

# Twin Tunnels Environmental Assessment



Purpose:	<b>Twin Tunnels EA and Frontage Road Project SWEEP Meeting</b>		
Day:	<b>Wednesday</b>	Date:	<b>November 30, 2011</b>

Location:	<b>CDOT Region 1 - Golden</b>
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## Participants:

Attendee	Representing	
Ben Acimovic	CDOT R 1	Y
Phyllis Adams	Upper CC Watershed Assn.	N
Samer Alhaj	CDPOT R 1	Y
Chuck Attardo	CDOT R 1	N
Sandy Beazley	Jacobs	Y
Jim Bemelen	CDOT R 1	Y
Rena Brand	USACE	N
Allan Brown	Atkins	Y
Carl Chambers	USFS	Y
John Connelly	Michael Baker	N
Jeff Crane	Colorado Watershed	N
Mike Crouse	Clear Creek Consultants	Y
Lynne Deibel	USFS	N
Jim Eussen	CDOT R 1	Y
Lauren Evans	Pinyon Environmental	Y
Sarah Fowler	EPA	Y
Gary Frey	Colorado Trout	N
Janet Gerak	CDOT R 1	Y
Stephanie Gibson	FHWA	N
Al Gross	CDOT R 1	Y
Josh Hollon	Atkins	Y
Holly Huyck	CDOT	Y
Randy Jensen	FHWA	Y

Attendee	Representing	
Tamara Keefe	Michael Baker	Y
Carol Kruse	USFS	N
Kelly Larkin-McKim	USFS	N
Fred Lyssy	Upper CC Watershed Assn.	N
Gina McAfee	Jacobs	Y
Wendy Magwire	USFS	N
Alison Michael	USFWS	N
Bill Miller	Miller Ecological	Y
Ben Moline	Upper CC Watershed Assn.	Y
Matt Montgomery	USACE	N
Marc Morton	CDOT R 1	Y
Pat Noyes	Pat Noyes & Assoc.	Y
Becky Pierce	CDOT	Y
Bob Quinlan	Jacobs	Y
Ed Rapp	CC Watershed Foundation	Y
David Singer	CDOT	Y
Jo Ann Sorensen	Clear Creek County	Y
Francesca Tordonato	Jacobs	Y
Melinda Urban	FHWA	N
Mary Jo Vobejda	CH2M HILL	Y
Paul Winkle	CO Parks & Wildlife	Y
Mandy Whorton	CH2M HILL	N

## Discussion Items

The purpose of the meeting was to review the list of project specific issues identified at the first meeting and the proposed work plan.

### **Twin Tunnels EA and Frontage Road Project Overview**

Jim Bemelen gave a brief overview of the projects for those attending the SWEEP Meeting for the first time. The Proposed Action includes widening the interstate to three eastbound lanes between Idaho Springs and the base of Floyd Hill, enlarging the eastbound bore of the tunnels and addressing safety issues on the eastbound highway curves between the tunnels and Floyd Hill. The Twin Tunnels EA schedule is very aggressive with the decision document to be signed in September 2012. Construction is expected to begin in the spring of 2013 and would take about six months.

Jim said the I-70 Frontage Road Improvements project came about as part of the commitments from the I-70 Mountain Corridor Programmatic Environmental Impact Statement (PEIS). The goal of this project is to develop context sensitive solutions (CSS) for the Frontage Road to provide enhanced safety and mobility for vehicles, pedestrians, and bicyclists. The CatEx is expected to be signed in January of 2012 with construction starting in the summer. The widened frontage road could be used to accommodate the detour of traffic off of I-70 during construction of the Twin Tunnels.

Although the projects are separate, many of the environmental resources to be evaluated overlap and the decision was made for the SWEEP group to consider both projects concurrently.

### **Review of Issues**

The group reviewed the initial SWEEP Issues Work Plan and suggested the following changes which are included in Attachment 1:

#### **Water Quality - Sediment Management**

No changes.

#### **Water Quality - Clean Water Act**

“Hazardous Material Spill Control” should be changed to “Spill Control”. There are other spills (boxes, food, etc.) that can have an impact on the water quality of Clear Creek

#### **Water Quality - Mine Workings**

“South side of the bank on the frontage road east of the Twin Tunnels” should be changed to “South side of I-70, north bank, east of the Twin Tunnels”.

#### **Water Quality - Mine Waste**

“Mine waste impacts” should be change to “Mine waste impacts and mineralized rock disposal”.

### **Natural Habitat – Wetlands Protection**

No changes

### **Natural Habitat – Aquatic Species**

No changes

## **Approach to Issues**

### **Proposed Work Plan**

A CDOT lead has been identified for each of the Issues and will be responsible for seeing the issues are addressed per the Work Plan.

### **Water Quality – Sediment Management**

Historical maps and boring logs of the tunnel indicate there may be mineralized veins along the south bore of the tunnel. Holly Huyck is working to insure when the boring sampling is done in February it will go through the fabric of the rock. The roadway sampling on I-70 is underway. A seep sample from inside the tunnel will be collected quarterly. If the Frontage Road project will involve excavation, there will need to be sampling done. Holly said with the information she has available she will be able to insure the SAP will address any type of solid or liquid minerals that may be found. The tunnel sample cores will be kept by CDOT.

Sediment control for deicers/salt will be addressed in the SCAP.

### **Water Quality – Clean Water Act**

Clear Creek Consultants has two sampling stations in the project area but no sampling has been done since 2006. These stations could be used during construction to make sure the water quality goals are being met. Upper Clear Creek Watershed and Clear Creek Watershed collect samples at Kermitts that can be used for the EA Affected Environment Chapter.

Well water sampling could be done now and continue to be monitored at the property near the dog house bridge that is being obtained by Clear Creek County.

The EPA said storm water mitigation should be included.

It may be necessary to obtain a dewatering permit from the CDPHE. This is usually the responsibility of the contractor.

There is historical spill and crash data available in the PEIS that should be included in the SCAP. Addressing spills, erosion and sediment control are all a top priority and will be addressed in the SCAP.

### **Water Quality – Mine Workings**

Clear Creek Watershed and Clear Creek County have extensive historical data on the surface and sub-surface mining and minerals found in the area. Chi-Chi Bell is also a good resource for placer mining information. Lauren Evans will send the link for the historical USGS map for the area.

The mineralized out crop, both sides of the Twin Tunnels and the area of the Frontage Road that will be cut for the retaining wall will need to be looked at closely. The materials management plan will address all three areas. Historical boring logs will be compiled into one database to insure everything is being addressed and to avoid duplicate work.

### **Water Quality - Mine Waste**

Because the Twin Tunnels area is within a Super Fund Study Area, CDOT will include Clear Creek County in the meeting with the EPA and CDPHE to discuss the property the County is acquiring. This may require a Liability Relief Memo.

A possible site for the disposal of the tunnel rock is near the sewer plant, east of the Highway Patrol Building. This would require consent from Idaho Springs and the waste would have to be placed in a dry area and capped.

### **Natural Habitat - Wetlands Protection**

Six wetlands have been identified in the project areas. Total acreage is a little more than an acre. The Twin Tunnels project will have some temporary impacts but it is anticipated there will be no permanent impacts. Phase One of the Frontage Road does not anticipate permanent impacts and will be cleared with a nation-wide permit.

### **Natural Habitat - Aquatic Species**

Since the Brown Trout population in Clear Creek is healthy and self-sustaining there probably isn't a need to do a macroinvertebrate survey. CDPHE does have some species surveys on their website that may be useful. There are no Greenback Trout in this section of Clear Creek. Colorado Parks and Wildlife does have two sites in the area they monitor.

Both projects will require a Nationwide Permit for stream and wetlands restoration. The Twin Tunnels project and the Frontage Road project may be accomplished under Nationwide Permit (NWP) 14-Linear Transportation Projects. If CDOT were to undertake any aquatic habitat restoration, that work may be covered under NWP 27-Aquatic Habitat Restoration, Establishment, and Enhancement Activities. Any aquatic restoration project would be considered a separate action for permitting purposes. The USACE defers to the Colorado Parks and Wildlife on what they would prefer regarding in stream work during spawning season (October-May). CPW realizes the constraints of the short construction season and high water flows during the summer and is willing to work with CDOT on this. The rafting community will need to be engaged before work begins in the creek.

During construction there will be equipment and personnel on site so this is an excellent opportunity to provide enhancements to Clear Creek.

### **Information & Research Needs**

The CSS website will be used as the repository for all project data. Janet Gerak will upload the deicing studies this week. Let her know if you have any additional reports that should be uploaded.

### **Next Steps**

The group agreed upon the next meeting date of Thursday, January 19<sup>th</sup> from 9:00 - 11:00 in the Fox Hollow conference room at CDOT in Golden.





# Twin Tunnels EA and Frontage Road Project

## AGENDA

Purpose:	<b>SWEEP Meeting</b>		
Day:	<b>Wednesday</b>	Date:	<b>November 30, 2011, 9:00 am</b>
Location:	<b>CDOT Region 1 - Golden</b>		

### Introductions

### Review Issues

- Initial list of issues

### Approach to Issues

- Proposed work plan
- Developing recommendations

### Next Steps

- Next meeting schedule



## Twin Tunnels EA and Frontage Road Project SWEEP Issues Work Plan

<b>Water Quality - Sediment Management</b>			
<i>Issue</i>	<i>How it will be addressed</i>	<i>Information and data needs</i>	<i>CDOT Lead</i>
Excavated rocks and possibilities for exposing mineralization	Tunnel and roadway boring sampling and analysis plan (SAP)	Rock content, structure, mineralized structures	Holly Huyck
		Seep samples	Marc Morton
Sediment control and ongoing maintenance of BMPs	Clear Creek SCAP	Sediment sources and recommended BMPs	Holly Huyck
<b>Water Quality - Clean Water Act</b>			
<i>Issue</i>	<i>How it will be addressed</i>	<i>Information and data needs</i>	<i>CDOT Lead</i>
Event impacts	Monitoring Boring SAP	Stations at Kermitts and Twin Tunnels provided baseline data for PEIS	Holly Huyck
This segment of Clear Creek is on the Section 303(d) list for cadmium	Boring SAP Water quality monitoring	Heavy metals	Holly Huyck

Dewatering	Boring SAP Well sampling	Seep samples and flow rate before and after	Marc Morton
Spill control	Clear Creek SCAP	Spill and crash reports, BMPs	Holly Huyck
<b>Water Quality - Mine Workings</b>			
<i>Issue</i>	<i>How it will be addressed</i>	<i>Information and data needs</i>	<i>CDOT Lead</i>
Area of mineralized rock and mine workings east of Idaho Springs and west of Twin Tunnels	Review and document, develop recommendations Materials management plan	Inventory, mapping, roadway boring analysis	Marc Morton
County Road 314 could have mine waste as sub-base material	Review and document, develop recommendations Materials management plan	Inventory, mapping, roadway boring analysis	Marc Morton
South side of I-70, north bank, east of the Twin Tunnels	Review and document, develop recommendations Materials management plan	Inventory, mapping, roadway boring analysis	Marc Morton

<b>Water Quality - Mine Waste</b>			
<i>Issue</i>	<i>How it will be addressed</i>	<i>Information and data needs</i>	<i>CDOT Lead</i>
Mine waste impacts and mineralized rock disposal	Determine the need for a Liability Relief Memo	Identify properties, mine workings inventory	Marc Morton
<b>Natural Habitat - Wetlands Protection</b>			
<i>Issue</i>	<i>How it will be addressed</i>	<i>Information and data needs</i>	<i>CDOT Lead</i>
Wetlands impacts	Wetland delineation	Extent of permanent impacts	Becky Pierce
<b>Natural Habitat - Aquatic Species</b>			
<i>Issue</i>	<i>How it will be addressed</i>	<i>Information and data needs</i>	<i>CDOT Lead</i>
Aquatic species impacts, including construction impacts	Ecological and species inventory	Greenback cutthroat trout Brown trout spawning season Other species from CPW and River Watch inventories	Jim Eussen

<b>Information &amp; Research Needs</b>			
<i>Issue</i>	<i>How it will be addressed</i>	<i>Information and data needs</i>	<i>CDOT Lead</i>
Repository for project data	Identify and post additional data on CSS website	Deicing studies Inventory of riparian and aquatic species Additional studies	Janet Gerak