

INNOVATIVE FINANCING TO HELP RESTORE SOIL HEALTH: IROQUOIS VALLEY'S SOIL RESTORATION NOTES



United States Department of Agriculture
Natural Resources Conservation Service



PROJECT SUMMARY

Between 2016 and 2020, Iroquois Valley developed three separate offerings of the “Soil Restoration Notes” (SRN’s). SRN’s are an innovative conservation financing tool that provides investors a return and enables farmers to invest in the land. These notes specifically target support for soil health and the organic transition. This work was partially funded by a Natural Resources Conservation Service (NRCS) Conservation Innovation Grant.

The SRN instrument is unique because it facilitates a more direct way to share risk between private investors, a farmland operating entity, and farmers. For investments that range from 3-5 years, investors receive a fixed income return. Iroquois Valley uses this private financing in lieu of commercial lending to make farmland purchases and provide secure land tenure through long term leases and mortgages to organic farmers. As investors accrue interest, Iroquois Valley also pays an additional 0.5% into a Soil Restoration Pool (SRP). The SRP is disbursed on a semi-annual basis directly to farmers for soil building projects, support through the transition to organic production and/or reduction of lease/mortgage payments. These funds are deployed to farmers at no cost as reimbursable grants.

THE ORGANIC TRANSITION

Transitioning to organic farming practices can be a 3 year challenge in both cash flow and soil restoration.

During this transition, farmers incur many of the additional equipment, labor, and soil building costs associated with organic farming without the benefit of selling their crops at organic prices.



Iroquois Valley pays 2.75% per year on the Soil Restoration Notes

2.25%
goes directly to investors

0.5%
goes directly to farmers

As reimbursement for cover crop seed, fencing for rotational grazing, costs associated with the organic transition, and other soil building work

WHAT IS A ‘NOTE’?

An unsecured promissory agreement purchased by investors - the investor loans the company the principal, the company pays a fixed rate of interest on the note. The capital is used to offer land access to farmers through innovative leases and mortgages.

PAYING FARMERS THROUGH THE SOIL RESTORATION POOL

Building soil health is ongoing work for organic farmers. The Soil Restoration Notes are specifically designed to help with this transition time. As investors earn interest, Iroquois Valley also pays one-half percent (0.5%) into the Pool.

Because farmers have different needs, funds allocated from the soil restoration pool may go toward soil amendments, cover crop seed cost reimbursement, fencing assistance to integrate livestock, and/or reimbursement for rental expense or mortgage interest.

KEY STATS FROM THE THREE SRN OFFERINGS

- Engaged over 130 private investors to provide over \$8,500,000 of private capital.
- Iroquois Valley used this financing to provide long term, secure land leases and mortgages to 25 farmers across 5,000 acres working to restore our soils, clean our water, and reduce the impacts of climate change through organic agriculture.
- Over \$50,000 was provided directly to farmers for soil building work through the Soil Restoration Pool.

THE IMPACT OF THE SOIL RESTORATION NOTES

SUMMARY OF THE SRN OFFERINGS

Note Offering	Offering Amount	Number of Investors	Minimum	Total Amount Invested
Soil Restoration Notes 1.0 launched 2017	\$5 million	31	\$25,000	\$2,150,000
Soil Restoration Notes 2.0 launched 2018	\$5 million	51	\$30,000	\$6,100,000
Soil Restoration Notes 3.0 launched 2020*	\$10 million	41	\$50,000	\$3,764,999.99 as of August 15, 2020
Total	\$20 million	123	---	\$20,265,000.99

*The 2020 offering launched in March 2020 and remains open to investors at the time of the report. Iroquois Valley anticipates closing that offering at the time it is filled.

IMPACT OF THE SRN'S

SOIL RESTORATION POOL DISBURSEMENTS TO FARMERS



2018

- 5 farmers funded who were transitioning to organic
- Represents projects covering 976 acres

2019

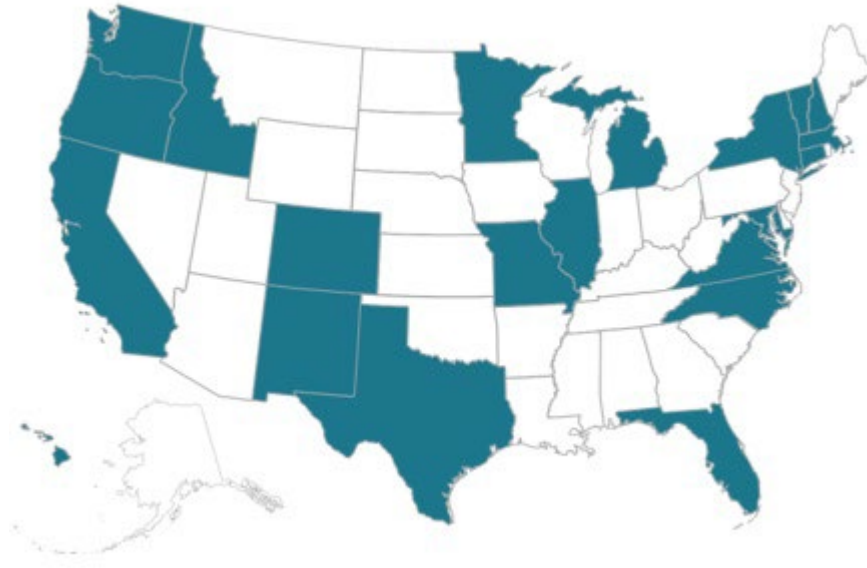
- 7 farmers funded who were transitioning to organic
- Represents projects covering 2,000 acres

2020

- Soil Restoration Pool program launch, providing funds to both transitioning and organic farmers for all soil-building and conservation projects
- Farmers apply for funds directly to Iroquois Valley twice Annually
- 15 farmers funded

THE SOIL RESTORATION NOTE INVESTORS

- Average investment is approximately \$100,000. Investments range from \$25,000 to \$1.5MM.
- Individuals, trusts, family offices, foundations, non-profits & donor advised funds all participated.
- Many financial advisory firms that focus on impact and socially responsible investing are marketing these to their clients.



INNOVATING A NEW MODEL FOR SHARING RISK

The current, flawed, model requires farmers to shoulder risk up front and predicates their success on a profitable year. With the climate becoming increasingly unstable, profitable years are not guaranteed.

As the earth warms, Iroquois Valley believes we need more farmers using organic & regenerative practices that sequester carbon in the soil, improve water quality & efficiency, and create habitat for pollinators & wildlife.

It's imperative that we keep farmers who are creating positive outcomes for our planet on the land and in business.



Iroquois Valley farmers & SRP recipients, the Wepking Family
Meadowlark Organics / photo credit: Andy Manis

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HOW DOES RISK GET SHARED?

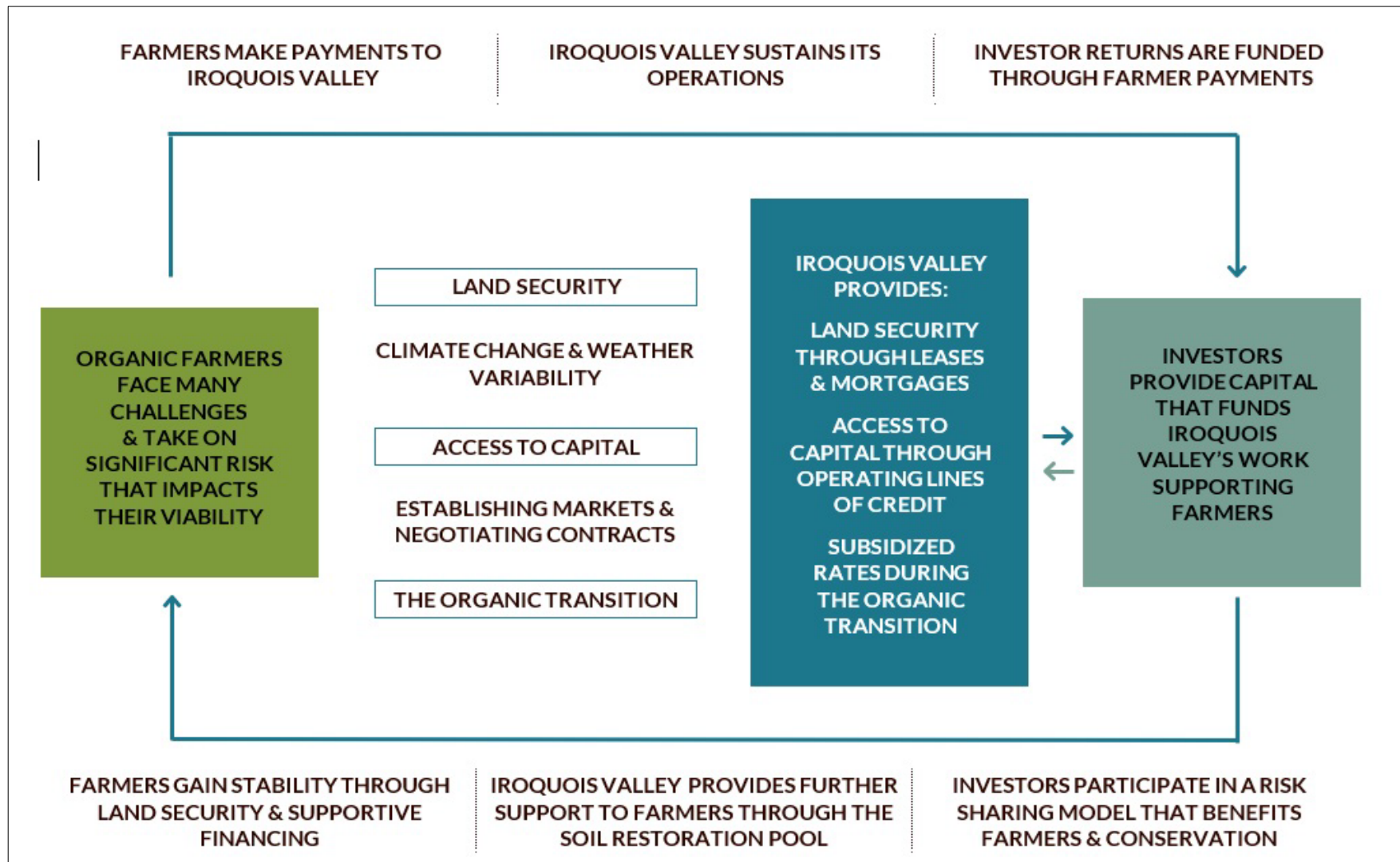
Investors trade liquidity for a longer-term commitment because they are attracted by the direct impact of the Soil Restoration Pool and the fixed income return. The Soil Restoration Notes provide mission-aligned investors with higher interest rates than comparable investments such as bank certificates of deposit (CD) or money market funds. Farmers take on the risks of farming, but have long-term land security and a financial partner that understands the investment farmers make in the land and in their businesses.

Investors, farmers, and Iroquois Valley take these risks trusting that each party will fulfill their roles: farmers making payments that allow Iroquois Valley to sustain its work of investing in farmers and making payments to investors.

HOW DO THE SOIL RESTORATION NOTES HELP FARMERS?

Soil Restoration Notes help farmers by allocating funds for conservation and soil health work, which is critical for mitigating climate instability and improving on-farm cash flow.

The Notes provide a way for investors to participate in a risk-sharing model that directly benefits farmers.



DEVELOPING THE SOIL RESTORATION NOTES

The Soil Restoration Notes built upon ideas behind Iroquois Valley's successful 2014 offering of Young Farmer Land Access Notes. Those notes were designed to respond to investors' interest in helping millennial farmers transition to organic while also providing a vehicle for investors to receive a fixed income return. The notes also provide Iroquois Valley with an alternative source of debt financing beyond its valuable line of credit from a Farm Credit bank. These notes expanded on the idea behind the Young Farmer Land Access notes both in size and scope by focusing on transitioning land to organic.

Structuring the investment offering took a total of six months. Key decisions made up front included:

- » Identifying accredited investors as the target audience
- » Determining the interest rate and note structure. The interest rate reflects current market rates for five year notes.
- » Developing a marketing plan for the notes
- » Creating a process for managing the Soil Restoration Pool

WHAT IS A PRIVATE PLACEMENT MEMORANDUM (PPM)?

The comprehensive document that describes the investment opportunity and the various risks associated with it and gives investors a full picture of all things associated with the investment, including the entity offering the investment.

WHO ARE ACCREDITED INVESTORS?

An accredited investor is a person or entity who is allowed to deal, trade and invest in financial securities if they satisfy one (or more) requirements regarding income, net worth, asset size, governance status or professional experience.

Learn more at <https://www.investopedia.com/terms/a/accreditedinvestor.asp>

PUTTING A REGULATION D NOTE OFFERING TOGETHER

Element	DECISIONS MADE & PEOPLE INVOLVED	TIMELINE
Internal design of the security	<ul style="list-style-type: none"> • Amount of offering • Interest rate amount for investors and impact pool • Length of note term • Liquidity provisions 	1 month
Production of the PPM	<ul style="list-style-type: none"> • Write company narrative • Financial history & projections (in concert with auditors) • Risk factors (in concert with legal team) 	2 months
Review PPM Draft	<ul style="list-style-type: none"> • Iroquois Valley staff • Accountants • Legal team • Outside strategic partners, such as financial advisors 	1 month
Notify SEC of Regulation D Securities Offering	<ul style="list-style-type: none"> • Securities Exchange Commission (SEC) may comment on offering and ask for more details before giving approval 	1 month
Marketing & Sales of Offering	<ul style="list-style-type: none"> • To existing and prospective investors • To investment advisors • To family offices, foundations, and individuals • Through website • Through conferences and events 	Ongoing
Due diligence with prospective investors	<ul style="list-style-type: none"> • Reviewing terms • Reviewing risk factors • Reviewing company history, vision, and operations 	Ongoing
Investment processing & administration	<ul style="list-style-type: none"> • Receipt of subscription agreement • Receipt of funds • Countersigning & dating investment • Interest accrual begins 	2-4 weeks per investor after paperwork is submitted

LESSONS LEARNED

1) INVESTORS ARE INTERESTED IN ORGANIC AGRICULTURE & SHARING RETURNS WITH FARMERS

Not only was it possible to find investors who wanted to invest in soil restoration through organic agriculture, but over the three offerings, they showed their willingness to increase both their minimum investments, and increase the length of time they were invested. Upon maturity of the first SRN offering, only four investors out of the original thirty-one chose not reinvest.

2017 minimum investment	\$25,000	3 year maturity
2018 minimum investment	\$30,000	5 year maturity
2020 minimum investment	\$50,000	5 year maturity

These changes were made to raise the greatest amount of capital in the most efficient way, and capture the most investment interest from the target market of impact investors.

2) WE NEED TO BALANCE FINANCIAL RETURNS WITH IMPACT DATA

Impact investors balance financial return with the impact of the investment. Investors continue to want to know more about the farms that are in the Iroquois Valley portfolio as well as understand what cumulative positive impacts are across their investments. Throughout the SRN process, it became clear that different types of investors have different criteria for understanding impact.

In general, early SRN investors were individuals who were more interested in the stories about the farms and farmers behind the investment than in any specific metric. They sought information about actual farm-level activities and felt that stories from the field provided more insight than data quantifying the impact.

As the SRN's scaled and organizational investors began showing interest, quantifying impact became more important. Questions about the metrics Iroquois Valley used to measure impact, and how they worked with their farmers became more routine. Providing stories that balanced both nuance and data became essential.



Over time, Iroquois Valley has continued to refine its impact reporting to incorporate stories about individual farms, the portfolio, and specific metrics across both levels. The impact tracking and reporting that the Company has developed reflects the feedback of the Note investors, and continues to expand and improve as the Company gains capacity and staff.

COMPLEXITIES IN TRACKING SOIL HEALTH

Most farmers in the Iroquois Valley portfolio sample their soil to inform their land management. While farmers are happy to share data, there are challenges involved in tracking, summarizing, and analyzing this information across the entire farmland portfolio. To add more complexity, many farmers that Iroquois Valley works with have additional land that they rent from other entities or own themselves. This means that their soil tests may represent land unaffiliated with Iroquois Valley, so isolating data related to the portfolio presents difficulties. Farmers use different soil testing protocols that reflect the tremendous amount of variables that can be sampled for within soil health metrics. In the future, Iroquois Valley will track soil organic matter changes by taking a baseline test when land enters the portfolio and then tracking changes over the life of the lease or mortgage. This approach will be incorporated as staff capacity and expertise allow. Ultimately, we do not want to collect data from farmers, or pay to have data collected, unless we have a plan for its use.

3) ENVIRONMENTAL, ECONOMIC AND SOCIAL IMPACTS OF ORGANIC FARMS ARE COMPLEX AND INTERCONNECTED

Organic farms are complex and diverse systems. The USDA Organic Standard requires that organic production systems maintain or improve the resource. Summarizing the plethora of activities that are implemented across a portfolio of diversified organic farms to achieve that goal is no easy task.

No single farm is a replica of another. Farms are unique and are shaped by their ecosystem, their production system (crops, animals, agroforestry, etc.), their human community, and the impacts of climate variability. Instead of a list of singular metrics, four overarching ideas of system change were identified as indicators of impact. These are:

- Transition to farming systems that more closely mimic nature
- Manage for soil health as a system rather than a check-list
- Encourage farmer investment in soil health by providing secure land tenure
- Research and highlight the economic benefits associated with organic agriculture for farmers and communities



4) INVESTING IN FARMERS IS AS IMPORTANT AS INVESTING IN LAND

The SRN's are innovative and provide secure land tenure to farmers. However, they represent only one element in a larger system of farmer support. Organic farmers implement conservation strategies that build soil organic matter; however, their longevity can be at risk because of climate and market variability. Supporting organic farmers financially and holistically is essential. Simply enabling the transition to organic production does not assure long-term farmer success. Organic farms are full of complexity and biodiversity, which makes it difficult to find conventional financial products that fit.

New models of financing, contracting, and sharing risk more equitably, directly, and creatively with farmers are critical to

scaling land stewardship across more acres. Doing this will require investment in building trusting relationships with the farmers and their production systems, beyond investing in the land alone.

WHY NOT TRACK GREENHOUSE GAS (GHG) EMISSIONS?

We explored using COMET-Farm, a whole farm & ranch greenhouse gas accounting system, to measure impact across Iroquois Valley's organic farm portfolio. Using a standardized system to model soil carbon sequestration was appealing and yielded promising results from the five farms involved in the pilot program. An early project goal identified reducing emissions by 250 MT CO₂e/year. Four out of five farms accomplished this in 2017. However, other challenges made COMET-Farm impractical as a tracking tool:

Farmers do not necessarily track the input data or have knowledge about practices before their tenure on the land, which COMET-Farm needs.

Using a "scenario" approach can be too prescriptive.

Because each farm is different, results from farms modeled do not represent the whole of the Iroquois Valley portfolio.

Soil restoration and carbon sequestration are not the same as net GHG reduction.

LOOKING AHEAD

EXPANDING THE SOIL RESTORATION POOL

Soil Restoration Notes have been used to support farmers during their transition period into organic certification. As the offerings progressed, the intentions around the soil restoration pool also evolved. Originally conceived as rent and mortgage relief, the SRP eventually offered direct assistance for projects related to the organic transition. From there, it broadened further to its current version, which includes soil restoration and other on-farm risk mitigation projects beyond the organic transition. Effectively, we expanded our use of the pool funds to support better soil health, conservation, and financial stability for the farmer. This broadening also impacted eligibility and made these funds accessible to farmers taking on the organic transition as well as those who had already completed it.



Laying hens at Mint Creek Farm. The Carr family & team were awarded SRP funds to expand egg production and increase the amount of chickens that move through their pastures, which supports soil nutrition and reduces pests while providing additional income.

EXPANDING FROM A FEW INVESTORS TO MANY

Iroquois Valley believes that investing in organic agriculture should not be impacted by wealth. However, as a private company, Iroquois Valley's options for offering securities are limited and subject to regulations. The Company decided to classify its Soil Restoration Notes under Regulation D, which is available only to accredited investors. Since launching the Soil Restoration Notes, Iroquois Valley has created another investment offering that is open to some non-accredited investors who meet eligibility requirements. This path may influence the structure of future Soil Restoration Note offerings.

SHARING RISK WITH FARMERS: SCALING OUR SUPPORT

The Soil Restoration Notes represent an early attempt to share risk with farmers differently. While Iroquois Valley can't control weather variability or market risk, we can support farmers who are creating positive outcomes for our planet to stay in business and on the land. Organic farms are more diverse and complex – few fit the conventional financing model. The crops and products they sell are not sold on commodity markets, which can make cash flow more complicated to model and predict. In 2019, we offered our first working capital line of credit. Additionally, we are exploring what opportunities exist to strategically partner with philanthropy. These efforts intend to blend capital sources to support farmers as they withstand climate variability by directly impacting their ability to cash flow.

PROJECT PARTNERS

Soil Restoration Notes were made possible with a Conservation Innovation Grant (CIG) from the Natural Resources Conservation Service (NRCS), United States Department of Agriculture (USDA), on Innovative Financing to Help Restore Soil Health: Iroquois Valley Farms' Soil Restoration Notes, led by Iroquois Valley Farmland REIT.

The CIG is a competitive grant program that encourages innovative approaches for conservation on agricultural lands. Through this grant program, NRCS partners with public and private entities to accelerate technology transfer and adopt promising technologies. Learn more about the CIG program at <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/cig/>

Iroquois Valley Farmland REIT, PBC is a real estate investment company incorporated as a public benefit company. Iroquois Valley raises investor capital to finance the expansion of organic and regenerative agriculture in the US by partnering with independent farmers. Iroquois Valley is funded by socially responsible investors interested in directly supporting farmers while creating financial, social and environmental returns. Learn more at www.iroquoisvalley.com

Delta Institute, who supported the COMET-farm analysis, researched soil health principles specific to organic production systems, and economic impacts to communities for organic agriculture. Learn more at <https://delta-institute.org/>

TO LEARN MORE

Learn about our Soil Restoration Notes: <https://iroquoisvalley.com/invest/soil-restoration-notes/>

Learn about the COMET-Farm tool: <http://www.comet-farm.com>

Our work in soil health, which includes an overview and deeper dives into the organic system, conservation, and communities. This is all contained in a white paper, available to read at www.iroquoisvalley.com/impact/soil-health. This information will evolve over time as we improve our ability to collect and understand soil health data from our farmers.

ACKNOWLEDGMENTS

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Many thanks to the early Soil Restoration Notes investors who made this innovative financing possible.