United States Department of Agriculture

Natural Resources Conservation Service 655 Parfet Street, Room E200C Lakewood, Colorado 80215

April 4, 2008

Mr. Joe Brand Cherry Creek State Park 4102 S. Parker Road Aurora, CO. 80014

Re: 12 Mile Dog Park erosion and compaction problems

Dear Mr. Brand,

Thanks for calling. Dan and I enjoy any day where we can get out of the office and into the field. Mike gave us some background information on the dog park as we were touring the area. The greatest impact from the dog and human traffic appeared to be along the creek immediately west of the stables.

Compaction from the traffic has taken most of its toll on the ground west of the trail with about a ten to twelve foot wide swath along the east side as well. Much of the area in question is completely devoid of any vegetation and so compacted that it is like walking on concrete. The streambank is vertical and sloughing off into the creek; resulting in some water quality problems. Some of the area is not quite so compacted and still supports some vegetation. Other areas, while compacted a little, are beginning to sprout some grass leaves and can bounce back with a little rest.

To establish vegetation on those areas with the heavy compaction, the ground should be ripped to a depth of about 8 inches. Then disked to break up the clods and prepare the soil for planting. The seed should be drilled following the contours and then covered with an erosion control blanket. We recommend taking a wait and see approach to the lightly compacted areas. Give them a year of rest and reevaluate before seeding. You might not need to revegetate most of it and can save some money.

Of course none of this will work unless you can control the foot traffic. You also need to look at protecting the toe of the streambank where willows are not established. The sloughing will continue back toward the trail if this is not addressed.

If you are interested, I can bring one of our engineers out to the site, and he can give you some recommendations on what is needed. I was originally thinking of willow facines and pole plantings, but velocities will need to be studied before any specific recommendations can be made.

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For the control area west of Cherry Creek Dan and I selected a couple of areas between the trail and the creek near the beaver dam. They are narrow, but covered with native vegetation. The predominant species is western wheatgrass, with scattered clumps of blue grama and what is probably green needlegrass.

Several years ago I presented the park with a binder containing soils descriptions, ecological site descriptions, and their appropriate seed mix. I have identified the soil as the Nunn loam and the loamy mix could be used. Given the close proximity to the creek, I'm recommending some changes to the mix, and I'm using our critical area planting rates instead of rangeland planting rates.

		Percent	PLS lbs./Acre	PLS lbs./Acre
Species	Variety	of Mix	(Drilled Planting)	(Broadcast)
Western wheatgrass	Arriba	30	9.6	19.2
Green needlegrass	Lodorm	20	4.0	8.0
Blue grama	Lovington	30	1.8	3.6
Sideoats grama	Vaughn	10	1.8	3.6
Buffalograss	Sharps	10	1.2	2.4
	TOTAL:	100	18.4 lbs./ac.	36.8 lbs./ac.

If you have any questions, don't besitate to call.

Edward M. Spence

District Conservationist

720-544-2869