

East Plum Creek Stabilization Project



Bank erosion along E. Plum Creek



Grade Control Structure along E. Plum Creek

Problem:

As development continues within the Plum Creek watershed, increased stormwater runoff can cause excessive channel erosion that is a nonpoint source of nutrient and sediment pollution to Chatfield Reservoir. Nonpoint sources of nutrients, bound up in sediment, are the number one contributor of nutrient loading at Chatfield Reservoir. As the amount of nutrients increase, so does algae growth, making the reservoir less inviting. If the stream system is not stabilized to account for changes in the watershed, nutrients and sediments resulting from excessive erosion will have a significant impact on the fish, wildlife and public who rely on Chatfield Reservoir as a natural resource.

Solution:

The Town has recently completed a study of East Plum Creek within the corporate limits of Castle Rock which includes over 10 miles of stream. The study identifies stabilization requirements along this reach of stream to meet the demands of development. Several grade control structures have been identified in the study as high priority projects to address current areas of concern. Grade control structures are installed at key locations along the stream to harness erosion and protect the overall stream system.

Need:

Sponsorship of one or more grade control structures within the limits of the Castle Rock study area. Sponsorship is also needed for monitoring equipment and personnel to measure the effectiveness of the erosion controls.

Cost:

A single grade control structure is estimated to cost approximately \$115,000. Monitoring equipment and personnel are about \$15,000 per year.

Contact Information:

Castle Rock is an active member of the Chatfield Watershed Authority. For more information about the East Plum Creek Stormwater Master Plan, contact the Town of Castle Rock Utilities Department at 720-733-6000.