

LAND CORE

Opportunities in policy and finance to
drive risk-mitigation in agriculture



Aria McLauchlan
Co-Founder & Executive Director
aria@landcore.org

October 2020

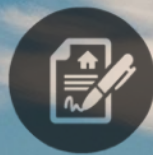
A scenic landscape at sunset. The sun is low on the horizon, casting a warm, golden glow over rolling hills. In the foreground, there is a field of large, green, textured leaves, possibly a vegetable field. The overall atmosphere is peaceful and natural.

Land Core is building the missing infrastructure and market-based incentives that will make the rapid adoption and scalability of soil health possible.

OUR WORK



POLICY



LAND LEASES



RISK



EDUCATION





POLICY IS POWERFUL

- American agriculture is heavily informed by government policy and subsidies
- “Farm Bill”, passed every 5 years, over seen by Agriculture Committee
- Other committees
- United States Department of Agriculture (USDA)
- Key agencies: NRCS, ARS, AMS, FSA, RMA

MAKE PUBLIC INFRASTRUCTURE WORK FOR US



CONSERVATION PROGRAMS

Conservation programs providing technical and financial assistance to producers:

- Environmental Quality Incentives Program (EQIP)
- Conservation Stewardship Program (CSP)
- Conservation Reserve Program (CRP)
- Regional Conservation Partnership Program (RCPP)
- CIG: On-Farm Innovation Trials
- CIG: Soil Health Demonstration Trials



CONSERVATION BILLS

- S.2452 - Climate Stewardship Act of 2019
- H.R.5861 - Agriculture Resilience Act

INFRASTRUCTURE

- S.3429 - Farmer Driven Conservation Outcomes Act of 2020
- S. 3479 - Cover Crop Flexibility Act of 2020
- H.R.6023 - COMPOST Act

INNOVATIVE INCENTIVES

- "45T" carbon sequestration tax credit
- H.R.8057 - Healthy Soil, Resilient Farmers Act of 2020
- S.3894 - Growing Climate Solutions Act of 2020



KEY INITIATIVE

Specific policy considerations for 2020 include:

- "Outcomes-Verified Soil Health Program" legislation
- Soil health testing & lab calibration infrastructure



LAND CORE POLICY RECS

Specific policy considerations for 2020 and beyond:

- [Land Core Policy Objectives](#)
- [Land Core's Congressional Bill Tracker](#)
- [Land Core Policy Recommendations](#)
- Go to www.landcore.org/programs#policy-section

RISK MITIGATION

*quantifying the risk-mitigating impact of
soil health practices to scale and de-risk adoption*



There is broad scientific consensus that soil health practices mitigate risk in agriculture, yet the institutions that price risk, such as lenders and insurers, do not yet incorporate soil health practices into their risk pricing.



WHY?

Lenders and insurers lack effective, actuarially-sound models to determine the risk-mitigation benefits associated with specific soil health practices on any given piece of land.

lenders and insurers have a lot on the line

\$271.9 billion was extended in agricultural loans in 2018 ¹

Federally subsidized crop insurance costs taxpayers over \$9 billion annually ^{2 3}

SCALING REGENERATIVE AGRICULTURE

DE-RISK SOIL HEALTH PRACTICE ADOPTION BY DE-RISKING FINANCE

If lenders and insurers have the empirical data to value soil, then healthy soil *is* valuable and can be incentivized

Products & offerings such as reduced-rate loans, larger loans, more flexible terms and lower crop insurance rates will de-risk a farmer's upfront investment in new practices

Economic incentives from finance and insurance don't have the social stigma of government and NGOs, which will help overcome cultural barriers to behavior change



HOW?

Build a predictive, actuarially-sound modeling tool

- Model the risk-mitigating benefits of specific soil health practices
- Use remote sensing & biophysical data on cover cropping, tillage, rotational diversity & other practices
- Use those data to inform a statistical, economic model that predicts outcomes such as yield variability and recovery time
- Assign a “risk score” for a farm or ranch based on existing conditions and future management plans
- Pilot + rollout at regional scale, beginning in the U.S. Midwest
- Design to be a web-based, fee-for-use, pragmatic decision-making tool for lenders and insurers

INNOVATIVE FINANCING



rePlant





OPPORTUNITY

1. Invite new stakeholders to the table: lenders, insurers and investors
2. Embrace risk mitigation as a way to address economic prosperity, food security and environmental resilience
3. Use the data and learnings from risk mitigation work to make crucial policy changes to federal crop insurance and public lending

Contact:

Aria McLauchlan
aria@landcore.org
www.landcore.org