The holder of a conservation easement must monitor the eased property at least annually and perform other duties and activities necessary to uphold the easement’s conservation objectives in perpetuity. Easement holders are advised to estimate and plan for the costs of this stewardship work prior to acquiring easements.

Introduction
With conservation easements, an easement holder’s main responsibilities begin with the signing of the easement document. From that point onward, the holder is responsible—in perpetuity—for a variety of easement stewardship activities and their associated costs. Activities include:

- Regular site monitoring visits
- Responding to landowners’ questions about the easement
- Maintaining positive relationships with landowners
- Building relationships with new landowners
- Ensuring easement violations are resolved
- Responding to landowners’ requests to review plans for activities that require holder’s review and approval
- Amending the easement when necessary

Some unusual easements require a holder to manage the land to some extent, such as maintaining a specific habitat or removing invasive weeds; this also counts as stewardship activity.

This guide provides readers with a basic understanding of what activities are involved in stewardship and the average or range of costs associated with each. The Pennsylvania Land Trust Association’s Model Stewardship Cost Calculator can help holders estimate the stewardship costs for a proposed easement.

To fund stewardship, holders should establish a stewardship endowment or fund that is segregated from the holder’s other assets and used strictly for stewardship purposes. The sample calculator can also be used to estimate how much money will need to be invested in a stewardship fund to cover stewardship costs.

For an in-depth guide to easement stewardship costs, see the Land Trust Alliance’s (LTA) Determining Stewardship Costs and Raising and Managing Dedicated Funds (available free of charge for LTA members).

General Considerations When Estimating Stewardship Costs

Subdivision
Allowing the subdivision of an eased parcel into two separate parcels may double the costs of stewardship (three parcels could triple the costs, and so forth). As
each new parcel moves into separate ownership, it essentially brings into existence an independent set of easement management issues—most notably landowner relations and easement enforcement—and associated liabilities. (Travel costs may be mitigated if monitoring visits can be coordinated between the different landowners and neighboring properties monitored at the same time, but such savings won’t be found in most other stewardship activities.)

Volunteer vs. Staff Time

Although a holder may, at the time a conservation easement is acquired, use volunteers to conduct some or all of its stewardship, for planning purposes, holders should estimate stewardship costs based on the use of paid staff. Conservation easements must be stewarded in perpetuity, and as the number of easements held by a holder increases, easement stewardship can become too much for volunteers to handle (or to handle without substantial staff support). Additionally, a holder should consider that it could lose its volunteer energy over the decades and even cease to operate. In this case, will another organization be willing to accept the holder’s conservation easements without a corresponding endowment contribution that reflects staff—not volunteer—costs of meeting easement responsibilities?

Of course, volunteers play a vital role for many organizations, and can greatly strengthen a holder’s stewardship capacity (e.g., by allowing endowment money to be reinvested to further build the endowment instead of spent on staff for monitoring). Nonetheless, it is a mistake to plan on volunteers being able to handle easement responsibilities in perpetuity.

Future Landowners

Holders have found that stewardship demands increase after land ownership changes from the landowner that initially established the easement. Holders are likely to spend more time answering questions and dealing with potential and actual easement violations with subsequent landowners. Future landowners are more likely to be hostile towards the easement’s restrictions. A national survey of land trusts found that, of 21 easement violations that required litigation to resolve, none were committed by the original easement grantor.

Staff Needs

The Land Trust Alliance’s (LTA) Determining Stewardship Costs and Raising and Managing Dedicated Funds (available free of charge for LTA members) estimates that a full-time staff person or volunteer can complete conservation easement stewardship of 50–100 properties a year. Of course, the specific number depends on the nature of the properties, their locations, and the complexities of the easements.

Stewardship Costs

Average annual stewardship costs can range from hundreds to thousands of dollars per easement (excluding the costs to resolve major easement violations). As holders proceed with their stewardship work, they should carefully record their expenses to develop a better understanding of their long-term stewardship liabilities and the fiscal impact of each new easement project. Stewardship often costs more than expected, so tracking actual stewardship costs and factoring this into long-term planning is crucial. Organizations that remain solvent in the long run will have successfully balanced the liabilities inherent with holding easements with reliable resources to offset those liabilities.

The following sections describe the costs involved with the components of stewardship.

Initial Stewardship Costs

There are several activities that some organizations classify as initial stewardship expenses and others classify as part of the expenses associated with establishing the easement:

- Baseline documentation
- Installing signs indicating the property has been preserved
- Landowner education

Baseline Documentation

A crucial part of easement monitoring is proper baseline documentation, a record that establishes the condition of the property at the time an easement is
signed (or as soon thereafter as possible). It is used to measure property changes and future development against the terms of the easement. It is a critical document in case of an easement violation. The PALTA guide *Costs of Due Diligence in Conservation Acquisitions* provides more information about baseline documentation.

**Signs**
A well-drafted conservation easement document will include a right of the holder to install one or more signs to notify the public of the property’s conserved status, call attention to the benefits of conservation, and provide supplemental notice to prospective purchasers, lessees, and others of the property’s conservation restrictions. (PALTA’s state-of-the-art *Model Grant of Conservation Easement and Declaration of Covenants* includes this provision in article 6.) Holders typically install signs along a public right-of-way and easement boundary. Signs can vary greatly in size, material, and cost. See PALTA’s *Sign Gallery* for sign examples.

To identify the average costs of installing signs, PALTA analyzed grant applications to its *Conservation Easement Assistance Program*; in these applications, land trusts reported the costs actually incurred for installing signs on eased properties.

According to analysis of 29 applications submitted between 2007 and 2019, sign materials cost an average of $424 per eased property with a range of $104 to $868. The cost of personnel and mileage for installing the signs on each property averaged $204 with a range of $21 to $322. (Reports of zero costs were not included in this average.) Thus, in total, the costs of installing signs on a conserved property averaged $546 with a range of $108 to $1,158.

**Landowner Education**
A holder typically helps the owners who conveyed the easement on their property understand the holder’s stewardship policies and procedures and what resources the holder can offer to the landowner prior to the establishment of the easement. Holders must also educate new owners when properties change hands. One way to accomplish this is providing a standard packet of information.

**Monitoring**
Conservation easement monitoring is the regular inspection of the eased property to ensure the terms of the easement grant are being upheld. Monitoring allows holders to:

- Observe and document changes in a property’s condition
- Find existing violations and prevent future violations
- Maintain a relationship with the landowner(s) and remind them of the easement provisions
- Find areas where land management technical assistance can be provided, and establish records in case legal action is necessary

Practice 11.C of *Land Trust Standards and Practices* (Conservation Easement Monitoring) calls on land trusts to:

1. Adopt a written policy and/or procedure for monitoring conservation easements that establishes consistent monitoring protocols and recordkeeping procedures.
   - If the land trust uses aerial monitoring, conduct on-the-ground monitoring at least once every five years.
   - Promptly document the annual monitoring activities for each conservation easement.

**Basic Monitoring Costs**
Monitoring costs include:

- Staff time for preparing for the inspection, including file review and contacting the landowner
- Inspecting the property and preparing an inspection report
- Travel (gas and mileage, meals while traveling, tolls, etc.)
- Consultants (e.g., specialists to review and monitor particular easement provisions, such as forestry management)
- Equipment (camera, GPS equipment and software, etc.)
If applicable, the costs of running volunteer monitoring programs—such as staff time to oversee, trainings (whether sponsored by the holder or another organization), and recognition events—should also be factored in.

**Additional Monitoring Costs**

Some easement attributes necessitate more frequent or intensive monitoring, resulting in higher stewardship costs. Examples include:

- Easements with unusual restrictions
- Easements that impose on landowners an obligation to maintain the resources protected by the easement (as contrasted with simply avoiding activities and uses harmful to the resources)
- Easements that allow development (monitoring is needed especially during the construction itself)
- Easements that allow commercial timber harvests or other uses that require uncommon expertise of both those managing and monitoring the activity
- Easements abutting residential developments and other heavily used areas, which face increased risk of encroachment
- Easements that allow public access, including corridor access for motor vehicles, bikes, or horses
- Co-held easements, which involve a layer of holder coordination absent from easements held by one party

There are also several land-related factors that can increase monitoring costs, such as:

- The presence of threatened or endangered species or unique natural communities that necessitate additional monitoring of permitted activities to ensure that the frequency or intensity of the use is not detrimental to the protected resource
- Multiple noncontiguous parcels
- Relatively large acreage

Additional monitoring may not need to be as extensive as the regular annual monitoring. Some holders make frequent drive-by visits an integral part of their monitoring schedules.

**Length of Monitoring Visits**

Several factors affect how long it takes to complete a monitoring site visit. These include the size and shape of the property, the complexity of the easement, the permitted uses of the eased lands, the types of land uses on adjacent lands, the number of home sites at the time of the easement, the number of reserved home sites, and the accessibility of the eased land. Holders should also factor in the average travel time between easements and the holder’s office.

Although larger easements are costlier to monitor than smaller ones, many costs are not proportional to the size of the easement. While it takes longer to view the land of a larger easement, other costs, such as communications with the landowner and travel to the property, are unrelated to property size.

One example of how permitted uses of eased land can affect monitoring costs comes from *A Report on Working Forest Conservation Easements*, which found that the Society for the Protection of New Hampshire Forests requires 1.25–1.5 days to monitor an easement, compared to the average reported monitoring time of 5.25 hours. Most of the Society’s easements allow forest harvesting and require the use of a forest management plan, which complicates and lengthens the monitoring process.

**Aerial and Satellite Monitoring**

Some holders use low altitude aerial monitoring (increasingly, using drones) as an additional tool to track changes in eased properties. It can be a cost-effective means of reviewing a large easement or several small ones in the same area because land can be viewed at a significantly faster rate than on-ground monitoring. Additionally, it can allow holders to monitor areas that might be inaccessible or hard to access on the ground. When potential violations are observed, the holder should follow up with on-ground monitoring.

Some holders use satellite imagery. Satellite images can be a cost-effective way to detect landscape changes for large properties or for nearby properties that can be captured in one image.

**Landowner Communications**

Practice 11D of *Land Trust Standards and Practices* (Landowner Relationships) calls on land trusts to:

1. Maintain regular contact with owners of conservation easement properties to maintain
relationships and avoid potential easement conflicts
2. Establish systems to track changes in land ownership
3. When the property changes hands, attempt to meet with the new owner or property manager and provide information in writing about the conservation easement and the land trust’s stewardship policies and procedures

When holders view stewardship less as enforcement and more as an opportunity to build partnerships with landowners, they often decrease the number and severity of easement violations.

The primary form of landowner communications is meeting with landowners during annual monitoring and responding to landowner requests and questions are essential. However, it’s important to communicate and cultivate relationships with landowners in between visits. Additional forms of landowner communications include:

- Hosting educational events for landowners to gather and learn
- Sending newsletters or personal notes
- Recognizing landowners for excellent resource management
- Providing direct technical assistance to help landowners plan and implement best management practices
- Referring landowners to land-management funding sources

New Landowners
When a piece of land changes hand, communication with the new owners is especially important—holders must ensure new landowners understand the existence and terms of the easement as well as the holder’s stewardship policies and procedures.

Reserved and Permitted Rights and Approvals
Some easements include reserved rights, such as the right to construct a building or to extract timber or other resources. Often these reserved rights require the holder to review and approve the activity. Holders must be prepared for review of the request to exercise the right, which can include all of the following:

- At least one site visit
- Review of the easement language
- Review of the landowners’ plans (e.g., construction or timbering plans)
- Hiring of outside consultants such as foresters or architects
- Meeting with the landowner to discuss, negotiate, or modify plans

As the rights are being exercised, the holder must carefully monitor the land to prevent intentional or unintentional violations. Holders may want to meet with those carrying out the action, such as the construction manager or forester. Remember, it is easier to address potential violations during—rather than after—construction or tree harvesting. For construction, the holder should also prepare to conduct a post-construction site visit to document the construction work that occurred. Holders must maintain careful records of the review, approval, and inspection of exercised rights.

Holders should decide how to cover the costs of approval and monitoring of reserved rights before accepting an easement. The grant of conservation easement may be drafted to require landowners to cover the costs at a set rate before the review and approval process begins or after all activities have been completed (or a combination of the two).

Holders can also include the costs as something the holder will cover out of its stewardship endowment fund.

Legal
Over time, stewardship will inevitably result in questions about easement interpretation, proper procedures, and other points of law. Handling requests to exercise reserved rights will likely require legal services; easement interpretation and enforcement after a violation will always require legal services. For the easement holder, having ready access to an attorney to answer questions and provide legal counsel is essential.

Many holders seek board members who are attorneys to help address the day-to-day legal matters; others obtain legal services at a pro bono or discounted rate.
However, pro bono or discounted legal advice is not guaranteed. Therefore, holders should include full-cost legal advice in their estimates of stewardship costs.

**Easement Enforcement**

This guide separates enforcement of easement violations into two categories:

- Minor (those that don’t require litigation)
- Major (those that require litigation)

**Minor Violations**

Violations can generally be resolved without legal action. However, even without litigation, the holder may expend significant resources to reach resolution.

- Staff will need to travel to the property to inspect and document the violation, meet with the landowner, (and possibly the violator, if not the same person), develop and negotiate a resolution, and inspect the site once the violation has been resolved.
- Staff may need to work with original owners, new owners, and neighbors.
- Holders will need to obtain legal counsel to review the easement and offer advice on appropriate responses.
- Holders may need to hire consultants to provide additional technical expertise, such as water quality testing.
- Holders may find it necessary to remediate damage to the property’s natural resources itself, and could incur significant costs to do so. It is sometimes impossible to recover the costs of resolving violations and holders should be accordingly prepared.

**Major Violations**

Although taking a violation to court is generally viewed as a last resort, it may be necessary to prevent further resource damage or force a landowner to repair damages. Taking a case to court can be very costly, both in legal fees and staff time. A holder may also need to spend additional time rebuilding relationships with other landowners and the community at large. If litigation is necessary, the holder must be able to hire legal counsel with litigation expertise, actively participate in the formulation of the case, and provide careful baseline, monitoring, and violation documentation. The holder must be able to ensure it has sufficient funds to cover the costs or the ability to obtain them.

Every holder should plan on eventually facing some form of major legal challenge.

*Average Costs to Resolve Major Violations*

*Conservation Easement Violations: Results from a Study of Land Trusts* (1999) studied data from 147 land trusts and found that land trusts’ legal fees for major easement violations (including those that did not go to trial) averaged $35,000 ($52,800 in 2019 dollars) and ranged from $5,000 to $100,000 ($7,540 to $151,000 in 2019 dollars). Legal costs were recovered in half of the litigated cases.

A 2009 survey of more than 200 land trusts found that, among legal challenges costing more than $5,000, the average cost (not including staff time) was $37,500 ($43,900 in 2019 dollars). Two disputes cost between $100,000 and $300,000, and one cost over $400,000. Nearly half (47%) of survey respondents reported having at least one easement violation or legal challenge that required more than $5,000 in non-staff costs.

Other notable findings from the survey:

- There was an average of seven years between conserving the land and the land trust learning of the first violation
- 53% of violations were resolved within two years; 15% lasted at least five years
- 27% of the land trusts that experienced a legal challenge or violation would have considered pursuing legal action if greater funding had been available

An analysis of Terrafirma data from 2001–2011 produced several key findings, including:

- In urban and suburban service areas, challenge frequencies per parcel are almost 50% higher than in rural areas and the average external challenge costs are almost 90% higher
- Challenges brought by the original landowner have external cost severities that are approximately one third the external cost of successor landowner challenges
The frequency of challenges rose dramatically from 2000 through 2011. In 2011, a parcel of land was more than twice as likely to have a challenge then that same parcel of land would have been in 2001.

How often should holders expect a major easement violation? It’s hard to say. Past experience can’t be relied on to predict the future because:

- Relevant and statistically meaningful data is virtually non-existent
- Most owners of eased lands are the individuals who chose to grant the easements and are presumably less likely to challenge an easement than subsequent landowners
- One successful and prominent defense of an easement could put the brakes on future violations and, conversely, an unsuccessful defense could lead to more

### Amendments

If a landowner seeks an easement amendment, the holder would normally expect them to pay for the costs of doing so. However, if a holder initiates an amendment (likely to correct a deficiency in the easement language) the holder generally pays.

Based on 13 CEAP applications from eight different land trusts between 2007 and 2019, projects to amend/restate easements supported by the Pennsylvania Land Trust Association ranged in cost from $676 to $82,816 with a median cost of $7,394 (the $82,816 project is an outlier because it included $35,000 in survey costs). In most cases, legal costs were the largest component of the cost to amend/restate easements, ranging from $90 to $10,000 and averaging $3,669.

### Indirect Costs

Indirect costs are those not specifically identified with stewardship work but necessary for the holder’s general operations and stewardship work. Indirect costs include things like staff salaries and time, computers, phones, trainings, rent, utilities, insurance, and office maintenance. Holders should include these costs in their stewardship cost calculations.

Holders that rely partially or completely on volunteer time for stewardship should estimate what their costs would be if they had staff. The same goes for organizations without an office.

### Determining Stewardship Fund Amounts

To fund stewardship, holders should establish a stewardship endowment or stewardship fund, which is segregated from the holder’s other assets and used strictly for stewardship purposes. Annual stewardship costs should be paid from the fund’s income, not the fund’s principal.

To determine how much to invest in its stewardship fund in order to cover annual stewardship costs, the holder should divide the estimated annual stewardship costs by the expected return on investment. For example, if estimated annualized stewardship costs are $400 and the holder expects a 3.75% return (adjusted for inflation), the holder should invest $10,667 in the stewardship fund.

### Estimating Rates of Return

Since a stewardship fund is intended to fund stewardship costs in perpetuity, it is appropriate to look at investment returns over a long period. For the 20-year period ending in 2019, the compound annualized growth rate (annualized return) of the S&P 500 stock index was 3.79% adjusted for inflation. For the 40-year period ending in 2019, the annualized return was 8.51% adjusted for inflation. (See Moneychimp’s Compound Annual Growth Rate calculator.)

### Estimating Endowment Amount Needed to Cover a Major Violation

The upfront stewardship investment needed to cover a future major violation likely dwarfs the money needed to cover other stewardship activities. But reliably projecting the actual amount that needs to be set aside for violations is exceedingly difficult due to several factors:

- Estimates vary greatly with the assumptions used regarding the likely cost and frequency of violation.
- In spite of several years of Terrafirma claim experience and a few studies, the reality is that most
Costs of Conservation Easement Stewardship

conservation easements are relatively new and relatively untested in the courts.

- While one can make fairly accurate estimates of the costs of regular stewardship activities…?

Using an online calculator, for example, the Securities and Exchange Commission’s Savings Goal Calculator, you can determine the annual return on investment the holder would need to address a major violation.

Sample Calculations

If a holder estimates a major easement violation to cost $65,000 and to occur once in 40 years, the holder would need to save $725 per year, to fund the cost of the defense. To fund this cost out of a stewardship fund, assuming a 3.75% rate of return after inflation, the holder would need an initial endowment investment of $19,341 ($725/3.75%).

If the holder assumes a major violation is expected to occur once every 50 years, the holder would need to save $460 a year with an initial investment of $12,2667 ($460/3.75%).

If the holder assumes a major violation is expected to occur once every 80 years, the holder would need to save $135 a year with an initial investment of $3,606 ($135/3.75%).

Asking most landowners for that large of a stewardship fund donation is not feasible, which points to the fundamental problem that most holders are likely unprepared to cover the costs of major easement defense. Easement documents should require owners to reimburse the holder for all costs associated with a violation, but there is no guarantee that a court will enforce this requirement.

Some holders divide the cost of a single easement defense amongst multiple (50–100) easements. This method has two major flaws. First, it assumes that only one easement will need to be defended in court against a violation. Second, small holders do not have enough easements to spread the costs over.

Terrafirma

In 2011, the Land Trust Alliance launched Terrafirma, a conservation defense insurance program to insure the costs of upholding conservation easements when they have been violated or are under legal attack. Terrafirma is a risk retention group, a mutual insurance arrangement whose business is limited to insuring its members (to join Terrafirma, organizations must be LTA members). See the Terrafirma website to learn more.

Model Stewardship Costs Calculator

The Pennsylvania Land Trust Association’s Model Stewardship Cost Calculator can help holders estimate the stewardship costs for a proposed easement.

The sample calculator is based on a fictional conservation easement. As discussed in this guide, there are many factors that can increase or decrease potential stewardship costs. When using this calculator, holders should carefully consider the specificities of each easement and adjust time and cost calculations appropriately.

The most recent version of this guide and related resources can be found at https://conservationtools.org/guides/86

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