

CRR Shoreline Stabilization Project Annual Update 2012 – 2013

Summary since May 2012:

- July – August 2012 Majority of scotch broom pulled or ground level cut in project vane sites. Irrigation sprinklers operating August - September at low terrace vane sites 1 and 5 through 7.
- September 2012 100 Douglas Fir replacement trees purchased and planted. Majority of cages removed, debris cleaned up and maintenance accomplished on remaining caged trees.
- November 2012 Project site restoration status report prepared and submitted to Pierce County and Wa. State Fish & Wildlife. Report available on-line: http://crystalriverranch.org/?page_id=73. Data collection started for baseline technical assessment by Lawrence Dominquez, EcoAssets.
- December 2012 Pierce County Planning and Land Management planner communicates the project site restoration monitoring will be through summer of 2014. CRR anticipating late 2014-2015 for possible permit closure provided 80%+ restored trees are healthy. After close of project permits if there are remaining funds, the CRR board will provide a disposition plan.
- February 2013 Rock-vane sites technical report completed and available: http://crystalriverranch.org/?page_id=73
Objectives satisfied in the above baseline assessment by Lawrence Dominquez, EcoAssets were:
 1. Conduct a qualitative shoreline assessment of the south bank White River containing 14 rock-vanes.
 2. Provide recommendations for a long-term monitoring protocol of bank erosion.
 3. Provide recommendations for stream-flow gage site and support for securing funds regarding stream gauge purchase and installation.
- March – April 2013 As expected, on-going bank erosion observed. 1 to 2 feet of bank sloughing at vanes 2 – 4 and 14. All vanes 1 through 14 are still buried in an unexposed state.

Work objectives ahead are to satisfy permit restoration requirements and when appropriate provide relevant content in the HOA hazard mitigation plan regarding this project.

1. Continue monitoring, care maintenance and/or replacement of trees to satisfy the 80%+ survival requirements for restoration permit closure.
2. Provide the annual data collection and restoration report submittal required by the county and state permit closure process.
3. Continue work effort on assessing shoreline stabilization erosion risk scenarios and when appropriate determine recommended reserve for future hazard mitigation.

Overview of the CRR Shoreline Stabilization Project

Goals:

1. Protect the community water system wellheads
2. Protect and retain the remaining community shoreline property as much as possible

Scope change:

The original 17 rock-vanes project direction in channel changed to 14 buried rock-vanes inland on remaining CRR community property due to:

1. Pierce County, the Wa. state agencies involved and Corps. of Eng. were indicating a full Environmental Impact Study (EIS) was going to be required. CRR could not have privately funded the prohibitive EIS expense. Another 2 years delay was too high a risk to take regarding shoreline erosion affecting the well heads.
2. By constructing buried rock-vanes inland on CRR property, the permitting hurdles regarding zero rise to flood plain elevation, creating in-channel coffer dams to temporarily divert water, fish handling protocol by certified biologists, the opposite shoreline (invalid) concerns by Crystal Village and more permit process issues were eliminated.

Limitations:

The 14 vanes are buried inland, not in channel. They are buried and located at river bed elevation pointing upstream at an approximate 30 degree angle, positioned to prevent bank erosion at the well heads and to protect community shoreline property.

Construction and location of the 14 buried rock-vanes was restricted to what remained of CRR community shoreline property available December 2010. Total shoreline protection for the entire 1 mile CRR reach was land restricted at the onset of this project.