



# **ESMC Request for Information for EcoHarvest Program**

## **Biologicals to Drive Soil Health Outcomes in Carbon Programs**

**October 2025**



# Table of Contents

Background and Goals .....	2
Introduction: About ESMC and EcoHarvest .....	2
Goals and Objectives.....	2
Scope of Work.....	4
Timeline .....	5
Proposal Requirements .....	6
1. Background on Organization and Team.....	6
2. Products for Review .....	6
3. Scientific Efficacy and Life Cycle Analysis (LCA).....	6
4. Distribution Network.....	7
5. Pricing.....	8
6. Field Trial Support.....	8



# Background and Goals

## Introduction: About ESMC and EcoHarvest

The health of our planet starts with the hands that work its soil. But in an ever-changing climate, the pressure to be both a producer and steward of the land is higher than ever. When it comes to high yields and healthy ecosystems, we can prioritize both. EcoHarvest by ESMC connects farmers with corporate partners to turn regenerative practices into farmer revenue and verified impact that advances corporate sustainability goals.

As an ecosystem services program, we take a holistic approach by addressing soil carbon, water quality, and biodiversity—all equally critical to supply chain resilience. But we know that no one piece of land or company can tackle it all. So, we create tailored, vetted, science-backed programs with a proven end-to-end experience that considers both farmland operations and corporate partners' environmental goals. The result? A growing investment in regenerative agriculture that benefits farmers, businesses, and ecosystems.

To further advance these outcomes, ESMC is exploring the integration of biological and biostimulant inputs into our EcoHarvest program. These innovations ranging from microbial solutions, plant- and soil-focused stimulants, and enhanced rock weathering materials, have the potential to amplify regenerative practice benefits by enhancing soil health, improving nutrient efficiency, strengthening plant resilience, and accelerating measurable carbon, water, and biodiversity outcomes. By pairing practice-based change with product-based innovation, we can unlock larger, more verifiable impacts that deliver stronger returns for farmers, corporate partners, and the environment.

## Goals and Objectives

ESMC is issuing this request for information to invite proposals for the inclusion of biological products into the EcoHarvest program. ESMC acknowledges the benefits of biologicals and sees increasing demand from farmers to utilize these products. ESMC is actively working to deliver better return on investment (ROI) on carbon programs and ecosystem services outcomes (i.e. water quality and biodiversity improvements) to both program investors and farmers. ESMC seeks submission of information on products that will drive carbon benefits that can be quantified via any of the following:

### **Carbon & Greenhouse Gas (GHG) Benefits**

- Reduced GHG emissions during product manufacturing compared to conventional synthetic inputs.
- Reduced nitrous oxide emissions from soils through improved nutrient efficiency.
- Reduced emissions due to decreased reliance on synthetic fertilizers, pesticides, or other high-footprint inputs.



- Increased soil organic carbon (SOC) sequestration and storage through enhanced microbial activity, root growth, or soil aggregation.
- Increased rhizobia bacteria, endophytic fungi treatments, and mineral-based materials to drive SOC removals.
- Extended permanence of stored soil carbon due to improved soil stability and structure.

### **Water Quality & Water Use Efficiency**

- Reduced nutrient leaching (especially nitrogen and phosphorus) into waterways.
- Reduced risk of runoff of agricultural chemicals.
- Improved water retention and infiltration in soils.
- Increased water use efficiency (yield per unit of water).

### **Soil Health & Agronomic Benefits**

- Improved soil structure, aggregation, and porosity.
- Increased microbial diversity and activity in soils.
- Enhanced nutrient cycling and mineralization, reducing application needs for synthetic inputs.
- Greater resilience of soils to stressors such as drought or flooding.

### **Biodiversity Benefits**

- Increased below-ground biodiversity (microbial communities, fungi, etc.).
- Increased above-ground biodiversity (pollinators, beneficial insects, wildlife habitat).
- Reduced reliance on broad-spectrum synthetic pesticides/herbicides that harm non-target species.

### **Yield & Farmer Outcomes**

- Improved crop yields and/or yield stability across variable growing conditions.
- Improved crop quality (nutritional content, protein levels, etc.).
- Enhanced crop resilience to abiotic stress (drought, heat, salinity) and biotic stress (pests, disease).
- Reduced overall input costs for farmers (if products replace or reduce more expensive synthetic inputs).

### **Supply Chain & Market Benefits**

- Verified environmental outcomes that can be quantified and reported in supply chain sustainability frameworks.
- Potential for co-claiming benefits with downstream partners (corporates, food companies, retailers).





- Contribution to long-term farmer profitability and risk reduction, supporting supply chain resilience.

This RFI will allow ESMC to assess biological products based on relevance to EcoHarvest programs (crops and geographies), scientific rigor, distribution readiness, and cost effectiveness for farmers.

At the conclusion of the assessment, ESMC will create an approved list of products for use in the EcoHarvest program and establish a pathway for farmers to adopt the approved products. ESMC will continue to update this list as new research and products come to market that are a fit for EcoHarvest.

## Scope of Work

ESMC seeks information from input providers and companies on products that can be integrated into the EcoHarvest program to enhance environmental, agronomic, and supply chain outcomes. In addition to the product label, respondents will provide information addressing:

### **Product Description & Mode of Action**

- Product type (e.g., microbial inoculant, enzyme, plant extract, soil amendment, biostimulant, mineral based materials, etc.).
- Primary function(s) and mechanisms of action in agricultural systems.
- Scientific or agronomic evidence supporting claimed benefits.

### **Environmental & Agronomic Outcomes**

- Expected impacts on carbon sequestration, greenhouse gas reduction, water quality, soil health, biodiversity, and yield stability.

### **Adoption & Farmer Fit**

- Recommended use patterns (crops, regions, management systems).
- Cost, application method, compatibility with regenerative practices.
- Evidence of farmer adoption and perceived benefits/barriers.

### **Innovation & Collaboration Opportunities**

- New product development or pipeline opportunities (product lifecycle stage).
- Areas where collaboration with ESMC, farmers, or corporate partners could accelerate outcomes.



## Timeline

### Rolling applications

- For possible inclusion in Phase I: Submit by January 31, 2026
  - Expected to launch for 2027 Program year (program enrollment in Spring/Summer 2026, with planting in Fall 2026/Spring 2027)
  - Anything received after January 31, 2026 will be considered for Phase II

The Phase II application window will open June 1, 2026.



# Proposal Requirements

Please provide responses to sections 1 – 6 below in your response.

Optional Non-Disclosure Agreement: If you would prefer, ESMC can complete an NDA for any information submitted as part of the proposal documents; please review [ESMC's NDA](#) and contact us if you would like one by emailing [info@ecosystemservicesmarket.org](mailto:info@ecosystemservicesmarket.org) (subject line: Biologicals RFI NDA Request).

Submissions: Submissions should be emailed in PDF (with PDF as an attachment) to Matt Starr at [info@ecosystemservicesmarket.org](mailto:info@ecosystemservicesmarket.org). If you have any questions about this RFI, please submit them by email to Matt at the email address referenced above.

## 1. Background on Organization and Team

Respondents should provide a high-level introduction to their organization, including mission, history, and relevant experience in agricultural markets. Information on the leadership and technical teams, as well as the company's capacity to scale product use across diverse production systems, is appreciated.

ESMC is particularly interested in evidence of credibility and innovation, including collaborations with farmers, corporate partners, universities, or contract research organizations. Data generated through independent or third-party research is encouraged, as it strengthens the scientific basis for product performance claims and environmental outcomes.

## 2. Products for Review

What products are you submitting for review and assessment?

## 3. Scientific Efficacy and Life Cycle Analysis (LCA)

### Measurement & Verification Potential

- Available methods or evidence for quantifying environmental benefits (e.g., emissions reduction factors, soil carbon testing, water quality monitoring).
- Compatibility with existing measurement, reporting, and verification (MRV) systems.
- Opportunities to align with third-party protocols or standards.

### LCA for product(s)

- Emissions associated with production of the product(s) is required for any product that is being assessed



- Field Trails
  - Data from product(s) showing claims were realized in field trials
  - Geography in which field trial(s) was conducted
  - Size and duration of field trial(s)
  - Trial protocol(s)
- Treatment method for product(s)
  - Types
  - Seed Treatment
    - On Farm (Box treatment)
    - Commercial dealer where seed is purchased
    - Third-party treatment outside of dealer
  - In furrow or foliar applied

## 4. Distribution Network

### Key Geographies & Crops

Please indicate which crops your products are applicable for. Please indicate where you have distribution networks in these key geographies.

#### Corn & Soy (Midwest & Mississippi Basin)

- Iowa, Illinois, Indiana, Minnesota, Ohio, Nebraska, Missouri, South Dakota

#### Wheat (Great Plains & Northwest)

- Kansas, Oklahoma, North Dakota, Montana, Washington

#### Cotton (Southern Plains & Southeast – Cotton Belt)

- Texas, Arkansas, Mississippi, Georgia, North Carolina, South Carolina, Alabama, Kansas, Oklahoma, Tennessee, and Missouri.

### Retail Partnerships

- Do you have established relationships with ag retailers or cooperatives in EcoHarvest states?
- Do you have agronomists in key geographies that work with your product(s)?
- Do you provide in-field training, demos, or customer support for growers and agronomists?
- What is your general sales cycle and when are products available for purchase?

### Scaling Potential





- Is there active adoption/sales of your product where EcoHarvest operates?
- What is your capacity to expand distribution if demand increases in EcoHarvest supply sheds?
- Are there any constraints on manufacturing, storage, or transportation that could affect availability in key regions?
- Are your products licensed/registered in all the states where EcoHarvest operates?

## 5. Pricing

- Cost provided on a per acre basis for all products you are submitting for review
- Preferential pricing opportunities for farmers/EcoHarvest program
- Volume Tiers/Bulk Discounts
  - Are there price discounts based on acres, volume, or multi-year commitments?
  - Do you offer bundled pricing with other products or services (e.g., seed, fertilizer, biological packages)?
- Seasonality/Prepay Discounts
  - Are there early-order, pre-season, or prepay discounts that growers could leverage?
- Cost-Sharing/Incentives
  - Are you engaged in cost-share programs, sustainability incentives, or partnerships with retailers/NRCS/brands that reduce grower cost?
- Price Stability
  - What is your expected pricing outlook over the next 3–5 years, and do you anticipate volatility (supply chain, inputs, regulatory)?

## 6. Field Trial Support

If you are missing any key data points or geographies, ESMC is exploring conducting trials to help meet gaps for inclusion in the EcoHarvest program.

Are you interested in participating in a field trial?