

1.0 Executive Summary

Introduction

With its tight link to Rocky Mountain National Park, the Estes Valley is a treasure of our state, drawing over 3 million visitors annually. The Fall River corridor is a highly visible and important part of the experience, beginning its journey from headwaters in the Park, then flowing through Estes Park and joining the Big Thompson River in the heart of downtown. The Fall River Corridor is critically important to and well-loved by the many people who live, work, and play along it. With so much development located in the river corridor, reducing flood risk and improving stream health is essential for successful coexistence with the river.

Fall River is a typical mountain stream with coarse-grained bed materials (i.e, gravels, cobbles, and boulders) and relatively steep gradients that flatten as the stream moves farther down the valley. In Town, the most notable change in gradient occurs at the Elkhorn Lodge and this grade change contributed to the extensive sediment deposition on this property during the September 2013 flood event. Adequate stream corridor widths with low benches and terraces, for frequent floodplain access, are key requirements for stability and stream health in mountain streams like Fall River.

In September 2013, Fall River experienced a flood event. Damage due to floodwaters, erosion, and river location changes was rampant in the Fall River corridor. Estimates of peak flow for Fall River varied widely from 500 cubic feet per second (cfs) to 3,800 cfs (ICON, 2013; NRCS, 2013). Best consensus currently falls between 1,100 and 1,200 cfs, a peak flow range that falls between predicted values for the 50- and 100-year recurrence interval floods of 1,040 cfs and 1,670 cfs, respectively (CDOT, 2014). The primary reason for the damage, however, is the abundance of infrastructure, homes, and condos encroaching into the river corridor.

The flood of 2013 and subsequent scientific and planning efforts show that we still have much work to do in to achieve a healthy, resilient river system that protects both life and property during flood events.

With funding and technical support from the Colorado Water Conservation Board (CWCB) and the Office of Emergency Management (OEM), flood-affected communities were guided to create watershed coalitions and develop collaborative stream corridor master plans as the first critical step towards resiliency for our river systems, our economies, and our communities. The directive of the funding is to guide communities towards prioritization and implementation of flood recovery and stream restoration projects that protect life and property from hazards, while enhancing riparian ecosystems for wildlife and recreation.

In Estes Park, the **Fall River Corridor Plan for Resiliency** is the fruition of this directive and the first step in a decades-long journey of recovery and preparedness. The Plan is both a technical reference serving as a basis for final design, construction, and monitoring as well as a funding tool to support the grant writing process for flood recovery implementation funding.

The Fall River Plan is based on three base philosophies:



Estes Park Condos Antlers Point Utility and Structure Damage



Fall River August 2014

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- Resiliency requires understanding the river and working with river processes, rather than forcing it into a mold of what we think it ought to be;
- A risk-based approach to planning is the only way to fully accommodate the complexities of river systems and inter-relationships with our roads, homes, and infrastructure; and
- With so many people impacted by the September flood, resiliency planning can only be successful by engaging a broad range of public, private, and non-profit stakeholders and through widespread outreach and education to garner public support.

The Plan defines the vision for resiliency and identifies goals to achieve the vision. Through education and outreach to date and critical ongoing education and outreach, the Plan fosters consensus driven and technically sound resiliency solutions that will be the foundation for project funding and implementation in both the short- and long-term.

Measures of success of the Fall River Plan include reduction of high risk areas (for both flood and geomorphic hazards), community understanding of the river corridor and associated risks, increased resiliency for long-term support of recreational, educational, and correlated economic opportunities, and healthy and functional fish and wildlife communities and native riparian plant communities.

With this Plan and the formation of the Fall River Coalition, which is transitioning to the broader and permanent Estes Valley Watershed Coalition, the Estes Park community embarks on the critical next step in flood recovery *to build permanent recovery work on a foundation of strong science and engineering, vetted through the communities it will benefit.*

We are on the path to resiliency for our river system, our economy, and our community.

