


MEMORANDUM

DEPARTMENT OF TRANSPORTATION
Materials and Geotechnical Branch
4201 East Arkansas Avenue
Denver, Colorado 80222



Date: February 6, 2004

To: Tim Harris Staff Services Director

From: 
C.K. Su, Soils and Rockfall Program Manager


Subject: **Policy Memo -015**
Rockfall Mitigation Project Plan (RMPP) – Bundling Option

Issue: To allocate Rockfall Program resources more efficiently in terms of project cost savings, time required for design, and expedited mitigation; bundling of sites listed for mitigation in the Rockfall Mitigation Project Plan (RMPP) should be considered.

Action: The Rockfall Program is requesting ratification by the RTDs of the attached bundling option for sites listed in Table 2 of the Fiscal Year (FY) 2005 – 2010 RMPP.

Background: Currently, sites are selected for mitigation according to their hazard ranking in the Colorado Rockfall Hazard Rating System (CRHRS). Sites listed in Table 2 of the FY 2005 – 2010 RMPP, adopted in March 2003, are presented using this method. Bundling sites with similar rockfall hazard ratings along a corridor will produce benefits in the form of savings in design, construction and mobilization; and will potentially result in a greater risk reduction to the overall corridor.

Recommendation: The RTD's agreed that the Rockfall Program should proceed with a bundling option and voted for Option 1 of the options presented on February 4, 2004.

I concur:  1/10/05
Craig Siracusa Date
Chief Engineer

cc: RTDs
T. Aschenbrener

Rockfall Mitigation Project Plan FY05 through FY10 (Option 1)

Fiscal Year	Site	Region	Mile Post		CRHRS Score	CRHRS Rank	Preliminary Estimate
			Begin	End			
FY 2005	I-70 - Georgetown Hill (see note 2)	1	226.048	226.290	684	1	\$0.00
	SH 24 - Ute Canyon	2	296.225	296.360	642	3	\$250,000.00
	SH 24 - Ute Canyon	2	296.539	296.596	642	3	\$200,000.00
	US 34 - 6 mi west of Loveland	4	81.600	82.775	606	6	\$500,000.00
	US 34 - 6 mi west of Loveland	4	81.330	81.550	588	10	\$300,000.00
	Personnel Services/Operating Costs						\$250,000.00
							\$1,500,000.00
FY 2006	US 550 - Molas Pass	5	60.577	61.000	672	2	\$600,000.00
	US 550 - Molas Pass	5	58.178	58.416	563	17	\$400,000.00
	SH 12 - Weston	2	50.700	50.760	582	12	\$200,000.00
	Personnel Services/Operating Costs						\$250,000.00
							\$1,450,000.00
FY 2007	SH 119 - Clear Creek Canyon	1	2.700	2.750	615	5	\$200,000.00
	SH 119 - Clear Creek Canyon	1	6.351	6.394	606	6	\$200,000.00
	US 6 - Clear Creek Canyon	1	270.200	270.363	597	8	\$250,000.00
	I-70 - Georgetown Hill (see note 2)	1	226.290	226.492	594	9	\$0.00
	US 6 - Clear Creek Canyon	1	266.015	266.088	555	18	\$150,000.00
	US 6 - Clear Creek Canyon	1	267.095	267.217	552	19	\$250,000.00
	SH 119 - Clear Creek Canyon	1	0.000	0.167	543	24	\$250,000.00
	Personnel Services/Operating Costs						\$250,000.00
							\$1,550,000.00
FY 2008	US 50 - Big Horn Sheep Canyon	2	242.230	242.600	579	13	\$500,000.00
	I-70 - Georgetown Hill (see note 2)	1	227.426	227.723	570	15	\$0.00
	US 550 - Red Mountain Pass	5	88.890	89.257	588	10	\$550,000.00
	US 550 - Red Mountain Pass	5	88.250	88.424	552	19	\$300,000.00
	Personnel Services/Operating Costs						\$250,000.00
							\$1,600,000.00
FY 2009	SH 133 - McClure Pass	3	44.370	45.130	575	14	\$500,000.00
	SH 133 - Paonia Reservoir	3	24.790	24.860	569	16	\$200,000.00
	SH 133 - Paonia Reservoir	3	24.060	24.350	552	19	\$400,000.00
	SH 133 - Paonia Reservoir	3	24.380	24.620	545	23	\$350,000.00
	Personnel Services/Operating Costs						\$250,000.00
							\$1,700,000.00
FY 2010	I-70 - Georgetown Hill (see note 2)	1	226.700	226.829	543	24	\$0.00
	SH 82 - Snowmass	3	35.600	36.200	543	24	\$450,000.00
	SH 145 - Norwood	5	96.539	96.693	552	19	\$300,000.00
	SH 145 - Norwood	5	97.047	97.185	543	24	\$200,000.00
	Personnel Services/Operating Costs						\$250,000.00
							\$1,200,000.00
Total Rockfall Pool expenditures planned to date:							\$9,000,000.00
Anticipated expenditures per year for FY 2005 - FY2010:							\$1,500,000.00

Notes:

- 1) Personnel Services/Operating Costs include:
 1. Salaries for Rockfall Program Personnel.
 2. Daily operating costs including equipment and supplies necessary for rock slope evaluation.
- 2) Georgetown Hill will not be mitigated for rockfall through the use of Rockfall Program funding, See Appendix A for details.