



FARMLAND LEASING TOOLS



This section provides tools and resources for land managers to overcome various barriers associated with implementing farmland leasing programs. The tools include items that help improve governance, build capacity, and enable technical robustness of the program. They can be used in concert with each other by organizations looking to re-envision their farmland management completely or individually to improve components of the program taking into account existing constraints. This section also includes a number of informational resources that can be utilized by the public agencies.

WHY REGENERATIVE AGRICULTURE?

Public agencies that own farmland, often find it challenging to align agricultural land management with their conservation missions. Adopting regenerative agriculture principles and practices allows public agencies to manage their farmland in a way that closely mimics a natural system, while also producing food for people, and providing other valuable natural amenities. This approach can keep the operation profitable, build natural capital, and generate financial returns due to increased resilience and decreased use of inputs such as fertilizer and pesticides.

To use regenerative agriculture as a system to manage farmland, it is important to ensure that land managers and decision makers understand the key principles of regenerative agriculture. Though several definitions have been developed, they are all based on the idea that soil is a living, functioning system. Managing land for soil health is a critical component of regenerative agriculture. Basic principles of regenerative agriculture are outlined in the factsheet in the following pages of the report. The factsheet can be utilized to build a shared understanding and broad support for adopting regenerative agriculture principles.



FACTSHEET: REGENERATIVE AGRICULTURE

Resources for Illinois Public Agencies

Across Illinois, most of our farmland is losing invaluable topsoil and contributing to nutrient pollution in our waterways. Public agencies, such as forest preserve districts and conservation districts, can improve soil health of their farmland holdings through land stewardship practices. Though these agencies exist to protect and restore natural lands, their conservation efforts are primarily focused on habitat management but not farmland practices. For those tasked with farmland management within public agencies, this document provides a brief overview of an approach to farmland management through regenerative agriculture.

Strategy for Soil Health

Public agencies can use regenerative agriculture to improve stewardship of their land. Regenerative agriculture represents a way of thinking about soil improvement that benefits both the farmer and the environment. This farming system includes the integration of the following practices and principles, which can be implemented in a phased approach over time to maximize soil health, water quality, habitat benefits and minimize risk:

- 1 Minimizing soil disturbance** by practicing no-till or reduced tillage can reduce erosion and mitigate extreme weather. Reducing disturbance allows microbial communities and fungi to grow untouched, thereby improving soil aggregation and water holding capacity.
- 2 Keeping soil covered** using cover crops to keep soil covered for as much of the year as possible. Soil cover can decrease erosion and fertilizer needs by improving residue retention and adding soil organic carbon and nutrients to the soil.
- 3 Diversifying rotations** by adding additional crops to rotation can reduce costs for pest control, mitigate extreme weather and has the added benefit of diversifying income. Increasing diversity avoids depleting soils of nutrients while improving resistance to pests and diseases.
- 4 Integrating livestock** in order to graze cover crops and perennial crops in the rotation, restore on-farm nutrient cycles, and further diversify income.

STARTING THE TRANSITION

Public agencies can facilitate the gradual transition to regenerative agriculture through building partnerships with agricultural stakeholders and adopting farmland management policies and programs that align with their conservation goals. While public agencies seek to improve soil health, their tenants will need time and financial stability to determine how best to change their practices and implement them. Informing farmers about the benefits of regenerative agriculture other farmers have experienced will further support the transition.

More resources on regenerative agriculture and improving soil health are available [here](#).



PROGRAM PRINCIPLES

Organizations that preserve and manage natural resources (public agencies, land trusts), typically adopt a land acquisition policy and a procurement policy, however, many do not adopt policy or principles guiding farmland management decisions. Management of agricultural land should be driven by principles that reflect the goals of the organization and guide management decisions. Adopting farmland management principles or policies improves organizational transparency creating clear guidelines for tenant selection, budgeting, and reporting to constituents or other stakeholders. These are typically high-level, goal setting documents that allow for flexibility while referencing procedures that outline the operation of the program in detail. Organizations developing guidance principles should consider including goals that align with other priorities, such as:

- Conservation-focused or regenerative agriculture farmland management
- Equity in land access
- Partnerships that enable innovation
- Other goals, such as working with first-generation farmers or veterans, that may be priorities for the organization

We provide a template that outlines key farmland management principles to be used as starting point when working toward adopting organizational or regional principles. This template can help formalize commitments to conservation and create transparent governance structures for regenerative farmland management programs on public land.



TEMPLATE: PROGRAM PRINCIPLES

Natural resource agencies such as forest preserve districts and conservation districts are responsible for the ecological integrity of their land and are tasked with actively conserving, restoring and managing their natural resources, including populations of native species and their habitats. In addition to natural resource conservation, these agencies provide education, recreation and cultural opportunities.

Urban development in Illinois has converted a once predominantly agricultural and natural landscape into a mosaic of suburban and urban developments mixed with agricultural and remnant natural areas. **Many parcels of land, when acquired by agencies, are in agricultural production and often remain in agricultural production in the long-term. Continued agricultural use of the parcel is often an economically-driven management strategy for the agency that can be integrated into agencies' natural area management plans.**

It is in the agencies' best interest to **establish a Farmland Management Program (Program) that ensures protection of natural resources** by buffering adjoining natural areas, providing open space, reducing impacts to local water resources, and implementing regenerative farmland management. Enrollment of tracts in the Program could **generate revenue for the agencies to support restoration efforts as well as integration of farmland tracts into a cohesive natural areas management plan.** This will ensure that natural resources are not degraded while preparing the land for eventual restoration. The Program will also **contribute to the local agricultural economy.**

The Farm Management Principles (Principles) **establish Program goals (identified below) that will collectively guide those agencies with farmland** holdings to ensure that the farmland is managed in line with conservation mission of the agency, i.e. by supporting practices that build soil health and promote ecological diversity. Agencies that adopt the Principles will implement it in accordance with each agency's rules and procedures.



GOAL 1

Implementation of farmland management that conserve natural resources through:

- **Conservation measures:** Include conservation requirements in the lease, which would include conservation plans, pesticide use restrictions, buffers, tillage restrictions as well as additional requirements based on resource concerns identified in the conservation plans (e.g. cover crops, grassed waterways, diversification, etc.)
- **Farm license agreement and documentation:** Make the term of the lease between 3-5 years (longer where appropriate) to encourage conservation investments and provide a standard data form to help track progress toward conservation outcomes; include other conservation focused provisions in the license agreements.
- **Farm license termination:** Allow for early termination of licenses in case there are plans to restore land to natural areas or for not complying with the terms of the lease.
- **Farmland management/natural resources fund:** Revenue from farm licenses should go to a dedicated fund that goes toward natural resource restoration projects and farm management (e.g. soil testing, farm management staff, etc.) and pooled for shared services related to farmland maintenance and management.

GOAL 2

Provide equitable access to leased land

- **Public bid process:** Implement a fair and public bid process to award agreements; allow some flexibility to award bids to farmers who may not be the highest bidders, but are committing to implement conservation practices.
- **Land acquired with existing lease:** Provide a fair course of action for tenants with existing leases on acquired land.

GOAL 3

Build partnerships that enable innovation and transition to conservation focused management of farmland

- **Monitoring and verification:** Develop a framework to track implementation of conservation activities, assess progress, and report to the board; utilize data collected through the lease supplement; meet with tenants regularly to discuss management options and provide technical assistance.
- **Technical assistance:** In line with the education mission of the agency, develop programs that offer technical assistance and peer learning via workshops, demonstration farms, dedicated agronomy staff, etc.



TRACKING PROGRESS

Data collection and analysis is an integral part of managing a farmland leasing program, as it can strengthen current management decisions, communicate progress towards conservation goals, and inform strategies for the eventual restoration of farmland. Often public agencies have extensive datasets related to habitat and wildlife surveys, however, tracking farmland information requires some planning.

It is helpful to define specific management categories that are important to the organization and identify measurable or verifiable metrics that will evaluate the management category in question. One challenge is prioritizing those categories and deciding on a reasonable number of metrics to use based on availability of data, administrative burden, cost,

and ability to detect meaningful changes. Another challenge is integrating agronomic and ecological metrics to evaluate more holistically if natural resource protection goals are being achieved. Finally, an important consideration in setting up a data management system is deciding who generates, collects, stores, and analyzes the data.

Below, we outline categories of data that are important to consider when developing a data tracking framework. This section also includes an example of a model for data tracking, called the Agriculture Conservation Index. The Index was developed in partnership by McHenry County Conservation District, the Liberty Prairie Foundation, Delta Institute, and Foresight Design. The process and rationale for the Index are spotlighted at the end this section.



FRAMEWORK: DATA TRACKING

USEFUL CATEGORIES TO CONSIDER ARE LISTED BELOW:

Nutrient management

It is useful to distinguish between planning and implementation in this category. Having a plan doesn't guarantee that it will be followed, but having a plan is an important step in considering the application of fertilizers on the land. It might also be easier to verify and manage administratively.

Soil testing

There are several factors that can be used to assess implementation of soil testing and its effect on soil:

- Determining which kind of soil testing to conduct;
- Conducting the soil testing;
- Implementing different management practices in response to soil test results.

Cropping system

- This category can be used to evaluate the diversity of crop rotations and ground cover.
- Best management practices
- If a program requires specific conservation practices to be implemented, this category can evaluate the compliance - for example, buffer strips.

Habitat

For natural resource organizations, this will be one of the most important categories to think about. Depending on the organization's priorities, management activities can include: quantity and quality of in-field habitat; pesticide-use planning; and actual pesticide application.



DATA TRACKING MODEL: AGRICULTURAL CONSERVATION INDEX

	0	1	2
NUTRIENT MANAGEMENT	Fertilizer Application Planning	No plan	Nutrient Management Plan developed and kept updated
	Fertilizer Application	Fall application	Nutrients added immediately before or during the growing season
SOIL TESTING	Soil Testing frequency and farmer interaction	No soil tests	Cornell Soil Health Test Baseline established
	Advanced Soil Testing (Biological)	Cornell Soil Health Test Overall Quality Score 0-20	Cornell Soil Health Test Overall Quality Score 20-40
	Responses to Soil Testing	Soil test results not informing management	Implement at least one practice in response to soil test results
CROPPING SYSTEMS	Residue Cover (June 1st-15th)	Low: <20%	Medium: 20-60%
	Crop Rotations	Continuous (example: corn/corn)	Two crop rotation (example: corn/soybeans)
	Cover Crops - Implementation	No plan	Conservation plan guidelines followed
	Cover Crops - Diversity	No cover crops	Single species
BMPs	Grassed Filter Strip	No filter strip or doesn't meet specifications	Filter strip meets specifications (30 ft -65 ft next to high quality stream)
	In-field Habitat (not relevant)	Vegetation not suitable for wildlife habitat	Field includes filter strip, field border, or grassy waterway
HABITAT	In-field Habitat	No habitat	At least 10% of field acres is permanent habitat, could be around the edges
	Pesticide Use - Planning (any chemical sprayed on fields for bugs or weeds or fungus control)	No records	Keep records of pesticide / herbicide application on each field/ proof of license
	Pesticide Use - Implementation (any chemical sprayed on fields for bugs or weeds or fungus control)	Not following management plan restrictions	Use contact/selective herbicides (meet requirements of the management plan)



3	4		
	4R plan completed updated annually OR Crop consultant deems that no plan is needed	Fertilizer Application Planning	NUTRIENT MANAGEMENT
Variable rate application	No synthetic fertilizer used	Fertilizer Application	
Develop a conservation plan based on soil health test results		Soil Testing frequency and farmer interaction	SOIL TESTING
Cornell Soil Health Test Overall Quality Score 60-80	Cornell Soil Health Test Overall Quality Score 80-100	Advanced Soil Testing (Biological)	
Implement at least three practices in response to soil test results	Implement all management changes in response to soil test recommendations	Responses to Soil Testing	
	High: >60%	Residue Cover (June 1st-15th)	CROPPING SYSTEMS
Three or more crops in rotation (example: corn/soybeans/wheat)	Perennial cropping system	Crop Rotations	
Cover crops on NHEL ground	Grazing cover crops	Cover Crops - Implementation	
Multi species with a legume	Implementing cover crops (any mix) AND planting green	Cover Crops - Diversity	
		Grassed Filter Strip	BMPs
Establish in-field habitat with non-native cover	Establish in-field habitat with native cover	In-field Habitat (not relevant)	HABITAT
Manage hay field for late cutting	Implement permanent cover or pasture	In-field Habitat	
Develop an Integrated Pest Management plan utilizing less persistent/toxic for habitat (pollinators, aquatic life) Implement the IPM plan	Planning for Organic Certification	Pesticide Use - Planning (any chemical sprayed on fields for bugs or weeds or fungus control)	
	Eliminate pesticide use or Organic certification	Pesticide Use - Implementation (any chemical sprayed on fields for bugs or weeds or fungus control)	



BUILDING CAPACITY

A successful program needs staff with the right skill sets and time availability. For natural resource agencies, agronomy typically falls outside most employees' existing expertise. As such, increasing staff capacity will allow agencies to work better with farmers and the agricultural community. Yet, many organizations don't have the budget to hire additional staff, especially if agricultural land is a small portion of their overall land holdings. In addition to leveraging relationships with conservation and agricultural organizations, such as the Natural Resource Conservation Service, Soil and Water Conservation Districts, or County Extension Agents, agencies can consider utilizing a cooperative service model for a farm manager position shared by organizations working in the same locality.

Below is a list of decision points and questions to consider when thinking about how to structure such a position:

MODEL: SHARED STAFF

Primary employer

- Consider the following:
 - The organization that needs the most capacity
 - The organization that is centrally located
 - The organization that can obtain authorization without significant administrative burden
 - How the time and position responsibilities will be allocated among partners
- How much will each partner contribute to support the position?
- Will the independent contractor be vetted by all partners?
- What is the reporting structure for the position?

Position term

- Do the organizations prefer a part-time/full-time position or consultant?

Funding mechanism

- Can lease revenue be allocated to fund the position (long-term, with proportional contributions based on managed acres of each partner)?
- Are there federal or other government grants that can be used to fund the position?

Agreement structure

- Is it preferred to have one agreement with all partners signing on?
- Alternatively, should there be specific scopes and agreements with each district?
- Scope of work, potential roles and responsibilities may include:
 - Engagement and technical assistance to tenants
 - Verification and lease compliance
 - Farmland management data collection and tracking



FINANCING

Paying for conservation is a perennial challenge. There are numerous local, state, and federal programs that offer grants, cost-sharing, or loans for implementing conservation, though they regularly face budgetary constraints. In addition, the intended beneficiaries of these programs often do not have the capacity to apply for assistance. They may not know about the program, the eligibility requirements, or simply don't have time to manage the administrative burden.

In the case of agricultural conservation cost-sharing programs, frequently, the eligibility depends on land ownership and tenancy.

There may also be restrictions that prevent public agencies from being eligible. The most common programs that can be used to pay for implementation of conservation practices, such as buffers or cover crops, are funded through monetary allocations outlined in the Federal Farm Bill and through state funding. These programs can be leveraged to pay for implementation when agencies are working with farmers.

The table below summarizes common cost-sharing programs to help agencies and farmers leverage available resources.

LEVERAGING COST-SHARE

Program	Federal or State	Eligibility	Contract Length	Type of Monetary Assistance	Rate
Environmental Quality Incentive Program (EQIP)	Federal	Farmer	Ranges from 1-5 years	Cost Share	Ranges from 50%-100%
Conservation Reserve Program (CRP)	Federal	Both	Typically 10 years	Cost Share	Up to 50%
Sustainable Agriculture Grant Program (SAGP)	State	Both	1 year or greater	Cost Share	Up to 75%



Program Provision	Program Provision Language	What It Means For Implementation	Recommendations
EQIP eligibility- Part 515- EQIP; Subpart F- Program Eligibility	Federal, State, county, and local governments, and political subdivisions of State government (e.g., school districts, conservation districts, etc.) and entities with members of units of government or subdivisions, are not eligible for EQIP; however, land owned by these entities may be eligible if leased to an eligible applicant. See 440-CPM-515-F-515.52.	Conservation Districts and Forest Preserve Districts are not eligible to receive payments for conservation practices under EQIP. However, if the farmland is leased to a eligible applicant (private farmer/ operator), they can enroll the agencies land into EQIP and receive payments through EQIP for BMP implementation. The operator is responsible for the implementation and maintenance of that practice per Conservation Practice Standards (CPS).	It is recommended that public agencies list in their leases that all conservation practices such as filter strips and grassed waterways that are on the property are and will be maintained per design and NRCS standards by the operator.
CRP eligibility- CRP handbook: Part 6, Section 1, Par. 126	Eligible participants can include: individual, trust-revocable, general partnership, federal-owned, joint venture, State and local government, corporation, churches, charities, and non-profit organizations, limited liability company, public school, limited partnership, BIA or Indian represented by BIA, limited liability partnership, trust-irrevocable, limited liability limited partnership, individual operating a small business, estate, Indian tribal venture	Conservation Districts and Forest Preserve Districts are eligible to apply for CRP funding through the Farm Service Agency	It is recommended that public agencies list in their leases that all conservation practices such as filter strips and grassed waterways that are on the property are and will be maintained per design and NRCS standards by the operator.
SAGP eligibility	Any unit of government, organization, educational institution, non-profit group or individual is eligible to receive funding through the Sustainable Agriculture Grant Program	Conservation Districts and Forest Preserve Districts are eligible to apply for CRP funding through the Illinois Department of Agriculture	It is recommended that public agencies list in their leases that all conservation practices such as filter strips and grassed waterways that are on the property are and will be maintained per design and NRCS standards by the operator.

Data in this spreadsheet was collected in October of 2018 under the 2014 Farm Bill (subject to change).



BARRIERS

Assessing constraints at the outset will help prioritize which strategies that incentivize conservation can be implemented through changes to agricultural leases, and which might require additional planning and reforms. In some cases, existing structures, such as procurement rules, bond funds restrictions, or farmland management policy, prevent making particular changes in a lease.

Procurement

Public sector policies may dictate how the bidding process works, preventing contracts that favor conservation implementation. Before considering conservation provisions in a lease, one should review existing procurement rules, which may dictate what changes you can make to your lease structure.

Agricultural land management governance

A policy in place may restrict or disincentive conservation activities (e.g. cap on lease term), not be aligned with the conservation goals of the organization, or not be formalized. Typically, adoption of or amendments to a policy would necessitate a formal process, such as a hearing and/or vote by the governing body of the organization. Yet, having an approved policy or guiding principles that encourage conservation can help mobilize resources and add clarity and transparency to the program.

Agricultural lease length

One of the key factors that drive investment into regenerative agriculture transition is land tenure security. Therefore, having limits on the term of the lease can disincentivize action. Assess if there are any restrictions on lease length, such as a term period limit in the policy or procurement rules, restrictive funds, or contractual obligations.

Capacity and partnerships

Staff time may be split between multiple responsibilities, with limited time to devote to managing agricultural leases and working with farmers. Furthermore, managing leases can call for agronomic expertise. If staff lacks agronomic expertise, such expertise can be supplemented by partnerships with the local Natural Resources Conservation Service office, the Soil and Water Conservation District, extension staff, or private consultants. Additional effort may be required to strengthen those partnerships.

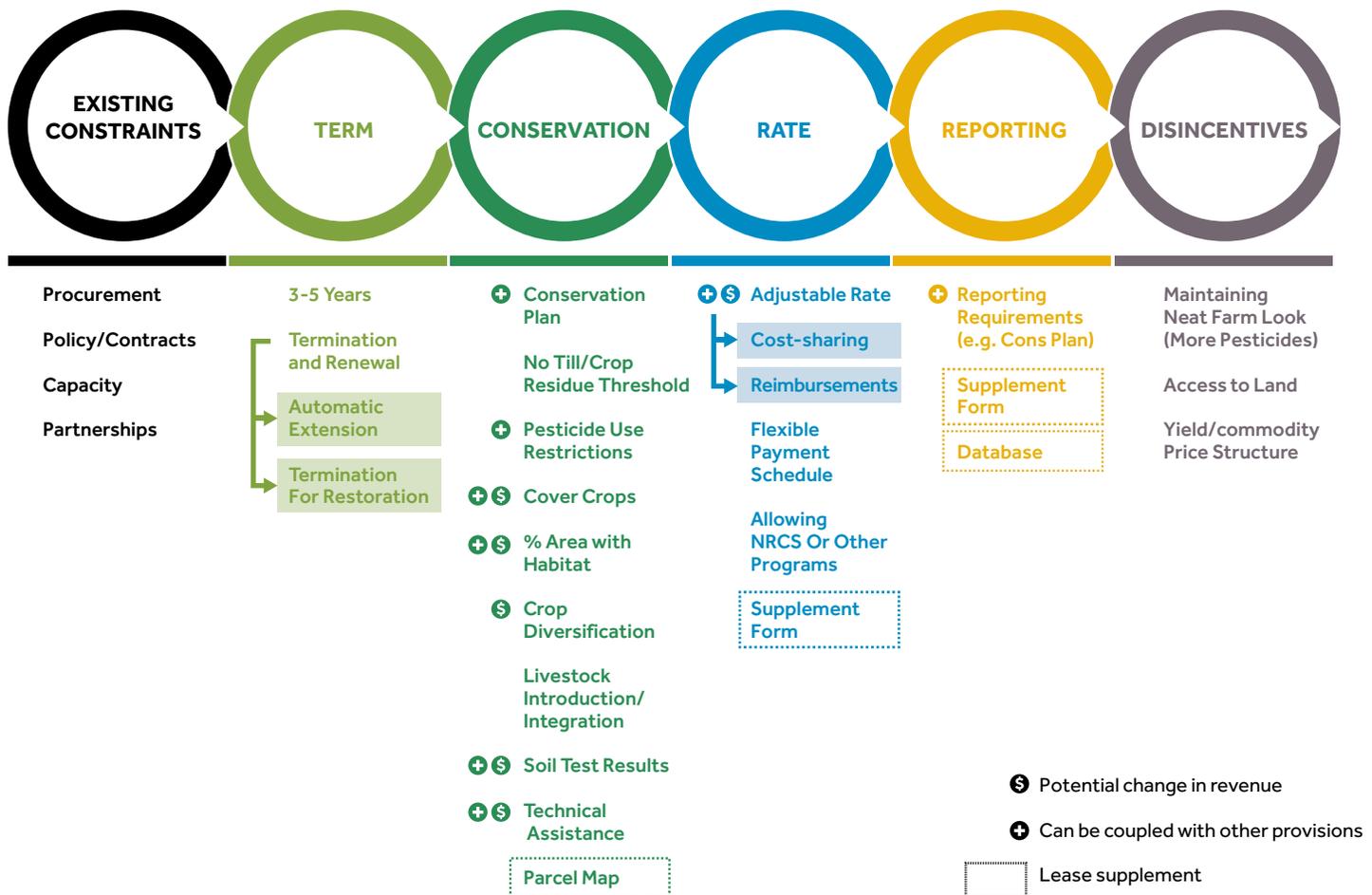


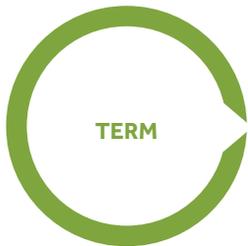
CONSERVATION LEASE

As a binding contract, the lease agreement is the key instrument that land managers and owners can use to ensure that their land is managed in a certain way. Prior to drafting a lease agreement or considering changes to the lease, consider what barriers might exist in the current governance structure that could prevent implementation of desired conservation focused provisions in the lease.

There is a spectrum of options available to build a lease that incorporates conservation and regenerative agriculture principles (11, 12). Organizations can tailor their approach by selecting provisions that fit best within their current situation. The diagram below provides an overview of conservation provisions, while the following sections outline relevant considerations for each category and how they can be coupled with each other to achieve maximum impact.

FRAMEWORK: CONSERVATION LEASE





LEASE TERM

Increasing the lease term creates an incentive to implement more conservation because it enhances tenure security. As such, the tenant has an opportunity to engage in

long-term planning and is on the land long enough to see the benefits of investing into on-farm practices. Conditions under which leases are renewed and terminated are also important because they can set the tone for establishing good working relationships with tenants and reduce transaction costs for the organization. For natural resource agencies that ultimately want to restore farmland to natural habitat, being upfront about plans and the timeline to terminate a lease ensures transparency in the process while addressing the organizations' needs.

To incentivize regenerative agriculture through the lease term, ensure that farmland policy doesn't set a cap term at a low number. If such cap exists, amend procurement rules or policies to increase or remove the cap. To streamline the lease renewal, explore and integrate provisions that allow for automatic renewals.

Term length of 3-5 years

Pros: Allows time for implementation of practices, increases tenant security, and reduces transaction costs.

Cons: Perceived reduction in flexibility to renegotiate rental rates.

A clause requiring annual approval and extension by the governing body can be used to provide regular oversight and engagement opportunity with tenants; term length can be variable from site to site and determined based on site management plans.

Streamlined renewal and expectation for termination

Pros: Further reduces transaction costs, builds trust with tenants.

Cons: Property transitioning to non-agricultural land use, untested tenant.

Termination provisions can be coupled with conservation provisions relevant to site needs and prospect of potential land use changes to ensure that termination is not unexpected. Furthermore, early termination for non-compliance should be included in the lease. Examples for streamlined renewals include: automatic extension without notice to terminate; option for adjusting rental rate in lease extensions based on a provided index (+ provision for indexing rate); right of first refusal when term is set to expire; lease term structure is 3+1+1 years rather than 5 years up front.

The next set of provisions to consider are related to implementation of specific conservation measures as part of the lease agreement.



CONSERVATION

In addition to creating a lease that encourages conservation practices, the lease can include provisions that require specific conservation practices to address particular resource

concerns or establish a baseline level of conservation on the land. Some practices may require special skills or equipment to implement, and could be coupled with technical assistance and/or alternative rate setting mechanisms to ensure an equitable and sustainable lease. Below are various approaches that incorporate conservation practice provisions into the lease.

Require tenant to develop and submit management plans, such as conservation, pest management, nutrient management plans

Pros: No-to-low additional cost to implement; plans may be required for other cost-sharing conservation programs; an opportunity to work with local Soil and Water Conservation Districts, Natural Resource Conservation Service staff, or university extension offices.

Cons: Though planning is important and provides a foundation for action, having a plan does not guarantee that it will be implemented, additional administrative burden.

Ideally the required plans are developed according to an existing standard (e.g. NRCS) to ensure consistency and quality.

Require no till and/or crop residue thresholds

Pros: No-to-low additional cost, fundamental to reducing erosion and improving soil health.

Cons: Depending on how conservation tillage is defined, it may be challenging to verify; may require new equipment or adjustments to cropping system and additional technical support.

The tenant might need additional resources to switch to a no-till system if they haven't done no-till before. If there is additional cost of implementation, it can be subtracted from base rental rate. An alternative or additional way to verify ground cover is to measure % residue.

Restrict pesticide use

Pros: Opportunity to strengthen pest management provisions and couple them with a pest management plan.

Cons: The administrative burden associated with increased data management and verification.

In addition to restricting use of particular pesticides, the organization can provide guidelines regarding and/or require best practices aimed at limiting herbicide use overall.

Implement cover crops

Pros: Keeping the ground covered is one of the fundamental principles of soil health and helps to reduce erosion; cover crops are becoming more widely accepted as a part of a cropping rotation, thus enabling wider adoption.

Cons: There is a fairly low adoption due to lack of information about benefits, delayed benefits and increased upfront costs (~\$20-30/acre).

To incentivize use of cover crops, such conservation provision can be coupled with an adjustable rate, for example, a discount for acres where cover crops are planted. More examples of how to couple conservation and adjustable rates are provided on the following pages.



Implement habitat, diversification, and/or livestock integration

Pros: Introducing requirements related to habitat and integration aligns with agencies' mission while diversification and livestock are tenets of regenerative agricultural system and improve soil health and environmental outcomes. Some agencies are piloting and implementing some of these practices already.

Cons: This is a newer approach that is more complex and resource intensive with potential pushback from the community (e.g. livestock operations in suburban areas). The agency can see a reduction in revenue due to taking land out of production associated with habitat practices.

To incentivize these types of practices, flexible rates can be used to lower rents.

Conduct soil testing

Pros: Relevant data is critical in informing management decisions and tracking progress. Advances in technology allow for data about biological soil properties that in turn inform management decisions. Soil test results and discussion of recommendations can be used as an engagement opportunity with the tenants. In addition, if the agency takes on the expense, it will then have control over data consistency and acquisition while sharing the benefit with farmers.

Cons: There is a cost to the responsible party, as well as an administrative cost to process and analyze data.

Soil testing is long-term investment with a learning curve and results should be provided as part of negotiations/bids to farmers to enhance transparency.

Soil data should also be linked to reporting provisions, if appropriate, to ensure that soil measurements are integrated into overall data tracking for the farmland. Without follow up, simply conducting soil testing does not guarantee implementation of conservation. In addition, without an effort to change management practices and associated changes in soil characteristics, investing in more expensive tests that measure soil biological properties is not worth the investment.

Provide technical assistance to tenants

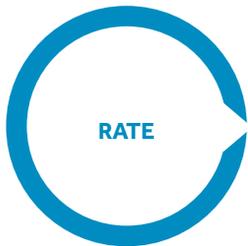
Pros: Providing support for implementing new conservation practices is critical to farmers' success and offering technical assistance can leverage partnerships with NRCS, SWCDs, or other agronomic organizations in the area.

Cons: Developing an effective program that provides needed assistance requires staff time and resources.

To incentivize participation in training or obtaining appropriate certifications, flexible rates can be used to lower base rate for tenants. Technical assistance programs can be internal or external or could be provided by a cooperative structure.

Lease supplements

Maps, practice specifications, and other supporting information (e.g. soil type) about the parcel should be provided by the agency to the tenants to increase transparency and solicit competitive bids.



RENTAL RATE

How the rental rate is set and the actual amount are important considerations in the lease negotiation process. If the goal is to promote sustainability and conservation, the rate

should allow for adjustments based on investments made by the tenant, especially if the tenant is unlikely to observe the benefits from the investment before the termination of the lease. Offering more flexibility through the lease payment structure can aid tenants transitioning to sustainable practices in managing their risk, as expenses and yield could be impacted in this period of transition.

Below are various provisions that incorporate adjustable payment structures into the lease.

Adjustable rate

Pros: Base rate can be based on the market prices, reducing complexity and eliminating power imbalance; bids remain competitive w/strong incentive to implement practices; many ways to structure adjustments through reimbursements or cost-share.

Cons: Detailed information about parcels and practices is needed to determine appropriate discounts. The agency might see a reduction in revenue.

Implemented practices, associated costs, and responsible parties for those costs need to be clearly articulated in the lease agreement.

There are three ways to think about adjustable rates - via a cost-sharing, reimbursement, or revenue-sharing approaches.

Cost-sharing approach

Reduction per practice: Reducing rate for improvements, for example, the rent for cropland acres planted with cover crops shall be reduced by 10%. The rent for land taken out of production for field borders, filter strips or grass waterways will be reduced by 20%.

Graduated rent: Allows for rent to be reduced by a certain percentage in first year, and brought up year by year to the normal rate. This method works best with a 3+ year lease. Good for transitioning or beginner farmers.

Implement and maintain: Agency pays for the installation or equipment needed, while tenant is responsible for maintenance of the practice.

Reimbursement approach

Implementation cost: Rent is the difference between market rental rate and implementation cost for conservation measures according to the budget submitted by the prospective tenant. A lease supplement might be helpful to capture expenses and specs for improvements.

Reimbursement: Agency reimburses tenant based on actual cost of implementation of the practice (not ideal since the capital is often needed up front to invest)

Revenue-sharing approach

Rate is based on share of gross revenue (25%-40%) – need to have and share detailed numbers



on production costs; focuses on yield rather than conservation; reinforces conventional cropping systems with few rotations. Not recommended for conservation leases.

Additional provisions and supplements can be utilized to provide additional flexibility for the lease rate adjustments and efficiency in their implementation.

Flexible payment schedule

Pros: Allowing tenants to make smaller payments early on and increase payment amount over time can provide tenants more capital to invest if they aren't able to invest all the capital up front.

Cons: More payments or different types of payments can increase the transactional costs for the agency and make it more difficult to budget.

Participation in conservation assistance programs

Pros: Additional resources (e.g. NRCS cost sharing) can be leveraged to implement practices, for both tenants

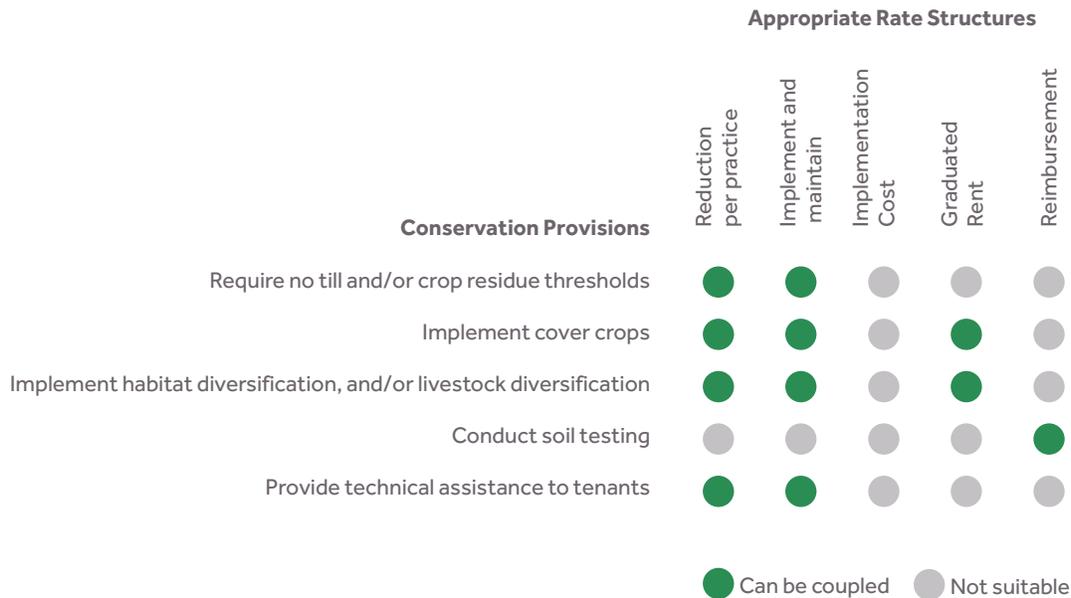
and the agency.

Some funds can only be distributed directly to the farmers and they must be willing to go through application process.

Lease supplements

Reimbursement lease supplement can be used to specify improvements and expenses associated with implementation of conservation practices.

The figure below highlights most suitable ways to combine conservation provisions with various adjustable rate structures. For example, technical assistance (workshop or field day) that helps implement conservation practices can be reflected in the rate via a set lease rate reduction or the agency providing resources (i.e. implementing) for the training.





REPORTING

Data about management activities and outcomes is key in assessing progress, which can in turn build more support for the farmland leasing program and more resources

allocated to its implementation. As data is gathered and analyzed, agencies can make informed decisions about the program and continue to refine it to achieve conservation outcomes.

Reporting provisions

Pro: Provides data for increased transparency and evaluation of the program. The data about management establishes the basis for discussion and improving relationships with tenants.

Cons: Collecting and analyzing the data creates an additional administrative cost.

This provision should be coupled with conservation provisions that require documentation (e.g. conservation plan submission, pesticide/nutrient application) to make verification more efficient. If the agency is developing a data tracking system, reporting provisions in the lease can be an efficient mechanism to ensure that needed data is provided to the agency.

Lease supplements

A standard form to gather data from tenants can be used to ensure consistent reporting and intake of the relevant data.



DISINCENTIVES

Some provisions have the potential to disincentivize conservation. When reviewing and amending the lease to encourage and/or require particular practices, it is

important to identify and change provisions that may inadvertently create barriers to conservation.

A 'good neighbor' provision

These are aimed at maintaining a neat farm look and managing noxious weeds. Provisions like these can incentive the overuse of pesticides. This can be addressed by either removing the provision or strengthening the pesticide/ herbicide restrictions.

Access to land

As part of their duties, public agencies often reserve access to leased farmland during certain parts of the year. Restricting farmer access can prevent certain on farm conservation practices (ex: winter cover crops), conversely, agency staff need to access land to verify lease conditions are being met and/or to install practices. Conditions need to be clearly stated and formulated so that conservation is not impeded.

Rental rate structures

While rates should be set to ensure equity and transparency, adjustments based on yield or commodity prices or revenue-sharing cost structures may disincentivize more diverse crop rotations and innovative practices that carry the risk of reduced yield.

The lease agreement is the tool that allows the land owner and the tenant to not only formalize the expectations and roles, but also to build a solid foundation for a working relationship between them. Public agencies that lease farmland already have a lot of the legal and administrative infrastructure to enhance their written agreements. The provisions outlined above demonstrate the range of options an organization has to create a lease agreement that supports transition to regenerative agriculture, works within their existing conditions, and provides mechanisms to enforce implementation.

An organization can start by adopting one or two provisions that may be easier to implement, such as extending the term of the lease. As relationships between the organization, i.e. the landowner, and the farmers in the community progress, additional conservation measures can be included in the lease in a way that distributes some of the risk and financial burden in an equitable way while allowing for verification and transparency. Many of the lease provisions outlined here can be also utilized in the private sector. Additional resources on farm leases are provided by the [Farmland Information Center](#) and [Vermont Law School Center for Agriculture and Food Systems](#).



IN THE SPOTLIGHT...



The McHenry County Conservation District, located in northeastern part of Illinois, owns over 25,000 acres of open space, including many diverse habitats and approximately 6,000 acres of farmland. Their vision is to manage their agricultural land holdings balanced with natural resource considerations and to contribute to a culture of conservation and stewardship among the farmers in their community. The District partnered with the Liberty Prairie Foundation, Delta Institute, and Foresight Design to develop a data system to assess, track, and inform management on their 6,000 acres of farmland. The work was supported by Food:Land:Opportunity Fund through the Searle Funds at The Chicago Community Trust and the Kinship Foundation.

McHenry County Conservation District owns and manages approximately 6,000 acres of farmland. While the long-term plan is to convert this land to natural habitat, the District sees many benefits in keeping the land in agricultural production for the time being. In keeping with the goals of the District's Farm Management Policy, the District is intent on working with their tenant farmers to adopt regenerative farming practices that restore soil health, improve the resiliency of the farm, and enhance habitat.

The project team began by assessing the farmland management system that was in place and what would be needed in a revised system to efficiently bring about better farming practices. It became clear that fundamental needs were (1) a better way of managing all data related to the District's farmland and (2) a way

to better understand the condition of each parcel of farmland and to track management practices being used on that land. This understanding was critical in informing strategies for improving stewardship of the farmland and accomplishing the goals of the District's Farm Management Policy. Consequently, the partners focused their efforts on designing a general data tracking system and an index assessment system that would make it possible for District staff to assess the condition of each parcel of land and to work with their tenants to make changes in how the land is managed. There are many indexes that managers of natural habitat can use for translating complex data into quickly understandable numbers. This kind of index is largely lacking for conservation-minded farmland managers.



The team set out to develop an index system that condenses a number of complex parameters related to farmland (e.g. nutrient management, cropping system, soil testing) and natural land (e.g. pesticide management, in-field habitat) management to provide an overall conservation assessment - at a parcel scale and at a composite District-wide scale.

After numerous discussions with the District's natural resource team - including data specialists, restoration ecologists, and land managers - the project team identified 14 different areas of management activities or field conditions that would form the basis of the Agricultural Conservation Index (ACI). For each category in the ACI, a point value between 0 and 4 (with 4 being the highest) is assigned based on current conditions and current practices being used in each field at a particular time. A higher overall score denotes better soil conservation conditions and practices in the field. The ACI can be used to take a current census of conditions on District farmland and to continue to track those conditions over time through annual ACI assessments. The goal would be to increase each field's ACI score over time while also increasing the average index of all of its farmland over time. The ACI scores would be useful for District-farmer conversations and also useful for communicating with the District board and the public about how well the farmland is being managed.

The ACI outlines five major management categories: nutrient management, soil testing, cropping system, best management practices, and pesticides.

Each category can be weighted to prioritize a particular resource concern such as ground water, soil health, wildlife habitat, etc. While the project team developed the initial ACI structure to balance the complexity of particular management activities and capacity to collect and analyze large datasets that the District now has, the system is set up in a way that allows new categories and specific activities to be added as needed once the initial structure is up and running.

As a result of the project, the District is now working to create the general data tracking system that will include the data needed to generate ACI scores. In this process, the District staff is beginning to standardize their data collection methods and digitize data that has been amassed over many previous years to fully implement this new approach.

The ACI offers great potential for gauging the conservation value of current cropping systems and informing transitions to more conservation-focused agricultural systems that will benefit the landscapes of local communities. It can also be used as a model for other natural resource organizations, both public and private, that manage working lands in the Midwest.

The ACI could also be an extremely useful tool to encourage conservation adoption by farmers. For example, it could be utilized to increase implementation of conservation practices while maintaining farmer profitability through a flexible rate cash rent lease. The rental rate can be adjusted based on implementation of conservation practices rather than crop yields or commodity prices, which incentivize high production agriculture.