## TRU TERRA

## **Truterra<sup>™</sup> Insights Engine**

Better Protecting the Planet By Saving Farmers Money

Designed by a farmer-owned cooperative, for farmers, the Truterra<sup>™</sup> Insights Engine by Land O'Lakes SUSTAIN is a first-of-its-kind, interactive on-farm stewardship digital platform that will help farmers advance their goals for stewardship and financial return-on-investment in real time while offering companies expanded metrics that help them achieve sustainability goals.

As a farmer-owned cooperative, Land O'Lakes understands that farmers need to balance the long-term success of their farm business with protecting natural resources. Farmers know that factors like erosion and runoff are not only bad for the environment, they also lose a farm money and can jeopardize the long-term health of a farm business.

## Profit Insights

Through the Profit Insights capability, the Truterra Insights Engine takes a unique approach to natural resource stewardship by starting the conversation focused on a farm field's profitability, giving farmers an acre-level understanding of where they're making money in a field and where they're losing money. More often than not, where the field is unprofitable is also where the field is experiencing unsustainable soil erosion and nutrient losses.

The Profit Insights capability offers farmers and ag retailers the information they need to create customized solutions and make informed decisions about field and crop management opportunities to enhance their return-oninvestment (ROI) and stewardship. Profit Insights helps farmers model how adopting new or expanded conservation practices can help a farm save money while also improving soil health, reducing runoff and other positive environmental outcomes.



Profit Insights Current Field Information Grower Name Refe Crymes Field Name South Field Field Name South Field Field Size 12-17 ares Current Crop Com		t Practices	Selected Comparison Somaric: Enhanced Nitrogen Practices			
Crop Year 2018	Profit Performance Est	timate	Profit Performance Estimate			
Select Comparison Scenario:	Acres Yield O	124.7 170.5 butter	Acres Yield ©	124.7 170.5 but		
Enhanced Nitrogen Practices     Improved Residue Cover	Profit o	-6.13 Stat	Profit o	-7.77 Size		
Strip Tillage Interseeded Winter Cover Post Harvest Winter Cover	Total Profit O ROI O	-877.87 -0.8	Total Profit © ROI ©	-1,112.88 5 -1.0 %		
<ul> <li>Contour Conservation Management </li> </ul>	Stewardship Performa	Stewardship Performance Estimate		Stewardship Performance Estimate		
Terrace Conservation Management      Profit Focused Conservation Cover	Insights Score ©	18	Insights Score 🌣	74		
<ul> <li>Build custom practice o</li> </ul>	Soil Erosion O	27.7 🔿	Soil Erosion ©	0.7 🏟		
	Soil Quality o	- <b>^</b> * so	Soil Quality 💿	- <b>(</b> )* so		
	Emissions 👳	<mark>16</mark> .6 ≈	Emissions o	-1.5		
			CSP - Cover Crop	s Conservation Service Programs		

\$49

\$23

Truterra™ Insights EngineTRUTERRAProfit Insights Report									
Prepared For Pete Cryme	es Farm Behin	d Joe's	Retailer Greenpoin	t Ag					
Enhanced Nitrogen Practices			Potential Revenue Opportunities USDA Natural Resources Conservation Service Programs						
	Field Name South Field Current Crop Corn Crop Year 2018		CSP - Cov Code 340 EQIP - Co Code	Low \$7 ver Crop Low	High \$14 High	ac			
Profit Performane	ce		340	\$23	\$49	ac			
Acres Yield Profit Total Profit ROI	124.7 170.5 -7.77 -1,112.88 -1.0	bu/ac S/ac S	Commen	ts					
Stewardship Performance									
Insights Score	74								
Soil Erosion	0.7	•							
Soil Quality	-	+ SCI							
Emissions	-1.5	<b>A</b>							



## Through its Profits Insights capability, the Truterra Insights Engine:

Offers eight different pre-built "bundles" of stewardship practices so that farmers can compare to the activities currently in place on their fields. Farmers also have the option of selecting individual practices to understand their economic and environmental impacts.

Compares the impacts the bundles of stewardship practices have across multiple factors, including economic indicators such as per-acre and field-level profitability and ROI, as well as key stewardship outcomes including:

- The Insights Score a quantitative benchmarking of a field's stewardship activities.
- Soil Erosion total estimated erosion measured in 20ton dump trucks.
- Soil Quality Trend estimated trend of soil organic matter and soil carbon.
- **GHG emissions –** total estimated net CO2-equivalent emissions measured in number of cars.

Generates a profit heat map that reveals where a field is profitable – or not – based on the mix of agronomic and conservation practices. The heat map helps farmers to identify where and how they can adopt practices designed to improve a field's ROI and sustainability.

Identifies financial assistance opportunities for sharing the cost of conservation practices available through the U.S. Department of Agriculture's Natural Resources Conservation Service.

The Truterra Insights Engine creates a framework for continuous improvement by focusing on a field's profitability and empowering farmers and their trusted advisors with options for improving both a farm's ROI and stewardship.

Visit www.TruterraInsights.com for more information on how to access the tool.

