Department of Education | Absent |
| Brenda Windmuller | Iowa Department of Education | Absent |
| Tim Woods | IDOT Freight Advisory Committee | Absent |
| Kaveh Mostafavi | Eco-Care Supply/The Compost Ninja | Absent |
| Christine Hradek | Iowa State University Extension Outreach | Absent |
| Joe Harms | PDI | Present |
| Samuel Sturtz | Iowa DOT | Present |
| Madeline Schmitt | Iowa DOT | Present |
| Theresa Stiner | DNR Internal SMM Team | Absent |
| Reid Bermel | DNR Internal SMM Team | Present |
| Laurie Rasmus | DNR Internal SMM Team | Present |
| Mike Sullivan | DNR Internal SMM Team | Present |
| Tom Anderson | DNR Internal SMM Team | Present |
| Jennifer Wright | DNR Internal SMM Team | Present |
| Jennifer Reutzel Vaughn | DNR Internal SMM Team | Absent |
| Michelle Leonard | Consultant – SCS Engineers | Present |
| Christine Collier | Consultant – SCS Engineers | Present |
| Jeff Phillips | Consultant – SCS Engineers | Absent |

| Name | Company | Attended 3/28/22 |
|-------------|--------------------------------------|------------------|
| Rosa Cruz | Consultant – SCS Engineers | Present |
| Karen Luken | Sub-Consultant – EESI ⁽¹⁾ | Present |

⁽¹⁾ Economic Environmental Solutions International

A. Subcommittee #5 - Organics & Fibers Summary

The meeting began with the project consulting team reviewing the agenda for this meeting (see Attachment A), the overall objectives of the Sustainable Materials Management (SMM) – Vision for Iowa project, the process and goals of the project process, and the goals for today’s subcommittee meeting. The slides presented for this Subcommittee meeting are included in Attachment A.

The goal for this meeting was to establish a clear direction for implementing an SMM system with immediate (0-3 years), medium (4-10 years) and long-term (11+ years) strategies for the objectives discussed during Subcommittee Meeting #4.

Implementation strategies were crafted to identify

- Responsible party/implementation approach
- Legislation and policies
- Infrastructure
- Funding mechanism
- Performance metrics

As previously discussed, the lifecycle model we are using for organics in the Iowa SMM process is based off of the ReFED 2030 action plan to achieve a 50% reduction in food waste by 2030. ReFED is a national nonprofit dedicated to ending food loss and waste across the United States by advancing data-driven solutions. The ReFED strategic plan has seven key action areas that are illustrated in Figure 1.

Figure 1 – ReFED Key Action Areas



The consulting team recommended starting with Recycle Anything Remaining and Reshape Consumer Environments as ReFED data shows that these two action areas have the greatest potential to divert food waste from the landfill. For two of the key action items, Subcommittee members discussed implementation of identified strategies. The implementation strategies identified by Subcommittee members are located in Attachment B.

The following are subcommittee member discussions for implementing strategies for the two key action items.

B. Key Action Area – Recycle Anything Remaining

STRATEGY: SURVEY/INVENTORY COMPOSTING AND AD FACILITIES TO ESTABLISH A BASELINE – SHORT TERM

Subcommittee Member Discussion

- The Subcommittee group identified the Iowa Department of Natural Resources (DNR) solid waste division as the party for inventorying composting facilities and AD plants. The Subcommittee group also had discussion that co-digestion of food and sludge at wastewater treatment plants could be an alternative option as there are already several facilities in Iowa. The Subcommittee thought the DNR wastewater division would be the best entity to survey the latter and they may already have much of the data. The time frame for obtaining data from these facilities already report could take a couple of months to a year. Obtaining data they are not already required to report could require a change in code and take 4-10 years (medium term strategy).
 - Currently no facility is required to report any data related to AD. A rule or code change could be implemented to require facilities to report information.
 - This needs to be confirmed (short term strategy)
- No infrastructure is required to survey/inventory composting and AD facilities to establish a baseline.
- No additional funding is needed to survey, the goal of the survey would be to provide the public with information on facilities that accept food for composting or digestion.
- If a database is needed it would cost around \$50k - \$100k, the cost depends on how extensive the database would be. Possible information the data base could provide is what facilities are within 50 miles? What are the facilities specifications? What would the cost be?
 - Creating a robust data base would be a medium strategy.
- Gathering some of the data may be a challenge when implementing this strategy as some of the data is to remain confidential.

STRATEGY: INVENTORY FOOD WASTE REDUCTION/RECOVERY LEGISLATION IN OTHER STATES/ASSESS VIABILITY IN IOWA – SHORT TERM

Subcommittee Member Discussion

- Potential parties identified to be responsible in helping implement this strategy were the DNR, Iowa Grocers Association and the health department.
- No legislation or policies were suggested to implement this strategy.
- Research what other states are doing and assess whether their legislation is viable in Iowa.
- Identify waste generation hot spots, are there certain demographics creating more food waste? Where is the greatest potential for recovery?
- Current mandate examples are:
 - California has a mandate to rescue edible recoverable food and mandates a percentage of food waste that needs to be kept out of the landfill.
 - Texas has a sales tax on single serve products.
 - Hennepin County, Minnesota has requirements for businesses to recycle and compost.

- Identify where incentives should go. Should it be to producers, food rescue organizations or somewhere else?
 - Incentives may require legislation. Researching what other states have done with incentives would be short term and any legislation would be medium term.

STRATEGY: PROVIDE FUNDS AND DESIGN REGULATIONS TO FACILITATE INNOVATIVE PROCESSING TECHNOLOGIES – MEDIUM TERM

Subcommittee Member Discussion

- Create multi-county waste sheds for organic waste for organic waste.
 - The responsible party for implementation was identified as the DNR-FABA.
 - There is no control over what is going out of state.
 - Compost or AD facilities will be needed dependent on system set up.
 - The Solid Waste Alternative Program (SWAP) has grants available. Currently there are three loan tiers, \$0k-10k is forgivable, \$10k-25k needs to be paid back with 0% interest and \$25K and higher has 3% interest. This could change in the future to increase the amount that is forgivable. Current SWAP funding cannot support this level of technology roll out with continued funding of more traditional SWAP projects.
 - There are potential funds available through the Iowa Economic Development Authority (IEDA) for community development.
 - The Iowa Energy Office has potential funds for AD. This could be a match of 50% for up to two million dollars.
- The DNR – Solid Waste and Wastewater were identified as parties to help implement this strategy.
- The Subcommittee suggested a food recovery master plan.
- Assess funding opportunities and market.
- Add people from DNR who work in wastewater to the conversation
 - This would be done in the short term.
- If there is a market in Iowa, compost facilities create products that may sell out. What products are actually being made at compost facilities?
 - This would be part of the Creating an Inventory strategy.
- Soil health is depleting in Iowa so agriculture could be a potential market for compost.
- Currently not all wastewater treatment plants are set up to accept food waste so there will need to be time to build infrastructure.
- In the state of Iowa, Muscatine, Sioux City, and Des Moines are current examples of co-digestion success stories.

STRATEGY: INCENTIVIZE KEEPING ORGANICS IN STATE – MEDIUM TERM

Subcommittee Member Discussion

- Investigate where organics are going; some producers are taking it across state lines due cheaper prices.
 - This would be part of the Creating an Inventory strategy.
- What are some incentives to keep organic waste in Iowa for a more beneficial solution?

- If a business wants to be more sustainable, what are their options in Iowa for diverting organic waste from landfills?
- Initial assessment of what it would cost to take organic waste to digesters and composters and compare to cost at landfills, there could possibly be a financial incentive.
 - Determining the cost would be part of the create inventory and survey of composting and AD facilities strategy.
- Businesses look for cost-effective solutions. They need to be cost neutral at least.
- Convenience needs to be considered.
- AD currently does not take food waste. In order to consider implementing food waste acceptance at AD it is important to take a look at AD and composting facilities that have failed in order to prevent it from happening in Iowa. Policies and training could be implemented to prevent failures.

STRATEGY: RESEARCH FEEDING FOOD SCRAPS TO LIVESTOCK – MEDIUM TERM

Subcommittee Member Discussion

- What is the difference between AD process and boiling food waste?
- There was discussion on moving the strategy to immediate/short term. However, because Iowa Department of Agriculture and Land Stewardship (IDALS) would need to change their policies toward feeding food scraps to livestock, which they have no incentive to do at this time, it was recommended to keep this as a medium term strategy.

STRATEGY: REQUIRE THE STATE TO PROCURE RECYCLED ORGANIC WASTE PRODUCTS – MEDIUM TERM

Subcommittee Member Discussion

- Is there anything in place that requires the state to purchase sustainable products?
 - Municipal vehicles are to use ethanol blends in Iowa.
 - Iowa used to have a green committee that required the use of soy ink, recycled paper and other elements of green purchasing. This was never mandatory and the state seems to no longer be doing it.
 - The Iowa Department of Transportation's (DOT's) use of compost is encouraged but not required.
- LEED requirements under old energy days. If a school wanted to do energy investment they could get funding. This no longer exists.

STRATEGY: DEVELOP REGULATIONS THAT DEFINE COMPOSTABLE VS BIODEGRADABLE – MEDIUM TERM

Subcommittee Member Discussion

Subcommittee agreed that this should be delayed until infrastructure is established and facilities are actually accepting paper products.

STRATEGY: ESTABLISH STANDARDS FOR COMPOST – MEDIUM TERM

Subcommittee Member Discussion

- Understand what the testing and certifications are for the different grades of compost.

- When dealing with compost there will always be some contamination. The outgoing compost needs to be clean and marketable with inappropriate materials taken out. Are composting facilities having issues with contamination?
- Iowa Compost Council (IACC) provides operator recertification. They would like to provide and develop their own training to certify and recertify but need funding.
- IACC currently has a summary of requirements for selling compost available on their website.
- IDALS has requirements for testing and certifications for the sale of compost.
- Who is testing? Currently operators can send their samples to a lab to test for things such as nutrients and presence of heavy metals.
- Grade certification when incorporating food waste.

STRATEGY: PROVIDE FOOD WASTE COLLECTION TO ALL RESIDENTS AND BUSINESSES – LONG TERM

Subcommittee Member Discussion

- This strategy should be looked at once there is infrastructure in place. There is no reason to collect organics if there is nowhere to take them for processing.
- Contamination is a big issue when collecting from residents.

STRATEGY: ADOPT FEED FOOD SCRAPS TO LIVESTOCK REGULATIONS – LONG TERM

Subcommittee Member Discussion

- This strategy would fall on the IDALS and what their specifications are.
- What is the benefit to producers? Their concern is with keeping livestock healthy and safe.

C. Key Action Area – Reshape Consumer Environments

STRATEGY: WORK WITH K-12 INSTITUTIONS TO CREATE SMALLER SIZE OPTIONS FOR MENU ITEMS – MEDIUM TERM

Subcommittee Member Discussion

- The parties identified to be involved with this strategy are the USDA and the Iowa Department of Education.
- Any changes to food portion sized would require federal law change.

STRATEGY: INVENTORY WHAT AGENCIES ARE DOING WHAT WITH EDUCATIONAL AND INSTITUTIONAL FOOD WASTE – MEDIUM TERM

Subcommittee Member Discussion

- Schools are still recovering from students learning remotely because of COVID, this should be delayed until medium term.
- Students and staff should be educated on what is required vs what is optional in the lunch room. For example, if a student does not like milk they should know that it is an optional item.
- There is already work being done in Iowa schools in regards to food waste reduction.

- The Iowa Waste Reduction Center (IWRC) has data from waste sorts performed at schools on their website.

D. Other Notes

Other items of note from the #5- Organics meeting are as follows:

- Subcommittee meeting #6 will be held April 25, 2022. The Key Action Items and Strategies that will be discussed include:
 - Reshape consumer environments
 - Promote premeasured ingredients for specific meals
 - Establish education and outreach campaigns to reduce plate size (buffets and individual servings)
 - Standardize food label dates to two phases (quality & safety risk)
 - Strengthen food rescue
 - Create a database of food recovery organizations
 - Facilitate a system to match donors with food recovery organizations
 - Establish a vetting system for food donors
 - Educate businesses on the need to pay for food donation collection
 - Increase donation storage and handling capacity
 - Adopt edible food recovery legislation
 - Optimize the harvest
 - Create a system to package and distribute surplus, off-grade, near-expired, or imperfect produce to retailers/institutions
 - Encourage the agricultural community to allow others to collect leftover produce after the initial harvest
 - Work with schools/public institutions to adjust procurement policies to accept imperfect foods
 - Implement processes to only implement partial loads of produce
- The third Stakeholder Meeting will be held June 15, 2022. Subcommittee members in addition to other interested parties are invited and encouraged to attend.

Attachments:

Attachment A: PowerPoint Presentation

Attachment B: Key Action Areas/Strategies

Attachment A
PowerPoint Presentation



Agenda

- 1. Introductions**
 - a. Project Team
 - b. Subcommittee Members
- 2. Background**
 - a. Sustainable Materials Management
 - b. Iowa Vision for Iowa Project
 - c. Process
- 3. Strategy Implementation Schedule and Tactics**
- 4. Organics Road Map**

IOWA DNR PHASE II SMM VISION FOR IOWA SCS ENGINEERS

Introductions



A photograph showing a person standing at the front of a classroom, pointing at a whiteboard, while several students sit at desks facing the front.



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IOWA DNR PHASE II SMM VISION FOR IOWA SCS ENGINEERS

Committee Introductions

Name/Nickname

Organization

Your Experience with Organics

IOWA DNR PHASE II SMM VISION FOR IOWA SCS ENGINEERS

What is SMM?

"Sustainable materials management is an approach to using and reusing materials most productively throughout their entire life cycles"

It represents a change in how our society thinks about the use of natural resources and environmental protection

Source: USEPA

IOWA DNR PHASE II SMM VISION FOR IOWA SCS ENGINEERS

What Isn't SMM?

- Product Bans without LCA on alternative products
- Landfill diversion requirements without:
 - Strategies to reduce generation
 - Sufficient infrastructure and funding to collect and process
 - Assessment of impact on greenhouse gas emissions; especially at landfills with landfill gas to energy systems
 - Assessing the impact of GHG emissions from transporting recyclables across country/world
 - Viable off-take markets

IOWA PHASE II SMM VISION FOR IOWA SCS ENGINEERS

Goal

Establish a clear direction for implementing an SMM system with immediate, medium and long-term strategies

IOWA PHASE II SMM VISION FOR IOWA SCS ENGINEERS

Process to Date

Craft implementation strategies

- Responsible party
- Legislation and policies
- Infrastructure
- Funding mechanism
- Performance metrics

IOWA PHASE II SMM VISION FOR IOWA SCS ENGINEERS

Strategy Implementation Schedule

Short (0 - 3 Years) Medium (4 - 10 Years) Long (11+ Years)

IOWA PHASE II SMM VISION FOR IOWA SCS ENGINEERS

Strategy Implementation Considerations

- Responsible Lead Party
- Legislation/Policies
- Infrastructure
- Funding Needs and Sources
- Performance Metrics

IOWA PHASE II SMM VISION FOR IOWA SCS ENGINEERS

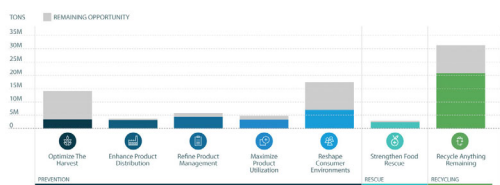
ReFED Road Map to 2030

Optimize The Harvest Enhance Product Distribution Refine Product Management Maximize Product Utilization Reshape Consumer Environments Strengthen Food Rescue Recycle Anything Remaining

IOWA PHASE II SMM VISION FOR IOWA SCS ENGINEERS 12

Summary

Tons Diverted from the Landfill



Attachment B
Key Action Areas/Strategies

Recycle Anything Remaining

Create inventory & survey of composting and AD facilities

Create multi-county waste sheds for organic waste

Phased-in food reduction/recovery legislation

Incentivize keeping organics in state

Research feeding food scraps to livestock

Require the State to procure recycled organic waste products (compost, renewable gas, etc.)

Adopt feed food scraps to livestock

Provide funds and design regulations to facilitate innovative processing technologies

Increase compost and AD infrastructure

Research compost quality standards

Develop regulations that define compostable vs. biodegradable

Provide food waste collection to all residents and businesses

Reshape Consumer Environments

Work with K-12/Institutions to create smaller size options for menu items

Promote pre-measured ingredients for specific meals

Encourage restaurants to create smaller size options for menu items

Standardize food label dates to two phases (quality and safety risk)

Optimize food packaging size and design for complete consumption

Institute advocacy campaigns to raise awareness and educate consumers about ways to prevent food waste and environmental effects

Establish education and outreach campaigns to reduce plate waste on buffets

Immediate
(0-3 years)

Medium
(4-10 years)

Long-Term
(11+ years)

Strengthen Food Rescue

Create database of donation sources and increase awareness/vetting system for food recovery organizations

Educate businesses on the need to pay for food donation collection

Increase donation storage handling and capacity

Create a system to coordination food generators with food donation

Adopt edible food recovery legislation

Optimize the Harvest

Create system to package and distribute surplus, off-grade, near-expiration, or imperfect produce to retailers

Encourage agricultural community to allow others to collect leftover produce after initial commercial harvest

Work with schools/public institutions to adjust purchasing specifications to allow for imperfect produce

Implement processes to only reject partial loads of produce

Immediate
(0-3 years)

Medium
(4-10
years)

Long-Term
(11+ years)