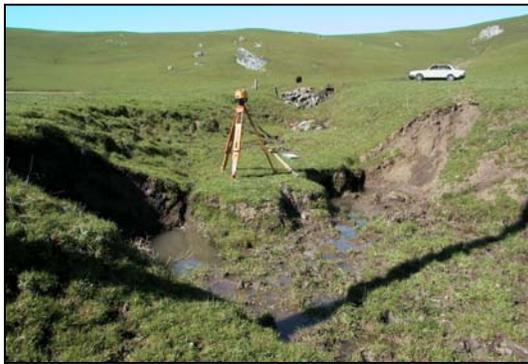


Tomales Bay Watershed Enhancement Program

The following are examples of the conservation practices covered under the program.

Grade Stabilization Structure

A structure built into a gully or downcutting channel to control the grade, to stabilize the slope, to prevent headcutting and formation or advancement of gullies, and to enhance the natural functioning of the channel, including raising the water table and allowing for establishment of vegetation. This practice refers to brush, erosion control fabric, rock, concrete, or timber structures that do not impound water but allow the channel to convey water in a stable manner, resulting in reduced erosion and improved downstream water quality. Grade stabilization structures in perennial or fish-bearing channels are not permitted.



Before

After

Loose-rock headcut repair funded by State Coastal Conservancy, State Water Resources Control Board and CA Department of Fish and Game in 2002



Before

After

Willow wattle headcut repair funded by CA Department of Fish and Game in 2002

Grassed Waterway

A natural or constructed channel that is shaped or graded to required dimensions and velocities and planted with suitable vegetation for the stable conveyance of runoff. This practice is designed to reduce erosion in a concentrated flow area such as a gully. It is designed to reduce sediment and substances delivered to receiving waters. Vegetation may act as a filter in removing some of the sediment delivered to the waterway, although this is not the primary function of a grassed waterway.



Before

After

Funded by CA Department of Fish and Game and Students and Teachers Restoring A Watershed (STRAW) in 2000

Lined Waterway

The placement of an erosion-resistant lining (i.e., erosion control blanket) along a waterway or outlet. The waterway allows for safe disposal of runoff from other conservation structures or from natural concentrations of flow where unlined or grassed waterways would be inadequate. The practice is not used for irrigation water conveyance.



Before

After

Rock-lined step channel funded by Wildlife Conservation Board, Students and Teachers Restoring A Watershed (STRAW), and AmeriCorps in 1999

Fish Stream Improvement

Improving a stream channel to create new fish habitat or to enhance an existing habitat. This practice is used to improve or enhance aquatic habitat for fish in degraded streams, channels, and ditches by providing shade, controlling erosion, and restoring pool and riffle stream characteristics. Pools and riffles are formed in degraded stream sections through the strategic placement of root wad or natural rock that reduces the flow velocity through the area. Coarse-grained sediments settle, reducing the quantity of sediment delivered downstream. Although this practice may require the placement of rock, use of rock is kept to a minimum. Increased shading from shrub and tree plantings may decrease water temperature during the warm season. Dissolved oxygen content may be increased, improving the stream's assimilative capacity.



Boulder cross log structure funded and managed by Marin Municipal Water District.

Stream Channel Stabilization

Stabilization of the channel of a stream with suitable structures. This practice is used in stream channels that are undergoing damage or degradation that cannot be controlled with upslope practices. The design and installation of stream channel stabilization structures produce a stable streambed favorable to wildlife and riparian growth.



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2



3

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J-hook boulder vanes funded by State Coastal Conservancy, CA Department of Fish and Game and Students and Teachers Restoring A Watershed (STRAW) in 2002

Stream Bank Protection

Installation of vegetation or structures to stabilize and protect banks of streams, lakes, estuaries, or excavated channels against scour and erosion. The banks of streams and waterbodies are protected to reduce sediment loads causing downstream damage and pollution, to improve the stream for fish and wildlife habitat, and to produce adjacent land from erosion damage. This practice can be applied to natural or excavated channels where the streambanks are susceptible to erosion from the action of water or debris or due to damage from livestock or vehicular traffic.



Before

After

Willow wattle streambank repair funded by CA Department of Fish and Game and AmeriCorps in 2002



Before

After

Willow revegetation funded by State Coastal Conservancy in 1990

Critical Area Planting

Planting vegetation such as trees, shrubs, vines, grasses, or legumes, on highly erodible or critically eroding areas (does not include tree planting mainly for wooded products). This practice is used to stabilize soil, reduce damage from sediment and runoff to downstream areas, and improve wildlife habitat and visual resources. This practice can be used to replant areas where invasive vegetation has been removed or as an ancillary to stream restoration activities.



Before



After

Stream restoration funded by State Coastal Conservancy in 1996