

# Indigo US Project No. 1

5th Reporting Period

Results Through Harvest 2024





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### What is a Reporting Period (RP)?

Each year, Indigo conducts data collection and quantification on the carbon project and then hires an independent verifier to carry out an audit. New credits are issued following each audit. The period of time being verified is the reporting period. This report describes both the cumulative progress to date, as well as the specific impacts during the most recent reporting period.



# Project Overview



**2M+ credits**

verified tonnes of CO2e removed or abated across 5 reporting periods



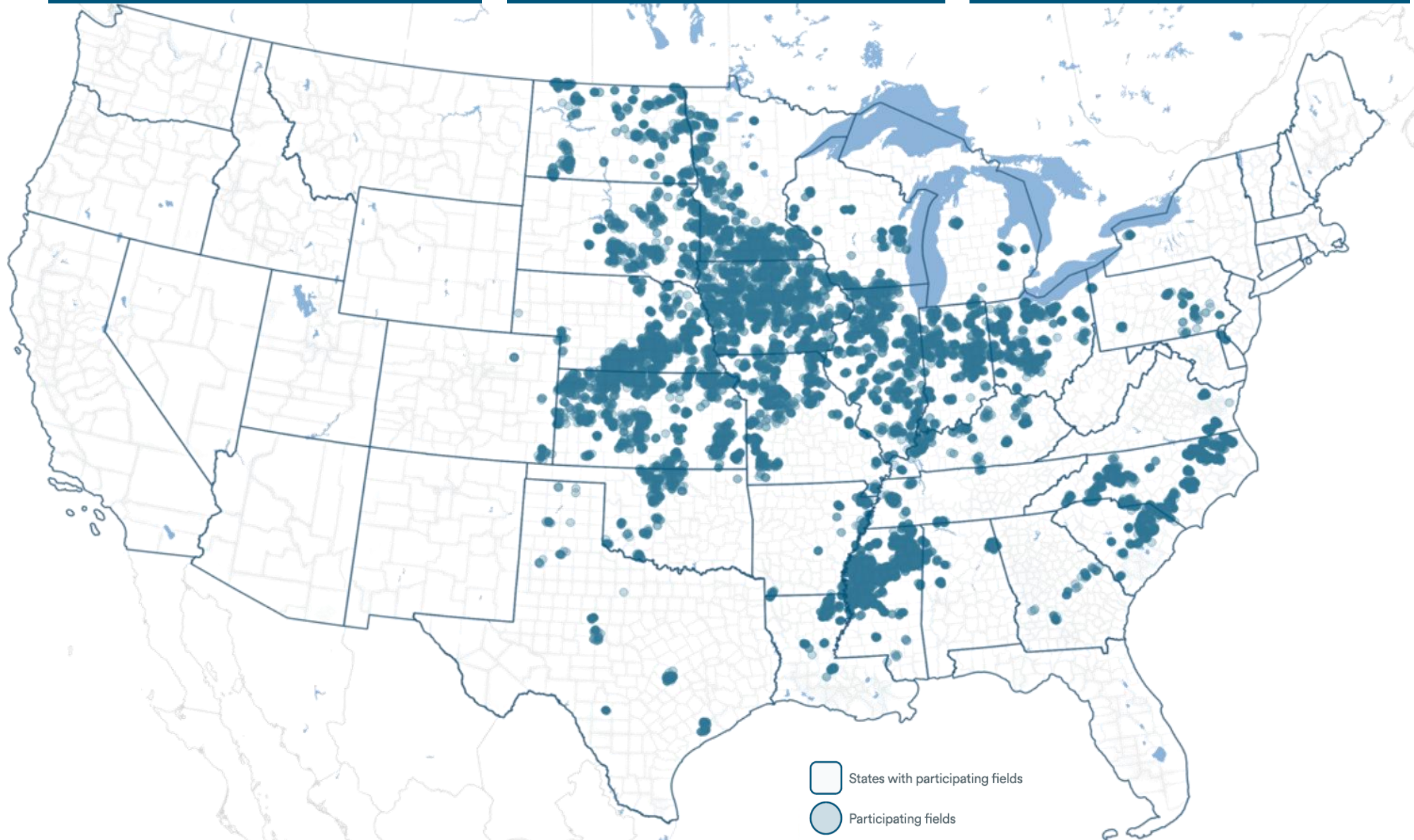
**1,423 farmers**

participating in the most recent issuance



**8M acres**

enrolled across 28 states (enrollment is open to all lower 48 states).



States with participating fields  
Participating fields

<b>Project Name</b>	<b>Indigo US Project No. 1</b>
Developer	Indigo Carbon PBC
Country	United States
Registry	Climate Action Reserve
Project Type	Agricultural land management
Credit Type	Soil carbon removals and reductions; GHG reductions
Methodology	Soil Enrichment Protocol v1.1 (CCP-Approved)
Registry ID	CAR1459
Crediting period start (project)	March 2018
Crediting period end (field)	10 years from field start date; renewable twice
Durability	At least 100 years from credit issuance
Quantification methods	CAR SEP v.1.1, Section 5; Monitoring Plan, Section 5
BeZero Carbon Rating	BBB
Sylvera Rating	pBBB
MSCI Rating	A



## Project Overview

Indigo US project No 1 is rooted in the concept that farmers can sequester carbon back into their soils and abate greenhouse gas emissions through regenerative farming practices – and should be rewarded for doing so.

Under this project, farmers must implement one or more new land management practice changes that reduce emissions and/or enhance soil organic carbon storage.

Indigo began engaging with farmers about the climate benefits of changing management practices in 2018 and publicly launched Carbon by Indigo in 2019. Since the project’s start, farmers participating in the program have sequestered or abated the equivalent of more than two million metric tones of carbon dioxide equivalent.

We take a science-first approach and believe that farmers, the environment, and Indigo will only achieve real benefits through adherence to the highest standards of integrity and quality. Learn more about our project in the following pages of this report.

## Project Overview

### Why Transition to Regenerative Agriculture Practices

Regenerative agriculture helps address climate change by restoring soil health and sequestering carbon from the atmosphere.

Practices like cover cropping, reduced tillage, and crop rotation can lower emissions, improve soil health and water retention, support biodiversity, and importantly, strengthen long-term farm productivity.



Plant or improve cover crops



Reduce tillage



Add a crop to the rotation



Optimize nitrogen application

## Regenerative Agriculture in Practice



**Figure 1.** Cover-cropped field (left) compared to bare soil (right). Continuous ground cover helps protect soil, retain moisture, and support carbon sequestration.



**Figure 2.** Soil from two adjacent fields: conventional (left) and regenerative (right). The regenerative soil is darker, indicating higher carbon content.

## Project Overview

### Barriers to the Transition

Even when they recognize the environmental and economic advantages, many farmers face challenges making the transition to regenerative ag.

Transitioning practices may require upfront costs for new equipment, seeds, and management changes. Changes in management practices can introduce both real and perceived risks, which can slow adoption.

While financial barriers can be relevant to the adoption of new sustainability management practices, social and cultural forces are often the primary barriers within U.S. farming communities.

### How Indigo Empowers Farmers to Make the Transition

Indigo's Carbon Program helps farmers overcome these barriers to not only make the transition accessible but also rewarding.

- **Direct financial incentives:** Farmers receive a majority of carbon credit revenue when they participate in the project, creating a new income stream tied to practice changes.
- **Agronomic education and support:** Expert guidance from a broad network of agricultural partners help farmers implement and scale regenerative practices effectively
- **Digital tools and technology:** Software simplifies field enrollment, streamlines data management, and generates carbon outcome projections for farmers.
- **Performance feedback:** Data-driven insights help farmers maximize environmental benefits.



# Project Co-Benefits

Practices adopted under Indigo US Project No. 1 that supports climate change resiliency, biodiversity, and water stewardship at a larger scale. Some of these include improvements to soil health, water and nutrient availability, crop productivity and yield, habitat and species biodiversity, and resilience to extreme weather events.

The program also generates meaningful economic benefits, with a majority share of carbon credit revenue returned directly to farmers, creating a new income stream tied to practice changes. This additional revenue supports farm profitability and brings new capital into rural communities.

## Alignment with UN Sustainable Development Goals



## Thoughtful Community Engagement

Indigo Field Day. Indigo partners with organizations such as the Indian Land Tenure Foundation and National Indian Carbon Coalition to support historically underserved Indigenous farmers while promoting regenerative practices. Through field days, advisory boards, and ongoing engagement with Tribal Nations, we provide education, resources, and feedback channels to ensure programs meet farmers' needs. These collaborations expand access to new revenue streams and strengthen long-term prosperity for communities that have been historically underserved.

## Project Co-Benefits

### Reduction in Surface Water Runoff

Indigo farmers reduce surface water runoff primarily by planting cover crops and reducing or eliminating tillage. This can have both water quality and quantity benefits:

- Enhanced groundwater recharge and flood mitigation
- Lower sediment and nutrient runoff, which improves water quality
- Enhanced stream baseflow, which benefits aquatic wildlife during low flow and/or warm weather conditions
- Improved soil moisture retention making crops more drought resilient
- Reduced soil erosion and transport of sediment, chemicals, and nutrients to water bodies

*Water impact is calculated using the USDA NRCS Curve Number Method (as recommended in the World Resources Institute's Volumetric Water Benefit Accounting)*



**141+ billion gallons**

of surface water runoff reduced by  
CAR1459 across the first 5 credit issuances



## Farmer Spotlight

Julia Strnad, Strnad Land & Cattle



### Scaling Regenerative Ag and Boosting Revenue

Julia Strnad has been farming in Wellington, Kansas since 1998 with her husband and children. By working Indigo, Strnad has been able to access new revenue for her farm. Starting out in the program in the first, her earnings have allowed her to invest in expanding her operation's land. She grows a host of crops including double cropping wheat and beans, cotton, sorghum, and oats.

On her operation she does reduced tillage and runs a cattle operation, letting her cattle graze for several months a year. She then sells beef, focused on making sure it's naturally raised.

Diversification of revenue stream has given Strnad the confidence and flexibility to grow her operation. The financial freedom it allows lets her build back into her farm.

### Scaling Regenerative Ag and Boosting Revenue

Strnad's two children have returned to the farm to work with their parents to build out the legacy of the farm for the future. As she says, "It is interesting seeing the new ideas getting along with the old... But so far it is working well." The continuation of the legacy and help from the next generation has allowed Strnad to monetize her farm in other ways, including building a wedding venue. She works with her local community to bring

business to the economy through selling meat to local stores, hosting weddings, and running the day-to-day operation.

As Strnad looks forward, she sees a future where she builds out her relationship with Indigo and plans to enroll more acres of the land she's expanding her farm on into the Carbon program.



"I've been in the carbon program for four seasons, and with the earnings I expect this year, we're able to invest in expanding our land. Carbon gives us the confidence and financial flexibility to grow for the future. And with our future land expansion we plan to enroll more acres with our favorite, beloved, dear Indigo."

*Julia Strnad*  
**Strnad Land & Cattle**

# Farmer Experience

## Eligibility Check

Indigo's program is open to farmers who...



### New Practice Adoption

Fields must be enrolled into a carbon project before the harvest of the cash crop associated with the practice change in order to be credited.

### Regulatory Surplus

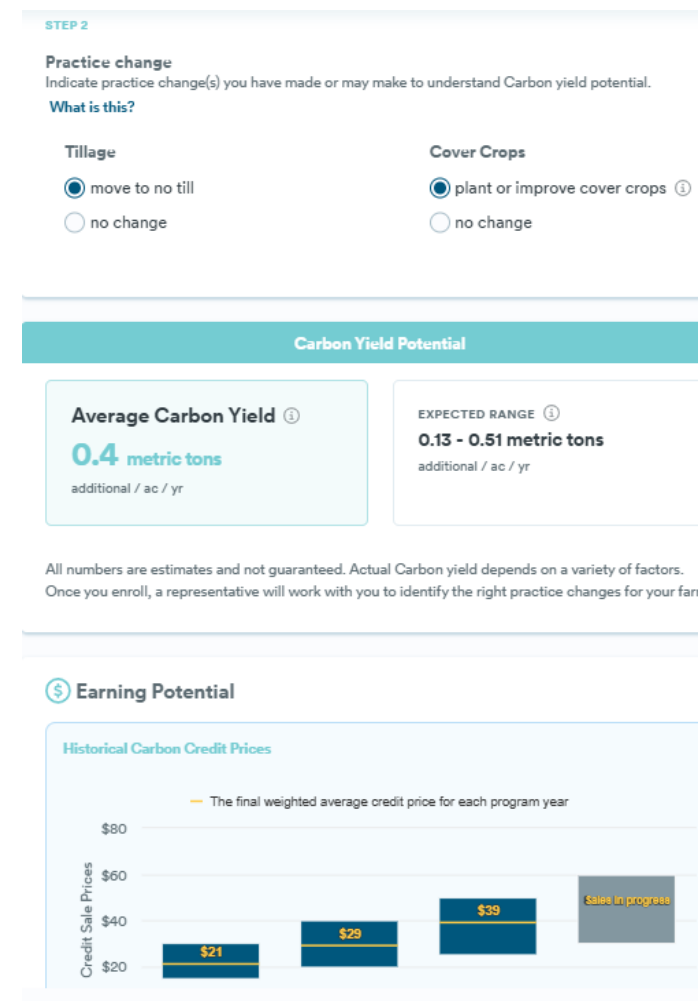
Credited practices must not be required by any law, statute, or other legally-binding mandate

### Common Practice Assessment

Individual practice changes are not additional on their own if they are adopted by >50% of acres in the county (based on USDA NASS data).

## Adopt

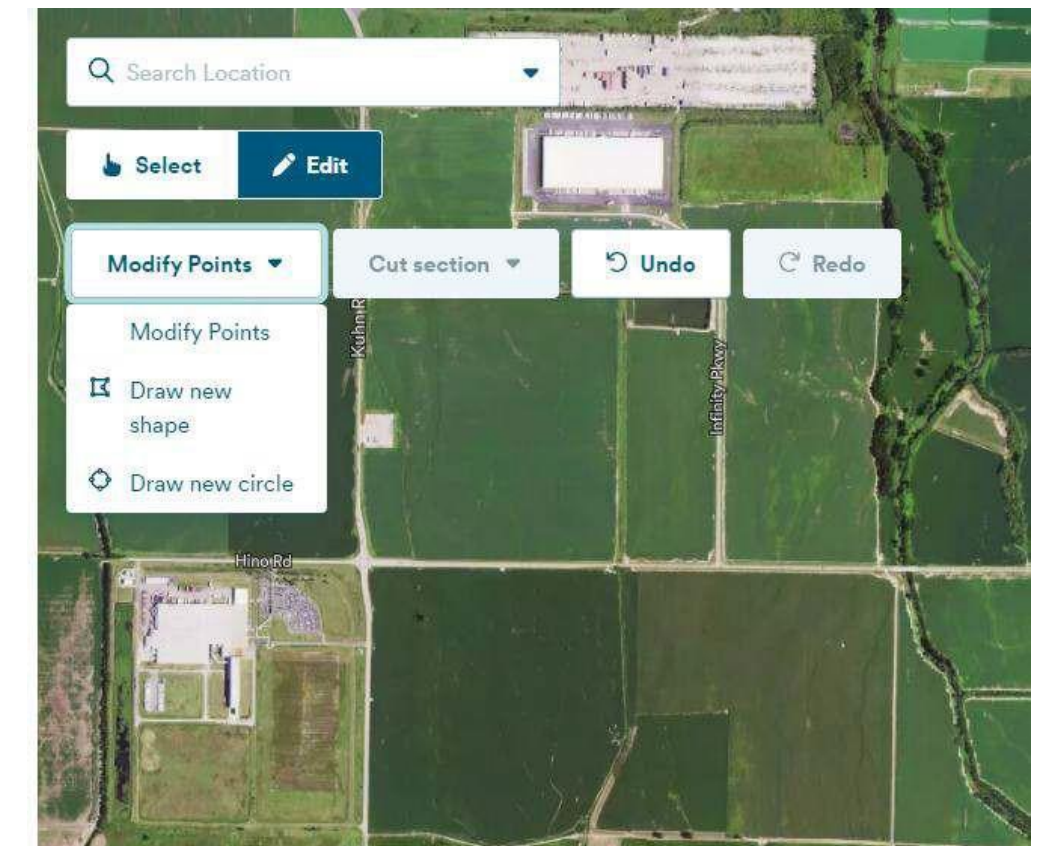
Farmers must adopt a new practice like no-till or cover cropping.



Among other tools and resources, Indigo provides a sophisticated Carbon Calculator (based on actual data and model runs) to help farmers understand their earnings potential before enrolling.

## Enroll

Farmers and partners use Indigo's software to enroll. This involves identifying field boundaries (see below) and signing a 5-year renewable contract.



Indigo software pre-assigns field boundaries that growers can edit when enrolling fields into the program.

After enrollment, farmers are involved in the data collection process (see page 15). And eventually, farmers are paid on a vesting schedule for the outcomes they create.

## Total Project Summary

Reporting Period	Vintages (Primary)	Farmers	Fields	Acres	Credits	Registry Buffer Pool	Soil Enrichment Protocol Version	DayCent-CR Model Version
RP1	2019, 2020	175	1,184	100,371	22,225	3,291	V1.1	1.0
RP2	2020, 2021	427	5,083	423,740	111,389	18,678	V1.1	1.0.2
RP3	2021, 2022	972	15,766	1,289,360	163,048	26,875	V1.1	1.0.2
RP4	2022, 2023	1,086	20,248	1,517,893	630,634	91,574	V1.1	1.1.0
RP5	2023, 2024	1,423	37,437	2,463,691	1,187,163	154,487	V1.1	1.1.0

**2,113,863**

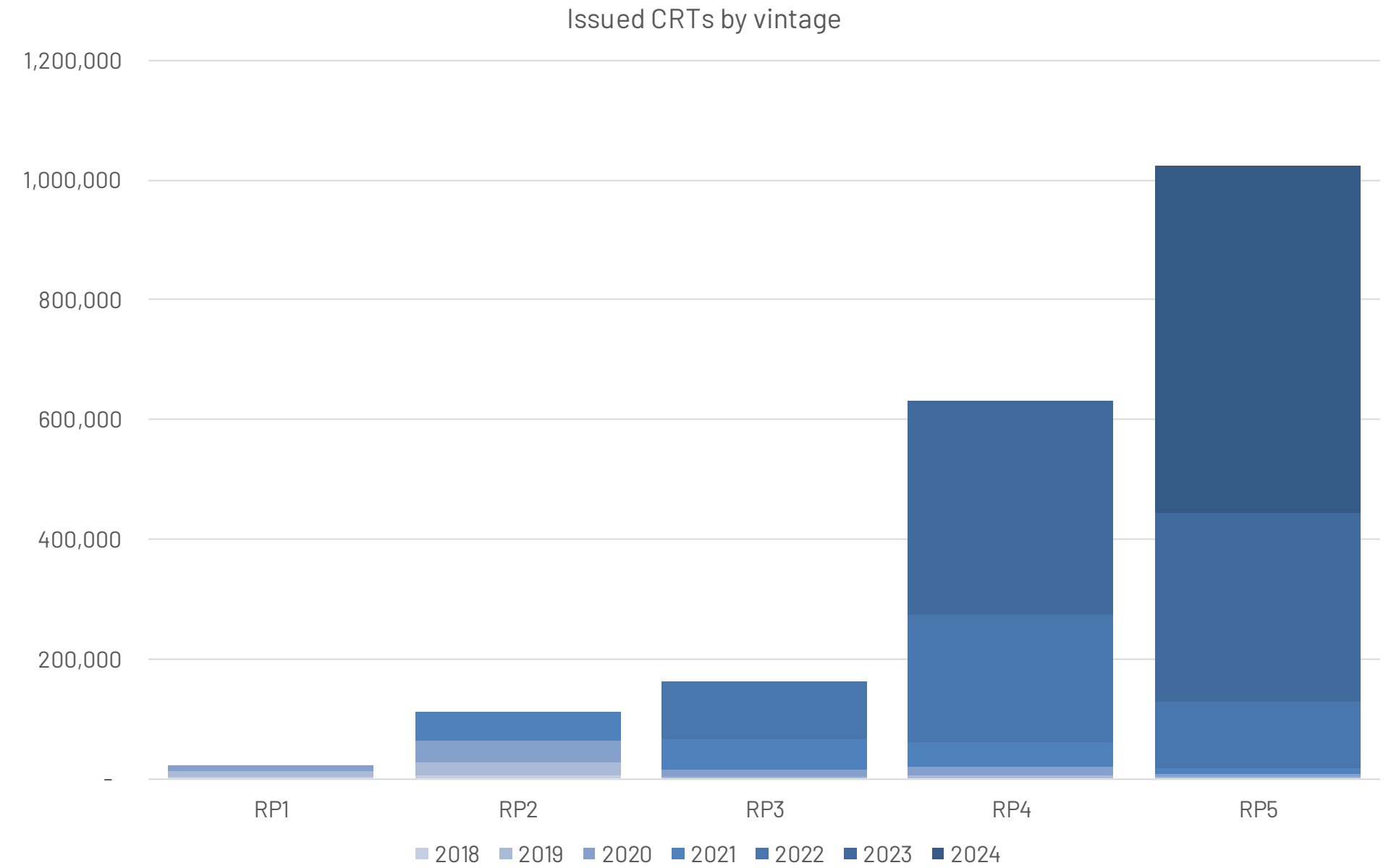
# Understanding Vintages within Credit Issuances

## What is the vintage year?

Credits are assigned a vintage year based on when the climate impact occurs. Under the CAR SEP, cultivation cycles that span multiple calendar years must be divided accordingly. For example, if 100 credits are generated on a field during a cultivation cycle from November 1, 2024 to October 31, 2025, a portion is assigned to 2024 and the remainder to 2025 based on the time in each year (e.g., 16 credits to 2024 and 84 credits to 2025).

## Why would an issuance have more than two vintages?

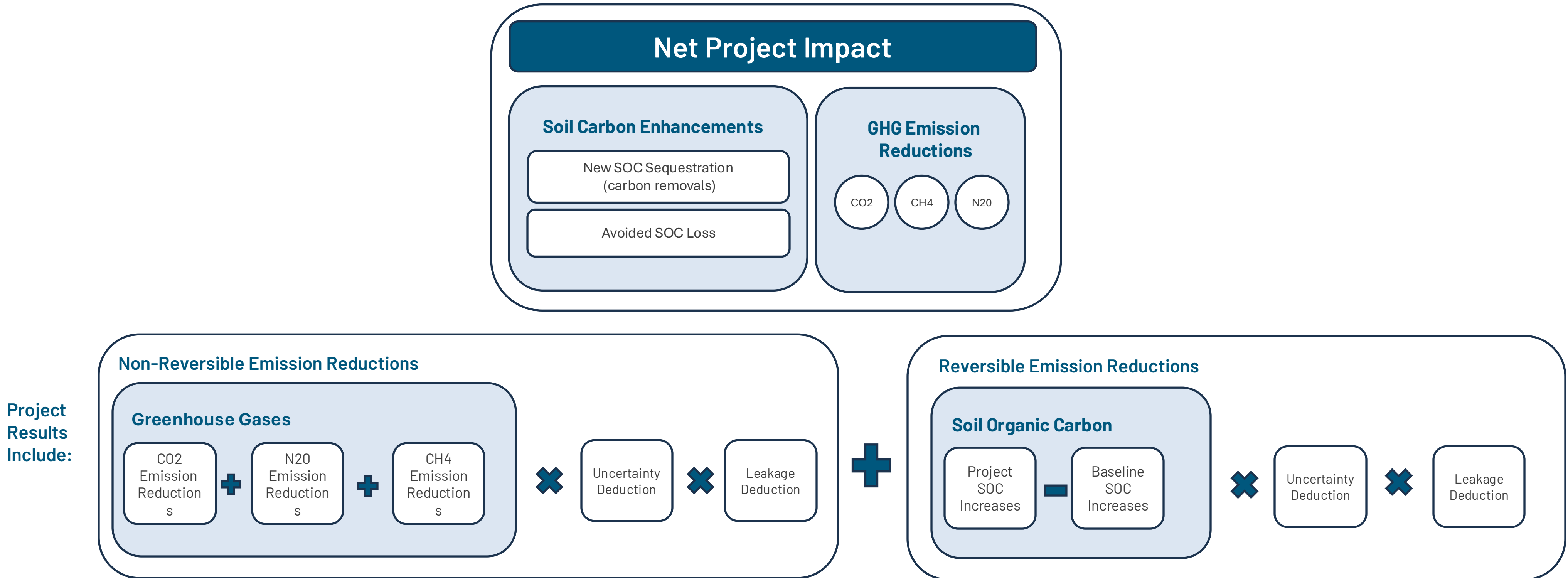
An issuance may include more than two vintages when fields are verified across multiple cultivation cycles that span additional calendar years. To elaborate, fields are only included in the verification if they submit complete data for the cultivating cycle. For example, a farmer may have enrolled multiple fields and be missing some data for a few of them, which are then left out of the verification. We will work with that farmer to get complete data during the following verification, meaning those fields will include two full cultivation cycles that span three vintage years. There have also been cases where fields were enrolled with a new practice change on crops for which the model was not validated (e.g., cotton in RP1). Those fields were later included following an updated model validation that expanded the domain.



**Vintages versus calendar years**  
Due to the time required for measurement, reporting, and verification, the most recent vintage in an issuance is typically one to two years before the current calendar year.

# Understanding Impact within Credit Issuances

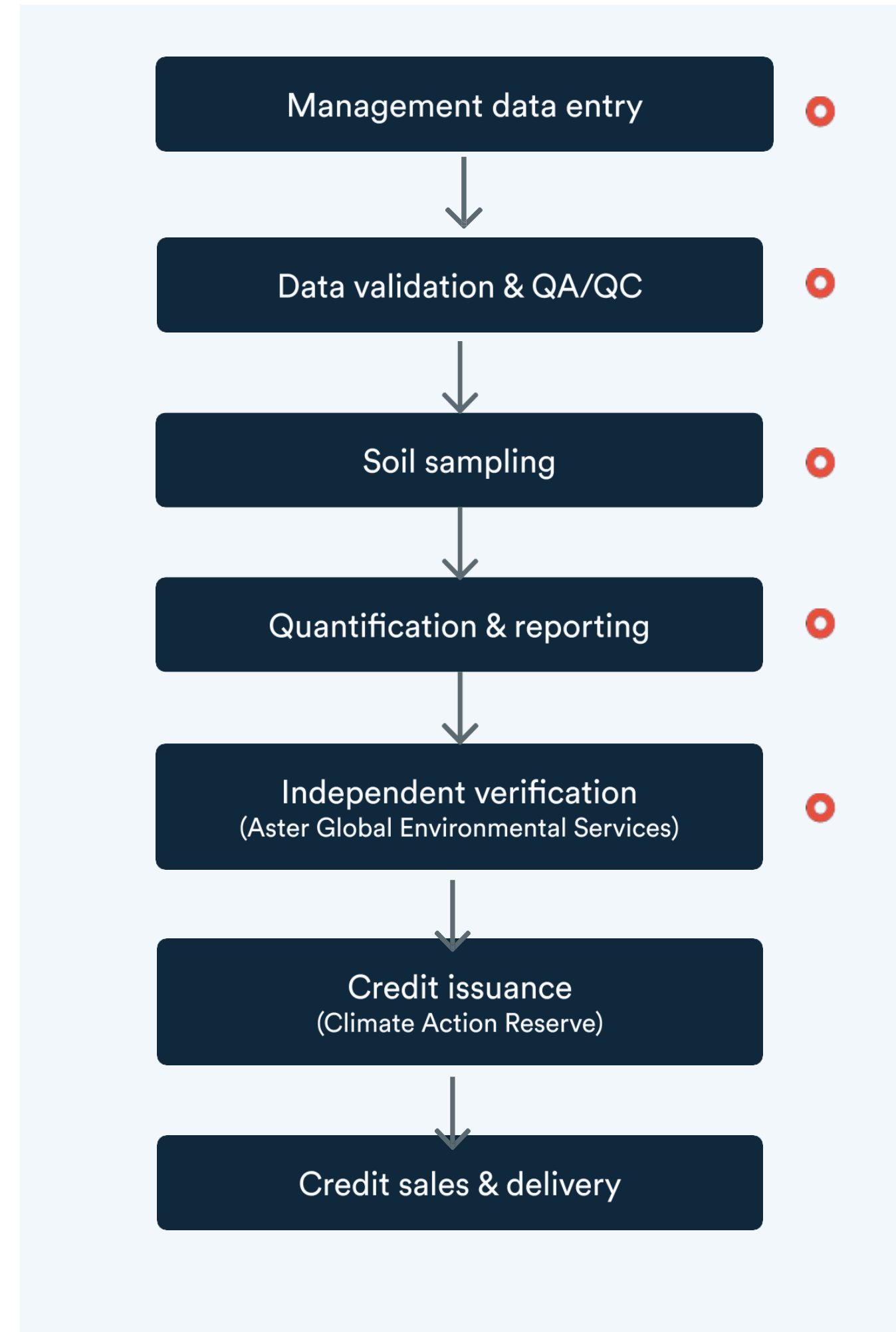
**US Project No. 1** incentivizes a broad range of agriculture management activities, all of which are necessary for climate mitigation and farm resilience. Thus, the project can generate three different types of carbon credits from one basket of project activities.



## MRV: Overview

### Monitoring, Reporting and Verification (MRV)

Indigo quantifies project impact via a hybrid sample and model approach. We built a sophisticated, software-based MRV pipeline that incorporates rigorous science and proven technology to deliver accurate, scalable, and auditable results.



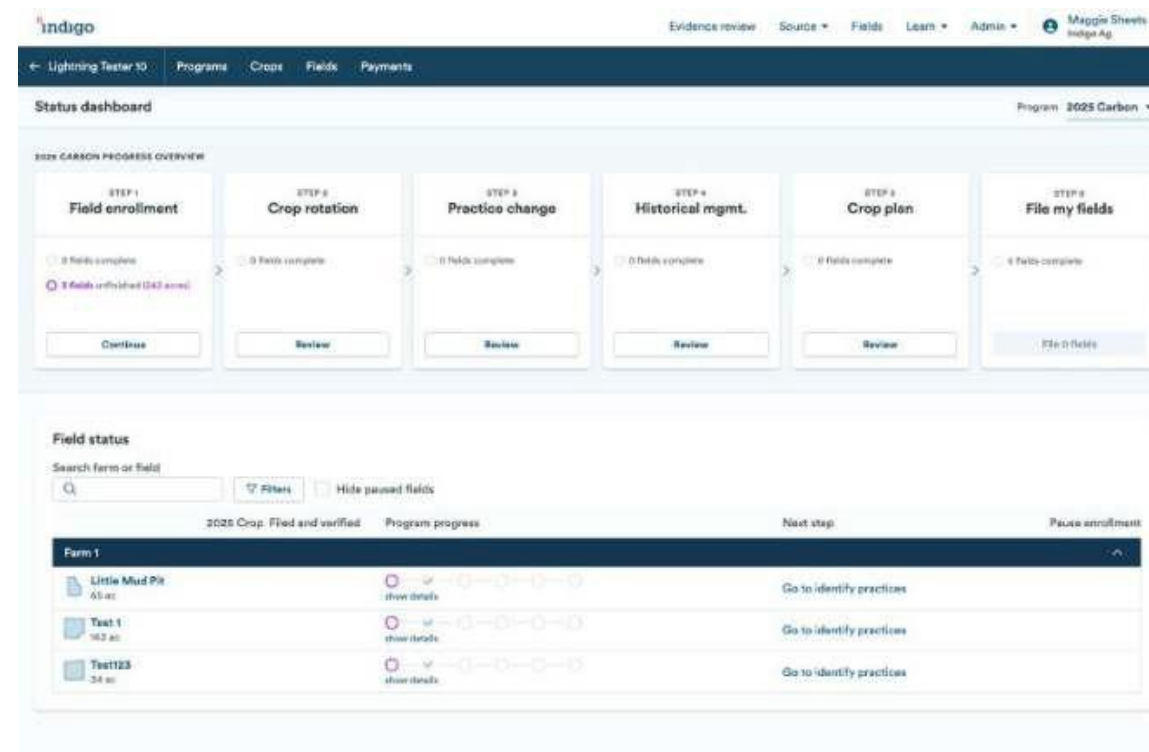
“When I first signed up in 2020, it was too hard. I wanted to participate, but it took too much time, and I didn't know what I'd earn. This year, it took 90 minutes to enter my form information from 2020-2024 plus four-years of historic look back, and I got a real estimate based on years of data. Why wouldn't farmers do this?”

**Matthew Rebenitsch**  
Farmer, North Dakota



## Management Data Collection & Validation

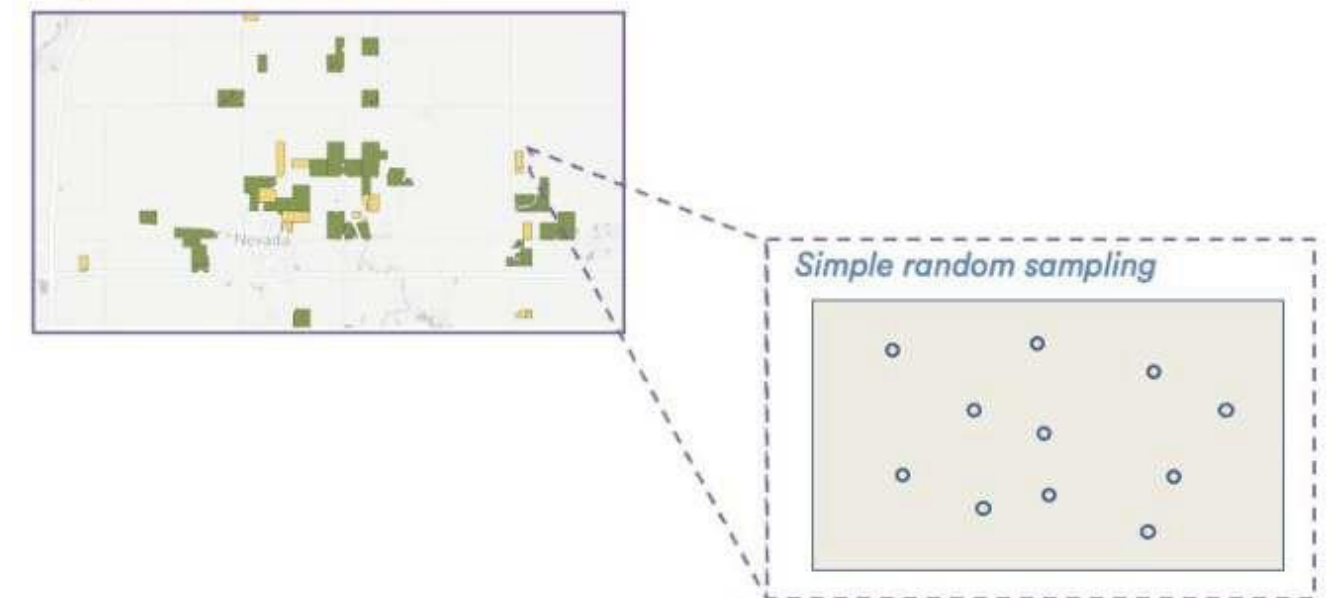
- Management data are collected from every field in the project using a self-service data entry platform.
- Indigo’s approach to the collection and validation of field records follow a crop plan format, where a “crop container” is used for all relevant management activities in support of a given crop (i.e. between the previous harvest and crop plan harvest).
- Indigo’s software automatically validates data, assessing growing data for both agronomic reasonableness as well as other logic to detect errors.



## Soil Sampling

- Indigo captures soil data directly by collecting samples from random points within a stratified random sample of fields.
- Samples are sent to NAPT-accredited labs for analysis via dry combustion. Labs conduct QA/QC to ensure accuracy.
- Soil sample data are translated into model-ready inputs and run through models for quant

A grower's enrolled fields



# MRV: Quantification and Reporting



## Quantification

All management and soil data are translated into model-ready inputs and run through our models. Model results are combined with default equations to quantify baselines and changes made as a result of the project. Credits are based on the difference between soil carbon flux in the project and baseline scenarios.

### Baselines

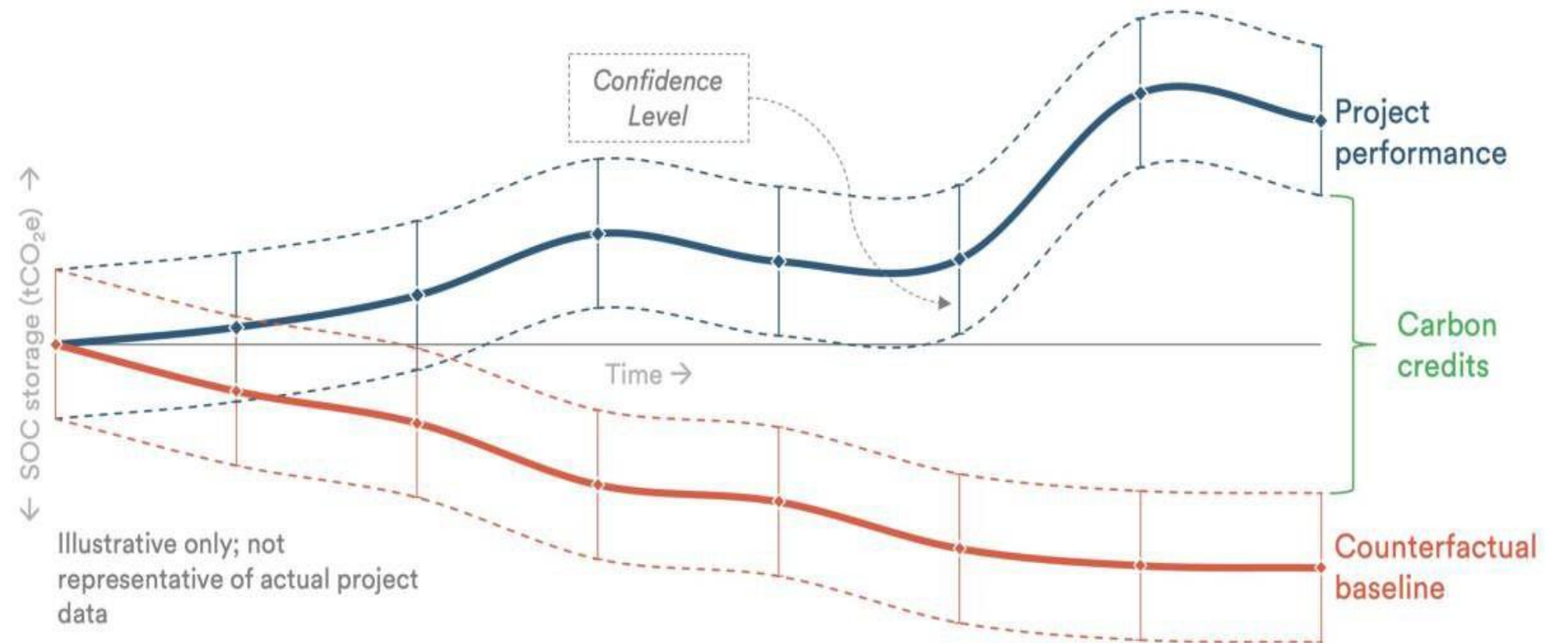
- Indigo collects 3-5 years of historical management data on every field to establish the counterfactual "business as usual" management scenario.
- The counterfactual baseline is modeled every year using actual weather data to avoid the possibility of over-or-under crediting.

### Biogeochemical Modeling

- Indigo uses the DayCent-CR biogeochemical model to quantify SOC flux and direct N<sub>2</sub>O emissions. The model is used in hundreds of peer-reviewed publications.
- We have calibrated and validated the model in accordance with SEP requirements three times. Each validation report must be reviewed by an independent expert and approved by the Reserve.

### Default Equations

- For sources and gases outside of the validated model domain, the SEP provides conservative default equations derived from other Reserve protocols and the IPCC Guidelines for National Greenhouse Gas Inventories.
- These equations are used to quantify CO<sub>2</sub> from fossil fuels, indirect N<sub>2</sub>O emissions, and CH<sub>4</sub> emissions



## Spotlight On: Aggregation, Leakage, and Uncertainty

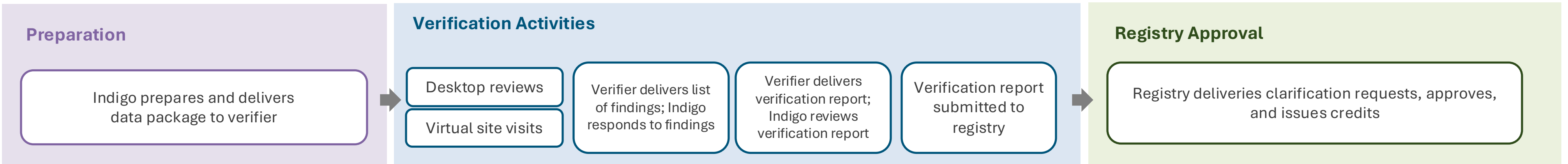
<b>Aggregation</b>	<b>Leakage</b>	<b>Uncertainty</b>
<ul style="list-style-type: none"> <li>Farmers and fields are aggregated into a single project to create statistical power, reduce uncertainty and risk for individual farmers.</li> <li>Field and sample point-level data are also aggregated into strata and then the project level.</li> <li>Permanence is monitored and tracked at the field level, but the risk is pooled across the project.</li> </ul>	<ul style="list-style-type: none"> <li>We monitor and account for potential emissions leakage related to the displacement of livestock from the project area, as well as declines in crop yields.</li> <li>Thus far, our growers have not experienced any long-term yield declines.</li> </ul>	<ul style="list-style-type: none"> <li>We account and report on uncertainty caused by sample, measurement, and model prediction error.</li> <li>Indigo credits are calculated from the 30th percentile of the probability distribution, meaning we are 70% confident that we are under-issuing credits.</li> </ul>

# MRV: Independent Verification

## Independent Verification

Credits are only issued after successful, independent verification by a registry-approved verification body.

For its 5<sup>th</sup> reporting period, Indigo contracted **Aster Global Environmental Solutions** for independent verification of CAR1459. Aster Global has deep expertise with agricultural carbon; they are ANAB-accredited against ISO standards and approved by Climate Action Reserve.



## Data and Documentation

- Aster Global conducts a desk review of important documents: Project Monitoring Plan and Monitoring Report, a full list of fields and growers, field-level data and results, project-level results, and supporting documentation such as maps from site visits and desktop reviews.
- Aster Global then selects a risk-based random sample of Field Managers and conducts virtual site visits. This involves an interview with the grower and visits to fields.
- Aster Global also conducts a live assessment of the soil sampling procedure.



# Volumetric Water Benefit Accounting (VWBA)

Indigo follows the World Resources Institute's [Volumetric Water Benefit Accounting \(VWBA 2.0\) guidance](#), which provides a consistent framework for companies and practitioners to credibly quantify volumetric water benefits across different geographies and water stewardship activities. In its carbon projects, Indigo quantifies volumetric water benefits using the Curve Number method, an approach aligned with the guidance.

## The Curve Number Method

### Program Field Data

- Verified grower land management data
- Soil and weather data from public data sources (SSURGO, and NLDAS-2 Daily Precipitation)

### The Curve Number Method

The CN model estimates event-based or daily surface runoff depth as a nonlinear function of precipitation (P) and watershed storage capacity (S). It captures:

- Runoff depth generated after surface storage and infiltration demands are met
- Relative differences in runoff response across soils and land uses
- Landscape sensitivity to precipitation inputs

Higher Curve Numbers indicate lower infiltration capacity and higher runoff potential; lower values indicate greater infiltration and storage.

### Tile Drainage Adjustment

The CN model represents surface runoff generation and does not explicitly simulate subsurface tile drainage. To remain consistent with model scope and assumptions, runoff benefits associated with tile-drained portions of a management zone are removed from CN-based runoff estimates. Field portions identified as having tile drainage\* are removed from modeling.

\*Tile drainage spatial data is from USDANASS, compiled in a peer-reviewed Nature article (Valayamkunnath et al., 2020\*).

### Counterfactual Program Fields Results

Indigo quantifies field-scale surface water runoff for both the program year and the field counterfactual, defined as the field prior to the additional management practice. By subtracting the program year value from the counterfactual value, Indigo generates an amount of surface water runoff reduced through implementation of the practice.

# MRV: Permanence

CAR1459 credits are durable for **at least 100 years** following each issuance.

## Permanence Risks, Monitoring and Mitigation

Natural disasters such as floods or extreme drought, and management risks such as changing land tenure, introducing new management, or land development can cause reversals.

Indigo deploys several strategies to reduce risk:

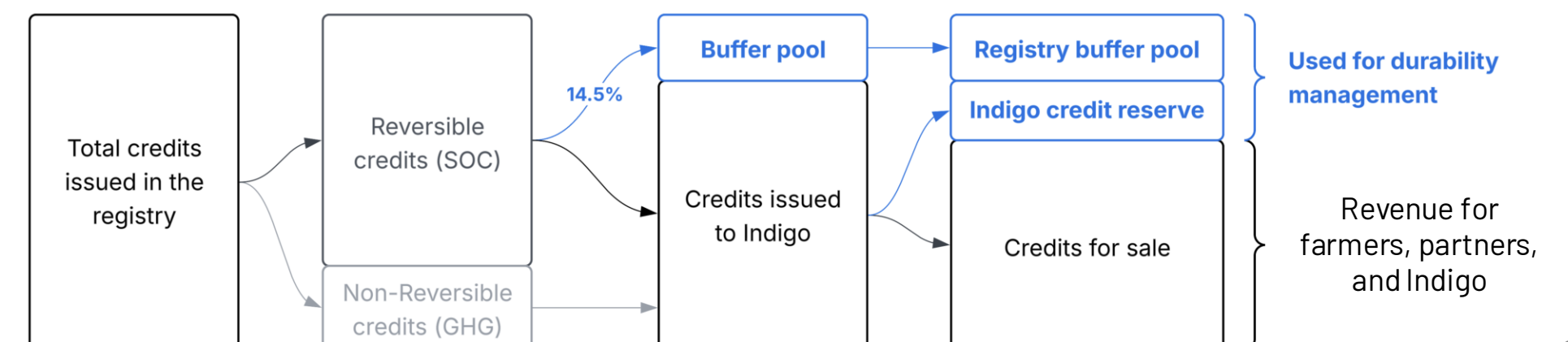
- We manage permanence in aggregate across the entire pool of growers and fields to reduce the risk that a single natural disaster or management change could impact the entire project.
- Grower payments are vested over multiple years to provide an incentive for farmers to stay in the program. We are exploring additional farmer engagement strategies to reduce reversal risk.
- Fields are monitored remotely after their crediting period to assess management and/or land changes that could cause loss of credited, stored soil carbon.
- At present, the area of detected potential reversal is conservatively assumed to experience a total reversal.

## Compensation for Reversals

The Climate Action Reserve maintains a shared buffer pool of credits from all project types with reversal risk. Indigo contributes a percentage of credits from each issuance into this pool. "Unavoidable" reversals such as natural disasters are compensated from the Climate Action Reserve buffer pool.

For "avoidable reversals," such as those caused by land use or land management changes that may release stored carbon, Indigo deducts those impacts from our next credit issuance. We also maintain a reserved pool of credits that grows over time. This serves as a backstop against the risk of significant reversal events as well as reversals that may occur after the project term has concluded.

Together, this structure ensures there is no liability for carbon buyers. The non-permanence risk rating for CAR1459 is 14.5%.



# High Integrity Crediting

## At Indigo, credits meet highest standards

CAR1459 and the associated credits meet the highest standards for scientific rigor, credit quality, and integrity.

### Peer Reviewed Publications

- Journal of Environmental Management (2024)
- Geoderma (2023)
- Soil Security (2023)
- Frontiers in Climate (2021)



## CCP-Label Approved

- Integrity Council for the Voluntary Carbon Market’s approved the U.S. Soil Enrichment Protocol v1.1 for its Core Carbon Principles label.
- Credits from Indigo US Project No. 1 are labelled as “CCP-Approved”

## Independent Project Verification

- Credits only issued after successful ex post verification to ISO standards by an accredited third-party verification body
- CAR1459 has been verified by Aster Global Environmental Solutions



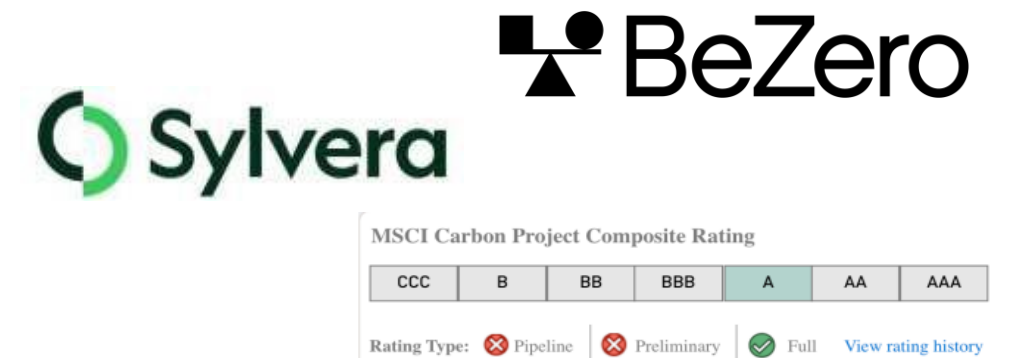
## Independent Model Review

- 3 successful reviews by independent modeling experts



## Independent Carbon Ratings

- BBB rating from BeZero
- Provisional BBB rating from Sylvera
- A rating from MSCI



## Climate Action Reserve

- Nonprofit founded by the State of California
- Approved by the ICVCA
- Approved by CORSIA
- Approved by California ARB
- Endorsed by ICROA



## Data Privacy & Security

- Certified by Ag Data Transparent



## Credit Sales

### Trusted by Leading Companies

Carbon by Indigo continues to be trusted by leading companies across fashion, finance, technology, and consumer goods – who are accelerating agriculture's role as a scalable climate solution.

Microsoft

Barclays

Blue Bottle Coffee

The North Face

Honda

Shopify

JP Morgan Chase & Co

Butcherbox

Block

Watershed

BCG

Maple Leaf Food

Dogfish Head

*"Indigo was Watershed's first regenerative agriculture partner, a category designated by the IPCC as a key potential technology for emissions reduction. The decarbonization projects available to customers are vetted by our Science Advisory Board, ensuring buyer confidence while enabling high-impact climate action."*

Amberlyn Saw

**Carbon Products Lead, Watershed**

*"Soil organic carbon restoration is vital to the future of food systems, economies and climate change mitigation. We are pleased to collaborate with Indigo to advance both the adoption of regenerative agriculture practices and the soil organic carbon scientific evidence base."*

Brian Marrs

**Senior Director of Energy and Carbon Removal, Microsoft**

*"At Block, we're committed to reducing our carbon footprint and aligning our operations with meaningful sustainability efforts. Indigo was our first regenerative agriculture partner – an excellent inclusion to use our portfolio of high-integrity carbon solutions. Their deep commitment to supporting local farming communities and advancing water integrity solutions truly sets them apart. By reinvesting in the agricultural system and establishing lower carbon agricultural practices for more farmers, Indigo is helping to build a circular, resilient model that will drive lasting environmental impact."*

Neil Jorgenson

**Global Head of Stewardship, Block**

# Get In Touch

Check out our website



Buy credits



Explore CAR1459 documents



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## Carbon Project Disclosures

### Disclosures

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