

Update: Ecosystem Services Market

Growing resilience in our nation's soil

Noble Research Institute
July 31 2018



Agenda

- Introduction [Bill Buckner, CEO for Noble Research Institute]
- High level review of ESM status [Sean Penrith, Gordian Knot Strategies]
 - Working committees
 - Consultant teams (protocol, policy, economics, communications)
 - Timeline
- Protocol update [Debbie Reed, DRD Associates/C-AGG]
- Economic assessment update [Sean]
- Policy update [Bruce Knight, Strategic Conservation Solutions]
- Communications update [Adam Calaway, Communications Director for NRI]
- Farm Gate update [Chad Ellis, Industry Relations Manager for NRI]
- Closing remarks [Bill Buckner]
- Q&A

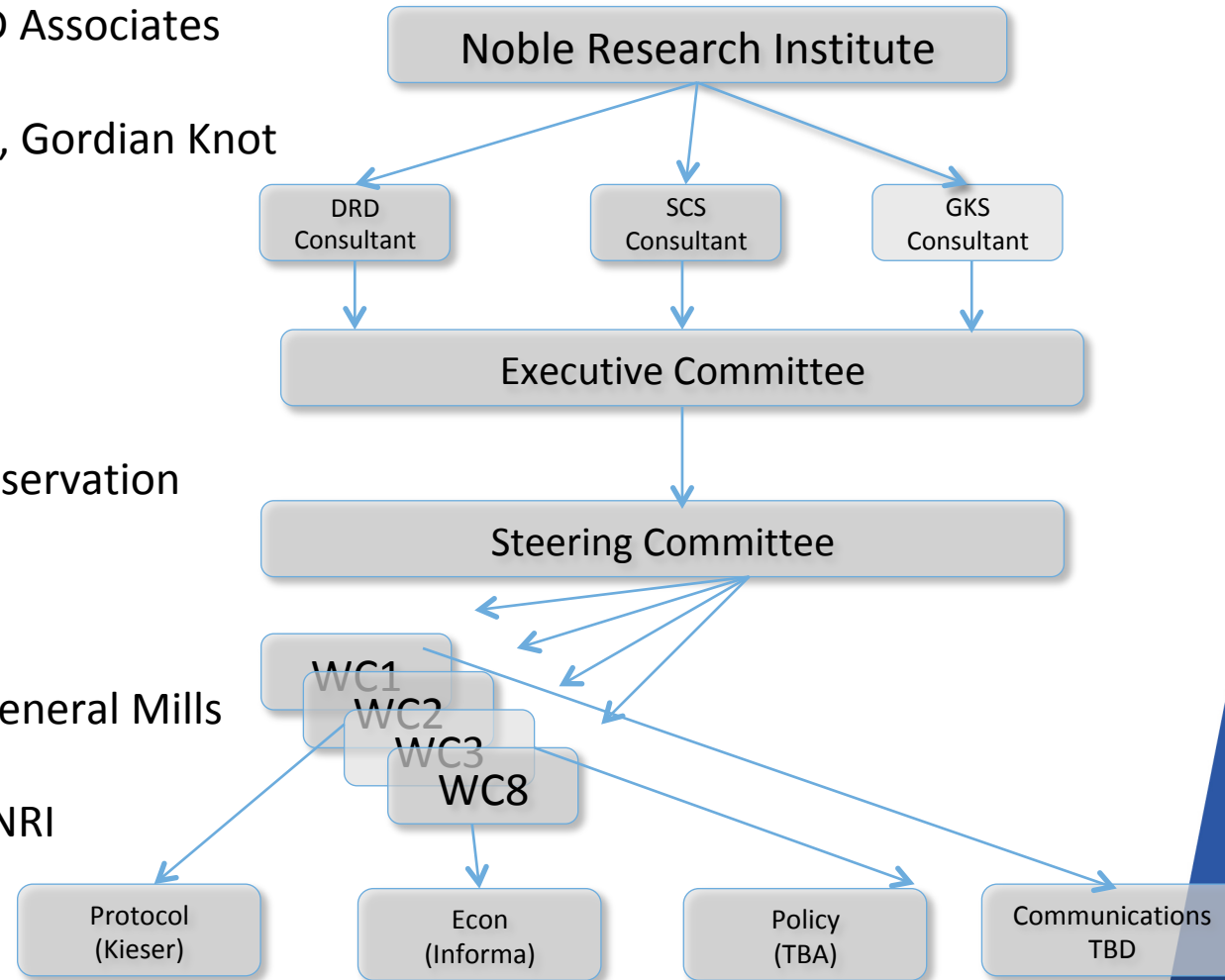
Introduction

MISSION

To advance ecosystem service markets that incentivize farmers and ranchers to improve soil health systems that benefit society

Review: Structure

- **Protocol development:** Debbie Reed, DRD Associates
- **Go-to-market strategy plan:** Sean Penrith, Gordian Knot Strategies (GKS)
- **Economic assessment:** Sean Penrith, GKS
- **Policy review:** Bruce Knight, Strategic Conservation Solutions(SCS)
- **Soil Health Club (demand):** Jerry Lynch, General Mills
- **Inside the farm gate (supply):** Chad Ellis, NRI
- **Communications:** Adam Calaway, NRI
- **Soil science:** Wayne Honeycutt, Soil Health Institute



Review: Structure, Steering Committee

Committee Structure

- Bill Buckner: Noble Research Institute
- Jimmy Emmons: Producer
- Steve Rowe: Newtrient
- Wayne Honeycutt: Soil Health Institute
- Bruce Knight: Strategic Conservation Solutions
- Jerry Lynch: General Mills
- Alex Echols: Ecosystems Services Exchange
- Tim Palmer: NACD
- Sean Penrith: Gordian Knot Strategies
- Gary Price: Producer
- Debbie Reed: DRD Associates/C-AGG
- **Working Committees:** Protocol development, Go-to-market strategy, Policy, Economic assessment, Inside the Farm Gate, Soil Health Club, & Communications

Steering Committee (SC)

The SC oversees all working committees and interacts with the teams that have been engaged to deliver the ESM conservation protocol, the ecosystem services economic assessment, and the state and national policy assessment.

Review: Timeline

Accelerating Soil Health & Resiliency



Protocol development update



Guiding statement of activity – Advance soil health by delivering positive impacts on carbon sequestration rates, water quality, and water quantity where the carbon metric is CO₂e (which includes fluxes of methane and nitrous oxide). Carbon is measured and modeled and N₂O and CH₄ are (measured and) modeled. Above ground natural systems will be counted in the system boundary. Water quality and water quantity metrics to be recommended by protocol development collaborative committee.

Protocol development update: Key dates & deadlines

- **June 25, 2018** - Protocol Development Contract awarded to Kieser & Associates Team
 - ***Deliverable:*** To develop a market-based protocol that specifies the requirements to quantify, monitor, report, verify and register for sale farm- and ranch-based ecosystem service credits (soil C, water quality, water quantity) based on soil health improvements on working lands.
- **July 25-27, 2018** - Kieser & Associates Team and NRI Protocol Team and Steering Committee members kick-off meeting in Ardmore, OK
- **August 2018** – Preliminary protocol field test plan delivered
- **September 2018** - Modular protocol components for credit quantification for Carbon, Water Quantity, Water Quality attributes delivered to NRI ESM

Protocol development: Key dates & deadlines

- **December 2018** - Completed draft NRI ESM Protocol delivered
- **January 2019-December 2019** – Pilot testing of NRI ESM Protocol on NRI Land Stewardship Program ranches and farms in Oklahoma and Texas
- **January 2019** – Protocol expansion and piloting in additional US geographies and agricultural production system begins
- **December 2019** – Completed final NRI ESM Protocol Delivered
- **January 2020** – Scientific peer review and public comment period for protocol begins
- **Date TBD** - Protocol expansion to include additional ecosystem service attributes begins

Protocol development: Key milestones achieved

- **June 25, 2018:** Protocol development contract award to Kieser & Associates, LLC (K&A) Team
 - ***K&A Core Team***
 - Kieser & Associates: water quality SME
 - Tetra Tech, Inc.: carbon, water quality, water quantity SME
 - WestWater Research: water quantity SME
 - ***K&A Strategic & Technical Advisers***
 - Troutman Sanders
 - Nyemaster Good
 - Environmental Policy Innovation Center
 - Terra Altus
 - ***DRD Associates LLC Team includes***
 - Debbie Reed of DRD Associates: ag carbon market, protocol SME
 - Rori Cowan of DRD Associates: carbon market protocol SME

Protocol development: Key milestones achieved

- **July 25-27, 2018:** Protocol development teams and SC members kick-off meeting in Ardmore, OK
 - Assessment and alignment of markets and tools for each of the 3 ecosystem service attributes (protocols, models, methodologies, markets)
 - Assessment and alignment of criteria for planning protocol expansion and pilot testing in additional US geographies and agricultural production systems
 - NRI Land Stewardship Program (LSP) site visits

Policy update: Briefings & coordination

- Policy leader briefings conducted with:
 - EPA
 - USDA
 - NGO's
 - Farm and commodity organizations
- Briefings will continue periodically as warranted

Policy update: RFP

- Policy RFP developed and issued to select # of firms
- Three proposals have been received
- Review panel ranked proposals
- Agreement with a contractor is in process
- Targeted start of work in September 2018
- Policy assessment and development will be ongoing and closely coordinated with protocol, economic and business plan needs.

Economic assessment update

- Agribusiness Intelligence | informa awarded the economic assessment contract
- Informa commenced their assessment mid-June & report submission is expected in Oct
- Informa's work is crucial in supporting scale, value proposition, and roll out
- Tasked to develop several prioritized economic assessments to inform total aggregated value of ecosystem services provided from privately owned, working agricultural lands.
- Privately held working lands are defined as agricultural production systems, to include commodity crops, specialty crops, tree/nut/stone fruit/vine orchards, range and pasture and silvopasture systems.
- Assessment is to inform both demand and supply potential for carbon, water quality, and water quantity impacts
- Assumed bulk of outreach & discovery with demand-side entities (Soil Health Club, etc.)
- Deliverable is an economic assessment roadmap that can guide the deployment scope for ESM program

Economic assessment update

- First draft of go-to-market plan to be reviewed by Steering Committee at Aug 27th meeting.
- To include integration of protocol, policy, economic analysis, farm gate, & communications into final version Oct 5th
- Purpose is to act as a blueprint for ESM program
- Reflect the challenge, solution, strategies & objectives, value proposition, market analysis, geography, supporting policies, competitive assessment, protocol & technical assistance, pilot plan, communications & branding strategy, organizational management & structure, financing & resource needs

ECOSYSTEM SERVICES MARKET PROGRAM



July 2018

Go-to-market business plan

This plan describes the role agriculture plays in mitigating climate change and the potential for farmers and ranchers in the USA to participate in a pay-for-success model that advances soil health with the support of the business and producer community. It recommends a financing mechanism, an outcome-based incentive structure, a protocol framework, segmented value propositions, proposed transaction flow, and the resources and structure of an organization that will oversee the effort post-pilot stage.

Prepared by Sean Penrith, Gordian Knot Strategies for Noble Research Institute. **CONFIDENTIAL**

Communications update

- Launched *Ecosystem Insights* monthly newsletter in June
- Distributed to ~200 key stakeholders
- ~ 48% open rate, 16% click-through rate

July 2018

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ESM UPDATE



Ecosystem Services Market Update

Since the [announcement](#) on Feb. 21 by the Noble Research Institute, which covered the creation of a new voluntary environmental services market, the steering and eight working committees that are guiding the effort have been industrious. The goal of the Ecosystem Services Market (ESM) initiative is to advance ecosystem service markets that incentivize farmers and ranchers to improve soil health systems that benefit society.

[More...](#)

PRODUCER FEATURE



Covered

Three generations have worked the 9,000 acres of southwestern Oklahoma farm and ranch land Jimmy Emmons' grandfather bought in 1926. About seven years ago, though, the yields for all his crops – sorghum, winter wheat, sunflowers and more – hit a wall. No matter what he tried, his output remained stubbornly flat. "It didn't matter if we put on more fertilizer or it rained more," he says. "We had reached a peak in production."

[More...](#)

MARKET SPOTLIGHT

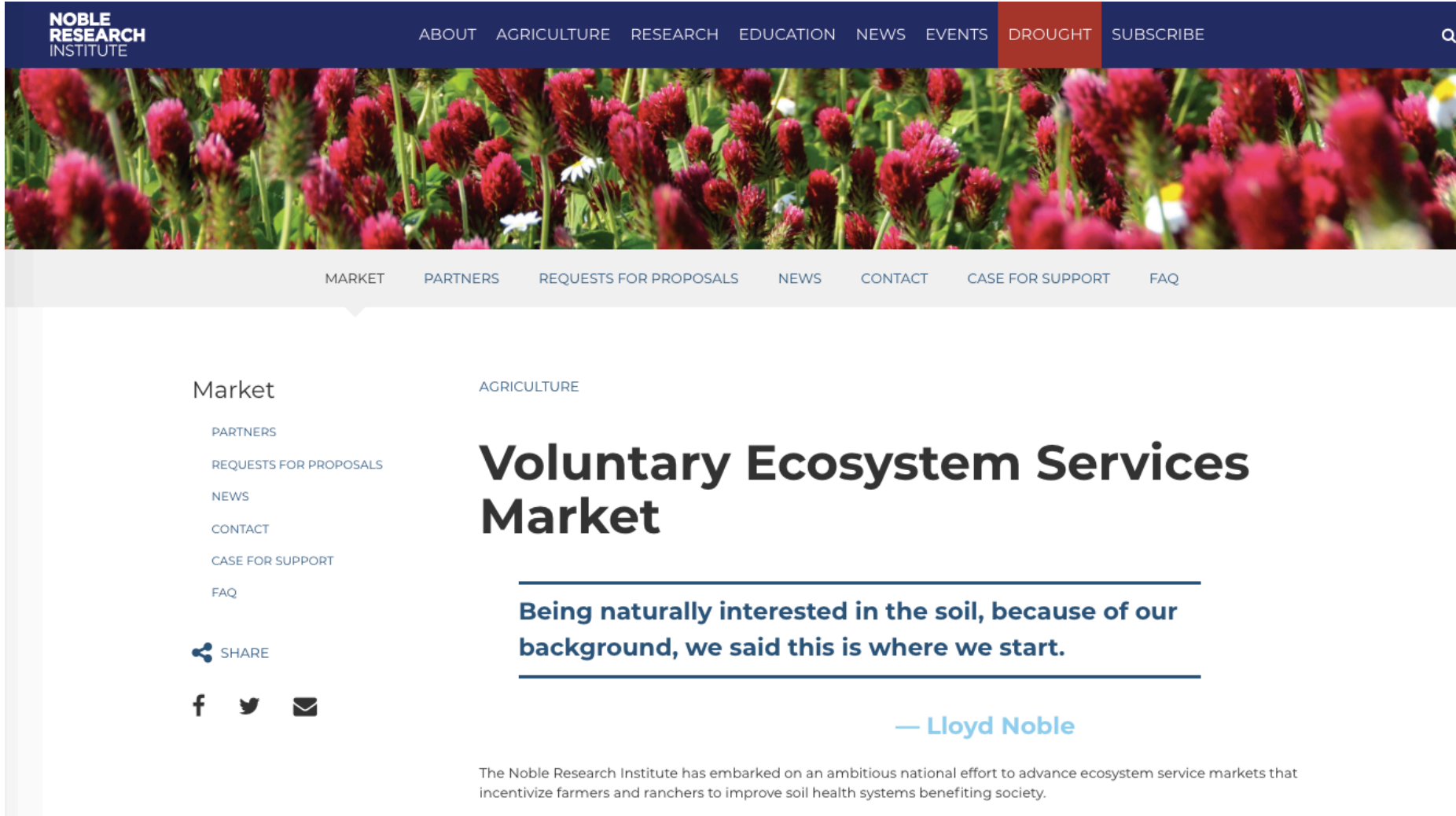


Seeding Soil's Potential: Building Soil Health

At Wrangler, our supply chain doesn't begin with fabric or cotton. It begins with the land itself. [More...](#)

Communications

- Developed ESM landing page



The screenshot shows the Noble Research Institute website. The top navigation bar includes links for ABOUT, AGRICULTURE, RESEARCH, EDUCATION, NEWS, EVENTS, DROUGHT (highlighted in red), and SUBSCRIBE. A search icon is located on the right. Below the navigation bar is a large image of red flowers. A secondary navigation bar contains links for MARKET, PARTNERS, REQUESTS FOR PROPOSALS, NEWS, CONTACT, CASE FOR SUPPORT, and FAQ. The main content area features a left sidebar with a 'Market' section containing links for PARTNERS, REQUESTS FOR PROPOSALS, NEWS, CONTACT, CASE FOR SUPPORT, and FAQ. Below these links are social media icons for Facebook, Twitter, and Email, and a 'SHARE' button. The main content area is titled 'AGRICULTURE' and features the heading 'Voluntary Ecosystem Services Market'. Below the heading is a quote: 'Being naturally interested in the soil, because of our background, we said this is where we start.' attributed to '— Lloyd Noble'. At the bottom, a paragraph states: 'The Noble Research Institute has embarked on an ambitious national effort to advance ecosystem service markets that incentivize farmers and ranchers to improve soil health systems benefiting society.'

NOBLE RESEARCH INSTITUTE

ABOUT AGRICULTURE RESEARCH EDUCATION NEWS EVENTS DROUGHT SUBSCRIBE

MARKET PARTNERS REQUESTS FOR PROPOSALS NEWS CONTACT CASE FOR SUPPORT FAQ

Market

PARTNERS

REQUESTS FOR PROPOSALS

NEWS

CONTACT

CASE FOR SUPPORT

FAQ

SHARE

f t e

AGRICULTURE

Voluntary Ecosystem Services Market

Being naturally interested in the soil, because of our background, we said this is where we start.

— Lloyd Noble

The Noble Research Institute has embarked on an ambitious national effort to advance ecosystem service markets that incentivize farmers and ranchers to improve soil health systems benefiting society.

Communications

- Released Communications agency-of-record RFP June 18th
- 5 proposals received by submission deadline July 20th
- Award estimated to be made Sept 17th
- Selected firm will be responsible for
 - 1. Segmentation & communications strategy development;
 - 2. Development & deployment of a comprehensive branding campaign
 - 3. Design & deliver outreach (producers, buyers, stakeholders) campaign

Communications

- Press releases announcements
 - Kieser & Associates (protocol)
 - Informa (economic assessment) TBA

Inside the Farm Gate update

Pilot

- Convening the first pilot ranches
- Working with Protocol Team
- Developing engagement plan, which includes appropriate decision support tools & methods for optimal producer engagement

Inside the farm gate update

Technology

- Convened a Technology Summit in June
- Created software specifications for the ESM platform following the summit
- Working with potential partners to evaluate the costs of implementation
- In process of defining the Land Ledger

Closing remarks



Q & A



Follow up queries can be sent on to: spenrith@gordianknotstrategies.com