



Colorado Department of Transportation

Flood Disaster Study Committee

November 5, 2013



Flood Recovery



Immediate Goals

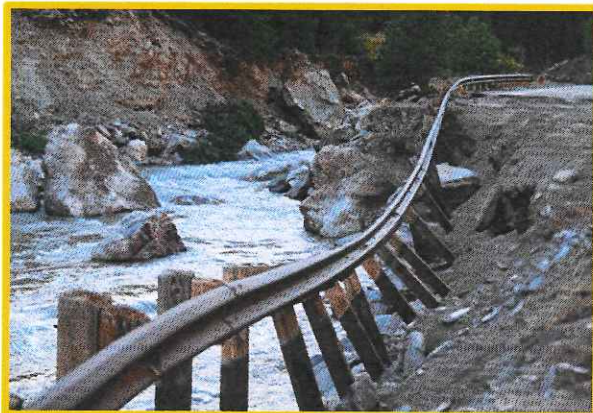
- Restore access by December 1, 2013
- Temporary repairs to restore mobility
- Reconnect communities

Long Term Recovery

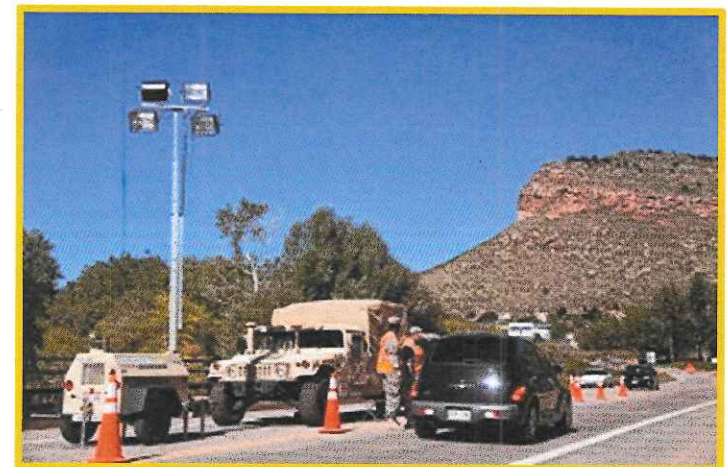
- Total costs estimated at over \$400M (includes state system only)
- Local road costs currently undetermined



State Highway 257 near Johnstown



U.S. Highway 34 near Drake



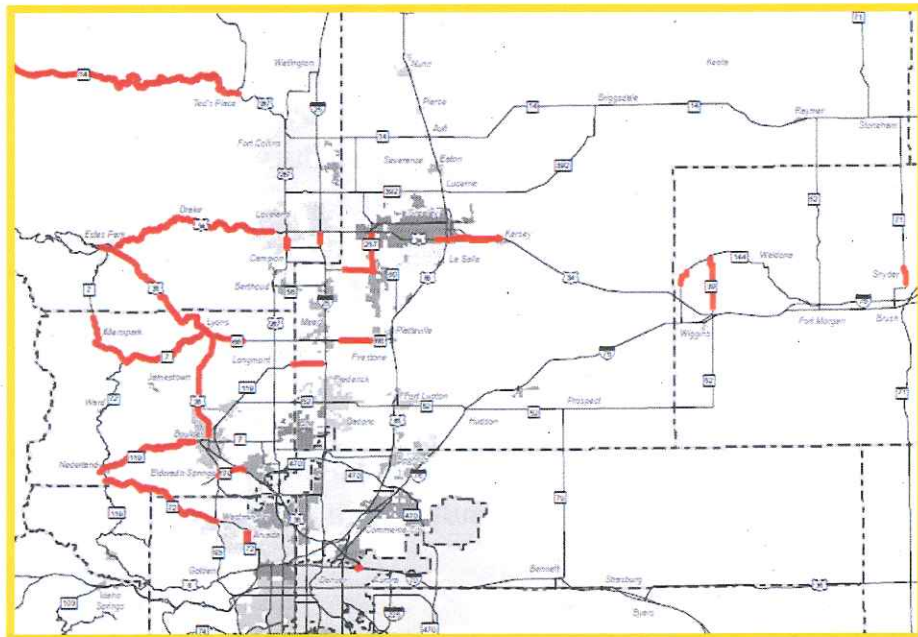
National Guard at U.S. 36

Flood Recovery



September 17, 2013

As of November 4, 2013



STATE HIGHWAY CLOSURES

- Closed to all traffic
- Closed - Emergency Only
- Closed - Local Access Only
- Open with Restrictions
- Open to All
- No Reported Damage - Expect Normal Travel

**89% of closures (24 of 27)
reopened as of November 3, 2013.**

Flood Recovery



Cumulative Transportation Damage

Impacts

- **Estimated Costs** – approximately \$385 million estimated in total state highway damage (excludes local roads)
- **State Highways** – 486 lane miles of state highways closed, damaged, or destroyed
- **Local Roads** – significant damage to county and city roads
- **Bridges** – 120 bridges damaged and requiring repair
- **Culverts** – multiple clogged, damaged, or destroyed culverts
- **Debris** – substantial debris on highway surfaces, structures, and culverts, requiring clearing operations
- **CDOT/CSP Buildings** – CDOT facility, equipment, materials damage:
 - CDOT/State Patrol shared Evans facility (to be demolished)
 - Drake facility (possible equipment destroyed, shed lost, sand/materials lost)
 - Crook facility (sand/materials lost)



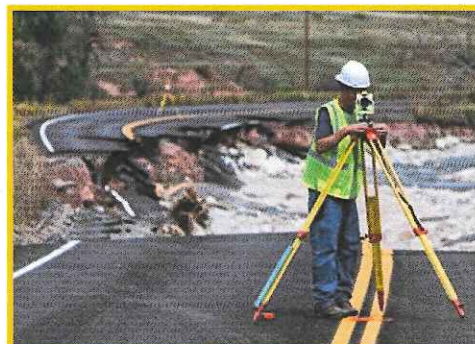
State Highway 72



State Highway 119



U.S. Highway 34



State Highway 7

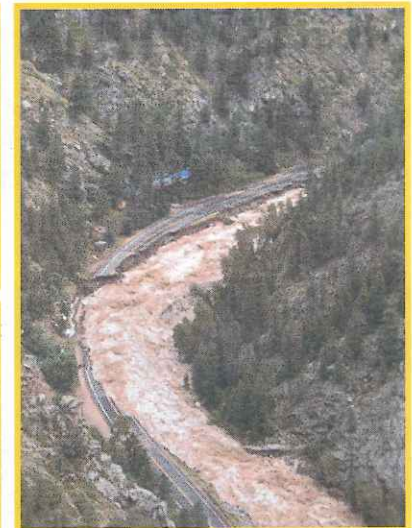
Flood Recovery



Infrastructure Recovery Force

IR Force

- **Tasks –**
 - Rebuilding Colorado's infrastructure with speed and efficiency
 - Make long term improvements to our transportation system
 - Provide coordination and assistance to local governments in reestablishing critical links to local roads, bridges, water, sewer, power, and communications
- **Staffing –**
 - CDOT employees on reassignment from regular duties
 - Led by CDOT Deputy Director Scot Cuthbertson and CDOT Region 4 Director Johnny Olson
- **Goals –**
 - **Response (December 1 End of Response Phase)** – debris removal, temporary road building, portable bridges, conducted by CDOT staff, emergency contractors, and National Guard personnel from 4 states.
 - **Recovery (Winter 2013 and forward)** – infrastructure construction



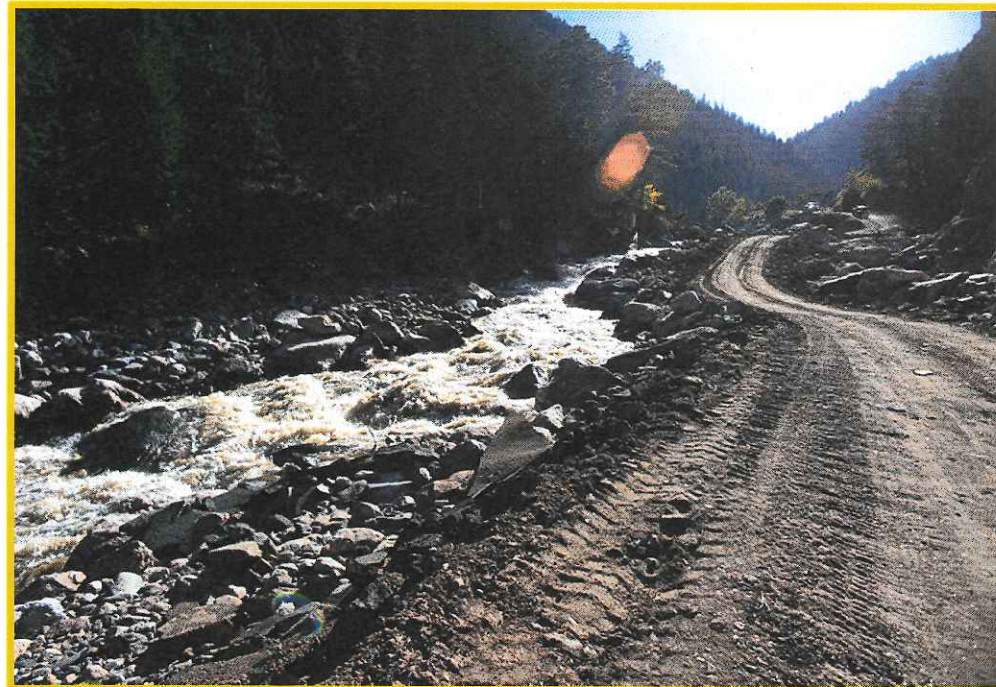
U.S. Highway 34
Big Thompson Canyon

Flood Recovery

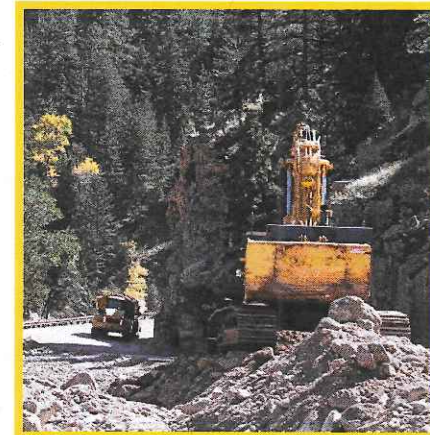


Big Thompson Canyon – U.S. 34

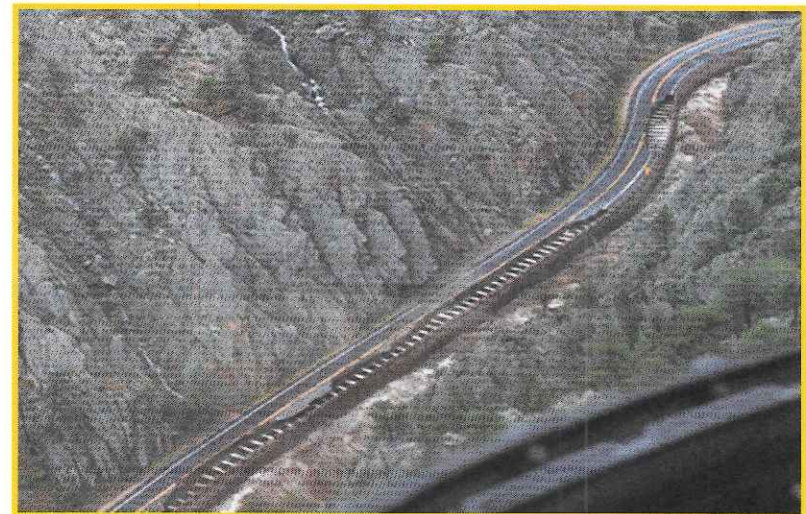
- **Status** – Active Construction-Day Light Operations 7 Days/Week
- **Percentage Complete** – 58%
- **Projected Road Opening Date** – December 1, 2013



U.S. Highway 34



U.S. Highway 34



U.S. Highway 34

Contractor: Kiewit Western

Flood Recovery



North St. Vrain Canyon – U.S. 36

- **Status** – Active Construction- Day Light Operations 7 Days/Week
- **Percentage Complete** – 100%
- **Projected Opening Date** – November 4, 2013



Natl. Guard at U.S. 36



U.S. Highway 36 (outside Lyons)

Contractor: Colorado, Florida, Kansas, Montana, and Utah National Guards

Flood Recovery

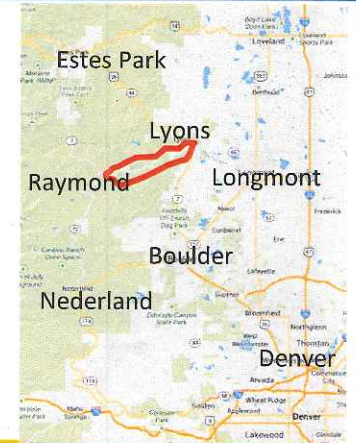


South St. Vrain Canyon – State Highway 7

- **Status – Active Construction-Day Light Operations 7 Days/Week**
- **Percentage of Project Complete – 65%**
- **Projected Road Opening Date – December 1, 2013**



State Highway 7



State Highway 7



State Highway 7

Contractor: Skanska and Wadsworth

Flood Recovery



Boulder Canyon – State Highway 119

- **Status** – Temporary Construction Complete
- **Percentage of Project Complete** – 100%
- **Opening Date** – Open as of 10/7/13
- **Project Updates** –
 - Planning and design for permanent work to begin, AD is planned for April 2014



State Highway 119



State Highway 119



State Highway 119

Temporary Repairs Complete

Contractor: SEMA

Flood Recovery



Coal Creek Canyon – State Highway 72

- **Status** – Active Construction 24/7
- **Percentage of Project Complete** – 74%
- **Projected Road Opening Date** – November 25, 2013



State Highway 72



State Highway 72



State Highway 72



State Highway 72

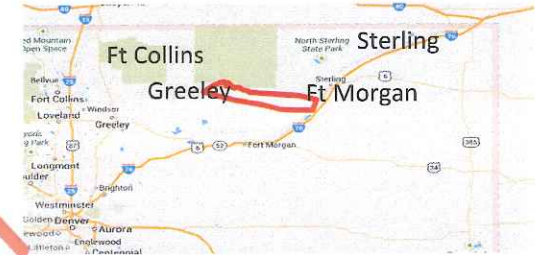
Contractor: Lawrence Construction

Flood Recovery



U.S. 34 East

- **Status- Active Construction** – 24/7 Operations
- **Percentage of Project Complete** – Temporary Repairs 100% Complete
- **Road Opening Date** – October 1, 2013



Temporary Repairs Complete

U.S. Highway 34

U.S. Highway 34

Contractor: Zak Dirt

Flood Recovery

Waldo Canyon – U.S. 24

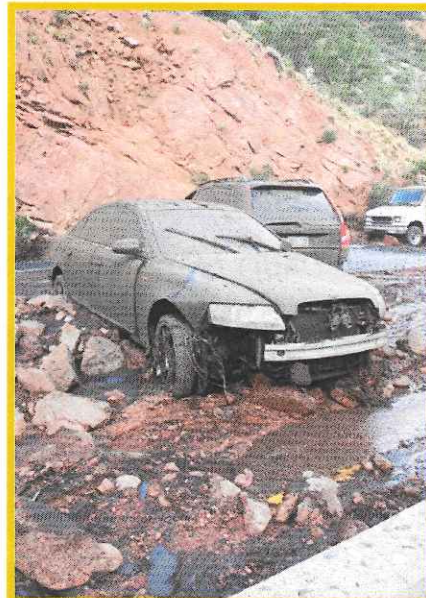
- **Flooding** – 2012 fire burn scar resulted in flooding of Manitou Springs in 2013
- US 24 closure imposed when one-quarter inch of rain is detected or NWS issues a flood warning.
- **Long-term** – new culvert to be installed by April 2014, will alleviate future runoff that can lead to flooding; re-vegetation of the watershed may take up to 10 years.



U.S. Highway 24



U.S. Highway 24



U.S. Highway 24



U.S. Highway 24 12

Flood Recovery



Contracting

Project	Contractor
US 34/Big Thompson Canyon	Kiewit Infrastructure (Littleton, CO)
SH 7/South St. Vrain Canyon	Skanska USA (Cortez, CO) Ralph Wadsworth Const. (Draper, CO)
Highways East of I-25 in NE Colorado	Lawrence Construction (Littleton, CO) URS Corp. (Denver, CO)
SH 72/Coal Creek Canyon SH 72 East	Lawrence Construction (Littleton, CO) Concrete Express (Denver)
US 34/Glade Road to Dam Store	Coulson Excavating (Loveland, CO)
US 34/Greeley to Kersey	Zak Dirk (Loveland, CO)
US 34 Business	Connell Resources (Ft. Collins, CO)
US 36/Lyons to Estes Park	Colorado National Guard
US 36/SH 66 to St. Vrain Rd.	Structures, Inc. (Englewood, CO)
US 36/damage near Lefthand Canyon	American West Const. (Denver, CO)
SH 14/Ted's Place to Cameron Pass	American Civil Constructors (Littleton, CO)
SH 36/Goodrich to I-76	Mountain Constructors (Platteville, CO)
SH 144/US 34 to Weldona	Mountain Constructors (Platteville, CO)
SH 71/Snyder north of Brush	Castle Rock Const. (Centennial, CO)
SH 1119/Boulder Canyon	SEMA Construction (Centennial, CO)
SH 257/Milliken to US 34	TLM Constructors (Greeley, CO)



U.S. Highway 34 near Kersey



U.S. Highway 34

Flood Recovery



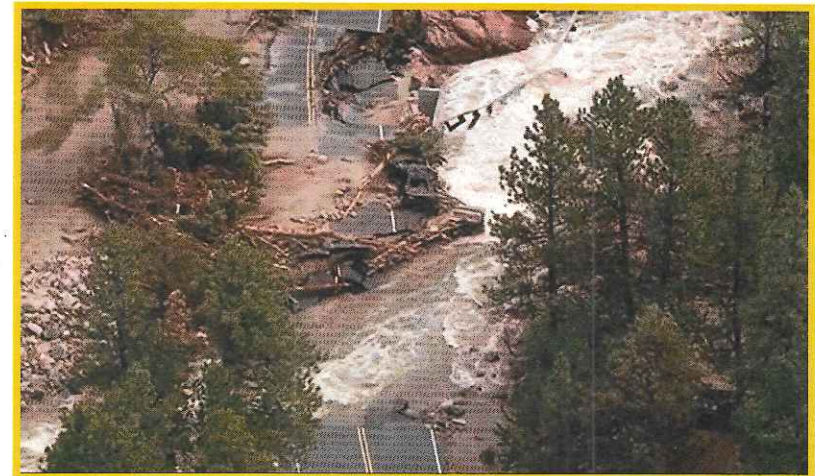
Federal Funding

FHWA Emergency Relief Program

- Provides funding to repair or reconstruct federal-aid highways and local federal-aid roads, if the Governor declares the damage to be a “disaster” via executive order
- Must be related to a natural disaster or other catastrophe
- \$35 million already advanced to Colorado from FHWA during the flooding
- **Funds available:**
 - Immediate federal funds are available, but capped at \$100 million per disaster
 - In October 2013, Colorado’s congressional delegation amended federal law to increase the cap to \$450 million for Colorado.



State Highway 72, Coal Creek Canyon



Left Hand Canyon Road, Lefthand Canyon

Questions?



U.S. Highway 36



State Highway 66



State Highway 14



State Highway 119



State Highway 7

