STREAM CORRIDOR EASEMENTS



The Stream Corridor Easement is a management tool used by community-based organizations and government entities to protect a natural stream corridor. The transfer of channel and floodplain management rights via a Stream Corridor Easement offers a unique tool for preserving stream functions that benefit human and ecological communities while also reducing flood hazards by protecting stream and floodplain processes at critical locations in our watersheds.







Introduction

The Stream Corridor Easement (SCE), is a voluntary legal agreement between a landowner and a land trust or government entity which contains permanent restrictions on the use or development of the land in order to protect certain qualities of the property. A Stream Corridor Easement is used as a management tool to preserve natural stream functions that benefit human and ecological communities while also reducing flood hazards by protecting stream and floodplain processes at critical locations in our watersheds.

Stream Corridor Easements are primarily intended as a "passive management tool," with a management plan centered on letting the stream adjust naturally within the corridor. The landowner may be able use the land within the easement for agricultural, forestry, and recreational purposes in a manner that does not interfere with the basic intent to allow the stream channel to move and access its floodplain.

Prioritizing Corridor Easement Opportunities

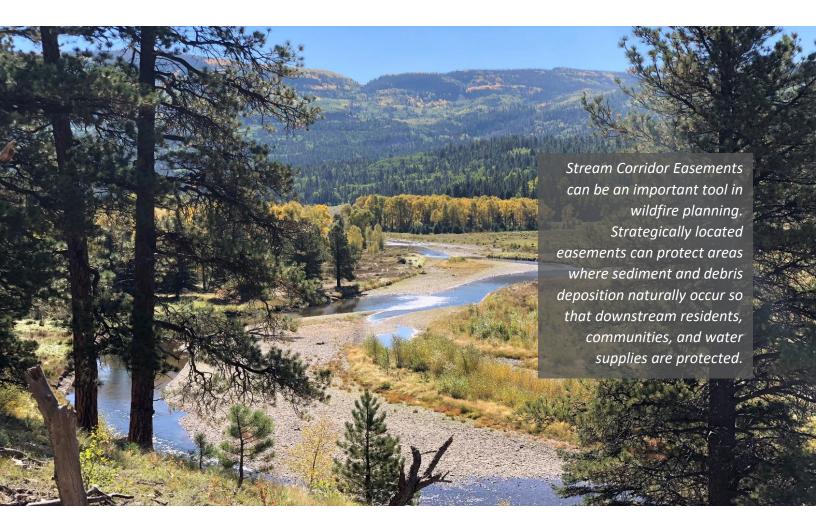
In general, Stream Corridor Easements are prioritized for areas in stream corridors with existing or easily rehabilitated floodplains. Floodplains can be thought of as "pressure relief valves" in stream systems and serve to protect downstream communities and infrastructure from high energy floodwaters. Floodplains are also critical to the deposition and storage of water, sediment, and organic material and serve as some of the most valuable habitat for wildlife and fish in Colorado.

The Colorado Water Conservation Board has developed methods for defining stream corridors, including lands adjacent to the stream channel that have been shaped by stream erosion and deposition under the prevailing flow and sediment regimes, as part of the Colorado Fluvial Hazard Zone Delineation Protocol (ColoradoFHZ.com). Fluvial Hazard Maps may be used to identify where the deposition and storage of water, sediment, and organic material is likely during a flood. The CWCB seeks to work with community organizations and planners to identify high priority areas for the implementation of stream corridor easements.

Stream Corridor Easements benefit the landowner and community at-large. Easements provide financial benefits to landowners as there can be direct payments made or short and long-term tax benefits. The stream corridor easement option is also especially attractive to landowners who do not wish to spend hundreds of thousands of dollars to attempt to manage stream channels through interventions such as dredging or rock armoring. These practices usually require expensive permitting, construction, and maintenance, and are prone to fail during a flood event. Through a Stream Corridor Easement, the landowner would instead agree to receive compensation for not installing expensive stream training structures, either through a direct cash payment or through tax deductions, and in return accept the stream movement, erosion, and/or deposition on the land. Similarly, by reducing long-term maintenance, the Stream Corridor Easement becomes an attractive, cost-saving practice to agencies and entities that have traditionally provided funding for technical, regulatory, and construction assistance to landowners.

Landowners Seeking Stream Corridor Easements

Landowners can initiate the stream corridor easement process by reaching out to their local watershed coalition, land trust, open space, or planning department. If none of these exist in your area, contact the CWCB directly via the website: www.ColoradoFHZ.com. More detailed information about Conservation Easements can be found at: https://coloradoopenlands.org/considering easement/



Easements as a Preferred Stream Management Alternative

For decades, when conflicts arose between streams and communities, channel interventions were constructed to prevent erosion, deposition, and channel movement and to keep water contained within the channel banks. It is now widely recognized that these management practices are increasingly expensive to maintain, can be prone to failure, and may actually *increase* flood risk. The practices of controlling and constraining streams also lead to significant environmental degradation, a loss of habitat critical to endangered species, and a loss of wetlands and the associated ecosystem services these areas provide.

Stream Corridor Easements seek to protect, rather than stop, natural processes by compensating landowners to forgo installing interventions that contain or control stream channels. Completed easements are grants made by a landowner to a land trust or conservation organization. Through the sale of an easement, landowners may divest from areas where repetitive losses are experienced or anticipated, while the easement purchaser makes a long-term investment in the soils, property, infrastructure, and ecosystem in the watershed. The resulting protected corridor provides relief to landowners and taxpayers and requires that future management steps away from construction in the stream corridor. Giving streams space, protecting floodplains, and using limited public resources to conserve corridors, to allow for the safe dispersal of water, sediment, and debris in natural channel and floodplain features will reduce future flood hazards and promote the ecological health of our streams.

Securing a stream corridor easement may be the most viable stream management alternative in areas where:

- 1) sediment deposition is expected in the channel and/or on the floodplain;
- 2) current development does not limit channel adjustments;
- 3) allowing natural stream processes to occur may help reduce flood hazards to already developed lands downstream.



Rights and Restrictions

Within the boundaries of the Stream Corridor Easement, the landowner retains the right to use the land per the terms agreed upon in the contract. A Stream Corridor Easement does not restrict the ability of the owner to sell, rent, lease, or bequeath the land to other parties.

A Stream Corridor Easement does not allow the public to access the property (unless specific access is granted) nor does an easement prevent the landowner from mortgaging, leasing, selling, or passing on the property. Easements are intended to support working lands and do not require specific agricultural practices.

Unless otherwise specified Stream Corridor Easements limit future division of the property and restrict construction of new buildings within the easement boundary. Surface mining activities are typically restricted, while historic use of water rights on the property are preserved.

Through a Stream Corridor
Easement, the landowner sells or
donates their right to modify a
stream's channel and access to
its floodplain thereby allowing
the natural processes of erosion
and deposition to continue in
perpetuity within the protected
easement corridor.

The Stream Corridor Easement has no effect on land use or activities outside of the contractual boundary.

Developing a Stream Corridor Easement Project

Based on the outcomes of local and regional planning efforts (e.g., fluvial hazard mapping, flood hazard mitigation planning, natural resources assessments, wildfire mitigation plans, outdoor recreation and open space, or stream management plans) certain landowners may be approached by a land trust or other working party about selling or donating a Stream Corridor Easement. Together, the landowner and easement proponents will shape the context for the project and the desired outcomes. The program is *completely voluntary*, and great care is taken to tailor the easement project to the individual needs of each landowner.

Typically, organizations and landowners wishing to pursue a Stream Corridor Easement will want to consult a Fluvial Hazard Zone maps to help identify the parts of the property that are subject to stream channel movements and sediment deposition and together identify the priority areas for the easement and the physical boundaries. The Stream Corridor Easement should not solely be based on the boundaries shown by FEMA Floodplain maps (FIRMs) as these maps do not capture the potential of the stream channel to erode and deposit flood debris nor do they account for all of the potential lands where natural stream processes may improve habitat and function of the stream in the long-term.

The primary parties of an easement are the landowner, who is the Grantor, and one or more parties (typically a land trust) who legally hold the easement, or the Grantee(s). The Colorado Water Conservation Board is available to bring expertise, funding, and creativity to maximize effectiveness of a Stream Corridor Easement project.

Funding a Stream Corridor Easement

Grants sought for the purchase of Stream Corridor Easements may come from a wide variety of state, federal, and private funding sources and should always include funds for the purchase price of the easement, the contracting costs, the costs associated with the identification of the easement boundaries (e.g., boundary surveys, stream science technical assistance, historical research, reporting and documentation) and the stewardship of the protected property.

The purchase price of an easement may be based on a percentage of the fair market value or other factors such as agricultural production or the benefit-cost ratio of the public investment. Pricing may also consider land use history and the propensity of erosion and deposition processes and the land's natural ability to provide protection and ecosystem services to the community within the easement boundaries. Since the landowner retains ownership and use of the property, the value of the Stream Corridor Easement is less than the full market value of the land.



Implementing a Stream Corridor Easement

All easement parties must invest both time and resources to ensure a successful outcome. Stream Corridor Easements are created carefully and with flexibility to give the stream room to roam within the easement corridor. As with river restoration or flood mitigation work, the project "designer" for the easement must give careful consideration to the stream dynamics and the constraints, both natural and human-made, that influence stream adjustments over time. Conservation partners work with the landowner to configure the Stream Corridor Easement language to best meet the objectives of the partnering organizations and the landowner. For instance, the landowner may request assistance to move an access road and stream crossing or conduct other water quality and land conservation practices in advance of the easement execution in order to make the easement proposal more feasible. While it is not necessary to have engineering drawings or plans for a Stream Corridor Easement, it is highly recommended that the parties consult with a qualified fluvial geomorphologist throughout the process in order to ensure that future land use expectations and conflicts due to natural channel adjustments are documented. The Colorado Water Conservation Board may be able to provide technical assistance, if requested.

Conclusion

Stream Corridor Easements provide a proactive means of maintaining stream and floodplain function while reducing long-term costs of flood recovery and loss of natural flood and sediment storage – a win-win for all those involved. A Stream Corridor Easement is not as a tool to be applied in all locations, though it will be a preferred option given the right circumstances.

The Colorado Water Conservation Board is promoting this as a tool to identify and conserve key floodplain areas thereby reducing fluvial hazards and flood recovery costs as well as to protect natural stream processes and functions while promoting healthy stream corridors with natural stream ecosystems.

