ONE FUTURE

Together, We Find a Way.



Oat Storage Feasibility Study

The Midwest was once the United States' leading oat-producing region, but oat acreage steadily declined as production shifted to Canada. Over the past decade, however, oats have experienced a resurgence, driven by strong farmer advocacy, growing consumer interest in oat products, and the development of a new farmer-owned oat mill in the region.

Integrating oats and other small grains into the dominant corn-soybean rotation is one of the most effective strategies available to Upper Midwest farmers for improving soil health, reducing nitrate runoff and groundwater contamination, diversifying seasonal workloads, and lowering rising input costs.

The Challenge

While the Upper Midwest oat industry has significant competitive advantages and growing market momentum, persistent gaps in infrastructure, financing, and supply chain coordination continue to limit long-term commercial growth. Limited grain storage capacity is a particular challenge for regional oat producers.

The Opportunity

To better understand opportunities to remove this barrier, The Nature Conservancy commissioned Greene Economics to conduct a feasibility study exploring the need for shared oat storage facilities. The study evaluated potential ownership structures, operational models, facility scales and designs, and financial projections for five storage scenarios, providing a roadmap for developing commercially viable storage solutions that can support continued growth of the regional oat industry.

Oats growing on a Wisconsin farm. © Ryan Stockwell/TNC

The Nature Conservancy

The Business Case for Storage

For a commodity crop with thin margins, storage is not a luxury but an essential piece to ensure profitability and market access.

- **Pricing Certainty:** Farmers without storage are often forced to sell oats at harvest, accepting market price which are typically low. Access to storage creates flexibility to market grain when prices improve or grain blending opportunities allow lower-test-weight oats to meet food-grade specifications and capture premium prices.
- **Marketing Logistics:** Without adequate storage, farmers are limited in their ability to commit to future delivery dates, since production outcomes remain uncertain until harvest. Storage reduces that risk, enabling farmers to make forward commitments and participate as reliable suppliers rather than spot-market sellers.
- **Quality Control:** Storage facilities provide a critical location to clean, blend, and hold oats while maintaining quality. They also serve as aggregation hubs, simplifying delivery logistics transportation and allowing multiple producers to combine production to meet buyer specifications that single farms cannot satisfy alone.

Oat Storage Scenarios

The feasibility study evaluates preliminary designs, cost estimates, and financial projections for five oat storage scenarios identified through interviews with farmers, oat buyers, and industry experts:

- **On-farm Individual Storage:** Evaluates the cost for individual farmers to install storage systems sized to meet their own needs. Cost estimates are based on small hopper-bottom bins with capacities of 10,000 to 15,000 bushels.
- **Consolidated On-farm Storage:** Evaluates a lower-cost, intermediate shared model in which a host farm provides centralized storage for neighboring growers. This scenario includes five 20,000-bushel bins loaded with grain conveyors.
- **Condominium Storage:** Evaluates the cost of purchasing land and constructing a licensed storage facility where farmers own space within a licensed facility. Individual bins allow grain to remain segregated, traceable, and closer to end markets.
- **Hybrid Storage Facility:** Evaluates a blended approach combining individual traceable bins with larger shared bins used for grain aggregation and blending.
- **Facility Purchase and Retrofit:** Evaluates the purchase and conversion of an existing grain storage facility in for oat storage. The example site includes nine bins in various conditions with a combined capacity of approximately 520,000 bushels.

Key Findings

The study identified several viable storage models across a range of scales and investment levels. Purchasing and retrofitting an existing grain facility emerged as the most capital-efficient option, providing 520,000 bushels of storage.

The elevator used as an example had a capital cost of approximately $862,000 and required a storage fee of only $0.07 per bushel per month to achieve financial viability. At $1.66 per bushel of capital cost, the acquisition and retrofit of an existing facility cost less than half as much for new construction with comparable storage capacity. Additionally, the per-bushel storage cost approaches commercial cooperative rates at roughly one-sixth the volume threshold.

For groups with more modest needs and limited capital, consolidated on-farm storage (100,000 bushels) is the most accessible entry point. Newly constructed facilities at larger scales (284,000 bushels) are technically viable but require significantly higher upfront investment and carry greater financial risk during the ramp-up period.

Across all scenarios, financial sustainability depends on maintaining storage occupancy above 50%. The study also highlighted the value of blending capability. Because blending requires grain from multiple producers, it cannot be achieved at the individual farm level and should be considered a core design feature of any shared storage facility.

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Visit nature.org/UMRfoodscape to learn more about our work.

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