

## Hinkson Creek

Collaborative Adaptive Management

**Project Proposal** 

Name:

Forum Nature Area Level Spreader

Estimate:

\$82,000 (Construction \$34,750, Monitoring \$47,250)

Timeframe:

Begin Construction Approx. 6 months after approval by Stakeholders.

Monitor for 5-10 years after construction.

Objectives:

Construct Level Spreader and reforest the area where the water is spread, and study

the efficacy of the practice for infiltrating (and thus cleaning) water.

Benefits:

Infiltration and cleansing of water, increased baseflow to Hinkson, better habitat for

riparian species

## Description:

This project will divert water from a small un-named tributary to Hinkson Creek (~115-acre drainage area) and spread the water over an area of Hinkson Creek Floodplain. The area where the water is spread will be reforested in order to improve infiltration of the water. The practice will focus on small runoff events—runoff from storms of 1-year frequency or less. This is expected to clean the water, reduce the immediate flow of runoff to the creek in channel altering storms, and increase baseflow in the creek.

A monitoring project will be implemented to study the efficacy of the project. The monitoring project will use sensors to determine the amount of water flowing through the level spreader and the overflow and soil moisture sensors to determine how well water is infiltrating and thus, how well the level spreader is working.

In order to quantify the reforestation process and its effect on infiltration, it is recommended to extend the project to 10 years at an additional estimated cost of \$46,900.

If approved to move forward, City staff plan to apply for a grant that may pay for as much as \$10,000 of the installation cost.