



Staying Connected in the Northern Appalachians

Potential Conservation Easement Provisions Designed to Explicitly Address Connectivity in the Northern Appalachians

Updated and Revised May 2012

In this document, we put forward sample conservation easement language designed to explicitly address issues of habitat connectivity. The information is organized according to general conservation easement sections including: Recitals/Whereas Clauses; Conservation Values; Purposes; Use Limitations; and Forest Management Plans. In each section, we overview the types of easement provisions that may be considered and the rationale for each, and offer sample easement language. We don't expect, and would not necessarily recommend, that sample language be used as "boilerplate", but rather that these provisions facilitate the drafting of connectivity language appropriate to the particular circumstances of a specific conservation easement property.

Terminology

The Staying Connected initiative has identified and defined a set of key technical terms relevant to connectivity. Among these, the following may be of value in drafting a conservation easement where connectivity is an important and recognized conservation attribute. These definitions may be included in a definitions section of the easement, or they may need to be included where the corresponding term is initially used in the easement.

Landscape connectivity: *The degree to which similar landscape elements, such as habitat patches or natural vegetation, are connected to each other so as to facilitate the movements of target organisms and ecological processes between them.*

Habitat corridor: *Components of the landscape that provide a continuous or near continuous pathway that may facilitate the movement of target organisms or ecological processes between areas of suitable habitat.*

Landscape permeability: *The degree to which a regional landscape, encompassing a variety of natural, semi-natural and developed land cover types, sustains natural ecological processes and is conducive to the movement of many types of organisms. Landscape permeability is a function of the connectedness of natural cover, the hardness of barriers, and the spatial arrangement of land uses.*

I. Recitals / Whereas Clauses

Recitals, or "Whereas" clauses, are often included as preamble to conservation easements, and are an important place to specifically recognize the habitat values and significant ecological resources known to occur on the property. According to *The Conservation Easement Handbook*¹:

- Recitals "[set] forth background information essential for understanding both the legal and factual basis for its creation."
- Recitals often include description of the "protected conservation values" of the property.
- "The recitation of the protected conservation values gives the term defining content. The purpose of reciting the qualitative values of the property... is to lay the foundation for the

¹ Byers, E., and K. Marchette Ponte. 2005. *The Conservation Easement Handbook*. Published by the Trust for Public Land and the Land Trust Alliance, Washington DC.

easement by summarizing, concisely, the characteristics of the subject property that have been identified for protection and the rationale for protecting them.”

- “[They] will function as a primary reference point for determining the purposes of the easement.”
- “Each resource... should be clearly described... so that the parties, their successors, and if necessary, the courts – however they may differ under a given set of circumstances on how the purpose should be achieved – will always be able to determine with some certainty the underlying purpose of the easement.”

Sample EASEMENT RECITAL/WHEREAS clauses related to connectivity:

- 1) *Whereas, the Northern Appalachians ecoregion (aka Northern Forest), spanning (in the United States) the Tug Hill Plateau and Adirondacks in New York, northern Vermont, northern New Hampshire, and western and northern Maine, is a largely forested region where wildlife still have the opportunity to roam freely across much of the landscape, and which has been identified as a largely intact forested region significant for wildlife in _____ (ADD REFERENCE TO ONE OR MORE STUDIES/PLANS SUCH AS STATE WILDLIFE ACTION PLAN). [THIS COULD BE TAILORED TO A SPECIFIC STATE OR AN ALTERNATE GEOGRAPHY]***

When and why to include such a clause? This recital helps to frame the ecological context for the property by connecting the property to the larger landscape/ecoregion. The recital indicates that, currently, the ecoregion is largely connected for wildlife. This clause could be used for any property located in the largely forested and intact Northern Appalachians ecoregion, where connectivity is one of the property’s conservation values.

- 2) *Whereas, there is increasing scientific consensus that an essential strategy for sustaining regional wildlife populations and counteracting the negative consequences of habitat loss, fragmentation, and climate change on wildlife is to maintain landscape connectivity sufficient to sustain natural patterns of wildlife movement and allow for species migration, relocation, movement, and other forms of adaptation. [IF APPLICABLE, REFERENCE CURRENT STATE WILDLIFE ACTION PLAN OR OTHER GOVERNMENTAL POLICIES OR PROGRAMS THAT PROMOTE CONNECTIVITY]***

When and why include such a clause? The recital specifically references “maintaining landscape connectivity” as a conservation strategy, and identifies how the property may contribute to maintaining regional wildlife populations (a public benefit). Referencing the state wildlife action plan or other relevant governmental program or policy strengthens the public benefit rationale.

- 3) *Whereas, the Property is located within an area that has been identified as important for regional landscape connectivity by [ADD RELEVANT STUDIES/PLANS AND/OR AGENCIES THAT HAVE IDENTIFIED THE AREA AS SIGNIFICANT FOR CONNECTIVITY]***

When and why include such a clause? This recital indicates the property is set within an important area for connectivity, and may be appropriate if the property and/or area have been specifically identified as important for connectivity through science-based studies or plans.

- 4) *Whereas, state wildlife agencies and conservation organizations [ADD OTHER ENTITIES SUCH AS MUNICIPALITIES IF APPROPRIATE] are working together to identify and conserve important regional wildlife habitat corridors that still support suitable habitat necessary to connect existing core forest habitats together for wildlife movement region-wide, including through the protection of land.***

Why include such a clause? This clause ties the project to a regional connectivity conservation initiative involving public agencies. Such language may be appropriate if a property has been identified as a connectivity conservation priority through a science-based planning analysis endorsed by public and/or private conservation entities.

II. Conservation Values/Attributes

This is the area of the easement in which the property's specific conservation values or attributes are identified. In some easement formats these are embedded in Recitals/Whereas clauses, sometimes in the Purposes, and sometimes they are specifically identified elsewhere. We believe that in most cases connectivity will be an additive conservation value, and not the exclusive conservation. In this way, referencing connectivity as an additional conservation value bolsters future opportunities to interpret the easement, but does not narrowly define the easement in a manner that could potentially undermine its validity should the connectivity value diminish over time.

Sample CONSERVATION VALUES/ATTRIBUTES clauses:

- 1) *The Property includes suitable habitat for [LIST SPECIES, IF KNOWN] and other wildlife that provides a habitat corridor that helps to connect the [LIST CONSERVATION AREAS OR INTACT CORE HABITAT AREAS THAT YOU ARE TRYING TO CONNECT] so that wildlife populations are not isolated by developed land. [IF NOT ALREADY DEFINED, YOU MAY WISH TO DEFINE HABITAT CORRIDOR HERE: "A habitat corridor consists of components of the landscape that provide a continuous or near continuous pathway that may facilitate the movement of target organisms or ecological processes between areas of suitable habitat."]***

Why include such a clause? Explicitly identifies the connectivity conservation value of the property, with a focus here on the property's role in area-to-area connectivity. Such language may be appropriate if a property has been identified as providing suitable habitat that facilitates connectivity for species of interest, and if the property helps to create a habitat corridor linking currently protected lands.

- 2) *In its forested, relatively natural, and unfragmented condition, the Property contributes to maintenance of a permeable and connected landscape [IN THE _____ REGION]. [IF NOT ALREADY DEFINED, YOU MAY WISH TO DEFINE LANDSCAPE PERMEABILITY HERE: Landscape permeability is the degree to which a region, encompassing a variety of natural, semi-natural and developed land cover types, sustains natural ecological processes and is conducive to the movement of many types of organisms. Landscape permeability is a function of the connectedness of natural cover, the hardness of barriers, and the spatial arrangement of land uses.]***

Why include such a clause? Explicitly identifies the connectivity conservation value of the property, with a focus here on landscape permeability. Such language may be appropriate if a property is largely forested and in a natural condition, and is located within a linkage or other region identified as important for connectivity.

III. Easement Purposes

The Purposes section is an extremely important section of the easement. It memorializes the intentions of the parties, and defines the vision for the property and its conservation values over time. According to The Conservation Easement Handbook, the Purposes “clause is, in fact, the touchstone of the easement.” Language can be included that makes it clear that conserving the connectivity values of the property is a specific, unambiguous purpose of the easement. However, as with the conservation values/attributes section, inserting connectivity into the easement Purposes should be additive rather than exclusive, to avoid the potential of weakening the easement rationale in the event that connectivity values do not persist due to external forces or circumstances.

Sample EASEMENT PURPOSES clauses:

- 1) *To help conserve an important habitat corridor, including the Property’s wildlife habitats [MAY WISH TO LIST WHICH ONES: such as forests, wetlands, riparian areas, streams, rivers, ponds, and/or other habitat features supporting connectivity], that facilitates the movement of organisms [MAY WISH TO MENTION SPECIFIC FOCAL SPECIES, BUT REALIZE THAT BY NAMING SPECIES THIS COULD OVER TIME PUT THE PURPOSE AT RISK IF THE SPECIES BECOMES REGIONALLY EXTIRPATED; IF LISTING SPECIES, THERE SHOULD BE DATA DOCUMENTING THAT THE SPECIES IS PRESENT AND THE PROPERTY’S HABITAT IS SUITABLE, AND BEST TO LIST SPECIES IN THE FORM OF: “such as..., ..., and ...” or “including but not necessarily limited to ..., ..., and ...”].between [LIST CONSERVATION AREAS OR INTACT CORE HABITAT AREAS THAT YOU ARE TRYING TO CONNECT].***

Why include such a clause? This clause clearly establishes conservation of the property’s area-to-area connectivity values for species movement as a purpose of the easement. Consequently, future uses of the property may be evaluated for consistency with this purpose.

- 2) *To help maintain a permeable landscape and physical habitat connection between [LIST CONSERVATION AREAS OR INTACT CORE HABITAT AREAS THAT YOU ARE TRYING TO CONNECT] for [POSSIBLY LIST SPECIES] by conserving and managing the [forests, wetlands, riparian areas, streams, rivers, ponds, and/or other habitat features supporting connectivity] on the Property so that it is conducive to wildlife movement.***

Why include such a clause? Similar to the above, but more focused on the property’s contribution to overall landscape permeability. This purpose may be appropriate if the property’s protection clearly helps to link existing protected areas.

IV. Use Restrictions

In this section, we include categories of use restrictions that may be included or tailored to reflect connectivity considerations. For each, we offer sample language that may be useful in drafting an appropriate use restriction clause for a specific property. We recommend careful consideration of the relevance and appropriateness of each restriction provision, based on the specific values and circumstances of a property, when deciding whether to include a given restriction.

CONVERSION: Restrictions on clearing/conversion of forest land to (re-)establish fields for agricultural [OR OTHER OPEN LAND] uses.

Why include such a clause? If the property's connectivity conservation values are related to its forested habitats, the easement holder may wish to specifically restrict conversion of forest land to agricultural or other open land uses.

Sample CONVERSION language:

Land Conversion. *There shall be no conversion of land that was in a forested condition at the time of the granting of this Conservation Easement to a non-forested condition, except temporarily as a result of natural disturbances or as part of a silvicultural treatment prescribed in the Stewardship Plan. Exceptions to this restriction may be granted by the Easement Holder, in its sole discretion, to advance the habitat connectivity [AND MAY ALSO WANT TO REFERENCE OTHER] purposes of the easement.*

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RIPARIAN AREAS: Restrictions on forest and agricultural management in riparian areas (no-harvest or light-management) to protect travel corridors.

Why include such a clause? Amongst many ecological values, riparian areas are known to provide important habitat and travel corridors for many wildlife species. Incompatible management in riparian areas may have detrimental impacts on connectivity. Restrictions on management in riparian areas may help to preclude or limit management practices that could be detrimental to connectivity. Including such restrictions will have easement monitoring implications for the easement holder, and may have financial ramifications for the landowner.

Sample RIPARIAN language:

Riparian Areas. *The following riparian management zones shall apply for tree cutting and removal operations [CAN ALSO APPLY TO AGRICULTURAL MANAGEMENT OPERATIONS] adjacent to streams, rivers, ponds, and non-forested wetlands, hereinafter referred to collectively as "water body".*

- *___ feet from each side of USGS mapped intermittent, 1st and 2nd order streams and along shores of ponds and non-forested wetlands less than 10 acres in size.*
- *___ feet from each side of 3rd and higher order rivers and streams and along shores of ponds and non-forested wetlands greater than 10 acres in size.*
- *Riparian buffer zones shall be expanded as necessary to encompass all vegetative*

communities subject to flooding, slopes greater than 35%, or soils classified as highly erodible that are adjacent to the water body or wetland.

Streams, ponds, and rivers shall be identified as those shown on 7.5 minute United States Geologic Survey Quadrangle maps. Non-forested wetlands shall include those emergent and shrub wetlands shown on National Wetlands Inventory maps, Town wetlands inventory maps, and other sources mutually agreed to by the Fee Owner and the Easement Holder.

The distance of the riparian management zone shall be measured from the edge of normal high water mark of the water body or wetland. In areas where there are wetlands contiguous to a stream, river, or pond: 1) the widest applicable riparian management zone shall apply; and 2) the starting point for the area shall be the upland edge of the normal high water mark of the water body or wetland.

- *[IF NO HARVEST ZONES ARE DESIRED] Within the riparian management zone there shall be no tree harvesting within the first ___' from the normal high water mark or wetland edge as defined above.*
- *[WHERE LIGHT HARVEST MANAGEMENT IS DESIRED] Within the (remainder of) the riparian buffer zone, tree harvesting methods shall be in accordance with the recommended practices in [INSERT APPROPRIATE BMP REFERENCE].*
- *Within the riparian buffer zone there shall be no application of pesticides or herbicides.*

Proposed exceptions to these limitations, such as cutting and dropping trees into streams for the purpose of restoring aquatic habitat, shall be described in the Forest Management (or Stewardship) Plan and may be granted at the sole discretion of the Easement Holder.

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ROADS: Restrictions on the development of new and widened roads. Landowner needs to clearly demonstrate that the existing road network is inadequate for management of the property in accordance with easement purpose and restrictions, thereby justifying any new/widened road.

Why include such a clause? Roads can serve as impediments or barriers to species movement, amongst other ecological impacts. While any road could have impacts, risks to connectivity increase with wider roads, with paved and gravel roads (as compared to unimproved woods roads), and with increasing intensity of use. The intent of a roads restriction clause is not to preclude the existence or use of roads on the property, but rather to establish standards for development of new roads.

Sample ROADS language: (ADAPTED FROM VLT LARGE WORKING FOREST EASEMENT)

New Roads. The Fee Owner may construct new roads and associated improvements necessary for forestry [AND/OR AGRICULTURE] with the written approval of the Easement Holder, provided that Fee Owner shall describe all such new roads and associated improvements in the Stewardship Plan described in Section 5 below. New (improved, paved, or gravel) roads and associated improvements shall only be constructed if Fee Owner demonstrates that:

- i. such construction is consistent with the Purposes of this Conservation Easement;*
- ii. the system of existing roads is not adequate and additional road improvements are necessary to provide reasonable access to the Property for forestry; and*
- iii. any such road improvements do not significantly impair surface water quality, wildlife*

habitat and connectivity, rare species, and exemplary natural communities on the Property.

The provisions of this paragraph shall not apply to the establishment and use of temporary harvest (skid) trails, which shall be permitted without prior approval of the Easement Holder. For the purposes hereof, a logging road is defined as a road suitable for use by a transport truck to take cargo of forest products off-site, and a harvest (skid) trail is defined as a non-structural pathway used to move forest products to a landing or logging road.

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FENCING: Fencing restrictions to reduce potential impacts of fencing as barriers

Why include such a clause? Fencing could serve as an impediment or barrier to movement for certain species. Note, however, that fencing restrictions may be problematic in areas dominated by livestock agriculture, and may be in conflict with other natural resource conservation goals such as water quality protection.

We do not offer sample fencing language. Restrictions on fencing could be included in existing clauses related to structures, or as a discrete type of structure with a separate use limitation clause.

V. Forest Management [aka Stewardship] Plan

Conservation easements on working lands typically include provisions requiring preparation of a forest management or stewardship plan, laying out the necessary elements of said plan, and mandating that management be undertaken in accordance with the plan.

Why include such a clause? Forest Management plans, or Stewardship plans, are an essential mechanism for translating easement purposes and provisions into more detailed land management practices. Most conservation easements today require the preparation and periodic update of management plans to guide on-the-ground management practices. The sample provisions listed below are intended to direct the landowner and the easement holder to give due consideration to the impacts of management on habitat connectivity. Because management plans will be updated over time, and therefore can and should be adapted in response to new information and circumstances.

Sample MANAGEMENT PLAN clauses specifying required elements of a plan related to connectivity [among other required elements]:

Plant and wildlife considerations; specifically, prescribed timber management activities must be compatible with, and performed in support of the goals of conserving and enhancing wildlife habitat values, including those pertaining to feeding, travel corridor cover, and travel corridor connectivity.

Analysis of how roads and stream crossings may affect wildlife connectivity and what types of mitigation management will be followed, such as maintaining forest canopy across a road or making sure stream culverts are sized and located in a manner that does not impede fish movement.