# Colorado's Riparian Corridors

Connecting Our Cities To The Headwaters Via Floodplain Greenways

## Brian Hyde, CFM





RMLUI Conference March 2, 2012

## Using floodplain greenways to travel toward the sourcewater What if you started bicycling in Denver



### Could you get to the headwaters?



in another floodprone community a little bit upstream *(like Golden)*?



## **Could you travel along floodplains in Fort Collins**

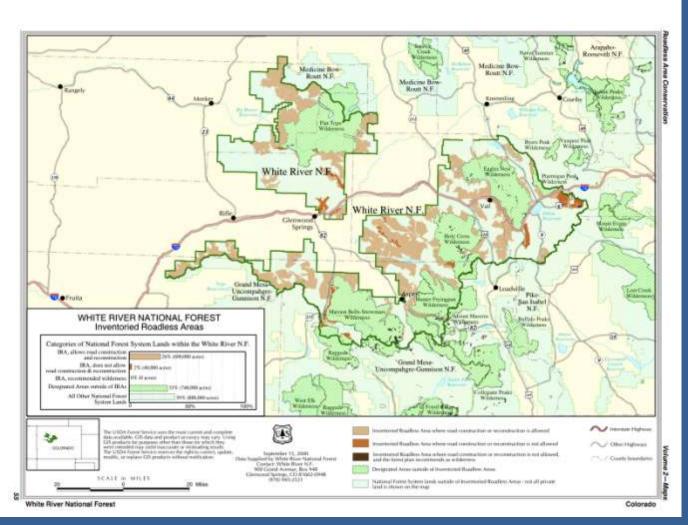


or in Colorado Springs?



## and reach the headwaters?

#### Wilderness Areas & Roadless Areas White River National Forest, Colorado A Significant Component of the Front Range's Headwaters



"... untrammeled by man, where man himself is a visitor who does not remain."

# "Where's the beef?"

- What could the connection to the headwaters be?
- What should that connection be?
- What do cities want that connection to be?
- If the connection is tangible (i.e. something besides money, something you can touch or experience with your other senses)
- Let's explore floodplain greenways

#### **Greenway :**

1. A linear open space established along a natural corridor, such as a riverfront, stream valley, or ridgeline.

2. An open-space connector linking parks, nature reserves, cultural features, or historic sites with each other and with populated areas.







# I Suggest Three Types of Greenways

- **Basic Greenway** almost allegorical streams; accept most constraints of prior urbanization
- Enhanced Greenway more recognizable channel shapes; moderate level of stream corridor rehabilitation
- **Restored Greenway** stream and floodplain corridors that recreate pre-settlement riparian channel and overbank conditions; very high level of riparian corridor network restoration

## **Potential Benefits of Greenways**

- □ Flood hazard reduction
- **Creation of an integrated system of community amenities**
- **Water quality and habitat enhancement**
- □ Protection of agricultural and urban gardening lands
- □ Recreation physical and emotional health
- Environmental education
- **Connectivity of communities to each other, to headwaters,**
- and to wilderness
- **Opportunities for alternative travel**







# Colorado's Ríparían Corrídors

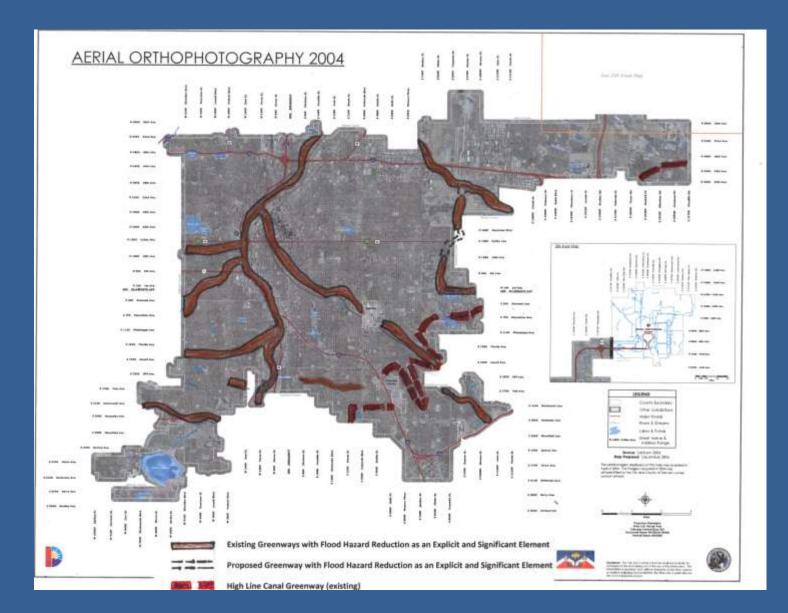
Connections - Part

## A "Denver-wide" View





## <u>A "Denver-wide" View</u> – Existing & Proposed Flood Hazard Reduction Greenways



# Colorado's Riparian Corridors Connections - Part ||

## A Regional View (UDFCD – Denver Metro area)





## <u>A Regional View</u> (UDFCD) – All Existing & Proposed Greenways ~ With & Without Flood Hazard Reduction

#### Map of Urban Drainage & Flood Control District



Existing Greenways with Flood Hazard Reduction as an Explicit and Significant Element



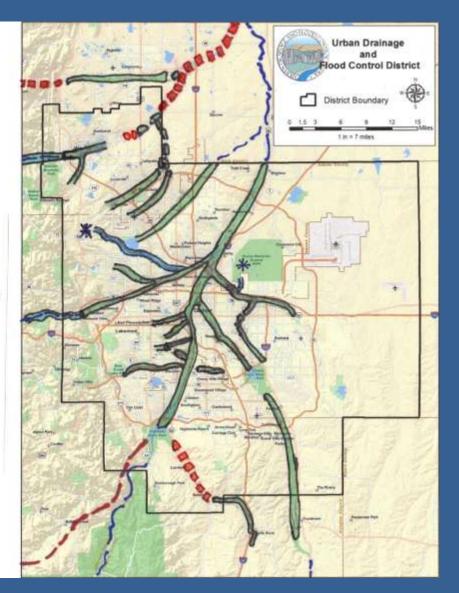
Proposed Greenways with Flood Hazard Reduction as an Explicit and Significant Element

Proposed Greenways Providing Only Incidental Flood Hazard Reduction (if at all)

Rocky Mountain Arsenal to Rocky Flats Greenway Connection Proposed by US Dept. of Interior

Colorado Trail (Denver to Durango)

Existing Foothills Canyon Trails



## Interior Secretary Ken Salazar is promoting the "Refuge to Refuge" Greenway in the Denver Metro Area



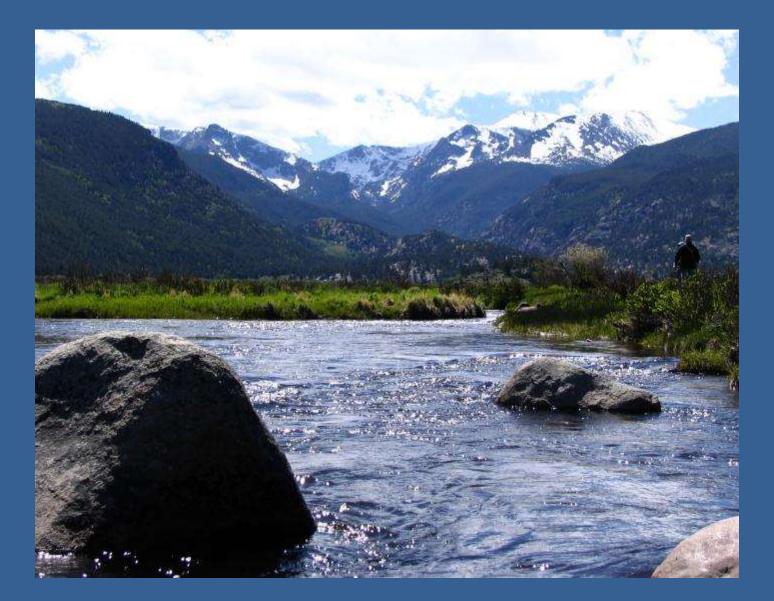
#### U.S. Fish & Wildlife Service

Conceptual Graphic of Connecting Urban Trails

Rocky Flats National Wildlife Refuge, Two Ponds National Wildlife Refuge and Rocky Mountain Arsenal National Wildlife Refuge, Colorado



## Consideration is Also Being Given to Connecting Rocky Flats to Rocky Mountain National Park



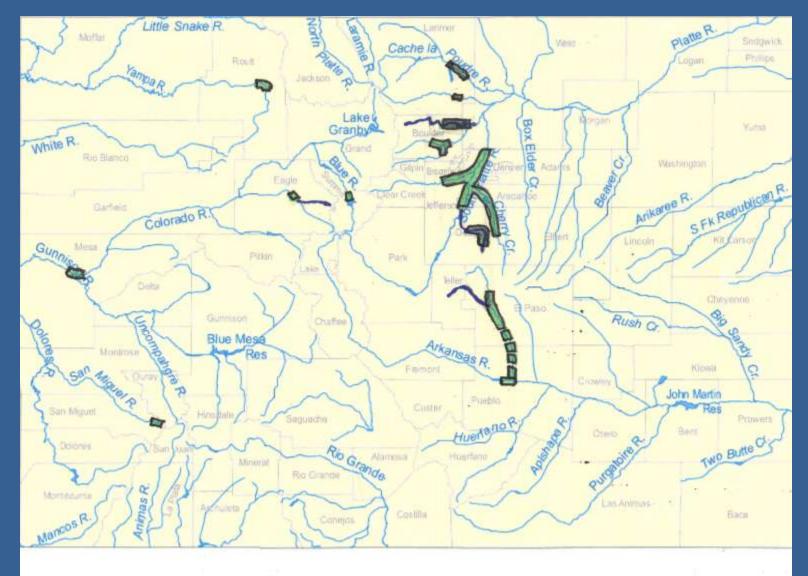
# Colorado's Riparian Corridors Connections - Part III

## A Statewide View





## <u>A Statewide View</u> - Existing & Proposed Flood Hazard Reduction Greenways



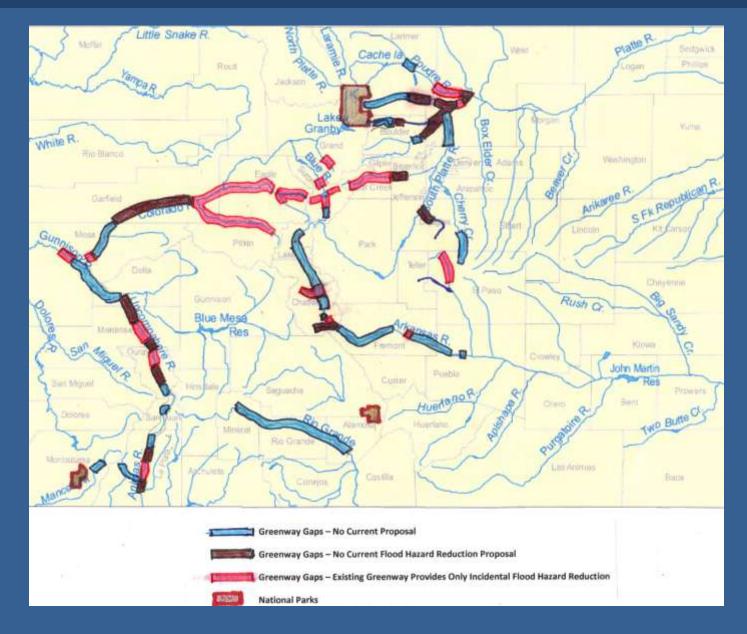


Existing Greenways with Flood Hazard Reduction as an Explicit and Significant Element



Proposed Greenways with Flood Hazard Reduction as an Explicit and Significant Element

# A Statewide View(JUST A THOUGHT)Maybe Create a Networkby Filling in the Floodplain Greenway Gaps?



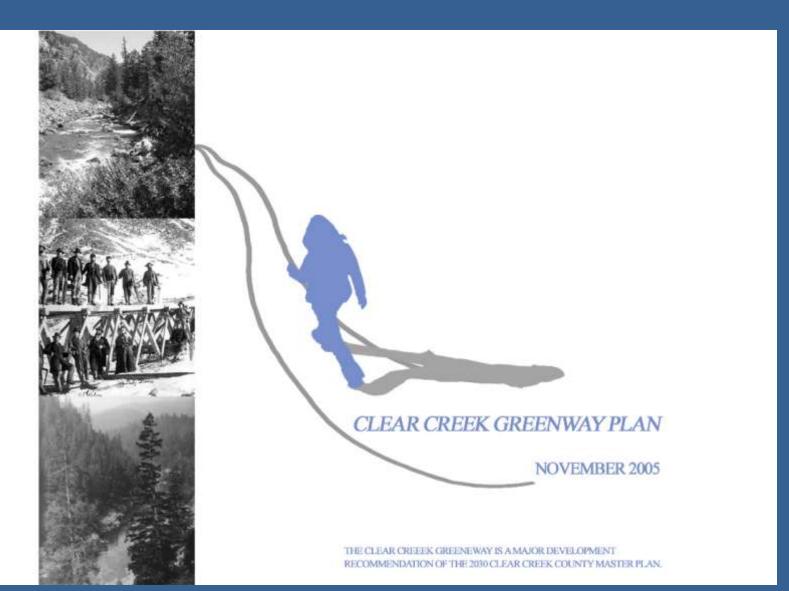
# Colorado's Riparian Corridors Connections - Part IV

## A Possible First Step in the Clear Creek Riparian Corridor

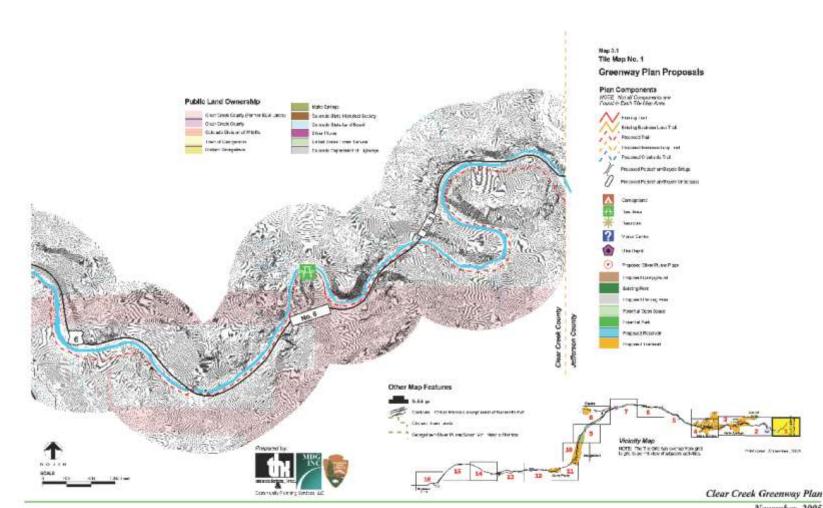




Implementing the Clear Creek Greenway Is a Logical First Step Toward Connecting the Metro Area to the Headwaters

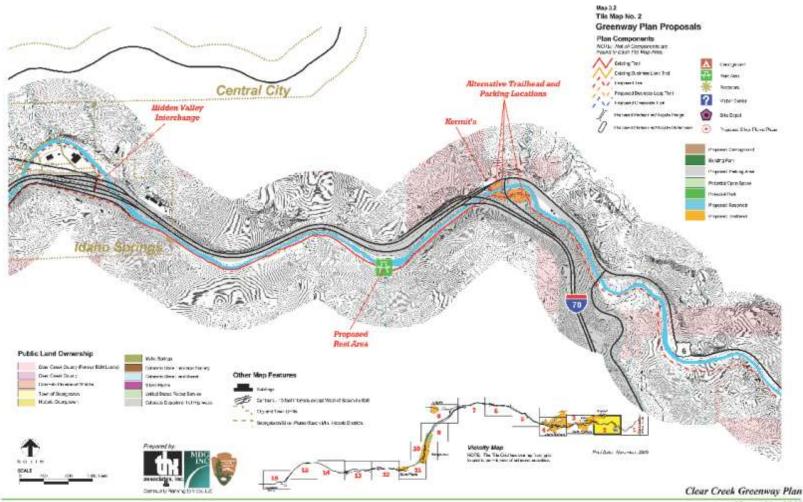


### Planning is Underway for a Connection from Golden (& uninc. Jefferson County) to Clear Creek County



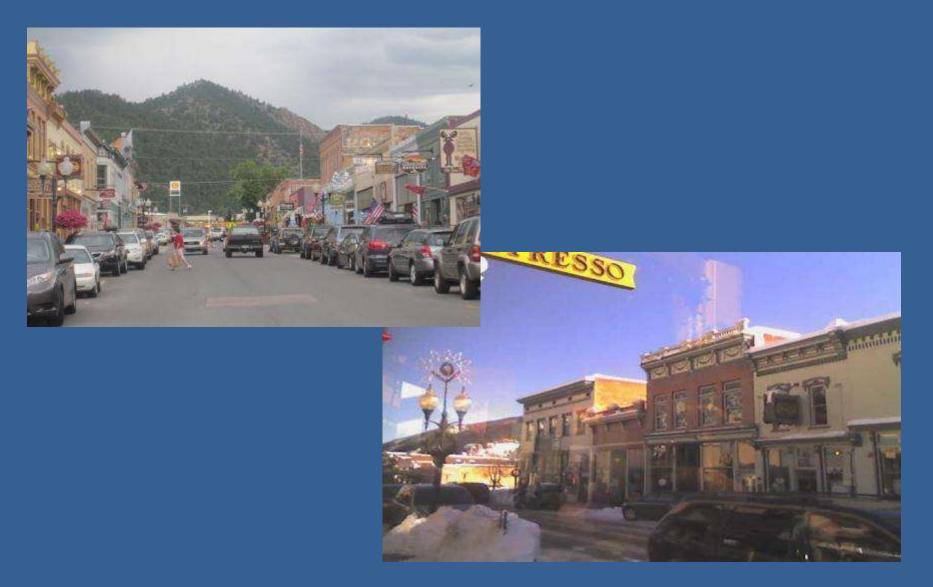
November 2005 Page 12

#### From the Bottom of Floyd Hill to Idaho Springs

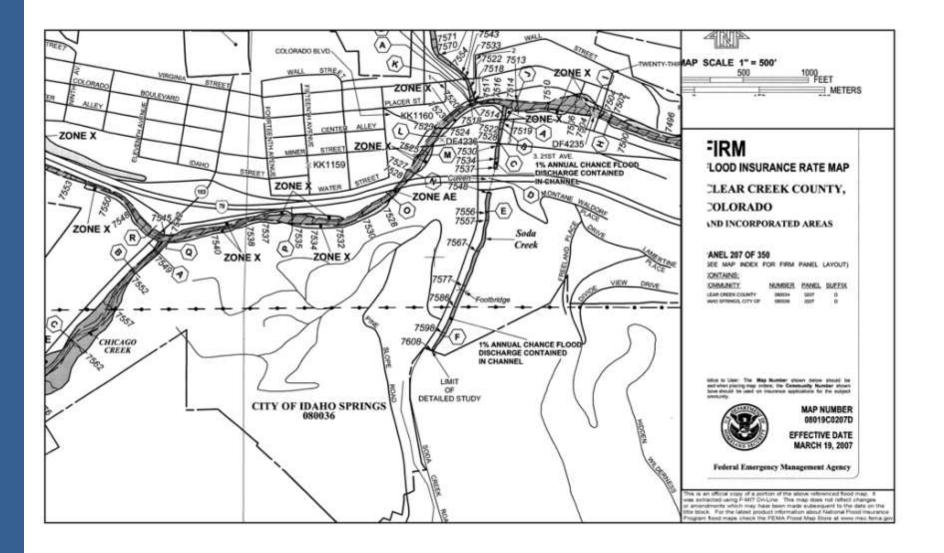


November 2005 Page 13

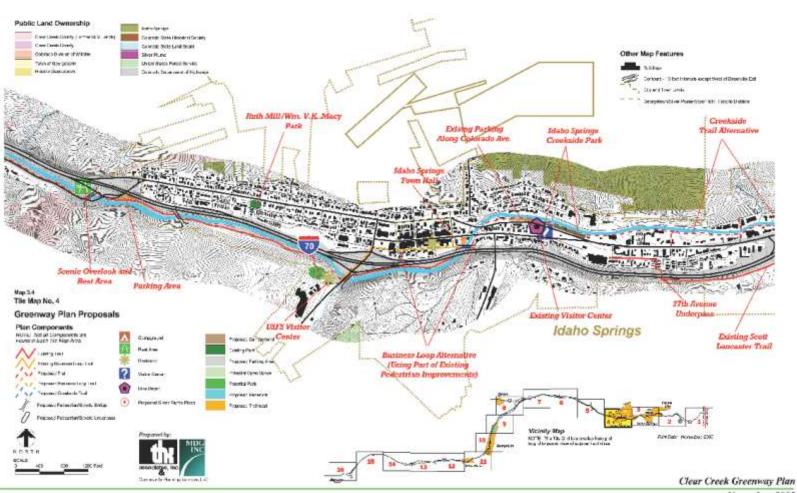
# Idaho Springs



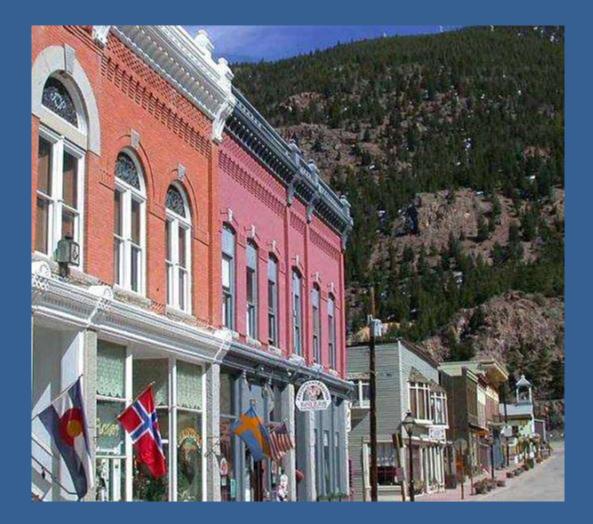
### Official Floodplain Mapping for Idaho Springs



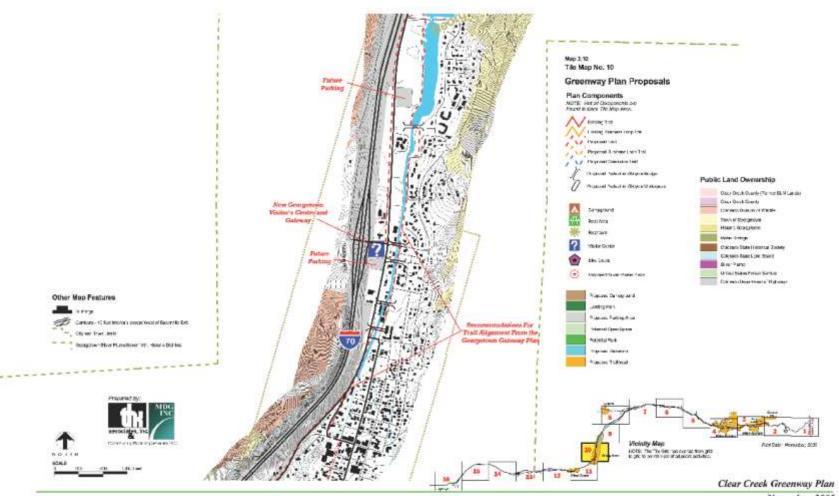
#### Through Idaho Springs and On to ...



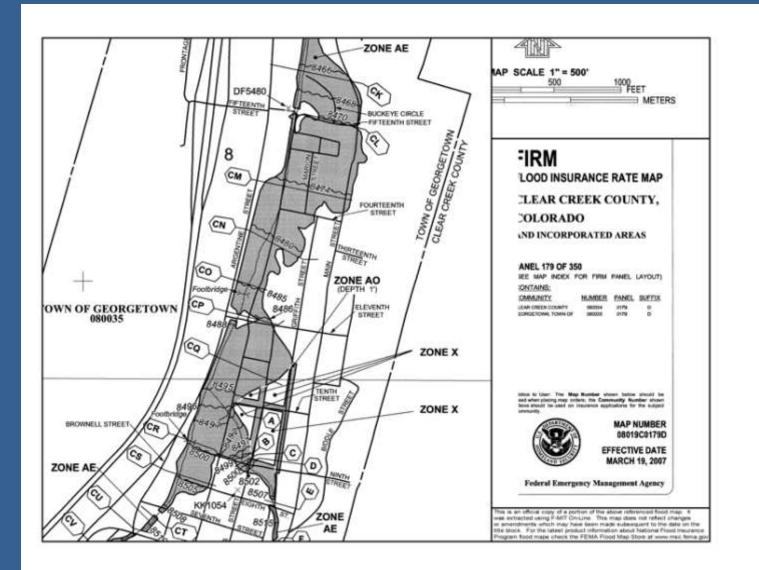
# Georgetown



#### Georgetown and ...



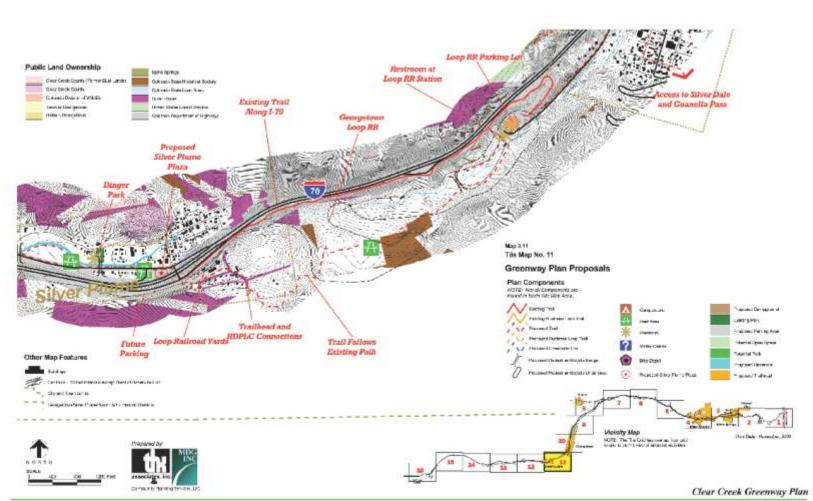
#### Official Floodplain Map for Georgetown



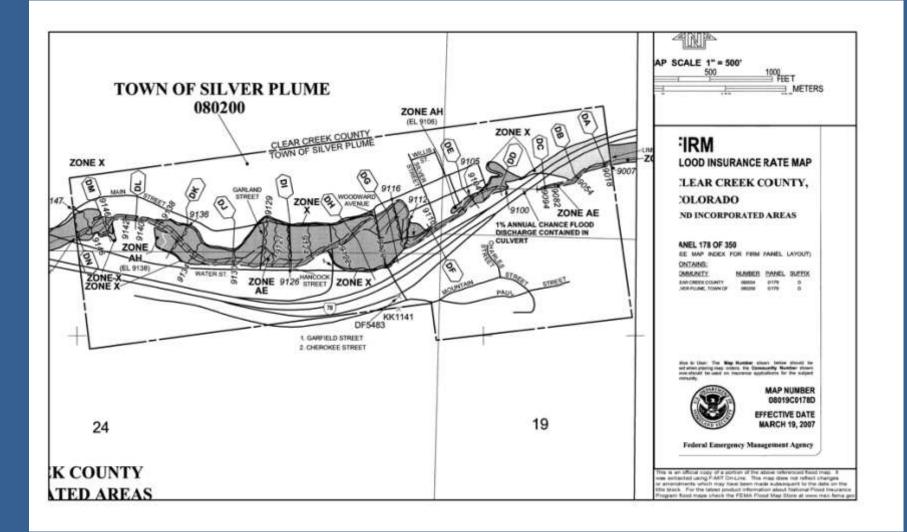
# Silver Plume



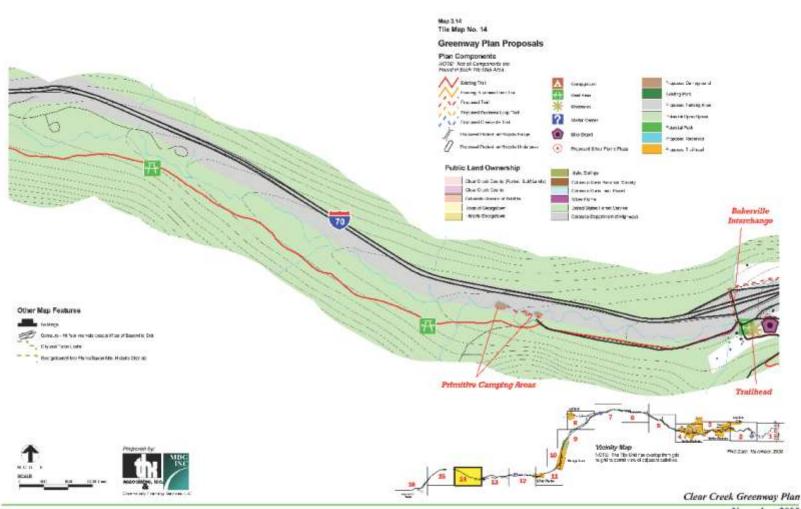
#### Silver Plume and Beyond



#### Official Floodplain Map for Silver Plume

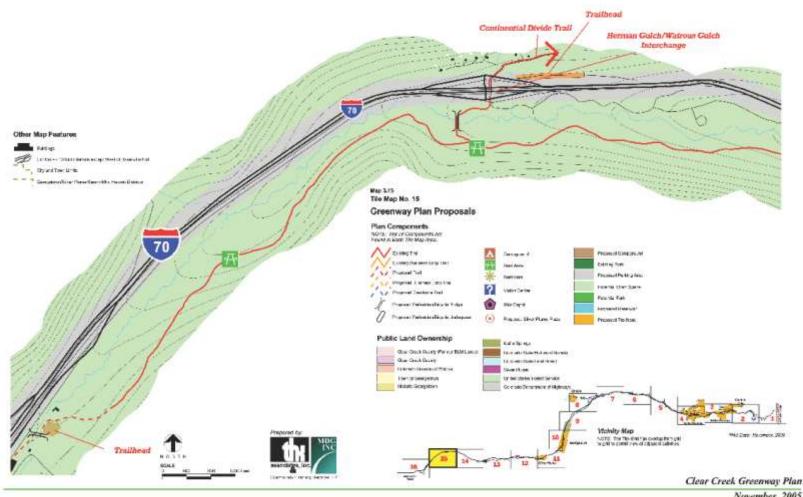


### This segment of the Clear Creek Greenway is already in place; it starts 5 miles upstream of Silver Plume in Bakerville.



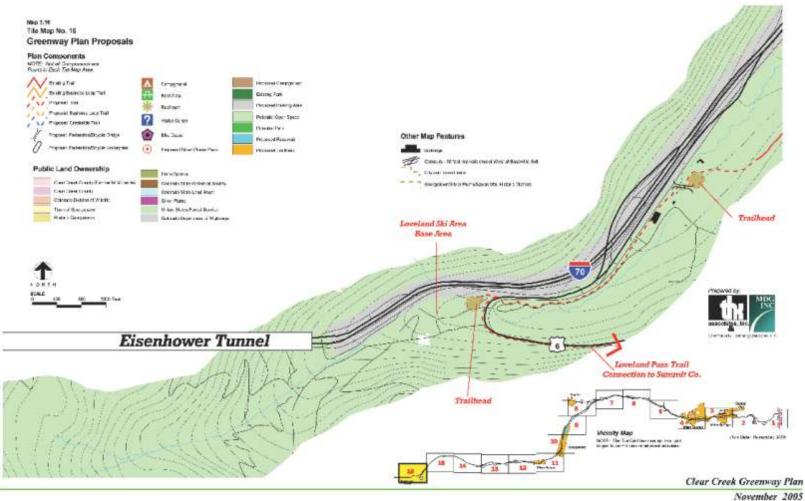
#### November 2005 Page 25

#### It extends 5 miles to Loveland Valley (the beginner ski area)



November 2005 Page 26

#### The Greenway Master Plan proposes connections to Summit County



Page 27

## Your Destination – The Headwaters



#### Clear Creek County



### Summit County

## Is there a legitimate nexus?

Could Denver Water and/or Aurora Water establish a valid set of reasons (on behalf of their customers) for:

- collaborating with Clear Creek County in implementing the Master Plan for the Clear Creek Greenway, and
- collaborating on other greenways connecting the Denver Metro Area to its headwaters?

## Is there a legitimate nexus?

Could the U.S. Forest Service and/or the National Park Service (as managers of public lands in the headwaters) establish a valid set of reasons for:

- collaborating with Clear Creek County in implementing the Master Plan for the Clear Creek Greenway, and
- collaborating on other greenways connecting the Denver Metro Area to its headwaters?

Questions Comments Better Ideas

## Contact me (Brian Hyde) at:

gunnison@gmail.com

(720) 939-6039