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111-2016-010

RE: Transit Mix Quarry Application Comments

Dear Reviewer,

My wife Betty and I own a cabin on Lot #8, Eagles Nest, west of the proposed quarry. We were shocked by the proposal and of course strongly urge that the permit sought by Transit Mix be denied.

We purchased the property in 1999 and repaired the cabin built about 1920. I am retired (2001) and normally go to the property every week unless the snow is deep as in the last winter. The only access is across the Hitch Rack Ranch on an easement maintained by Eagles Nest owners. Intermittent closure of the road would mean we would need to adjust our travel and recreation to times when the road is supposed to be open.

The problem goes beyond inconvenience. With a quarry and blasting, the value of the property would be much reduced. Imagine telling a prospective buyer, "by the way, you will not be able to go to and from the place when you want to." (As I write this letter the value of the cabin and the 32 acres is probably much reduced, pending your decision.)

Unfortunately, the potential of loosing full-time use of the road is especially serious for me. In February of 2014, I became restricted to full-time medical oxygen. The cause was auto-immune lung damage. The condition has stabilized and does not interfere with travel to the cabin, but the small portable oxygen bottles limit my time there to a few hours. Oxygen equipment failure or another mishap would require urgent use of the road.

In addition to our personal concerns, the site is a very poor place for a quarry. The region around the proposed site is now too densely populated for a quarry operation.

Truck traffic and blasting noise would increase in an area where people are presently enduring more aviation noise due to recent addition of helicopters at Fort Carson.

I have read the Exhibits in the Permit Application that deal with Wildlife, Vegetation, and Reclamation. Reclamation (two Exhibits) deals mainly with re-establishment of plants. Attached is a copy of some of my reactions to these Exhibits. These comments are based on my college teaching and field research experience involving the flora and fauna of the Pikes Peak Region since 1962. There are significant errors, omissions, and other issues in these exhibits. Overall, they underestimate the biological richness of the present setting, and vastly understate the difficulty of recovery after quarrying.

Sincerely yours,

James H. Enderson

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Review of the Wildlife, Vegetation, and Reclamation Exhibits in the Application for a Quarry Permit by Transit Mix on the Hitch Rack Ranch

James H. Enderson 17 March 2016

Below are comments that point to errors or other issues dealing with animals, plants, and the post-digging aftermath. These concerns are based on my familiarity with the region acquired in nearly 40 years of teaching field courses in zoology, botany, and ecology at Colorado College. My ongoing research involves raptors, work that has caused me to travel extensively in rugged drainages statewide. I own a cabin on land in Eagles Nest.

In the Wildlife, Vegetation, and Reclamation portions of the Application, various topics appear more than once. Further, some of these topics are mentioned again in the analysis by an outside consulting firm. My comments below appear generally in the order they were encountered in the text. I did not trespass when gathering information for this review, but remained on the legal easement to and from my property on Eagles Nest.

ANIMALS

1. The statement that "turkeys are not common in the mining area" is contrary to my experience. They are especially common there, and perhaps roost in the tall cottonwoods, and loiter in daytime in the adjacent dense forest.

2. Peregrines nest nearly two miles from the property. No mention is made of prairie falcons that have nested about one mile both NE and S from the property.

3. The paper mentions the drainages as corridors for elk, but then ignores the significance of Little Turkey Creek (LTC). The mine site is commonly used by elk, except perhaps in mid-summer. The site offers excellent forage. Elk are not limited to "higher elevations". Deer are present year-around because of prime forage available.

4. Spotted Owls probably use the area; in the mid-1990s I saw one in summer in lower Rock Creek four miles NNE, and tracked another by aircraft centered about 8 miles south. They are easily overlooked by ground surveys, especially outside the breeding period. The riparian habitat in the western one-half of the proposed mine site is ideal with diverse old-age timber.

5. The pre-mining forest would not be available to wildlife in "50 to 80" years. If wildfire were involved, recovery might occur that quickly. But removal of substrate, even with attempts to replace "topsoil", makes recovery extremely long-term. The Castle Concrete quarry north of Queens Canyon graphically bares that out. Many attempts to

establish tree cover there failed. How many decades will recovery of vegetation at Pikeview quarry require? At LTC, the pinyon-juniper component now includes trees exceeding 200 years in age (the oldest may exceed 400 years).

6. LTC is intermittent; in drought years there is no above surface flow on the permit area. Leopard Frogs do not last long in that environment.

7. What is the purpose of "pre-construction" raptor surveys? What if Coopers Hawks or Flammulated Owls were found on nesting territory?

VEGETATION

8. In the Animal section, mention is made of "seral stages" implying a gradual succession to forest habitat. Yet the reclamation section suggests Douglas Fir will be planted directly after the grasses. What "seral stages" are expected?

9. In the foothills setting of the proposed mine site, aspect (orientation in regard to the sun) primarily dictates which plant community or mixture will be naturally established. Orientation far outweighs the effects of the bewildering array of soil types shown in the tables. What is the purpose of this display? Would each soil type be returned post-mining in the original pattern instead of being mixed by machinery?

10. At least twice Lodgepole Pine is mentioned in association with Douglas Fir. There is no Lodgepole Pine within many miles of the site.

11. Blue Spruce is mentioned several times. There apparently is none on the site. White Fir is very common in all age groups, yet it is not mentioned at all.

RECLAMATION

12. This statement appears: "Surrounding land uses are wildlife habitat (National Forest) to the west and agriculture to the east". Actually, the land to the west is thinly residential, and mainly residential and military training/aviation activity to the east. Badly disturbed pasture exists on the site of the proposed mine access road.

13. Figure F-1 shows reclamation based on extensive Douglas Fir forest to be established on the quarried sites. The species is shown on both north and south facing slopes. No consideration of aspect is apparent. Douglas Fir would be of very limited use

in reclamation of the south-facing north side of the valley. Further, what has become of pinyon/juniper woodland in the re-vegetation scheme? It is now fairly extensive.

14. Gambel's Oak depends on underground stems for reproduction and fire durability. Reproduction by acorns is seldom seen. Attempts to plant oak on recently disturbed lands have been problematic. The oaks now existing on the property may include stands with root systems many centuries old.

15. A cocktail of the seeds of so many grass species, all sown for replanting on the same newly spread "top soil", assumes all have the same requirements. This is exceedingly unlikely. Does big bluestem actually occur on the site?

16. The present riparian habitat is small yet is rich in plant species. The result is great plant structural diversity. This in turn favors high animal diversity. The restoration map shows only a small section "restored" on LTC. A tract extending 50 meters on either side of LTC includes much of the most valuable habitat on the entire mine site in regard to the flora and fauna. It could not be artificially reclaimed if removed and would require at least two centuries to return naturally. Two giant specimens of White Fir now present would be typical of old-growth conditions and surely rank among the very largest White Firs in the County.

It is a stretch to claim bare blasted walls might be more esthetic than natural talus slopes. Is this an admission the slopes cannot be "reclaimed" or restored? Who in the CDRMS office or the El Paso County office will know if one is more esthetic than the other?

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In the end, the proposed quarry site is in an ecotone where several plant communities come together and mix. The result is a calico of flora resulting from the varied soils, slopes, and slope orientations. Restoration and "recovery" are impossible. One thing is certain. Once the quarrying is over, the site will quickly be vegetated with invasive foreign colonizers such as wooly mullein and sweet clover.