

Addressing Climate Change and Carbon Sequestration in Conservation Easements



The reality of climate change brought on by increasing levels of greenhouse gases in the atmosphere presents challenges to conservation practitioners. This guide examines how conservation easements may be better planned to deliver good conservation outcomes even as a changing climate affects the physical conditions on the land. The guide also reviews opportunities to boost carbon sequestration on lands under easement.

Introduction	1
Creating Flexibility in Easement Administration	2
Managing Changing Conditions.....	2
Use Firm but Adaptable Easement Terms	3
Use Management Plans and Revisions	3
Use Easement Amendments	4
Monitoring Ecological Conditions.....	4
Proactive Ecological Management	5
(Not) Compelling Landowner Action in the Absence of Commercial Activity.....	5
Grant Holder the Right to Manage.....	6
Addressing Carbon in the Conservation Objectives	7
Pointedly Addressing Carbon Sequestration and Reduction with the Restrictive Covenants.....	7
Agriculture	8
Forestry.....	9
Building Standards.....	10

INTRODUCTION

WeConservePA views this guide as a work-in-progress to be updated as helpful suggestions for improvements are offered. Please email info@WeConservePA.org to propose additions, corrections, and other changes to the guide.

With the industrial revolution's intense adoption of fossil fuels in the production of goods and services, humans began changing Earth's atmospheric chemistry in a major

way, every decade injecting more and more carbon into the atmosphere through the burning of the fuels. The concentration of carbon gases in the air is higher now than at any point in human history.

With weather change and other consequences now evident, people are accepting that steep reductions in carbon emissions and sequestration of carbon already in the air are necessary if we are to avoid the most calamitous changes to our climate and threats to civilization. The questions then arise: How best to reasonably achieve reductions and sequestration? Where are the opportunities?

Conservation efforts involving conservation easements are one place to look. The conservation easement is a proven tool for delivering conservation results in the public interest. Thanks to conservation easements, millions of acres of land once threatened by haphazard development will instead continue to provide greenspace, whether for farming, wildlife, recreation, sustainable timbering, water resource protection, or other purposes and activities. This success suggests that the conservation easement might be a promising avenue for increasing the uptake of carbon on the land.

However, expectations for the tool should be tempered by recognizing the nature of conservation easements. Their principal success resides in empowering easement holders to block activities and uses contrary to the easement's conservation objectives. It is this power that has enjoyed

support and affirmation from landowners, local communities, governmental organizations, and the courts. Blocking actions detrimental to conservation is one thing. Compelling landowners to take affirmative actions using their own money in support of conservation—in perpetuity—is quite another and likely not a viable path in most communities. Easements work well to eliminate basic threats like development but are not an instrument well-suited for forcing proactive conservation measures to be taken on the land.

That said, there may be opportunities to better tune the documents used to grant conservation easements and the operation of conservation easement programs to produce better carbon sequestration outcomes. Likewise, documents and program operations may be better tuned to maximize an easement's—and the land's—resiliency in the face of changing circumstances brought on by climate change. These opportunities include:

- Ensuring that the documents used to grant conservation easements are drafted to account for the need for flexibility in land management and easement management as circumstances change over time.
- Building a culture in easement stewardship programs that emphasizes the optimization of conservation outcomes over time.
- Empowering holders to monitor ecological conditions on the ground so as to be able to better advise landowners.
- Empowering holders to provide stewardship on the ground in cooperation with landowners.
- Adjusting some of the restrictive covenants set forth in conservation easement documents to increase carbon sequestration and reduction on a property.

Lastly, to the extent that organizations want to ensure optimal land management and conservation outcomes for particular locations, it makes sense to consider the conservation tool that maximizes organizational control—fee

simple acquisition. Of course, landowners may be unwilling to donate or sell their land, and organizations may not have the means to purchase and manage land. But when feasible, land ownership could be considered for providing maximal organizational discretion over land management and carbon sequestration.

This guide does not address carbon offset programs and how they might interact with conservation easements. That topic is instead addressed in the WeConservePA guide [*The Intersection of Carbon Offsets and Conservation Easements*](#). The topic of carbon rights is addressed in the WeConservePA guide [*Carbon Rights and Assignment of Carbon Credit Sale Proceeds*](#).

CREATING FLEXIBILITY IN EASEMENT ADMINISTRATION

Managing Changing Conditions

Conservation easements are intended to last—to ensure protection of important resources, no matter people's whims—through the decades and centuries. However, the world changes; the climate changes. The mix of species and types of habitats that can be supported by the eased land changes. So too do understandings of how best to meet conservation objectives.

To be effective in conservation work, the easement holder must be prepared to address these changes. The key pathways to exercising flexibility in the face of changing circumstances are:

1. Use firm easement terms that provide the holder flexibility to approve actions on the land not identified or contemplated at the time of the easement's establishment but which are subsequently identified as desirable in light of changing conditions or new knowledge.
2. Use management plans and revisions to those plans that are subject to holder review.
3. Use easement amendments consistent with the conservation objectives where actions in conflict with the

restrictive covenants turn out to be desirable for the advancement of the easement's objectives.

Use Firm but Adaptable Easement Terms

A grant of conservation easement that provides flexibility in managing change is a core element in accommodating climate change and myriad other changes in the world that may impact the advancement of an easement's conservation objectives. The [*Model Grant of Conservation Easement and Declaration of Covenants*](#) (the "Model Grant") published by WeConservePA is instructive.

Build in a Safety Valve

The Model Grant takes the approach of first setting forth a blanket prohibition on all activities. The prohibition is followed by a list of permitted actions. The approach provides clarity to both the owners and the easement holder as to just what is permitted and what is not.

Crucially, the easement document then provides the easement holder with broad discretion (but not an obligation) to allow other activities and uses not otherwise permitted under the easement if the holder determines that they are consistent with the conservation objectives. This permission is found at item 3.02(b)(10) of the model:

Other activities that Holder, without any obligation to do so, determines are consistent with maintenance or attainment of Conservation Objectives and are conducted in accordance with the Resource Management Plan or other plan approved for that activity after Review.

This allows the accommodation of activities and uses that were not yet invented or anticipated during the drafting of the grant of easement without resorting to amendment. It serves as a safety valve to provide latitude for changes in physical conditions on the ground as well as improvements in resource management practices and technologies over time.

For example, if native species found on the land at the time of the easement's establishment are no longer thriving due to climate change, there may be interest in

ensuring that species better adapted to a warmer climate can migrate to the property with human assistance (perhaps because highways and other obstacles hinder natural migration). Accommodations such as this can be accomplished with a resource management plan approved by the holder after review under the authority of 3.02(b)(10).

To guard against potential disingenuous requests by future owners and in recognition that there can be uncertain and hard to anticipate impacts from changes in land use and management, the permission places no obligation on the holder to approve such an activity or use.

Make Questionable Items Subject to Review

For activities identified during the planning of an easement that may or may not be consistent with the conservation objectives depending on the details (which, again could include changes in physical conditions due to climate change), the Model Grant provides for making those activities subject to review and approval by holder. For example, certain renewable energy structures could be allowed subject to review to allow the possibility of some renewable energy generation but not so much as to damage the property's conservation values.

Easement holders should be judicious in making items subject to review and approval as that every item that requires review by the holder will impose on the holder the potential need to secure adequate expertise and resources to assess future requests of the owners.

Use Management Plans and Revisions

The Model Grant requires holder approval of a resource management plan prior to:

- Activities on the land not addressed in the model as described in the previous section;
- Agricultural uses that involve removal of soil (4.02(b)(4)); and
- Sustainable Forestry (4.02(c)).

The model may also be customized to subject other areas of activity to resource management plans, for example the

application of herbicides in excess of some quantity or the conversion of woodland to meadow or farmland.

In addition to providing flexibility for an unknown future, provisions for resource management plans allow holders and landowners to defer complex and potentially expensive research and analysis on particular matters until there is actually a need to address those matters. It also allows decision-making to occur in the context of the physical conditions and state of knowledge at the relevant future date rather than engaging in a highly speculative effort under what could be quite different circumstances in the present.

As with other actions subject to holder review and approval, review and approval of resource management plans demand the availability of organization expertise and organizational discipline in conducting sufficient research, securing appropriate expertise, and following a process designed to minimize the potential for error.

Use Easement Amendments

It may be found that one or more of the easement's restrictive covenants is counterproductive to the achievement of the conservation objectives. This discovery may stem from new understandings of conservation or changes in physical conditions that necessitate changing the restrictive covenants to ensure that they serve the conservation objectives.

For example, at the time of easement drafting it may have been believed that all herbicides should be avoided for the optimal health of wildlife habitat, thus resulting in a prohibition in the easement terms; later, it may be determined that certain herbicides are crucial for invasive species removal and do not otherwise impact the conservation objectives. In this case, it would be appropriate to contemplate an easement amendment.

Section 6.03(a) of the [*Model Grant of Conservation Easement and Declaration of Covenants*](#) provides the holder the right but not the obligation:

To enter into an Amendment with Owners if Holder determines that the Amendment: (1) will

not impair Holder's power, enforceable in perpetuity, to block activities, uses, and Improvements of the Property inconsistent with the Conservation Objectives; (2) will not result in a private benefit prohibited under the Code; and (3) will be consistent with Holder's policy with respect to Amendment as of the applicable date of reference.

Easement amendments can be quite constructive for advancing conservation objectives, but care must be taken to avoid unintended consequences and other pitfalls.

WeConservePA provides the [*Guide and Model Policy for Conservation Easement Amendment*](#) to aid people in their easement amendment decision-making.

Individual land trusts and the land trust movement as a whole have gained a tremendous amount of knowledge and learned many lessons regarding easement drafting, resource protection, and easement stewardship over the years. If an easement was not established relatively recently, an amendment and restatement of the easement document can facilitate easement stewardship and improve conservation outcomes. WeConservePA publishes the guide [*Amending and Restating Grants of Conservation Easement*](#) to assist people with completing amendments and restatements.

MONITORING ECOLOGICAL CONDITIONS

To optimize land management and adapt to changing conditions requires an understanding of the land's conditions. However, under the typical conservation easement, the easement holder is limited to inspecting the property for compliance with the easement's terms. For the holder to be more effective in advising owners on land management as well as having a more complete understanding of the land when addressing requests for review and approval of proposed owner actions, there may be merit in drafting the grant of easement to afford the easement holder the right to conduct ecological monitoring. For example, you could add to section 6.03 "Other Rights of Holder" of the Model Grant a new right:

(d) Ecological Monitoring. To enter the Highest Protection Area and Standard Protection Area and monitor water, biological, and soil conditions to inform Holder in crafting land management guidance for Owners and in exercising its powers under this Grant. Monitoring may include taking small water, biological, and soil samples for off-site analysis. The entry and monitoring must be conducted with reasonable notice, in a reasonable manner, and at reasonable times.

This provision specifically excludes the Minimal Protection Area as this would be the portion of the property likely of minor importance for ecological monitoring and likely of greatest sensitivity for the owners in regard to privacy concerns. The provision could be expanded further to clarify a more intrusive right for the holder, for example, by adding the following sentence to the end:

Monitoring may also include continuous video and other electronic monitoring of specific highly localized sites in consultation with and subject to the approval of the Owners, such approval to not be unreasonably withheld, in order to better understand ecological conditions.

The example provides the holder the right to monitor conditions in both the Highest Protection Area and the Standard Protection Area. This right could instead be limited to one or the other area.

Providing the easement holder the right to conduct ecological monitoring is only a first step in the new, potentially productive direction of fostering proactive management of the land to optimize conservation outcomes. In order to capitalize on the right, a holder would need access to money and technical know-how to actually carry out ecological monitoring. And then, depending on the findings and analysis of the findings, substantial additional financial and technical resources would be necessary to proactively manage the land for the improved conservation outcomes. This last step, of course, would also require the landowner's consent.

PROACTIVE ECOLOGICAL MANAGEMENT

(Not) Compelling Landowner Action in the Absence of Commercial Activity

The success of conservation easements resides in their basic, traditional operation: empowering easement holders to block activities and uses contrary to the easement's conservation objectives. Occasionally, conservation practitioners have sought to invest additional powers in these tools including requiring landowners to take proactive land management actions above and beyond what might be required as a condition of holder approval of timber harvests or other owner actions of potentially significant impact on the land. For example, the easement's covenants could be written to require the landowners to refresh resource management plans for a meadow on the property every seven years, obtain holder approval of the revised plans, and conduct prescribed burns or other meadow maintenance activities at the owners' expense periodically.

This approach of requiring landowners to take active measures on the land in the absence of financial incentives to do so presents immense hurdles:

- Few landowners will be willing to commit themselves and all future owners to taking proactive—and largely unknown—measures as directed by the holder over time. The unknown costs could have a huge impact on property valuation and put a chill on potential buyers.
- How would courts view such requirements as applied to specific circumstances? How willing would the holder be to litigate if future owners refused to comply with the proactive management requirement. The easement holder's power to block inappropriate activities is [well-tested in the courts](#); not so are affirmative rights to compel owner expenditures on ecological management independent of associated economic activity.

Grant Holder the Right to Manage

Expand the Scope of the Easement Grant

The more promising approach is having the landowner grant the holder the right to conduct ecological management at the holder's expense.

To implement this, the Supplemental Provisions to the Model Grant guides users to expand in article 1 the description of the grant made to the holder:

The Conservation Easement empowers Holder to block activities, uses, and Improvements inconsistent with the Conservation Objectives **and to engage in certain resource management activities in support of the Conservation Objectives.** *[Bold indicates the added text.]*

Specify Holder's Affirmative Rights

Users would then describe with more specificity in article 6 the nature of the right granted to the holder in article 1. For example, assuming you have already added the right for holder to conduct ecological monitoring as per the previous section, you could add to section 6.03 "Other Rights of Holder" of the Model Grant the new right:

(e) Ecological Management. To enter the Highest Protection Area to perform resource management activities in furtherance of the Conservation Objectives. These activities are to be performed in accordance with a plan submitted to Owners for approval, not to be unreasonably withheld or delayed. Entry and management activities must be conducted with reasonable notice, in a reasonable manner, and at reasonable times.

The provision requires owners' approval in deference to the owners' understandable desire to participate in decisions that might significantly alter landscapes or involve safety risks. If there is comfort in Holder engaging in certain resource management activities without owner approval, then adjust the provision accordingly, for example:

(e) Ecological Management. To enter the Highest Protection Area to perform resource

management activities in furtherance of the Conservation Objectives. Resource management activities, other than planting and maintaining Native Species or removal of Invasive Species by mechanical or chemical means, are to be performed in accordance with a plan submitted to Owners for approval, not to be unreasonably withheld or delayed. Entry and management activities must be conducted with reasonable notice, in a reasonable manner, and at reasonable times.

Indemnity

It is normal and fair for conservation easements to provide that the owners indemnify the holder against claims of personal injury and damage to personal property. This is because the holder normally has no rights to manage the property and is in fact not managing the land. There is no good cause to expose the holder to liability from some other party who has an issue with the landowners.

In the situation where the easement will provide the holder with some management rights, it may be reasonable to place on the holder some responsibility for conditions on the land that could result in injury. To accomplish this in the Model Grant, you could look to adjust the indemnity provision contained in section 8.08. This section, without adjustment, reads:

Owners must indemnify and defend the Indemnified Parties against all Losses and Litigation Expenses arising out of or relating to: (a) a breach or violation of this Grant or Applicable Law; and (b) personal injury (including death) and damage to personal belongings occurring on or about the Property if and to the extent not caused by the negligent or wrongful acts or omissions of an Indemnified Party.

The "Providing for Public Access" section of the Model Grant's Supplemental provisions suggests one approach for the holder providing the owners with limited indemnification as appropriate to the holder's greater involvement with the land.

ADDRESSING CARBON IN THE CONSERVATION OBJECTIVES

If a prospective easement holder wishes to consider carbon emission reduction or sequestration in its stewardship of the easement, this should be incorporated into the conservation objectives (purposes) of the easement. For example, section 1.04 of the Model Grant reads:

The resource-specific and area-specific purposes of the Conservation Easement (collectively, the “Conservation Objectives”) are as follows... (5)

Ecosystem Services. To absorb within the Property rainwater that otherwise might cause erosion and flooding downstream of the Property; **to sequester carbon in plants and soil to mitigate rising atmospheric carbon levels** [*emphasis added*]; and to support other healthy ecosystem processes.

Similar carbon-centric references can be found in a number of statements of easement purpose in grants of easement from around the country.

Some may suggest a conservation objective of adapting the land to a changing climate. A perspective taken with the Model Grant is that this is unnecessary. The conservation objectives include the general protection of water, biological, soil, and other resources. While users may customize the Model Grant to cite particular resources present on the property at the time of the easement’s establishment, users should be careful to avoid customizations that would serve to *exclusively* protect those resources present at the time of establishment. If the climate changes, it is wholly appropriate under the Model Grant for land management practices to shift to achieve conservation of the changing natural resources—whatever they may be—under the new conditions.

For example, the Model Grant contains a conservation objective “to protect and improve the quality of natural habitat for animals, plants, fungi, and other organisms, particularly Native Species.” At the time the easement is created, a portion of the land may be a wet meadow. Over

time, it could morph into a floodplain forest community. The holder would seek to ensure that no actions on the land harm natural habitat in general, no matter which particular habitat (or intermediate habitat) conditions exist at the time in question.

This suggests a new question: under the Model Grant, is the owner free to act—within the bounds of the restrictive covenants or, in the case of items subject to holder review, with holder’s approval—to hasten or stimulate a change in the habitat to better match a warming climate, recognizing that the climate changes are underway?

The answer is not a simple yes or no. Land management to optimize conservation outcomes can be complex. Even more so in a changing climate. The holder’s role as the interpreter of the conservation easement and reviewer of actions subject to review is crucial. Section 6.02 “Rights and Duties of Holder” sets forth the holder’s right and duty:

To interpret the terms of this Grant and, at the request of Owners, furnish Holder’s explanation of the application of such terms to then-existing, proposed, or reasonably foreseeable conditions within the Property.

It is up to the holder to judge, for each particular circumstance called into question, what proactive habitat management actions would be appropriate.

POINTEDLY ADDRESSING CARBON SEQUESTRATION AND REDUCTION WITH THE RESTRICTIVE COVENANTS

Can the restrictive covenants within conservation easements (articles 2 through 5 of the Model Grant) be modified to better deliver carbon sequestration and reduction results? Beyond the suggestions provided earlier in this guide, the opportunities for improving upon the existing text of the Model Grant appear to be few. The most promising avenues identified to date are described below.

None will be universally (or generally) appealing to land-owners and holders at the present time. Some, however, could be found agreeable now and again. None are known to have been implemented as of this writing.

Agriculture

Background

More carbon [resides in the soil](#) than in all of our planet's plant life and atmosphere combined. All soil holds carbon, but the way the soil is managed affects how much carbon it can sequester and the rate at which it stores carbon. [Sustainable farming practices](#), which largely overlap with [carbon farming](#) or [regenerative agriculture](#) methods, increase organic matter in the soil, helping maximize carbon sequestration.

Some of the methods to improve soil organic matter and increase carbon sequestration in cropland are entering the agricultural mainstream. The most common include planting cover crops, minimized tillage, and use of soil amendments like compost. (These methods also increase soil fertility and, by preventing erosion, reduce water pollution.)

There is tremendous promise regarding improved [management of grasslands](#). In 2020, for example, scientists published a [peer-reviewed study](#) finding that a multi-species rotational grazing system reduced net greenhouse gas emissions by 80% (the one crucial catch being that the regenerative approach required 2.5 times more land than conventional grazing).

(See "[Soils for Sequestration](#)" and "[Soil as Carbon Storehouse: New Weapon in the Climate Fight?](#)" for more background.)

The Status Quo

Within Standard Protection Areas, the Model Grant permits:

Sustainable Agriculture that maintains continuous vegetative cover and, if conducted in accordance with a Soil Conservation Plan furnished to Holder, Sustainable Agriculture that

does not maintain continuous vegetative cover are permitted... (4.02(b))

"Sustainable" is defined to mean:

land management practices that provide goods and services from an ecosystem without degrading soil or water resources and without a decline in the yield of those goods and services over time.

This permission does not require holder review and approval of a resource management plan. It only requires a soil conservation plan (a "conservation plan" in Natural Resources Conservation Service terminology) if continuous vegetative cover is not maintained and that plan is not subject to holder approval.

The relative permissiveness of this permission as compared to say the requirement for a resource management plan approved by the holder for sustainable forestry can be attributed to a number of factors, among those:

- Many farmers work hard on tight operating margins. Farmers—like most people—dislike others telling them how to run their business, and the challenging farm business environment heightens resistance to being told how to conduct farm operations.
- Government-based agricultural conservation easement purchase programs typically place only modest demands on eased farms, and these programs pay for easements. Land trusts, which often cannot pay for easements or pay only a small fraction of the easement's value, are not well-positioned to make stronger demands on donor-landowners than those made under the government purchase programs.
- Those granting the conservation easement may very well be concerned about the marketability of a farm to future farmers and the farm's resale value if the easement's restrictive covenants are substantially more demanding than those contained in most easements.

These barriers to more restrictive easement covenants are significant but may be surmountable when holders are working with landowners who hold a deep concern regarding climate change and have the financial wherewithal to place a stricter easement on their land.

Possible New Easement Provision

The sustainable agriculture permission in the Model Grant could be rewritten to: (1) require resource management plans as defined in the model in all cases; (2) require the plans to ensure that farming practices used on the land will result in significant carbon uptake in the soil; and (3) require holder review and approval of the plans to ensure compliance. For example:

Sustainable Agriculture if conducted in accordance with a Resource Management Plan, approved after Review, that prioritizes permanent, increased storage of carbon in the soil...

Use of the “prioritizes permanent, increased storage...” ensures that consideration of carbon sequestration opportunity is prominent in agricultural planning and implementation rather than being treated as an afterthought.

One could place even greater emphasis on carbon storage by instead phrasing the permission as follows:

Sustainable Agriculture if conducted in accordance with a Resource Management Plan, approved after Review, that places first in priority the permanent, increased storage of carbon in the soil at levels shown to be reasonably feasible in the regenerative agriculture industry...

If acceptable to both landowners and holder, this provision would represent a major step forward in advancing the conservation objective of sequestering carbon.

Hurdles to Change

Such a change in the model language presents a number of challenges, some addressed earlier in this section. Others include the following:

- The restrictions could be viewed as unacceptably draconian by many landowners.

- In the same vein, farmers may resist requirements to go beyond what is mandated in NRCS conservation plans.
- The restrictions require review by the holder, who may not have access to the expertise or financial means to judge the sufficiency of the plan or to be reasonably confident of compliance in the implementation of the plan.

Beyond these challenges, it should be recognized that the science of soil chemistry as applied to various farming activities in highly particularized farming situations is not fully developed. Uncertainties are compounded when introducing dramatic events such as floods, unusual weather events, and the like, which could disturb in dramatic ways the expected uptake and retention of carbon in the soil. This is not an argument against addressing carbon in agricultural covenants but a suggestion that the achievement of carbon sequestration in soils should not be expected to be easily accomplished through simple one-size-fits-all-for-all-time formulas.

Forestry

Background

Trees take carbon from the air and distribute it—store it—throughout the tree from root to leaf. Carbon is also stored in the dead materials on the forest floor and in the soil. Globally, forests absorb and store billions of tons of carbon. In the U.S., family woodlands alone store [14 billion tons](#).

Old-growth forests are unrivaled in their storage of carbon; they have sequestered tremendous amounts of carbon over their long existence. Young forests in contrast have not stored a lot of carbon in their short lives but are taking carbon from the air at very high rates.

Adoption of carbon-friendly forest management practices can maximize the land’s ability to absorb carbon. Responsible management of threats from insects, diseases, invasive species, and fire help to protect the carbon stored

there. Some of these practices—like thinning—may release carbon in the short term, but when carried out appropriately, make the forest more resilient and resistant to large disturbances that would release a larger amount of carbon.

Carbon is sequestered—potentially for a long time—in the hardwood flooring, furniture, building framing, and other wood products created from timber harvesting. However, harvesting brings carbon emissions from the machinery used, transportation of logs, the decay of wood scraps left behind, and disturbance of the soil.

The Model's Provision

The Model Grant provides in the Standard Protection Area that:

Sustainable Forestry is permitted in accordance with a Resource Management Plan approved after Review.

“Sustainable” again is defined to mean:

land management practices that provide goods and services from an ecosystem without degrading soil or water resources and without a decline in the yield of those goods and services over time.

Doing Better

Addressing carbon sequestration in forest management planning in a way that actually affects atmospheric carbon levels is an immensely challenging undertaking.

No matter what one believes regarding the impact of various levels of timber harvesting—however conducted—on carbon sequestration in a forest, one has to account for how more or less harvesting on the eased property affects harvests on other forest lands under different management regimes. The global appetite for wood products and its impact on atmospheric carbon levels is not going to change as a result of harvesting choices on one eased property (or a great many eased properties).

If one takes the volume or rate of timber harvest out of the equation for optimizing carbon sequestration on forested land, this leaves a question of what else might be done forestry practice-wise to achieve optimization. At this

writing, it is unclear how to improve upon the practices that would already be expected under a requirement of performing forestry sustainably. Thus, there may or may not be ways to improve upon the Model Grant's restrictive covenants regarding sustainable forestry.

Building Standards

Background

Buildings account for [40%](#) of energy consumption in the United States, much of this energy derived from the burning of fossil fuels. The resulting addition of carbon to the atmosphere each and every day is immense.

A large portion of these emissions is avoidable with the adoption of green building practices and design. Some residences today are being built using technologies that reduce emission-generating energy consumption in the home by 20%, 50%, and even 100%. The technologies are far from dominant in the marketplace, but they are seeing more and more use.

Since most buildings will remain in service for decades after construction, the choices made today in building design and construction practices will likely have a huge influence on carbon emissions for generations.

With many conservation easements being established that permit one or more major buildings, often residential, on the eased land, holders and landowners might ask if it is appropriate to use conservation easements as a tool for ensuring more climate-friendly construction.

The Status Quo

The area-specific conservation objective for the Minimal Protection Area in the Model Grant is:

To accommodate, subject to moderate constraints, a wide variety of activities, uses, and Improvements, confining them to the Minimal Protection Area where they will not be detrimental to the achievement of other Conservation Objectives.

The identification of a Minimal Protection Area (MPA) within the eased property is intended to ensure that, on an

appropriate portion of the land, the owners will be able to construct improvements and engage in a variety of activities with only modest constraints and without undue interference from the holder. Users of the Model Grant are advised to confine the MPA or MPAs to as small an area as reasonably possible on the property and give the owners broad latitude within those confines. Placing restrictions on impervious coverage, building footprints, and other aspects of land development is avoided, and this avoidance is possible without harming the conservation objectives because the size of the MPAs is kept small.

This approach has seen widespread adoption in part because earlier easements often were quite prescriptive in regard to structures on a property. As a result, holder resources that could have been directed to new conservation projects were instead being used in non-productive (from a conservation standpoint) monitoring and regulating in minutia the square footage of homes, sheds, garages, etc.

In the context of the present-day hands-off-by-holder approach in MPAs, any move to now use conservation easements to affect construction practices and building design within an MPA would constitute a major shift in practice.

Possible New Easement Provisions

It would generally be unwise for easement holders to again enter the realm of regulating in detail what owners do in regard to residential and other buildings on their land. However, there may be a middle ground that could be appropriate in some circumstances for owners and easement holders. Rather than the holder getting directly involved in reviewing and approving construction methods and building design, it could instead simply confirm if a reputable third-party certifier has certified major new construction in MPAs to a well-established green building standard.

The 30-year-old [U.S. Green Building Council](#) seeks to transform how buildings are designed, built, and operated for the benefit of people and the environment. Their LEED system, the most widely used green building rating

system, has certified more than 105,000 buildings around the world. The system includes [four levels of certification](#)—Certified, Silver, Gold, and Platinum—to reflect how well a building addresses, carbon, energy, water, and other environmental issues in its construction and operation.

To take advantage of the LEED system and accomplish greater carbon reduction with easements, a provision, such as the following, could be added to the “Limitations on Improvements” in section 5.01 of the model:

Enclosed Additional Improvements in excess of 2,000 square feet of gross floor area must be certified to the LEED Gold or higher certification established by the U.S. Green Building Council or, alternatively, an equivalent green building certification system approved by Holder.

To help ensure that construction of a new building does not occur without attention to this green building requirement (which would be costly to implement post-initial construction), a provision such as the following could be added as a third bullet in section 5.02:

Owners must submit to Holder for Review, plans for construction of enclosed Additional Improvements of gross floor area in excess of 2,000 square feet to confirm that the construction is intended to achieve LEED Gold or higher certification or, alternatively, an equivalent green building certification system approved by Holder.

The choice of 2,000 square feet is somewhat arbitrary and should be adjusted to the circumstances. LEED certification is available for residential structures as small as 1,000 square feet gross floor area. However, LEED certification is costly, and thus the financial cost of certification as compared to the environmental benefit confirmed by certification is a less compelling proposition than for large buildings.

The choice of LEED Gold certification is also somewhat arbitrary. The level of certification should be chosen to suit the circumstances around the particular project.



WeConservePA produced this guide with support from the Open Space Institute’s Land and Climate Catalyst Planning Program, which is made possible with major funding from the J.M. Kaplan Fund and the William Penn Foundation, with additional support from generous individual contributions. Development of this guide was also supported by the Colcom Foundation and the Community Conservation Partnerships Program, Environmental Stewardship Fund, under the administration of the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation.

Andy Loza is the author.

Nothing contained in this document is intended to be relied upon as legal advice or to create an attorney-client relationship. The material presented is generally provided in the context of Pennsylvania law and, depending on the subject, may have more or less applicability elsewhere. There is no guarantee that it is up to date or error free.

© 2023 WeConservePA

Text may be excerpted and reproduced with acknowledgement of WeConservePA.

v. 8/19/2023