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Horse Gulch Assessment Report

Brad Clark*
Annie Henderspn-Selle[‡]

Jerome Bernard[†]
Meghan Scully**

*Fort Lewis College, clark_b@fortlewis.edu

[†]Fort Lewis College, JABernard@fortlewis.edu

[‡]Fort Lewis College, AHendersons@fortlewis.edu

**Fort Lewis College, scully.meghan@gmail.com

Horse Gulch Assessment Report (Fall, 2008)
Fort Lewis College – ENVS 495



ENVS 495 (Environmental Colloquium) Horse Gulch Assessment Report – Dr. Brad Clark (Principal Investigator); Jerome Bernard; Kim Hardwick; Annie Henderson-Selle; Meghan Scully



HORSE GULCH ASSESSMENT REPORT

Table of Contents:	Page:
Preface	3
Overview of the Horse Gulch Area	5
Update	7
Section I	
• History of Horse Gulch	7
Section II	
• Analysis of Stakeholders and Likely Development Scenarios	16
Section III	
• Laws, Policies, and Jurisdictions	31
Section IV	
• Legal Requirements for Road Development	45
Appendices	80
References	94

Preface

The ENVS 495 course (Environmental Colloquium) is a requirement for the Environmental Studies (ENVS) Major and it serves as the capstone course for the Environmental Policy Minor at Fort Lewis College (FLC). ENVS 495 invites students from both major and minor programs to conduct and report on a multidisciplinary research or assessment project involving a community-based issue, policy, or proposal. This requires that students consult with faculty members from across academic disciplines; elected officials and administrators at the local and county levels; and/or relevant members of the Durango-area community. These and other community resources become an integral part of the ENVS 495 experience. As such, the course format provides a community-based learning and research (CBLR) opportunity for students at FLC.

For the Fall 2008 semester, the ENVS 495 project centered on production of a comprehensive, multidisciplinary (e.g., historical, socioeconomic, political, ecological) inventory of the Horse Gulch area.¹ What follows is the end product from the collaborative effort of ENVS 495 students (Jerome Bernard, Kim Hardwick, Annie Henderson-Selle, Meghan Scully) and Assistant Professor of Political Science and Environmental Studies Brad Clark (who taught the course during Fall 2008). This multidisciplinary report addresses the following issues related to the Horse Gulch area:

- Historical trajectory
- Current assessment
- Stakeholder / Landowner Inventory and Related Agendas

¹ In February of 2000 a similar report, entitled, “An analysis of past, present, and potential future uses of FLC properties in the Horse Gulch Area near Durango”, was produced by the Horse Gulch study group. The group was comprised of FLC faculty members, including Don May (chair); Rob Blair; Gary Gianniny; Dave Gonzalez; Jim Judge; Melissa Knight-Maloney; Tom Norton; Bill Romme; and Preston Somers.

- Possible Land and/or Resource Development Scenarios
- Transportation Proposals
- City of Durango and La Plata County Land Use Regulations and Development Standards
- Federal, State, and Local Laws Relevant to Development and Transportation Proposals
- Critical / Unanswered Questions and Information Gaps
- Recommendations for Future Use / Development / Preservation of the Horse Gulch Area

This report begins with a section covering the history of the Horse Gulch area. It was written by Kim Hardwick, an Anthropology major and Environmental Policy minor at FLC. Kim's coursework in Anthropology allowed her to give special attention to the area's prehistory, protohistory and historic periods. A broader discussion is also offered regarding the larger, Durango vicinity. The section concludes with a brief discussion of possible avenues for historical and cultural protection of the Horse Gulch area; recommendations are offered to FLC regarding the future management of the Horse Gulch area.

The second section of this report offers an analysis of likely scenarios for development proposals affecting the Horse Gulch area and immediate surroundings. It also offers informed speculation on the intentions of some area stakeholders and the possible alternatives that exist for their properties. It was written by Jerome Bernard, an Environmental Studies major with a Policy Option at FLC.

The third section of the report discusses many of the laws and policies in relation to owner/jurisdiction and property rights in the Horse Gulch area. More specifically, it focuses on potential development in Horse Gulch and what would be required at the City

and County levels in order to adhere to established procedures and regulations. This section was written by Annie Henderson-Selle, an Environmental Studies major with a Policy Option at FLC.

The fourth section of the report expands upon the previous section by detailing the various legal requirements relevant to the development of a road(s) in the Horse Gulch area. In particular, laws that will pose potential problems for road development plans are discussed. This section also considers what overarching development model is most appropriate for La Plata County and the City of Durango to adopt, and how future plans will impact Fort Lewis College. It concludes with a discussion of critical questions yet unanswered, and mentions the alternative to developing the Horse Gulch area – preservation. This section was written by Meghan Scully, an Environmental Studies major with a Policy Option at FLC.

Overview of the Horse Gulch Area

Horse Gulch is a broad valley located directly east of Durango and Fort Lewis College. The Gulch runs in a general north – south direction; it is framed by Raider Ridge on the west and Grandview Ridge on the east. Elevations in the Gulch range generally from 6,500 ft. in the south to 7,200 ft. in the north. The higher reaches of Raider Ridge are near 7,500 ft. and slightly over 8,000 on Grandview Mesa. Most land in the area is privately owned and currently undeveloped. Privately owned parcels range in general from just over a single acre to slightly more than 290 acres. Please refer to Appendix 1

for detailed information on the 130 parcels (totaling just over 6,519 acres) that represent the operational definition of the Horse Gulch area for the purposes of this report.²

Many of the private parcels in the Horse Gulch area have been the target of increased pressures and incentives for residential and municipal development. In addition, a variety of transportation and infrastructure development proposals involve construction on both private and public lands in the Horse Gulch area (see Section IV for detailed information regarding road construction).

As major landowners in the area, Fort Lewis College and the Fort Lewis Foundation will at some point have to make important decisions about their future use(s) of the approximately 750 acres owned in Horse Gulch and on Raider Ridge. In addition to assessing future College-related uses of the Horse Gulch properties, the College also must consider the broader issue of how their decisions will influence the entire Durango community. The City has identified Horse Gulch as a key parcel of open space, with current heavy use and important future potential for recreation, aesthetics, and wildlife habitat. At the same time, parcels in Horse Gulch have increasing property values and development potential. Because the Fort Lewis properties are centrally located in Horse Gulch, decisions about the types of development allowed, and the kinds of access provided (or not provided), will either facilitate or constrain development of other private and public lands within the area (Horse Gulch Study Group, 2000).

² For the purposes of this report, the Horse Gulch area represents a collection of 130 land parcels of various sizes, ownership, and jurisdiction. The area is generally bounded by Highway 3 in the south, the eastern boundary of the US Bureau of Land Management's (BLM) 1,477.01 acre parcel, County Road 237 and the southern BLM boundary in the north, and the Skyridge neighborhood and Silver Peaks condominiums in the west. The cumulative actual value for parcels in this area is \$49,378,410.00. For detailed information regarding individual parcels in this area, please refer to Appendix 1.

Update

On February 17th 2009, the Durango City Council voted unanimously to initiate a contract for purchase of a 222.92-acre parcel in the northern end of Horse Gulch for \$700,000. The parcel in question is currently owned by the Durango-based Crader Properties LLC. The City Council also approved a plan to pursue a Great Outdoors Colorado (GOCO) grant, which would be used to significantly offset this purchase price.

Negotiations between the City and Crader purportedly began in the late-Fall of 2008 and were (at least in some part) motivated by concerns that Jerry Dalla, president of the Durango-based Drillco Inc., was interested in acquiring the parcel in question. Dalla and Drillco Inc., which is a land subdividing and developing company, currently own four parcels, totaling 408.511 acres, in the northwest corner of Horse Gulch. There currently exists road access to the Dalla parcels and conceivably, this could have been extended to provide access to six, 35-acre parcels in the Crader parcel, that were likely seen as desirable home sites. The significance of the 35-acre parcel size will be discussed in Sections II and III of this report. Suffice to say, the rapid development of the City's plan to acquire the Crader property is significant. The property is sizeable piece of the larger area identified as a priority for preservation in the adopted 2001 Open Space Master Plan. Please see Appendix 2, entitled "Potential Horse Gulch Opportunity: Crader" for a detailed map of this area.

Section I – History of Horse Gulch

Introduction

Specific historical data for the Horse Gulch area has been somewhat hard to locate by and in many cases has come in somewhat obscure forms. There are many parts

of history that are particularly lacking in evidence, such as the period of Spanish settlement in Horse Gulch. According to Coffey and Guerrero (2001), “constructing the specific cultural history of the Horse Gulch region is problematic due to the limited amount of data available. However, there is considerable literature devoted to defining the chronological sequence of human habitation in the Durango vicinity” (4).

Yet because of the lack of comprehensive information, some of the best accounts of the history of Horse Gulch come from personal interviews, old newspaper articles, maps, and land deeds. The area has been reported to have been highly used for a long period of time.³ This section of the report first discusses the prehistory of Horse Gulch. This is followed by a discussion of the protohistoric and historic periods in the Horse Gulch area and the Durango vicinity.⁴ This is then followed by a brief discussion of possible avenues for historical and cultural protection of Horse Gulch and associated resources. The section of the report concludes with some recommendations for future management of Horse Gulch by Fort Lewis College.

Prehistory

Archaeological excavations were conducted by the 1999-2000 Fort Lewis College Archaeological Field School on Fort Lewis property to determine the cultural resources present. The study yielded several isolated finds which were not necessarily indicative of cultural affiliation or temporal span.⁵ However, isolated finds Number 6 and 7 did yield artifacts (Coffey and Guerrero 2001, 7). A side notched projectile point as well as grey ware ceramics were found. These point to an extended periodic use of the area lasting from the archaic (6000BC- AD1), to Basketmaker III (450-700 AD), to the Pueblo I

³ For a brief summation of early newspaper articles related to the Horse Gulch area see included Appendix

⁴ Protohistoric period 1500AD-1880AD; Historic: from 1880- Present.

⁵ Artifacts found alone, disconnected from other sites or artifacts

transition period (750-800AD).⁶ The 1999-2000 study also discovered three archaeological sites; two were lithic scatters with no diagnostic artifacts, and the third site consisted of a lithic, ceramic, and ground stone scatter.⁷ The ceramics were dated to the Basket Maker III to Pueblo I period (Coffey and Guerrero 2001, 7).

The Archaic period is associated with rapid population increases and dispersion, the use of cultigens, with hunting and gathering as the main subsistence economy, increased social organization, and increased sedentism.⁸ The Archaic period is well represented in the Durango vicinity and, “It is entirely possible that Archaic period deposits may lay undiscovered beneath several centimeters of alluvium⁹ and colluviums” in the Ridges Basin and in the Durango vicinity (Coffey and Guerrero 2001, 5).

After a time period when the area is believed to have been abandoned from 400AD- 600AD, the Durango area was reoccupied by the Basketmaker III population (Coffey and Guerrero 2001, 6). This group lived in small, sedentary villages and relied upon a corn, beans, and squash subsistence economy, supplemented with hunted game such as elk and deer. Ceramics appear in the Durango area for the first time during this period. The Basketmaker III / Pueblo I transition period is the most highly represented in

⁶ Basket Maker III: An archaeological time period. Residents lived in small villages, generally comprised of single pit structures. Residents practiced corn, bean, and squash subsistence economy (Coffey and Guerrero 2001:6).

⁷ Lithic scatter: Artifacts made from stone, particularly chipped stone scattered on the surface, there are two different types of lithic technologies, The chipped stone industry which involves fracturing or flaking stone and Ground stones. Ground stone scatter: Ground stones are a form of lithic technology which is based on pecking and grinding or polishing stone.

⁸ Cultigens are human managed and grown plants, in the southwest they are most commonly corns beans and squash

⁹ Alluvium: (from the Latin, *alluvius*, from *alluere*, "to wash against") is soil or sediments deposited by a river or other running water. Alluvium is typically made up of a variety of materials, including fine particles of silt and clay and larger particles of sand and gravel. Colluviums is the name for loose bodies of sediment that have been deposited or built up at the bottom of a low-grade slope or against a barrier on that slope, transported by gravity. The deposits that collect at the foot of a steep slope or cliff are also known by the same name (Wikipedia.com).

the Durango area (Coffey and Guerrero 2001, 5).¹⁰ This period is represented by population aggregations in larger villages and sites that are located at higher elevations, perhaps to take advantage of available moisture during times of drought (Coffey and Guerrero 2001, 5).

In August of 2000, Thad Swan, the deputy coroner for La Plata County brought a burial that was located on the Chapman property, in Horse Gulch to the attention of the Fort Lewis College Anthropology Department.¹¹ The site was composed of one human burial and incorporated components of a larger Basketmaker III- transitional Pueblo I site. In 2001, another archaeological survey of the Chapman property was conducted and resulted in the discovery of eleven isolated finds and seven archaeological sites. Fifty-three acres were inventoried by the May 2001 Archaeological Field School, but no collections were taken. Only Chapman sites 1, 2, and 4 were deemed to contain archaeologically or historically significant deposits (Coffey and Guerrero 2001, 28).

According to the 2000 Horse Gulch Report, “the list of known sites in the Horse Gulch area should not be considered complete in any sense.” (Horse Gulch Study Group 2000, 25) The report also states that because much of the history of Horse Gulch is undocumented, to fully document the use of the area, a survey using formal archaeological techniques is required (Horse Gulch Study Group 2000, 24). The Chapman excavations yielded sites of enough significance that, “...it is recommended that all ground-disturbing activities proceed with caution with the possibility that such activities may unearth potentially significant archaeological deposits including human remains. Should such resources be discovered through construction

¹⁰ Pueblo I transition period: Archaeological time period. “This period is most highly represented in the Durango area” (Coffey and Guerrero 2001:6). This period is represented by population aggregations. “This period represents the last substantial prehistoric occupation of the Animas drainage” (Coffey and Guerrero 2001:6).

¹¹ Section 23, township 35 north, range 9 west, La Plata County, CO

activities, it is highly recommended that construction be temporarily halted and the proper authorities be notified. Should the owner wish to consider future archaeological preservation, review or excavation, it is recommended that these... sites be preserved and withdrawn from development. Future archaeological review and possible excavation would be favorable for these...sites, and could yield significant results” (Coffey and Guerrero 2001, 28).

According to private property owners in Horse Gulch, many artifacts including lithics and pottery sherds have been found on various pieces of private property.¹²

Because archaeologically and historically significant sites were found on the Chapman property, and a limited amount of the Horse Gulch area has been archaeologically surveyed, it is likely that there may be further sites of significance within Horse Gulch and possibly on the Fort Lewis College property in Horse Gulch. The College should consider these past surveys and excavations when determining the use for lands it owns in the Horse Gulch area.

Protohistoric and Historic Periods

The Horse Gulch area also has a large amount of more recent historical activities, although much information is undocumented.¹³ The Horse Gulch area was probably used by the Utes and Navajos during the protohistoric period – 1500-1880, but there is a lack of documented historic sites, “perhaps in part the result of archaeologists’ inability to recognize these sites in the archaeological record” (Coffey and Guerrero 2001, 7).

“Interviews with members of the Southern Ute Indian Tribe indicate the area was used for resource procurement, as well as for sacred purposes as long as they have been here (Horse Gulch Study Group 2000, 24). By the 1880s the area was abandoned by these groups as they were pushed out by early mining and ranching activities in the Durango vicinity (Coffey and Guerrero 2001, 7).

¹² Sherd is the technical archaeological spelling for pottery pieces. Personal interviews with Kathy Szlag, among others.

¹³ Recent: from 1880- present

European Arrival

The Spanish Conquistadors were the first Anglo group to explore the Durango area during the 17th century Dominguez and Escalante Expedition. The Old Spanish Trail ran through the Durango area, and was used as an early travel route until the mid-1800s (www.durangodowntown.com). There was no specific mention of the Horse Gulch area during this expedition.

The first Anglo-American settlement in the Durango area took place in the 1860s during the Bakers Expedition, when a small group of individuals came to Durango from Denver (Parsons, 1911; Szelag, 2008). The Bakers Expedition through southwestern Colorado was driven by a lust for gold. A few expeditions in the area were led through the 1860s and 1870s; however settlement was discouraged by the Utes who were living in the Durango area for a long time prior to Anglo-American settlement. Permanent Anglo-settlement did not occur until after an 1873 treaty with the Ute Indians was ratified (Parsons 1911, 192).

The first land surveys of Horse Gulch that the local Office of the Bureau of Land Management has are from this expedition. However, the land surveys are hand written and quite illegible so they provided little information other than the dates of the land surveys. By the 1870s many settlers were coming to the area, primarily from the East. Many were in search of gold, silver, or good ranch land (Courtney, 2005).

The spring after the 1873 Treaty witnessed an influx of miners, ranchers, and business men into the Animas Valley. The main forms of labor were mining, lumbering, ranching, and herding (Parsons 1911, 192).

Neighboring Animas City was a thriving log cabin town by the 1880s (Courtney, 2005). By 1900 around 14,491 acres of land in La Plata County were being cultivated; main crops included alfalfa, grains, and fruit orchards. Through all of this settlement, the population of La Plata County increased rapidly. The population was 1,110 in 1880, and had jumped to 5,509 by 1890. In 1900 the population was 7,016 and by 1910 was 10,812 (Parsons 1911, 192).

The Horse Gulch road was one of the earliest access roads to the Durango vicinity (Szelag, 2008). According to a quote from the 1800s from Emerald Flint Patrick, the son of one of the earliest settlers in Durango, “the stage coach [Horse Gulch] road came over Yellow Jacket pass, on west to the Bellflower Ranch by the old settlement of Los Pinos. There it crossed the Pine River on the middle bridge to Moss School, went out Wallace Gulch, and on past Benn Springs before going through Horse Gulch to Durango (Courtney 2005).” The first cattle were brought into the Durango area by ranchers in the 1870s. In 1872, the passage of the General Mining Act provided for legal mining claims (Gulliford, 2003).

The Denver and Rio Grande Railroad is a project that affected the history of the Durango area substantially. In the spring of 1880, railroad crews started out from Alamosa in the San Luis valley surveying, grading, and laying tracks. In July of 1881, the Denver and Rio Grande Railroad arrived in Durango – the same year that Colorado Utes were forced onto reservations (Chapman Report; Nossaman).

By the late 1890s the Horse Gulch area was recognized as an excellent place to mine coal, and in 1900, Rocky Mountain Coal Company owned a few coal mines in Horse Gulch (Durango Democrat, 1899). The railroad along with the coal mines built a

short railroad spur into Horse Gulch that was called the Horse Gulch Short Line (Szelag, 2008; Durango Democrat, 1899). See Map 1 on the following page.

In addition, there is present evidence of a telegraph system at the southeastern end of Horse Gulch. However, no documentation of it has been found for this study, despite significant efforts. There is a large amount of evidence that points to the Horse Gulch area as being heavily used throughout the 1900s, and many somewhat random events occurred there that have been recorded in the Durango Wage Earner. There were around 54 references to the Horse Gulch between 1885 and 1920 (Szelag, 2008). See Appendix 3, entitled “Newspaper Articles”.

Possible Protection for Horse Gulch

Horse Gulch has been heavily used by different peoples for the past 8,000 to 10,000 years (Horse Gulch Study Group 2000, 24). Because of this it should be noted that specific portions of it, including the Fort Lewis College property could be considered as significant Traditional Cultural Properties (TCPs) and could possibly be protected under the laws of the National Historic Preservation Act (NHPA). “TCPs are a type of cultural site that may not be a historic building, structure, or archaeological site, and yet they have deep significance for associated groups living in the area” (Gulliford, 2003). TCPs are found to be significant from the role they play in a community’s historically-rooted beliefs, customs, and practices. TCPs are assessed for designation by their continuity over time, their influence of community identity, and their traditional uses. TCPs can also qualify as a location where a community has traditionally carried out economic, artistic, or other cultural practices important for maintaining its historical identity (Gulliford, 2003).

One can reasonably interpret that sites used for mining and ranching traditions could qualify, although none have been included on the National Register of Historic Places (NRHP) to date (Gulliford, 2003). The criteria to identify a TCP are as follows; TCP has a permanent location, is rooted in community history and important to maintaining cultural identity within a community, and the integrity of the location remains which means that the landscape has not changed so significantly that practices and beliefs no longer make sense (Gulliford, 2003). Prehistoric sites should be considered to be TCPs unless consultation with tribes deems otherwise. Temporary sites, including vegetation affected by cultural activities may be TCPs. Some TCPs will have multiple cultural affiliations, and all sites must be at least 50 years old to be included on the register. TCPs generally have an association with events that have made a significant contribution to the broad patterns of our history, and have a history of yielding, or the potential to yield, information important in prehistory or history (Gulliford, 2003).

Conclusion

Horse Gulch has played an important part in the history of the Durango area, and this should be considered before the College makes any firm decisions pertaining to its land owned within the area. The amount of significant archaeological sites on private land points to the possibility for using the College's land in Horse Gulch for historical studies and/or an Archaeological Field School. The possibility for this area to be considered as a TCP could lead to an excellent study in the future. The wagon route as well as the telegraph line could serve as a prime location for students interested in environmental history.

Recommendation: The Horse Gulch area has great potential to be used as an outdoor classroom in the ways mentioned above, and the College Foundation as well as the Board of Trustees should consider the rich history of the area when making any future land management decisions.

Section II – Analysis of Stakeholders and Likely Development Scenarios

This section of the report focuses on analysis of likely scenarios for development proposals affecting the Horse Gulch area and immediate surroundings. It also focuses on the intentions of some of the stakeholders and the possible alternatives that exist for their properties.

Description of the Area

The Horse Gulch area southeast of Durango, CO is a focal point in the issue of managed growth and development in both La Plata County and the City of Durango. It is an area that is valuable for its open space and recreational opportunities as well as future real estate development. The Horse Gulch area is located in the City of Durango Plan Area, between historic downtown Durango to the West and areas where future growth and large scale urban development are proposed, including Ewing Mesa to the South and Three Springs to the Southeast (City of Durango 2007, 60). The land in the Horse Gulch area is not uniformly managed, and consists of parcels of diverse ownership including City of Durango, BLM, Fort Lewis College, and private landholders. This diversity of ownership is coupled with the fact that the land is bordering Durango City limits, and thus the City has an interest in its future development. Intergovernmental agreements between the City and County play a role in the future of the Horse Gulch area as well. The area includes both Tier 1 IGA (Inter-Governmental Agreement) and Tier 2 IGA area

parcels (La Plata County GIS map), meaning that both the City and County have criteria that must be met by large-scale developments (Aune, 2008). See Appendix 4 entitled, “La Plata County GIS Map”, for detailed information.¹⁴ At this time a disparate group of stakeholders hold ownership over the lands of the Horse Gulch area and a comprehensive plan for managing the Horse Gulch area resource has not been attained. See LaPlata County GIS Map 2 for additional information.

Recommendation: Some form of organization or common forum for discussion regarding the management of the Horse Gulch area should be assembled by the stakeholders with the intentions of completing a comprehensive plan for the Horse Gulch area and related resources. Fort Lewis College, City of Durango, La Plata County, Bureau of Land Management, and private stakeholders should all be represented. Representatives from the Durango area community should be included as well; a balance of public and private interests is important. Perhaps two groups should be assembled in order to eliminate potential conflicts of interest: one representing public interests, and one private of interests. Stakeholders with diverse viewpoints should be encouraged because, for example, open space preservation in the Horse Gulch area cannot be achieved without impacting development plans, and development plans cannot proceed without impacting open space areas.

Transportation Issues

The future of transportation infrastructure in the Durango area has the potential to fundamentally change the Horse Gulch area. The logistics of transportation infrastructure in the area are in part related to geology, as it plays an interesting role in providing

¹⁴ This is a three-page map of the Horse Gulch area that was provided to members of the ENV5 495 course by Kevin Hall, the Parks, Open Space & Trails Development Manager for the City of Durango.

Durango with unique scenery as well as engineering challenges, which may have implications affecting the Horse Gulch area and related resources. The Animas River corridor along which US 550/160 follows is so narrow, for example, it constrains traffic flow and is a major reason why a Ewing Mesa to Grandview Connection road has been promoted among City planners (2030 TRIP 2006, 41). Even with the planned improvements to US 550/160 (including widening the highway), the corridor is expected to become more and more congested in the future (City of Durango 2007, 58-59).

Since Horse Gulch Road (County Road 237) is closed to vehicles at its southwestern terminus, there is currently no way to drive from downtown Durango or the campus of Fort Lewis College to the Grandview area without traveling the congested US 550/160 corridor. Development proposals for the area are interrelated due to proposed road infrastructure connections. The focus of the current assessment is the Horse Gulch area, but its future will be affected by development in the surrounding areas. The Wyndham property, Oakridge Energy Inc. landholdings on Ewing Mesa and in the meadow area of the Horse Gulch area, and the Three Springs/ Grandview development areas all have the potential to impact the Horse Gulch area in the future.

Important Questions: What is unique about the Horse Gulch area? What is the significance of the Horse Gulch area to the Durango area community? Will the current development scheme impact what makes Horse Gulch unique and if so, in what way(s)? Is putting a road through Horse Gulch really going to alleviate traffic or just fuel more urban sprawl?

Stakeholders

Oakridge Energy Inc.

Who is Oakridge Energy, Inc. and what are their plans? Oakridge is an energy company that has become involved in Durango area real estate development. Due to the booming real estate market of the 1990's and most of the 2000's, the land which Oakridge held for a gravel pit and possible coal mine became much more valuable as a development site.

The company planned and proposed a large scale residential and commercial development, featuring a golf course for the top of Ewing Mesa which would extend into the meadow area of Horse Gulch. It would be known as "Oakridge at Durango" (Oakridge, 2008b). The scope of the development is large enough that new roads would be needed to provide adequate access. Consider the following from the Oakridge Energy official website,

"Headquartered in Wichita Falls, Texas, Oakridge Energy is engaged in the exploration, development, production and sale of oil and gas primarily in Texas. According to Oakridge Energy online news archives, the company owns approximately 1965 acres in Colorado, including gravel deposits from which it receives lease and royalty income, and of which approximately 1,100 acres are held for development"(Oakridge 2008a). This development has been proposed as a new-urban community, "a mixed-use village complex called Oakridge at Durango" (Oakridge Energy, 2002). A web article from 2001 details the proposal at that time,

"... the biggest project to hit the city in some time is Oakridge at Durango. Proposed for 1,343 acres on Ewing Mesa southeast of town, plans call for 1,725 homes and a 27-hole golf course in the residential section. A retail district would include storefronts, and a resort hotel and spa. There also would be a medical campus with a hospital, assisted-living center and medical offices. The neighborhood would be rounded out with schools and open space. For development-shy Durango, such a project might come across as public enemy No. 1. Until you consider the original plan. Texas-based Oakridge Energy bought the land 10 years ago to mine coal. "When the economics of coal didn't work out, we turned to real estate," said Oakridge Energy President Sandra Pautsky. With her property nearly overlooking downtown, the value of development easily surpassed the minerals. Add to that the community goodwill generated by not turning a prime piece of

real estate into a dusty black hole in the ground, and the choice to build houses was easy” (Titus, 2001).

City and County planners seem to favor high density growth on Ewing Mesa because it’s close to town, flat for building and wouldn’t add to the US 160/550 traffic bottleneck which is becoming an issue for the transportation infrastructure of the area (White and Aune, 2008; Hall, 2008). However, disagreements between Oakridge and the City of Durango have arisen over placement of high density developments. According to the Oakridge Energy Inc. 2008 Annual Report,

“Significant issues that arose during the approval process were public access across and through the mesa, the city’s desire for greater density, and the Company’s desire for its land to be developed at a lower density. The sole current access onto the Durango Property is located on the western end and serves incoming and outgoing traffic that in the past has included gravel trucks. The city required that the Durango Property be served by two or more access roads. The city’s 1997 US Highway 160/550 Area Plan included a bypass from Highway 160/550 across the Durango Property connecting US Highway 550 to Horse Gulch/Goeglein Road to the east. The Company advised the city that it could not support a bypass through the Durango Property. The issue ultimately was resolved by the Company’s agreement to accept the minor arterial roadway concept and the city’s agreement to shift the location of the roadway to the perimeter of its property so that the roadway would not cross the planned golf course. Additional access may be required in accordance with the Area Plan during the annexation process. However, no paved secondary access road serving the mesa is required until a traffic study determines the average daily traffic volume to and from the area will exceed 5,000 vehicle trips per day.” (Oakridge, 2008b)

Another aspect of the Horse Gulch area in which Oakridge is involved concerns the recreational trail system. The Telegraph Trail system crisscrosses the area, passing through private and public land. Noel Pautsky, former head of Oakridge Energy Inc., acknowledged the value of mountain biking in the Ewing Mesa area by granting the right of way to the trail system on Oakridge property to La Plata County. See Appendix 5, entitled “Trails 2000 – Telegraph Trails”, for more detailed information.¹⁵ According to

¹⁵ This map can be found online at: <http://www.durangodowntown.com/trails/teletrail.htm>

Oakridge, “Durango is called a “Cycling Mecca” and mountain biking is available adjacent to the Durango Property and through a portion of the Company’s lands on 12 miles of trails that the Company gifted to the County for local residents and tourists pleasure” (Oakridge, 2008c). According to a 2003 *Durango Telegraph* article, “the original owner of the [Ewing Mesa] land, Noel Pautsky, also left provisions in his will for a 10-foot easement for the trails across [Oakridge’s] parcel” (Votel, 2003). Mountain biking is a very popular activity in the Horse Gulch area and the institution of permanent, deeded trails should provide a means for preserving this activity.¹⁶

Important Questions: Is the community better off with a new, large development and expanded transportation opportunities – versus – a coal mine? How can we tell? How has implementation and the growth of Three Springs impacted the progress on Ewing Mesa? If Ewing Mesa continues with plans to develop, where exactly will the proposed road run? The answer may have the greatest single impact to the area.

Fairfield/ Wyndham

Who are Fairfield and Wyndham? “Wyndham Vacation Resorts is part of Wyndham Vacation Ownership, the world’s largest timeshare company. Wyndham Vacation Resorts markets, sells, and finances vacation ownership interests provides property management services to property owners’ associations; and develops vacation

¹⁶ The Telegraph Trail System began to take shape in the early 1990s when Trails 2000 began negotiations with private property owner Noel Pautsky to design a trail network that worked with his own development ideas and directed traffic away from the mining activities on Ewing Mesa. Around 1995, the community came together to build the Telegraph Trail and then later Crites Connect, Sidewinder and Carbon Junction. In subsequent years, Trails 2000 worked to negotiate the trails and came away with the trails gifted to the County in perpetuity. The Durango-area community has long-since been active in supporting the trail network used by hikers, runners, dog walkers and mountain bikers. Several National Championship running and mountain bike races have been held in Horse Gulch and the area has been written about nationally in such magazines as *Outside* magazine. To date, there are approximately 5,000 volunteer hours invested in construction of trails in the Horse Gulch area (Monroe, 2009).

ownership resorts” (Wyndham, 2008). Fairfield merged with Wyndham Resorts in 2002 to create the largest timeshare resort company in the world. Wyndham Resorts currently owns and manages a property in Durango near the Train Depot.¹⁷

North of Ewing Mesa across the Horse Gulch “Narrows” is the Fairfield property, located at the south end of Raider Ridge. In the late 1990’s, preliminary plans were accepted by the Durango City Council for a 106-unit time share condominium complex on the site (Durango Planning Commission, 2001). Access became an issue at that point because the City required retaining walls and other standards for the road which made the project cost prohibitive. The City vision was for a public road from Goeglein Gulch to connect not just to the Fairfield property, but onwards to Ewing Mesa. Fairfield had proposed a private road solely for access to the property as well as an emergency access road which would require an easement from Fort Lewis College to cross the parcel directly south of the Fairfield property. At that time, there were still proposals to build a reservoir in the Horse Gulch area, the Ewing Mesa Area Plan had not been adopted and the 2030 TRIP document had not yet been produced.¹⁸ Since Ewing Mesa was not ready to be developed, thus requiring a road, at that point the concept was put on hold. Fairfield Resorts is still committed to a project in Durango and may be able to develop in the future (Hoppe, 2000).

Important Questions: How would developing this property impact the Horse Gulch area? How would developing this property impact surrounding landowners? What does the City of Durango have to lose or gain if this development proceeds?

¹⁷ Wyndham Durango, 401 East 2nd Avenue, Durango, CO 81301. (970) 385-6886

¹⁸ See Proceedings of the Durango City Council January 6, 2004 “Hearing to Adopt the Ewing Mesa Area Plan” for additional information on the subject.

La Plata County

La Plata County is located in Southwestern Colorado; it is home to the City of Durango, Towns Bayfield and Ignacio, Fort Lewis College, Durango Mountain Resort, and of course, the Horse Gulch area. It is a fast growing county¹⁹ and is the governing body for the unincorporated areas not included in towns or cities.

La Plata County plays a major role in the future of the Horse Gulch area. Lands in this area which have not been annexed by the City are still in County jurisdiction, although the powers between the City and County are shared within the IGA. In addition to being responsible for managing growth and development, La Plata County is a stakeholder in the Horse Gulch area. La Plata County owns the right of way to the trail network which crisscrosses public and private lands (Oakridge, 2008c). Additionally, La Plata County jointly owns a large parcel of land in the Horse Gulch area along with the First Presbyterian Church of Durango and the Fort Lewis Foundation. The three parties had their parcel assessed in July 2008; as of November 2008 they haven't yet announced any plans to sell (Ricedorff 2008).

La Plata County Commissioner Wally White and Senior Long Range Planner Eric Aune were consulted for this study and provided the class with *the La Plata County Compass: An Overview of La Plata County's Strategic Plan*. Several of the "Core Strategies" addressed in the *Compass* relate to the Horse Gulch area. "Sustainable Development" is identified as one of these strategies. Included in the objectives are "Intentional Land Use Planning" and "Mixed Use Development Hubs" (La Plata County *Compass*). The Ewing Mesa development would fall under the mixed use development

¹⁹ 1990 population 32,284. 2000 population 43,941. 2006 population 47,936. United States Census Bureau.

category. Intentional land use planning information can be interpreted in the La Plata County Comprehensive Plan, Chapter 3.

“Transportation” is another strategy area which may affect the Horse Gulch area. “Mitigation of Peak Hour Congestion” and “Sustainable Road Construction and Maintenance Practices” are both identified among the objectives. A connection running from Goeglein Gulch Road across the Horse Gulch area, across Ewing Mesa to Grandview could conceivably alleviate rush hour traffic along the US 550/160 corridor. The engineering logistics of building roads in the area, however, could present significant challenges to the sustainability objective.

“Healthy Natural Environment” is another County strategy that may have implications for the Horse Gulch area. For example, Page 3.4 of the La Plata County Comprehensive Plan identifies the Horse Gulch area as part of Durango’s Urban Growth Area, and the City of Durango GIS Future Land Use Map identifies the area as designated ‘rural,’ allowing 1 unit per 35 acres with the parcels currently held by the Fort Lewis Foundation designated as ‘conservation open space.’ See Appendix 6, entitled “Durango Comprehensive Plan Update – Future Land Use Map” for additional information. Indeed, the future of Horse Gulch may depend upon how the planning strategies are put into practice as well as the wishes of landowners. Map available online at: <http://gis.durangogov.org/website/pdf/FutureLandUse-ESize.pdf>

County Commissioner Wally White expressed that the County budget may have an impact in future transportation infrastructure. The County budget has stagnated while road building costs have risen. Commissioner White asserted that connecting a road from

Ewing Mesa to Grandview may be out of reach for quite some time and may require state, federal, and developer funds if built at all (White, 2008).

Important Questions: How will the County Compass be implemented and what will be the implication for Horse Gulch? How big of a role will the current economic situation play in influencing development decisions which may affect the Horse Gulch area?

City of Durango

The City of Durango is known as the home of Fort Lewis College and the Durango-Silverton Narrow Gauge Railroad; it is also an outdoor recreation destination. It is the urban hub of Southwestern Colorado and is a rapidly growing small city currently faced with controlled development issues²⁰.

Kevin Hall, Durango City Parks, Open Space & Trails Development Manager, was consulted for this study. Hall said that the City of Durango should not help to fund a road when it runs contrary to the City's open space vision. The Horse Gulch area has been identified as a critical area in the City of Durango Parks, Open Space and Trails (POST) plan.²¹ Hall also offered insights as to the future of the Horse Gulch area. For example, Ewing Mesa is a prime candidate for annexation by the City, but at this time Oakridge has not requested annexation for the land. Hall provided members of the current study with a La Plata County GIS map of the Oakridge Energy Inc landholdings; eight of the parcels were highlighted. Refer to Appendix 7, entitled "Oakridge Energy GIS", for specific information.²² These highlighted parcels, located in the meadow area of Horse Gulch, are the most critical open space parcels in Mr. Hall's opinion. In order to conserve

²⁰ See *Durango Herald* October 26, 2003. "City Planners look at 6,000 new homes."

²¹ http://docs.durangogov.org/sirepub/viewftr.aspx?cabinet=SirePub_Documents&docid=227607

²² This map of the Horse Gulch area was provided to members of the ENVS 495 course by Kevin Hall, the Parks, Open Space & Trails Development Manager for the City of Durango.

those parcels, he conjectured, the City (assuming Oakridge completes annexation) could trade higher density development on the Mesa top in exchange for open space designation in the meadow. However, the City and Oakridge have clashed in the past over density issues and the meadow parcels are included in a proposed golf course²³.

Important Questions: How can the city of Durango and Oakridge work together for the best of the community? Is the golf course location negotiable from Oakridge's point of view?

Fort Lewis Board of Trustees

Who *are* the Fort Lewis Board of Trustees?

“In June 2002, Colorado Governor Bill Owens signed legislation that approved the creation of a stand-alone Board of Trustees for Fort Lewis College. This nine-member Board of Trustees began governing the College on September 1, 2002. The Trustees make policy for Fort Lewis College and oversee implementation. The Board consists of seven members who serve four-year terms. Each of these individuals is appointed by the Governor and requires Senate confirmation. The seven Trustees appointed by Governor Owens include Richard Ballantine, Brian T. Bissell, Linda Campbell, Peter Decker, Patricia Noyes, Thomas Schilling and Leonel Silva. The faculty and student body representatives are Dr. Charles Riggs, [Faculty member of the Board of Trustees] and [President of the Associated Students of Fort Lewis College] Aaron Elinoff, respectively. Prior to being governed by the Trustees, the State Board of Agriculture governed Fort Lewis since it first became an agricultural high school in 1911” (Fort Lewis College Foundation, 2008).

The Fort Lewis Board of Trustees replaced the Colorado State Board of Agriculture as the landholder of significant parcels in the Horse Gulch area when it assumed leadership of the College in 2002. Included among these is the parcel adjacent to and directly south of the Wyndham Resorts property as well as a pair of larger parcels adjacent to Fort Lewis' campus and Raider Ridge. As a result of this position, Fort Lewis College is a significant stakeholder in the Horse Gulch area resource.

²³ See Durango Geographic Information Systems Map *Ewing Mesa Area Plan- Proposed Land Uses*: <http://gis.durangogov.org/website/pdf/ewingmesa.pdf>

Fort Lewis College President Brad Bartell, who was consulted for the current study, asserted that the College has no plans for the parcels at this time other than preserving them as open space. He expressed support for using the land for outdoor classrooms and is aware that the land is currently being used for that purpose. He also indicated that Durango Nature Studies has been offered use of the land for children's nature programs. He indicated that the current land use philosophy of the Board of Trustees for the land recognizes the importance of the area for its open space qualities and recreational benefits. He added that the College is in a position to take their time with the decision making process. Also, he foresees a major road in Horse Gulch in ten years from now due to projected Grandview growth and acknowledged that land use may change on both sides of the road, but that recently there have been "starts and stops in planning." He indicated that the purpose of the road would be to help relieve pressure from Highway 3 and US 550/160. President Bartell also said that although there are no plans at the present time, Fort Lewis College would consider selling the land to the City to be preserved for open space. At this time, Fort Lewis College has not tried to develop or sell its land in the Horse Gulch area nor has it been designated as open space (Bartell, 2008).

Important Questions: How do current development proposals stand to impact FLC land in the Horse Gulch area? Can FLC develop a comprehensive vision for the future of its land? What role can FLC play in facilitating/ fostering dialogue among stakeholders?

Fort Lewis Foundation

What *is* the Fort Lewis Foundation? According to the Fort Lewis College website, "The Fort Lewis Foundation is a 503 (c) (3) tax-exempt nonprofit organization that exists

to support Fort Lewis College.” According to a Foundation Officer, it is “an independent entity there to serve and benefit the college” (Ricedorff, 2008).

Don Ricedorff, Full Member and Officer of the Foundation, was consulted for this study. The Fort Lewis Foundation holds one parcel in the Horse Gulch area outright and another in a three-way undivided partnership with the First Presbyterian Church of Durango and La Plata County. According to Mr. Ricedorff, an appraisal was conducted in July 2008 on behest of all three stakeholders. The Church may be interested in selling the property which would force the other two stakeholders to make decisions. To Ricedorff, the most plausible course of action for the Foundation in the event that the Church wants to sell would be to divide the large parcel into thirds so the Church could sell its share and retain the lower third of the parcel so that the Foundation would retain a contiguous parcel. The County, he speculated, may wish to pass ownership of its share to the City since the parcel doesn't border on any other County-owned land.

Selling the Horse Gulch area parcels could be an option according to Ricedorff, but only if they could be sold for full market value. Ricedorff mentioned that the City or County may want the land for open space. However, the Foundation is not interested in selling the land to the City or County for less than full market value. Another option that the Foundation may choose to explore is holding the land for future campus expansion. The general opinion of the Foundation is that selling now is not desirable because the land will be much more valuable in the future.

Important Questions: Does La Plata County or the Fort Lewis Foundation want to buy First Presbyterian Church parcel? Does FLC have a campus expansion plan or other plans for their landholdings?

First Presbyterian Church of Durango

First Presbyterian Church is located at 1159 East Third Avenue Durango, CO 81301. The Church is a joint owner with the County and the Fort Lewis Foundation of the aforementioned piece of property in the Horse Gulch area. Lee Campbell, a representative of the Church, was consulted for the study. He said that the land in the Horse Gulch area held by the Church was not on the market but the Church would be interested in selling their portion to either the Fort Lewis Foundation or La Plata County. He stated that the Ewing family had given land to the Church and that about 120 acres had already been sold to the City for a potential reservoir site.²⁴

Important Questions: Are either the County or Fort Lewis Foundation interested in the parcel? Is it feasible for either party to buy the Church's share?

Development Driven Infrastructure

Development Driven Infrastructure is the concept that land developers must share in the financial responsibility for providing adequate infrastructure access such as roads and utilities for their projects (Hall, 2008). This concept plays a role in the future of the Horse Gulch area and transportation development in La Plata County.

The currently under construction US 550/160 interchange (built by CDOT) near Grandview will connect to High Llama Lane when completed. Several alternatives for connections from Grandview to Ewing Mesa have been proposed at this site. Appendix B-3 of the 2030 TRIP illustrates Options A, B and C.²⁵ See Appendix 8 of this report, entitled "Recommended 2030 Roadway Network," for specific information.

²⁴ See Concerned Citizens of Southwest Colorado at www.ccswwcolorado.org. "Councilor Parsons Offers To Take Property For Open Space" March 9, 2008 for more information on the site.

²⁵ http://docs.durangogov.org/sirepub/viewftr.aspx?cabinet=SirePub_Documents&docid=485599

Option A runs West out of the North end of Grandview and connects into the center of the Ewing Mesa development. Option B connects directly to High Llama Lane then runs East to the South end of Ewing Mesa. 2030 TRIP identifies this proposed road as Alternative 12 (TRIP 50, 2006). Option C (Alternative 9 in TRIP) connects Dominguez Drive to Ewing Mesa. Therefore, a likely scenario would involve the development of Grandview, thus necessitating a Ewing Mesa connection to alleviate US 160/550 traffic congestion. This would then spur progress on Ewing Mesa if it was not already developing by that point. Increased development on Ewing Mesa would accelerate the possibility of building a road across Horse Gulch to access Goeglein Gulch Road.

Recommended 2030 Roadway Network illustrates potential future connections around the Durango area. Alternatives 9 through 12 would all have the potential to impact the Horse Gulch resource with Alternative 11 being the most critical. Alternative 11 is the proposed connection between Ewing Mesa and Goeglein Gulch Road which would cross Fort Lewis College property and provide road access to the Wyndham property. Access would be achieved by either a standard road through the Horse Gulch area or a bridge spanning the narrow section near the western terminus. See Appendix 6 of this report for additional information.

Important Questions: How long until the road goes in? Who would pay to construct Alternative 11, (2030 TRIP road cost estimate \$15.5 million)? What would the Horse Gulch area be like with a bridge over the narrows or a road through it? Are there any other proposals to alleviate the current US 160/ 550 bottleneck besides this one?

Conclusion

Development proposals to the Southeast of Durango may impact the Horse Gulch area. The proposals with the biggest impact at this time are the golf course which would extend into the meadow area of Horse Gulch, and the 2030 TRIP Alternative 11 – which proposes a road across Horse Gulch. Several parties are interested in preserving at least some of the area for open space including the City of Durango and the Fort Lewis Board of Trustees. Wyndham and Oakridge have large scale development plans for the area which may change it forever. The future of transportation and growth in the Durango area is linked to the future of Horse Gulch.

Section III – Laws, Policies, and Jurisdictions Relevant to this Report:

The purpose of this section of the report is to identify laws and relevant policies in relation to owner/jurisdiction and property rights in the Horse Gulch area. More specifically, this section focuses on the potential development in Horse Gulch and what would be required at the City, County, and Federal levels in order to adhere to established procedures and regulations. Because of the various ownerships and stakeholders in the Horse Gulch area, there is little consensus regarding the future land use and development of the area. More importantly, the private property stakeholders must adhere to differing developmental requirements depending upon location, ownership, and use. This section of the study will explore not only the possible development scenarios, but also the potential difficulties from the point of view of both the regulatory agencies, and the developers/landowners. Aside from specific policy, it is imperative to note the potential

difficulty of development due to environmental concerns, including wildlife and natural geo-hazards, and recreational uses within Horse Gulch.²⁶

Additionally, it is significant to recognize the implications of the current “energy crisis” in relation to future development and transportation plans. Further, during the Fall 2008 ENVS 495 course, the United States became saddled with a great economic recession, which has significantly impacted overall development. This section will explore possible implications of construction within Durango in light of current economic hardships.

Intergovernmental Agreement

Development of the Horse Gulch area would require consideration of many different types of County and City regulations, depending upon the type of proposed development. Many options would have to be taken into consideration in order to ensure that all proposed projects were in compliance with current standards and codes enforced by the City of Durango, La Plata County, and the federal government. The land in the Horse Gulch area is designated under three tiers via an Intergovernmental Agreement (IGA). Each tier has specified regulations of annexation and developmental regulations.

²⁶ Geo-hazard as used in this study refers to topographic situations such as potentially unstable slopes, landslide tendencies and erosion potential. These geologically related hazards include slope grade, soils, and surface geology. Because of the topography of the Horse Gulch area, these geo-hazards must be considered before development. Additional detail can be found at the City of Durango, Office of Planning and Community Development. (970)385-2890

The IGA tiers are defined as the following: (Intergovernmental Agreement, 2008). See Appendix 6 of this report for specific information.²⁷

Tier 1:

Tier 1 is the Annexation Area and consists of all property in the Joint Planning Area that is immediately abutting, adjoining, adjacent to, or otherwise contiguous with any City boundary, and that is eligible for annexation pursuant to the Municipal Annexation Act (C.R.S. § 31-12-101 et seq.). The land within the study that falls under the Tier 1 district includes parcels under the ownership of the Fort Lewis College Board of Trustees, Oakridge Energy, and Wyndham Resorts (under the previous ownership of Fairfield Resorts Inc.) (La Plata County GIS, 2008).

In order to receive a Land use permit, the responsible ownership must submit a development application for review of compliance with the current Land Use Development Code (LUDC) in the Joint Planning Area Map.²⁸ (La Plata County, Community Development-planning)

Tier 2:

The Tier 2 Area consists of all property in the Joint Planning Area that is indicated as “Tier 2” on the JPAM (Joint Planning Area Map). Tier 2 includes those unincorporated lands designated by the City’s Comprehensive Plan which are not presently eligible for annexation but are eligible for City water and/or sewer service and

²⁷ IGA tiers are defined by the City of Durango, Colorado, and La Plata County Colorado. Additional information can be found at www.co.laplata.co.us (2000) Intergovernmental Agreement Regarding Joint Land Use Planning Between the City of Durango, and La Plata County, Colorado.

²⁸ The stipulations for the La Plata County Land use code are outlined thoroughly in the *Code of La Plata County Colorado*, enacted Aug. 27, 2007. For more detail see municode.com.

for which all development or redevelopment shall be in accordance with applicable City Development Standards and City Land Uses. The Tier 2 area also includes all properties to which the extension of City water and or sewer has been formally authorized by the City. Land in Tier 2 of the IGA includes parcels owned by the FLC foundation, City of Durango, FLC Board of Trustees, BLM, and Jerry Dalla.

Tier 3:

The Tier 3 Area consists of all property in the Joint Planning Area that is indicated as “Tier 3” on the JPAM. Tier 3 includes those unincorporated lands designated by the City’s Comprehensive Plan as eligible for City water and/or sewer service, but for which only select City development standards, as identified in Section 4.1(c) are to be applied to development or redevelopment. If such properties are subsequently annexed, development shall be required to meet all applicable City standards. Tier 3 development shall also be required to be consistent with any Land Use Classifications contained within any land use classification map applicable to Tier 3 property that has been adopted by both the City and the County either prior to or following adoption of this IGA.

The responsible owner must submit a development application to apply for a Land Use permit. Unlike Tier 1 development, Tier’s 2 and 3 will be reviewed by a body of planning commissioners from both the City and County to assess potential for development within the joint planning area map. Land in Tier 3 does not apply to this study.

Oakridge Energy Inc:

Under Colorado Senate Bill 35 (30-28-101 et seq., C.R.S.), signed in 1972, counties are not allowed to regulate the subdivision of land into parcels of 35 acres or more (Colorado Department of Education, 2008). This has contributed to the creation of rural subdivisions and secluded lots on parcels of 35 acres or more across the state. This is referred to as a "density right" granted to landowners at a ratio of 1 residential unit per 35 acres (Colorado Department of Education, 2008). Oakridge Energy, owned by Sandra Pautsky, has recently subdivided their land of 1,865 acres into fifty-three, 35 acre parcels. This enables the company to sell each parcel for any desired sum to those seeking a plot to privately develop (Hall, 2008). This strategy ensures that there is limited participation with the City and County. If the land were to be sold in 35 acre parcels, this could be problematic in that there is no limit on unit size. In addition, development which does proceed has to meet only minimum requirements. In order to develop the parcels, it needs to be determined if and what type of permit would have to be obtained. (Sec. 82-1 La Plata County Code)

On a 35 acre parcel, the most likely scenario would be construction of a single-family, residential development and/or redevelopment (additions) (Riess, 2008). This would not necessitate a La Plata County Land Use Permit, but would require a building

permit as long as it reaches all applicable established minimum requirements (Sec. 82-3)

(La Plata County Municipal Code, 2008). They are as follows:

- Unit size: No limit
- Unit appearance and Location: No requirements
- Occupancy requirement: None
- Water: Meets requirements of Colorado Division of Water Resources
- Sewer: Meets requirements of San Juan Basin Health
- Access: Meets requirements of Section 74-61 or 74-91-7 of La Plata County Municipal Codes
- Parking: No requirements
- Compatibility: Not required

(See Appendix 9 of this report for Table C of Sec 81 in the La Plata County Municipal Codes)

The land owned by Oakridge Energy Inc. is perhaps the most important in the Horse Gulch area because of the urgency with which it could be developed. This could also ultimately determine the type of development that could occur in the Horse Gulch area. At this point in time, the preferable option from the point of view of the County would be to not see the land sold in 35 acre parcels because of the difficulty this would present in regulation and services (Reiss, 2008). At the current time, the land is not on the market for purchase. However, by subdividing the property into 35 acre plots it could be up for sale at the Pautsky family's discretion. Currently the Pautsky's and the County

are tentatively exploring alternatives to the parcel development, but no resolutions have come forth (White, 2008).

Wyndham Resorts

Wyndham Resorts (previously Fairfield Resorts Inc.) also owns a parcel of land which falls under Tier 1 in the IGA. There have been no recent proposals for development of these lands. However, given that Wyndham's primary objective is to develop and sell time share condos, there will likely be plans emerging in the future, in which case, the likely development would be of high density. This would be eligible for annexation under the IGA Tier I and would require a class II permit. Other permits that may be considered depending upon the type and scale of development are as follows (La Plata County Land Use Code, 2008):

Conceptual Development Plan Permit

This is a required preliminary step for subdivisions and commercial developments which will be developed in phases; optional preliminary step for non-phased subdivisions and commercial developments when trying to determine if the concept of a proposal is appropriate for a specific location prior to proving adequate water, sewer, and access.

Class I Permit

This includes single family residential development and/or additions which result in multiple dwelling units on a single lot or parcel (up to 3 units on agriculturally assessed land and up to 2 units on other land); duplexes; certain home occupations; temporary uses; certain changes in land use.

Class II Permit

This broad category includes commercial and industrial development or redevelopment; some home businesses; multi-family residential development; mobile home parks; mixed-use development, public facilities; churches; childcare or group care facilities; commercial campgrounds; gravel mining or mineral extraction operations; etc.

Minor Exemption Subdivision Permit

This is required when an agricultural property owner proposes to divide a tract of land into 3 or fewer parcels. Specific eligibility conditions apply.

Major Subdivision Permit

This includes creation of lots less than 35 acres on non-agricultural land or agricultural land which does not meet the criteria for the Minor Exemption Subdivision Permit; some mobile home parks, and residential condominium developments.

Water

Currently, there is no established infrastructure in the Horse Gulch area. Consequently no water, sanitary sewer, or storm sewer lines exist. Currently, the nearest water mains are located on Hwy 3 and West 8th Ave, and also at East 2nd and 3rd Streets.²⁹ Depending on what type of development goes forward, there will be a great need for a detailed assessment in regards to infrastructure design and planning. However, with the approved Ewing Mesa Development, there may be a greater potential for joint access to these residential necessities. Regardless, the proposal for construction must meet the

²⁹ City of Durango, Ewing Mesa Area Plan (2004). Ewing Mesa is outside of the confines of this study, however pending upon the development plans that have already been proposed, new infrastructure in the area could change access to resources in the Horse Gulch Area.

requirements of the Colorado Division of Water Resources and within that must obtain approval from the State Engineer (Colorado Division of Water Resources, 2008).

In addition, all wastewater, septic, and sewage systems must be in compliance with the standards maintained by San Juan Basin Health Department. In 1992 the State of Colorado Storm Water Regulation (5 CCR 1002-61) was created to satisfy policy brought forth by the United States Environmental Protection Agency. The intention of storm water regulation is to reduce the amounts of pollutants that enter streams, rivers, lakes, and wetlands as an inevitable consequence of the expulsion of the toxins associated with construction activities. The State regulation includes residential, commercial and industrial areas (Colorado Division of Water Resources, 2008). Prior to construction, a storm water discharge permit must be obtained through the Colorado Discharge Permit System (CDPS). This applies to any soil disturbance exceeding one acre and is monitored under the Water Quality Control Division within the Colorado Department of Public Health and Environment (CDPHE) (San Juan Basin Health, 2008). Under contract with CDPHE, San Juan Basin Health Department conducts compliance inspections of any construction that would occur in Horse Gulch.

Also maintained by SJBHD is the process of septic system installation. The developer must first obtain an On-site Waste Water permit to prepare for a site evaluation. (See Appendices to assess what type of septic system is appropriate for the type of development) Every application for a septic permit must be accompanied by a

Plot Plan, as specified in the local Regulation (Section 3.3 (A)(7)). Within this Plot Plan, the specifics that are taken into account include:

- Property boundaries and adjacent street(s).
- Existing and proposed buildings, easements, & buried utilities.
- Existing and proposed water wells.
- Existing and proposed septic tank and drain-field locations (including lagoons).
- Any springs, surface water, ditches, and steep slopes.

Assuming that the Septic and Storm water systems meet the requirements, San Juan Basin Health has the further responsibility of insuring that the water is potable and meets the EPA's standards for safe drinking water (San Juan Basin Health Department, 2008).

Wildlife

In addition to the possible permits, other policy areas will have to be taken into account regarding the future development in Horse Gulch. Perhaps among the most powerful is the Endangered Species Act of 1973 (Fish and Wildlife Service, 2008). Because the Horse Gulch is within the habitat of the Southwestern Willow Flycatcher (US Fish and Wildlife Service, 2008) a federally listed endangered species, there is potential for preservation effort in the name of the federal mandate. Within the objectives of the Endangered Species Act (ESA) is the declaration that it “provides authority to acquire land for the conservation of listed species, using land and water conservation funds” (US Fish and Wildlife Service, 2008). The ESA has the potential to limit, or cease development in Horse Gulch and should be taken very seriously because of the magnitude of this law, and its consequences. Additional wildlife concerns are included

within the La Plata County Code Sec. 70-43 and are further discussed in Section IV of this report.

To summarize, these concerns include an evaluation based upon the Division of Wildlife Cumulative impact maps (www.municode.com, 2008). Since Horse Gulch is an essential wildlife corridor for this area, the County recognizes the importance of minimizing the impacts by maintaining development standards which take into account the fragile ecosystems and the wildlife which inhabits them.

Given the natural topography of Horse Gulch, strict development standards must be met in order to ensure safety for both people and the environment (See Subdivision review checklist for developers provided by San Juan Basin Health Department). These considerations include the geo-hazards associated with unstable slopes due to very steep grades (land slide areas), and erosion. While Durango construction is extremely familiar with building on soils of Arboles clay, bodot clay, herm, sili, zyme, and falfa clay they can still be problematic for development. These soils can place extremely high pressure on the foundation of the development. If development is found to be on expansive clay soils, the building official will require that you provide either a soils report or an engineered foundation. La Plata County has developed “Minimum Foundation Details” for use with single family residences and out-buildings (La Plata County Land Use Code, 2008). These details are to be used only where a professional design is not provided or required. In addition to the soil, Durango and specifically Horse Gulch has a great deal of shale which is conducive to a difficult construction process. All of these geo-hazards

must be addressed according to approval from San Juan Basin Health Department (San Juan Basin Health Department, 2008).³⁰

Implications of the Energy Crisis:

Presently, this is a particularly interesting time to be discussing plans for future development due to the threat of the current energy crisis. The Transportation Integrated 2030 Plan (TRIP 2030) produced by La Plata County and the City of Durango attempts to foresee Durango's transportation needs twenty-two years from now.³¹ In this comprehensive report, there was no mention of our diminishing access to oil. The plan is built upon the assumptions that not only will the public be relying on motorized vehicles for commuting, but they will do so at a greater capacity. In order to accommodate this assumption, Durango is working to ensure that the City's infrastructure is prepared for the increase in motor vehicles by building new roads and funding improvement projects. In an interview with County Commissioner Wallace White, he hinted at the implications of "peak oil" in reference to the way that Durango addresses development, transportation, and expansion issues. He doesn't expect that road development in the future will necessarily be a top priority given both the energy and the current economic crises. The development and transportation needs of Durango may change drastically in the future which is why this section is included in the Horse Gulch study. The way that potential

³⁰ San Juan Basin Health is also responsible for adhering to regulation and policy set forth by the Federal Emergency Management Agency (FEMA).

³¹ See: (2006) La Plata County and the City of Durango 2030 Transportation Integrated Plan for the thorough report.

development is conducted in the Horse Gulch area should be assessed thoroughly for its necessity and viability in the years to come.

Global discovery of oil peaked in 1994. It is debatable that the global oil industry is in the midst of peak production which is estimated to occur between 2007 and 2015 (Yeomans, 2008). Acknowledging this is the recognition that the global oil market is on a downward slope. If this is the case, in twenty-two years, oil may be too expensive and scarce in order to be accessible to the middle-class. Colorado also gets highway and road construction funds from natural gas revenues. “However, natural gas production peaked in 2001, and has been on a steady decline ever since. Consequently, there will not only be fewer motorized vehicles, but also less state funding for building and maintaining automobile infrastructure” (Fitzgerald, 2008). Although this is only one area of speculation for future development, the TRIP 2030 should include alternative plans that address transportation without cheap oil, and abundant revenue from natural gas production.

Unresolved Issues / Questions:

It is difficult to foresee development in the Horse Gulch area, especially given the current economic recession. Therefore there is a lot of speculation regarding the development, but specific policy cannot be identified in relation to the type or location of construction until actual plans are proposed.

Wyndham Resorts Inc. has not made any moves regarding the land they recently obtained from Fairfield Resorts Inc. Although given the nature of their business, Wyndham would most likely develop time share condos. Again, this is speculation, and additional information will not be available until they move forward with development plans.

Oakridge Energy Inc. has subdivided their property into 35 acre parcels; however, it would be more economically feasible to sell the property as a whole. The two options will greatly affect the future of the Horse Gulch area but remain undetermined.

Given unknown implications of the Energy Crisis, it is also difficult to assess exactly what future energy needs will entail, and also how accessible it will be. Without a concrete understanding, one can only speculate the potential problems with global oil supply.

This study was conducted during a large economic recession in which credit is difficult to obtain; there are little funds for current/future development projects. Once again, it is difficult to say what the future impacts of the recession will be and what that means for development in La Plata County.

Conclusion

This section of the report has speculated on the potential developmental requirements for projects in the Horse Gulch area. Each scenario requires differing types of participation at the City, County, and federal levels. Because there has been no recent activity regarding private development, it is difficult to foresee the scale and scope of future development and the amount of cooperation and involvement from the regulating agencies. If private, large-scale development was to occur, it would greatly compromise

the wildlife and recreational aspect of the Horse Gulch area. As these are two major components of value and draw to the Durango community, the Horse Gulch area could see a large decline in recreational visitors as well as the seasonal wildlife which inhabit the area. With these considerations in mind, it should be in the interest of the (larger) Durango community to ensure that at a minimum, the area owned by Fort Lewis College be preserved as a resource for outdoor education and recreation.

Section IV – Legal Requirements for Road Development in the Horse Gulch Area

This section of the report discusses the various legal requirements that will come into play with the development of a road in the Horse Gulch area. Those laws that pose potential problems for the road development plans are discussed in greater detail. This section also considers what overarching development model is most appropriate for La Plata County and the City of Durango to adopt, and how future plans will impact Fort Lewis College. The section concludes with a discussion of critical questions yet unanswered, and mentions the alternative to developing the Horse Gulch area – preservation.

Road(s) at Issue:

Local population growth³² combined with the Grandview area development and future plans for the development of Ewing Mesa, has prompted the City and County to include the Grandview Connection in its future planning considerations. A number of proposals have been considered to relieve both the current and projected road congestion on U.S. 160/550. The following table lists the “Recommended 2030 Roadway Network” (City of Durango, Colorado; La Plata County, Colorado 2006, 50).

³² La Plata County is the second fastest growing county (at 93.8% growth rate) in the CDOT Southwest Region (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, 70).

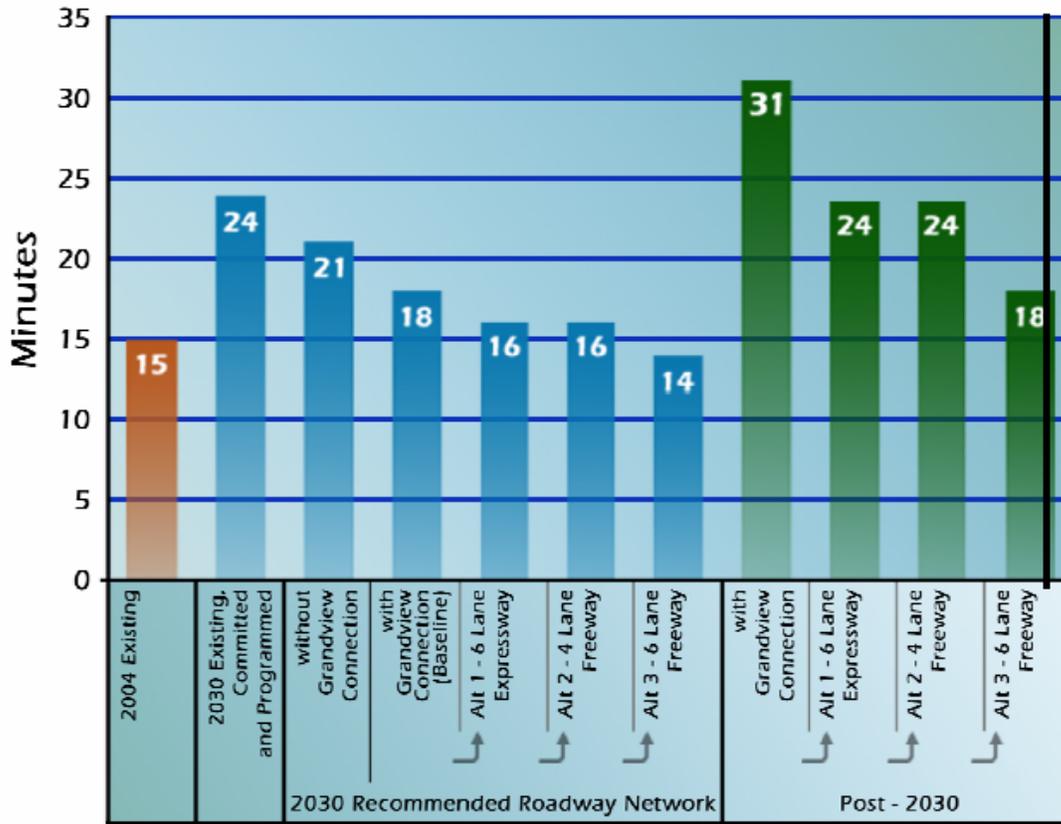
#	Location	Improvement	Length	Estimated Cost
1	E 32nd St / CR 250 from Holly Ave to Florida Rd	Add center turn lane, curb, gutter, and bike lane	0.7 mi	\$1,700,000
2	Florida Rd from E 3rd Ave to East of CR 250	Add center turn lane, curb, gutter, and bike lane	1.8 mi	\$9,500,000
3	Jenkins Ranch Road from Existing Terminus to Florida Rd	Extend as Arterial	0.8 mi	\$8,250,000
4	Turner Drive from Existing Terminus to CR 211	Extend Collector	0.3 mi	\$1,614,000
5	Frontage Road from La Posta south of Turner to Sawyer at US 550	New Underpass and Frontage Road	0.9 mi	\$11,526,000
6	Escalante from Dominguez Dr. to River Road	New Collector	0.6 mi	\$2,180,000
7	County Road 235 from New Grandview Arterial to CR 234	New Arterial	1.1 mi	\$1,769,000
8	US 160 EIS Preferred Alternative	Relocation of the Farmington Hill Interchange and widening of US 160 from 2 to 4 lanes east to Bayfield	n/a	*
9	Ewing Mesa Access (Dominguez)	New Arterial	1.0 mi	\$6,124,000
10	Ewing Mesa Access (Hwy. 3)	New Arterial	1.9 mi	\$14,784,000
11	Ewing Mesa Access (Goeglein)	New Arterial	2.3 mi	\$15,592,000
12	Grandview Connection (South alignment)**	New Arterial	2.0 mi	\$21,515,000
13	St. Highway 3 from Ewing Mesa to 8th Ave.	Widen to 4 lanes	0.5 mi	\$163,000
TOTAL				\$94,717,000

* Based on the "Draft Environmental Impact Statement/Draft Section 4(F) Evaluation for US Highway 160 From Durango to Bayfield La Plata County, Colorado (2005)" preferred alternative, these improvements are estimated to cost \$455.6 million.

Current traffic analysis models³³ suggest that area roads leading into Durango (i.e. U.S. 160/550) are already over capacity. Current commute times between downtown Durango and the Grandview area are around fifteen minutes; they are expected to increase to twenty-four minutes over the next two decades if no significant transportation improvements are implemented.³⁴ The chart below lists travel times from Grandview to Downtown Durango for each of the transportation improvement options (City of Durango, Colorado; La Plata County, Colorado 2006, 59).

³³ See City of Durango, Colorado; La Plata County, Colorado 2030 TRIP.

³⁴ See the Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, 52 and 55.



The City of Durango and La Plata County’s preferred solution is the South Alignment Option of the Grandview Connection, which will consist of a four-lane, extending just over two miles and including a 745 foot long bridge spanning across the narrows.³⁵ The cost of this road is estimated to be \$18,350,000. In the 2030 Transportation Integrated Plan (TRIP) document, it is explained that “a key component of the recommended roadway plan is a connection from the fast-growing Grandview area to Ewing Mesa and then into the heart of Durango. However, this connection would be costly, would pass through BLM land, and would significantly increase traffic on a

³⁵ “The critical need for the Grandview/Ewing Mesa connection is to provide an alternative route for Grandview/Three Springs Area traffic to downtown Durango as an alternative to the heavily congested forecast corridor of US 550/160. In review of the comparison maps, the addition of a Grandview/Ewing Mesa connection will have a sufficient demand to warrant a four lane facility” (City of Durango, Colorado and La Plata County, Colorado 2006, 60).

portion of State Highway 3” (City of Durango, Colorado; La Plata County, Colorado 2006, 60). The table below details the priority level of the proposed road improvement projects (*Ibid* 65).

Number	Location	Improvement	Length	Priority	
2	Florida Rd from E 3rd Ave to East of CR 250	Add center turn lane, curb, gutter, and bike lane	1.8 mi	Short-Term	\$9,500,000
5	Frontage Road from La Posta south of Turner to Sawyer at US 550	New Underpass and Frontage Road	0.9 mi	Short-Term	\$11,526,000
6	Escalante from Dominguez Dr. to River Road	New Collector	0.6 mi	Short-Term	\$2,180,000
7	County Road 235 from New Grandview Arterial to CR 234	New Arterial	1.1 mi	Short-Term	\$1,769,000
Short-Term Subtotal					\$24,975,000
1	E 32nd St / CR 250 from Holly Ave to Florida Rd	Add center turn lane, curb, gutter, and bike lane	0.7 mi	Mid-Term	\$1,700,000
4	Turner Drive from Existing Terminus to CR 211	Extend Collector	0.3 mi	Mid-term	\$1,614,000
8	US 160 EIS Preferred Alternative	Relocation of the Farmington Hill Interchange and widening of US 160 from 2 to 4 lanes east to Bayfield	n/a	Mid-term	-
12	Grandview Connection (South alignment)	New Arterial	2.5 mi	Mid-Term	\$21,515,000
13	St. Highway 3 from Ewing Mesa to 8th Ave.	Widen to 4 lanes	0.5 mi	Mid-Term	\$163,000
Mid-Term Subtotal					\$24,992,000
3	Jenkins Ranch Road from Existing Terminus to Florida Rd	Extend as Arterial	0.8 mi	Long-Term	\$8,250,000
9	Ewing Mesa Access (Dominguez) through Grandview	New Arterial	1.0 mi	Long-Term	\$6,124,000
11	Ewing Mesa Access (Goeglein)	New Arterial	2.4 mi	Long-Term	\$15,592,000
10	Ewing Mesa Access (Hwy. 3)	New Arterial	1.0 mi	Development	\$14,784,000
Long-Term Subtotal					\$44,750,000

* Based on the "Draft Environmental Impact Statement/Draft Section 4(F) Evaluation for US Highway 160 From Durango to Bayfield La Plata County, Colorado (2005)" preferred alternative, these improvements are estimated to cost \$455.6 million.

It should be emphasized that though the Grandview Connection (South Alignment – “Option B”) was the City’s selected alternative, the North Alignment Option is still relevant as it is likely to be used as a temporary access road until the U.S. 550-realignment project is completed.³⁶

³⁶ See City of Durango, Colorado; La Plata County, Colorado 2006, 58. It should also be noted that though the congestion levels projected for U.S. 160/550 do not appear to experience any relief with the addition of the Grandview connection, this is not an indication of its anticipated usefulness but rather a vestige of the fact that this road already experiences a level of traffic that exceeds its capacity (see City of Durango, Colorado; La Plata County, Colorado 2006, 60).

Transportation Planning and the CDOT Model:

In 2003, the Colorado Department of Transportation (CDOT) published an Environmental Stewardship Guide; its purpose was to announce that “CDOT employees are environmentally conscientious and ensure that the statewide transportation system is constructed and maintained in an environmentally responsible, sustainable, and compliant manner” (Colorado Department of Transportation 2003, 1). As a component of an environmental ethics statement, CDOT has outlined the following principles: “(1) CDOT goes beyond environmental compliance, (2) CDOT promotes a sense of environmental responsibility; (3) CDOT ensures that measures are taken to avoid or minimize the environmental impacts of construction and maintenance of the transportation system and that mitigation commitments are implemented and maintained, (4) CDOT designs, constructs, maintains, and operates the statewide transportation system in a manner that helps preserve and sustain Colorado’s historic and scenic heritage and fits harmoniously into communities and the natural environment” (Colorado Department of Transportation 2003, 2). The Regional Transportation plan (because commissioned by CDOT), echoes the same commitment to integrating concerns for the environment into transportation improvement plans. The position expressed in the RTP, “can be accomplished through both mitigation of impacts and seeking alternative modal options that may be less damaging to air quality, water quality, scenic assets, and other quality of life issues” (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, 116).

The standards set by CDOT provide perhaps the most stringent and comprehensive guidelines; it thus seems reasonable to suppose that in order to gain local

approval, any respectable project – even if privately funded – ought to adhere to those same standards. It should be noted then that this study will be based upon the CDOT standards, recognizing that if the project is privately funded there may be no legal obligation to satisfy all of the requirements set forth by CDOT. However, it is not so unusual to proceed according to the CDOT model given that the project will receive no federal or state government funding.³⁷ “CDOT is [occasionally] asked to approve or participate in actions that are initiated by the private sector. Whether or not federal monies or actions are involved triggering the requirements of NEPA or other federal laws, it is the policy of CDOT to use the same planning and environmental analysis process in making decisions regarding these actions or projects” (Colorado Department of Transportation 2003, 42). Though the proposed Grandview Connection will not be a state designated highway, this study maintains that it should still be considered a part of the statewide transportation system and should therefore be subject to the same standards and guiding principles set forth by CDOT.

The City and County’s 2030 TRIP document acknowledges the importance of this broader perspective in relation to transportation developments, such as the Grandview Connection. It states that: “the transportation system is often envisioned as the network of streets and highways that allow for automobile and truck traffic within, to, and through the region. In reality, roads make up only one component of the transportation system, albeit an important one. Transit service, bicycle facilities, and pedestrian infrastructure are essential to a well-balanced multi-modal transportation system” (City of Durango,

³⁷ Further, it would be strange for the Three Springs developers (who will also be the likely source of funding for the Grandview connection road), who took care to design their community in accord with green standards and available technologies to not also abide by the highest environmental standards that guide road construction projects.

Colorado and La Plata County, Colorado 2006, 17).³⁸ The speculative nature of this study is a vestige of the planning process; it is during this phase where issues should be raised and addressed because for many it is too late once construction has commenced (this is especially true for environmental considerations). For this reason, it is recommended that “when evaluating and developing proactive mitigation programs for natural resources, an ecosystem approach should be used. The ecosystem approach is characterized as a method for sustaining or restoring natural systems and their functions and values” (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, Appendix B 5).

Catalogue of Laws Bearing Relevance to the Proposed Development:

If either of the Grandview Connection proposals (e.g. the North or South Alignment Options) are to proceed, they will need to accommodate a host of laws in order to ensure compliance with Federal, State and local requirements. For each of these laws, a brief account of their applicability to this particular project will be offered, followed by a basic outline of what compliance will require and links to more detailed descriptions of the requirements.

National Environmental Policy Act (NEPA):

The State Department of Transportation (CDOT) maintains especially stringent environmentally-related requirements, restrictions, and standards; in particular, “CDOT has committed to complying with the intent and requirements of NEPA for all

³⁸ The authors state that this document “will guide the investments and policy decisions that will ensure a transportation system that meets the area’s future needs” and also “identifies long-term transportation demand for the 2030 horizon ... [and] identifies transportation capital investment to accommodate future growth” (City of Durango, Colorado; La Plata County, Colorado 2006, 7). Further, there is a recognition that “the planning process enhances the community’s character and quality of life by considering the interaction between land use and transportation and their cumulative effect on the built and natural environment” (City of Durango, Colorado; La Plata County, Colorado 2006, 7).

transportation activities, regardless of whether or not they are federally funded” (Colorado Department of Transportation 2003, 4). What is more, the Guide explains the utility of the NEPA model as an example of the type of “interdisciplinary approach [that] has been adopted for all CDOT projects or projects involving CDOT approvals, reflecting CDOT’s environmental ethic commitment to meeting both the intent and requirements of NEPA” (Colorado Department of Transportation 2003, 2). This should be understood as declaring that CDOT aims to adhere to both the procedural *and* the substantive requirements of NEPA.

An Environmental Impact Statement (EIS) will need to be performed prior to the construction of either option of the proposed Grandview Connection.³⁹ Besides the reasons discussed above suggesting the appropriateness of an EIS in this situation, the proposed route for the Grandview Connection crosses through BLM land, thus mandating an EIS.⁴⁰

Endangered Species Act (ESA):

This is not a separate EPA requirement, but an element of the EPA Stormwater Construction General Permit (CGP) requirements (United States Environmental Protection Agency Office of Compliance, 2006). This is one area in which CDOT goes beyond the federal requirements, extending protection to more species and habitats than are federally recognized.⁴¹ As of October 1, 2008 the state of Colorado has 31 species

³⁹ Though it is unlikely that this project will receive federal funding thus mandating an EIS, as discussed earlier in the study, it is accepted local practice (via CDOT’s principles and recommendations) to perform an EIS regardless.

⁴⁰ See CDOT’s NEPA manual for a comprehensive guide to the process and requirements of the NEPA, including the required EIS: <http://www.dot.state.co.us/environmental/Manual/NepaManual.asp>.

⁴¹ “CDOT evaluates all possible adverse impacts and takes all necessary measures to avoid harming proposed, candidate and listed species before, during and after construction and maintenance activities” (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, Appendix B 8). According to the 2035 RTP, “the U.S. Fish and Wildlife Service identified another 10 as candidate

listed as threatened or endangered. These 31 species include 18 birds, fish and mammals and 13 plant species.⁴² For a more comprehensive listing that includes federally and state endangered and threatened species as well as species of special concern in CO, see the state's wildlife website.⁴³ The 2035 RTP shows that the location of the proposed construction is in the Southwestern Willow Flycatcher's habitat.⁴⁴ This could pose serious limitations on the manner and location of any plans for development in the area.

Migratory Bird Treaty Act of 1918 (MBTA):

Originally proposed as a means for banning the commercial trade of birds and their feathers, the Migratory Bird Treaty Act "decreed that all migratory birds and their parts (including eggs, nests, and feathers) were fully protected"⁴⁵ (Fish and Wildlife Service, 2008). A list of birds protected by the act is available at the Fish and Wildlife Service website.⁴⁶ The authors of the 2035 RTP note that "all birds are protected by the Migratory Bird Treaty Act of 1918 (MBTA). ... U.S. Fish and Wildlife Service administers the MBTA which prohibits the take of any active nest. Construction activities ... that would otherwise result in the take of migratory birds, eggs, young, and/or active nests should be avoided" (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, Appendix B 25). In the 2035 RTP, issues relating to migratory birds are highlighted as some of the most critical for the region

species. In addition to the federally listed species, there are 16 species listed by the state as threatened or endangered and another 44 listed as state species of concern" (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, Appendix B 8).

⁴² For a list of the state's listed species see

http://ecos.fws.gov/tess_public/pub/statelisting.jsp?status=listed&state=CO

⁴³ <http://wildlife.state.co.us/wildlifespecies/speciesofconcern/threatenedendangeredlist/listofthreatenedandendangeredspecies.htm>.

⁴⁴ See Southwest Regional Transportation Planning Commission of the Colorado Department of Transportation 2008, Appendix B 20 and Fig. 3 on 22. The Southwestern Willow Flycatcher, *Empidonax traillii extimus* was listed as endangered on February 27, 1995. See

⁴⁵ <http://www.fws.gov/migratory>

⁴⁶ <http://www.fws.gov/migratorybirds/intrnltr/mbta/mbtintro.html>

(Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, Appendix B 84). Because “permits to remove an active nest are issued only under extraordinary circumstances when human health and safety are in jeopardy” (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, Appendix B 25), care must be taken to ensure the proposed area of construction does not interfere with the nesting habitats of any of the listed birds.

*Clean Water Act (CWA)*⁴⁷:

The purpose of the CWA is to “prohibit the discharge of pollutants from a point source into any waters” (United States Environmental Protection Agency Office of Compliance 2006, 19-20). Determining whether there is a wetland present on a construction site depends on the following questions:

- “Is your area in a floodplain or otherwise has low spots in which water stands at or above the soil surface during the growing season?”
- Does your area have plant communities that commonly occur in areas having standing water ... (e.g. cattail marshes)?
- Does your area have peat or muck soils?” (United States Environmental Protection Agency Office of Compliance 2006, 27)

Specifically, section 404 of the CWA deals with the fill material generated by construction projects, some of which require permits. These regulations would play a commanding role in the planning and construction phases if the bridge crossing above the Horse Gulch narrows is built.⁴⁸

⁴⁷ See United States Environmental Protection Agency Office of Compliance 2006, 25-32.

⁴⁸ Please refer to “Section 404” in the “Permits the Project May Require” section of this study.

*Resource Conservation and Recovery Act (RCRA)*⁴⁹:

The focus of the RCRA is hazardous and non-hazardous waste. It should be noted that hazardous wastes are dealt with at the federal level by the EPA while state and local level government regulates non-hazardous waste (United States Environmental Protection Agency Office of Compliance 2006, 40). Of particular concern in construction projects are concrete and asphalt, both categorized as non-hazardous wastes. Further, developers should be aware that “hazardous wastes can be either discovered or produced” (United States Environmental Protection Agency Office of Compliance 2006, 43) and they are held responsible for both kinds. Of particular relevance to any development/construction projects in the Horse Gulch area is the fact that this was formerly the site of a landfill. According to the RCRA, abandoned landfills should be assumed to contain hazardous wastes and be approached accordingly.⁵⁰

*Clean Air Act (CAA)*⁵¹:

The air quality requirements contained within the CAA aim to regulate and reduce harmful air-borne emissions. Of particular concern in construction projects are chlorofluocarbons (CFCs), emissions from hot mix asphalt plants, combustion gases from equipment, vehicle emissions, and dust generation (United States Environmental Protection Agency Office of Compliance 2006, 63).⁵² Contained within CAA is the Transportation Conformity Rule, mandating that “projects requiring funding or approval from the Department of Transportation (DOT), the Federal Highway Administration, or

⁴⁹ See United States Environmental Protection Agency Office of Compliance 2006, 39-48.

⁵⁰ The RTP even warns that “active, closed and abandoned landfill sites are also potential problem areas for transportation facility construction” (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, 82).

⁵¹ See United States Environmental Protection Agency Office of Compliance 2006, 63-68.

⁵² 40 C.F.R. part 60 establishes the performance regulations for stationary sources (e.g. portable rock crusher, cement plant, hot mix asphalt plant, etc.)

the Metropolitan Planning Organization must comply with the Transportation Conformity Rule” (*ibid* 65). The purpose of this rule is to minimize (or at least reduce) the harmful affects of transportation-related emissions on air quality (United States Environmental Protection Agency Office of Compliance, 2006).⁵³

Any construction project in this area, particularly those that indirectly promote driving (i.e. the building of a public road) and therefore vehicle emissions, must account for Colorado’ new S.I.P. for CAA compliance.⁵⁴ Further, the CDOT Office of Environmental Services identifies communities at risk for poor air quality, of which Durango is currently monitored for PM10 which is a “criteria pollutant,” classifying it in a “legal category for which there are national ambient air quality standards” (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, Appendix B 27). Any road development projects in the area must be cognizant of Durango’s current attainment classification relating to these standards and ensure compliance with the state’s programs for reducing these pollutants.

*National Historic Preservation Act (NHPA)*⁵⁵:

As described by the EPA, “section 106 of the NHPA requires federal agencies to account for the effects of their undertakings on historic properties and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment with regard to such undertakings. Federal funding or permitting of a project may constitute an undertaking under the NHPA” (United States Environmental Protection

⁵³ It should be noted that the EPA recently implemented more stringent emissions standards for non-road diesel engines. See www.epa.gov/otaq/nonroad.htm

⁵⁴ Composed by the CDPHE Air Pollution Control Division (APCD) to evaluate the consistency between state air quality standards/objectives and construction activities and transportation planning (Southwest Regional Planning Commission 2008, 80).

⁵⁵ See United States Environmental Protection Agency Office of Compliance 2006, 87 and 88.

Agency Office of Compliance 2006, 87). Accordingly, field surveys should be conducted throughout the Horse Gulch area to determine if there are any significant resources eligible for listing on the NRHP.⁵⁶ Special attention should be given to the old railroad line that entered the area, the wagon road connecting Pagosa Springs to Durango, the telegraph lines, the quarry that is the source of the stone walls in Berndt Hall at Fort Lewis College (FLC) and the pottery sherds found at multiple sites in the area; of these historical and cultural artifacts should all be assessed for NRHP inclusion. Section 106 of the NHPA also mandates consultation with local tribes (in this case, the Southern Ute and the Ute Mountain Ute tribes) when any sites of cultural or religious significance are located in the area of a proposed construction project.⁵⁷

Historical, Prehistorical, and Archaeological Resources Act of 1973:

This Colorado state law requires on-the-ground surveys to be conducted to identify resources that are eligible for listing on the NRHP (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, Appendix B 41).

CDOT Paleontological Resource Protection:

CDOT's Paleontological Resource Protection program requires identification of any fossils or fossil-bearing rock outcrops⁵⁸ in an area slated for road development so that

⁵⁶ "Historic properties include any prehistoric or historic district, site, building, structure, or object included, or eligible for inclusion, in the NRHP (which is maintained by the National Park Service), including artifacts, records, and material remains related to such a property or resource" (United States Environmental Protection Agency Office of Compliance 2006, 87-88).

⁵⁷ These tribes are to be contacted regardless of the fact that this area does not fall within the boundaries of their reservations (see Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, Appendix B 41).

⁵⁸ It should be noted that fossil remains have been identified in the Horse Gulch area. As described in the Horse Gulch Report, this area "contains an exceptional array of classic geologic features that draw geologists and geology students from across the country. In addition to the exceptional examples of sedimentary structures, fossils, faults, and terrace deposits, the area also contains a rich record of Earth history spanning 120 million years" (Horse Gulch Study Group, 2000).

accommodations can be made to preserve these resources (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, Appendix B 44).

FHWA Noise Abatement Criteria (NAC):

The FHWA has established noise level barriers that if exceeded must be addressed, and CDOT has further defined the acceptable noise levels 1dBA level lower than the FHWA NAC. CDOT's lower noise threshold requires noise abatement accommodations when the noise levels "substantially exceed the existing noise levels" (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, 81) especially in situations where new facilities are being constructed in areas previously free from noise.

Municipal Annexation Act:

C.R.S. § 31-12-101 et seq. If any land will be annexed as would be the case if the Grandview connection road is annexed according to the City and County IGA.⁵⁹

Colorado Natural Areas Act of 1977⁶⁰:

See the Colorado Natural Areas Program heading under the Avenues for Preservation Efforts on pg. 74 of this report.

Permits and Miscellaneous Requirements the Project will be Expected to Meet:

Incidental Take Permit:

- becomes a requirement if the project will result in a take of any kind (a "take" is described in detail in Section 9 of the ESA and includes "significant habitat modification which actually kills or injures a listed species through impairment of

⁵⁹ See City of Durango, Colorado; La Plata County, Colorado 2000, 5.

⁶⁰ For the text of the Act see:

<http://parks.state.co.us/NaturalResources/CNAP/AboutCNAP/TheNaturalAreasAct/>.

essential behavior (e.g. nesting or reproduction)” (United States Environmental Protection Agency Office of Compliance 2006, 81).

- before obtaining the permit a Habitat Conservation Plan (HCP) must be submitted⁶¹
- permit is issued under Section 10 of the ESA by the US Fish and Wildlife Service or NOAA Fisheries⁶²

*Stormwater Permit (included in the Construction General Permit (CGP))*⁶³:

Stormwater is defined by the EPA as “stormwater runoff, snow melt runoff, and surface runoff and drainage” (*ibid* 17).

- becomes a requirement if the construction project will disturb one or more acres *and* the “stormwater from the construction site [will] flow to a municipal separate storm sewer system (MS4) or a water of the United States”⁶⁴ (United States Environmental Protection Agency Office of Compliance, 2006 18).
- before obtaining the permit a Stormwater Pollution Prevention Plan (SWPPP) needs to be submitted⁶⁵

Section 404 Permit:

- becomes a requirement if the project will displace water with fill material (e.g. bridge pillars)⁶⁶

⁶¹ See <http://endangered.fws.gov/permits/index.html>

⁶² See *Ibid* 81 and <http://endangered.fws.gov/permits/index.html>

⁶³ See *Ibid* 17-24.

⁶⁴ A water of the United States is defined to “include, but are not limited to all interstate waters and interstate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds” (*Ibid* 96).

⁶⁵ This plan must demonstrate compliance with the ESA and account for local Total Maximum Daily Load (TMDL) requirements.

⁶⁶ Fill material can be understood to include any material that is put into water such that dry land replaces water or changes the depth of the water. For a complete definition of fill material, including examples, see *Ibid* 25.

Access Management Plan:

Recommended by the RTP commission for areas where residential and commercial development is anticipated to degrade existing levels of service⁶⁷

La Plata County Land Use Plan and La Plata County Comprehensive Plan:

Most of the construction for the Grandview connection will occur on, and be accessed from, County property.⁶⁸

City Development Application:

As outlined in the IGA between the City of Durango and La Plata County, (i.e. the major public land holders in the proposed development area) the project will need to account for the following requirements:

- ensure the development standards contained within the Land Use and Development Code (LUDC) and any relevant city ordinances are met
- establish right of way (ROW) dedications
- pay all County impact fees

In addition, the following resources should be consulted for project-specific requirements: the Federal Transportation Planning Requirements,⁶⁹ State-specific environmental requirements for construction,⁷⁰ and Congestion, Mitigation, and Air Quality (CMAQ) program.⁷¹

⁶⁷ See Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, 115).

⁶⁸ See http://co.laplata.co.us/plansum_compplan.htm and http://co.laplata.co.us/plan/code_revision/code_revision.htm

⁶⁹ Title 23 U.S.C. 134 and 135.

⁷⁰ From The Construction Industry Compliance Assistance (CICA) Center. See <http://www.cicacenter.org/cs2.cfm> and <http://www.cdphe.state.co.us/ap/down/landdevelop.pdf> and <http://www.cdphe.state.co.us/wq/permitsunit/stormwater/guidancefactsheets/constfactsheet.pdf>

⁷¹ Exists under SAFETEA-LU and makes funds available for transportation projects aimed at reducing congestion and improving air quality (see Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, 80).

Regulations Based on Funding:

Beyond the obvious, the source(s) of funding for the construction of a public road play a critical role in dictating various details of the project. Which permits must be obtained, which studies will need to be conducted, and what measures are taken to meet various requirements and standards depends heavily on whom (meaning the federal, state, or local governments or private interests) is funding the project. Different sources of funding will trigger certain requirements to satisfy the conditions of acquiring the funds. Of those CDOT and NEPA derived regulations relating to the construction of the Grandview Connection (South Alignment), several are tied to funding.⁷²

Issues that Warrant Further Consideration:

Who will be responsible for the road?

Any road connecting Grandview, Ewing Mesa and Durango (via some segment of the Horse Gulch area) will be developer-driven both in the sense of need and of funding (White, 2008). In the County's Grandview area plan a second access point is mandated once Grandview's (i.e. Three Springs') population reaches a certain number. Because the need for the road will be a direct result of development, it is the developers who must bear the financial burden. Any road in this area would be a County Road, but according to the Inter-governmental agreement (IGA) between the City of Durango and La Plata County, "the City agrees that in conjunction with the review and approval of proposed annexation and development of properties adjacent to the existing City limits, it will, when legally possible, annex County roadways that serve as the principal access from the

⁷² There are also funding opportunities available to projects focusing on alternative modes of transportation besides travel by vehicle on roads and highways. These options may be considered if the private financiers are either unable or unwilling to fund an extensive road development project. For example, the Transportation Enhancements Program is a source of funding for non-motorized trail projects.

City to such development” (City of Durango, Colorado; La Plata County, Colorado 2000, 5). Does the Grandview connection qualify for annexation as a city roadway?

Where will funding for this project come from?

At present, the City/County is operating under a “flat-line budget” in which there are no funds available for the type of construction required by this project (White, 2008). As reported in the January 2008 Southwest Regional Transportation Plan, it is not only local transportation funding that is scarce, but also state and federal. “Factoring in the significant inflation in construction costs over the last 3 years. An enormous jump in costs has been identified, approximately 33%, due to increasing pavement, steel, and transportation costs. This has caused a significant scale back of expectations for transportation improvements in the near term” (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, 101).

In fact, the scarcity of available funding is all the more lacking given the current national economic crisis and corresponding “credit freeze.” Though published prior to the recent market collapse, the authors of the Southwest Regional Transportation Plan make a prophetic claim about how financial hardships should prompt consideration of alternative solutions to transportation-related challenges because “current funding projections include an inability to simply build out of transportation problems through highway development alone” (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, 115). This statement raises a number of questions that warrant attention.

Planning for speculative development: If you build it will they come?

All of these road proposals are dependent upon pending or proposed community development plans; with the exception of Three Springs' first phase, none of the development projects necessitating the road have moved beyond the speculative and planning phases. What if the anticipated demand for these developments never materializes? How should the City and County weigh the consequences of either waiting to build the road until the actual growth necessitates it or building the road in anticipation of and preparation for future (projected) growth?

What is the significance of the Grandview connection south alignment being included in the City's long-term transportation plan (2030 TRIP)?

By virtue of the City's inclusion of this option in its future planning documents, are there any binding requirements that guarantee that the developer of the road proceeds according to the expectations of the City (i.e. build the southern alignment of the Grandview connection)? If the road is privately funded and crosses only private property, can a developer proceed without reference to the City's 2030 plan? In other words, if the developers devise a route that crosses nothing but private land (i.e. goes around the BLM plot), who oversees their actions? Would they be free to do whatever they want?

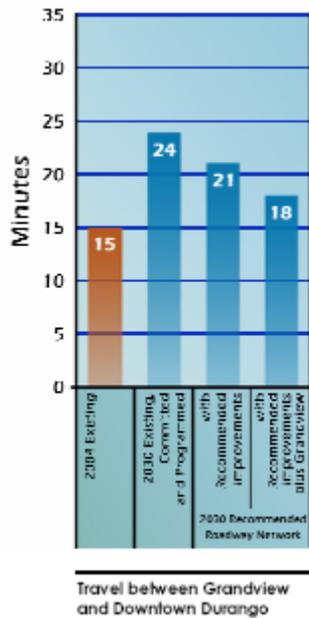
Realities of the local landscape:

In the Southwest Regional Transportation Plan, the authors draw attention to the fact that "the mountainous terrain prevalent throughout the region contributes to high roadway construction prices and the knowledge that congestion and other transportation issues will not be solved by roadway improvements alone" (Southwest Regional Planning Commission of the Colorado Department of Transportation 2008, 113). This point is

relevant to the subject of this study because the costs of any type of development in the Horse Gulch area will be higher due to the challenges presented by the terrain. It is worth mentioning that Durango is no “flat-land metropolis” where people can expect short, fast, direct and easily accessible commute times – if it were, these developments wouldn’t be on the table in the first place. Perhaps the “price” of getting to live (or vacation) in a magnificently scenic area that features rugged terrain and geographic obstacles that make travel more difficult and time-consuming is the few extra minutes it takes to commute into town.

Is the commuter’s burden worth the cost?

In the City’s 2030 TRIP document it is estimated that at peak hours (i.e. early morning and early evening) the drive from Grandview to downtown Durango currently takes about fifteen minutes; without any road improvements or modifications, the commute time from Grandview to Durango is projected to increase to twenty-four minutes by 2030 (City of Durango, Colorado; La Plata County, Colorado 2006, 55, 57, and 63). Without the Grandview/Ewing Mesa Connection (but still including the other improvement projects), it is expected that the commute time can be reduced to twenty-one minutes, and to eighteen minutes with the addition of the Grandview/Ewing Mesa Connection. The chart below summarizes the reduction in commute time that is expected from the addition of the Grandview/Ewing Mesa Connection (City of Durango, Colorado; La Plata County, Colorado 2006, 57).



For all the road improvements being proposed, it is rather surprising that in relation to the cost (and some might argue intrusion) of this extensive road development project the alleviation of commute time is minimal. How should the community weigh the social and economic costs of the proposed developments in relation to the three minutes of travel time commuters will be saved?

Making room for bicycles:

Much attention is given to the fact that bicycle commuters have few options for riding safely to and from work in the City’s 2030 TRIP document. Two solutions are offered to help alleviate the challenges (and often dangers) that get in the way of those who might otherwise bicycle to work. The 2030 TRIP mentioned building bike trails, but says nothing of the already existing Horse Gulch trail system, an area that would require only minor extensions to connect to the developing areas in the Grandview area. The 2030 TRIP also emphasizes that any new roadway should require width allowances that

accommodate bike lanes. Why isn't there more talk about the cheaper option of building trails and bike paths rather than roads with bike lanes?

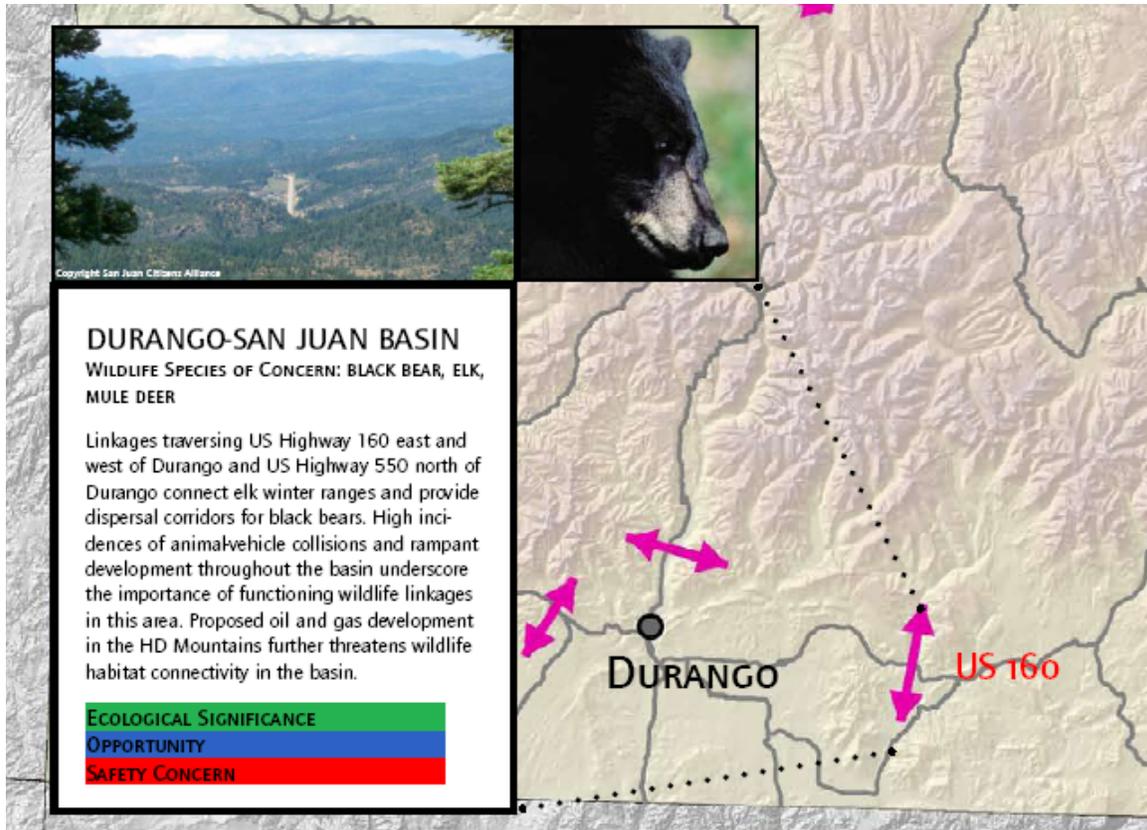
Future transportation and road-building plans lack a realistic assessment of the types of transportation that will prevail once our oil supply has been depleted:

Before lengthy and expensive road construction projects are initiated, consideration should be given to the status of both the national and global oil supplies. County Commissioner Wallace White suggests that even if the population in the area continues to grow as expected, there might not be a demand for the proposed road in the future because there will be no oil to power our vehicles; all road construction proposals should give consideration to such a possibility.

Linking Colorado Landscapes Program:

CDOT commissioned the Southern Rockies Ecosystem Project (SREP) to research wildlife mitigation patterns in hopes of finding a solution to the high number of animal-vehicle collisions that occur throughout the state. The project aims to “provide transportation planners, state and federal agencies, community leaders, engineers, and conservationists with a statewide vision for reconnecting habitats that are vital for maintaining healthy populations of native species” (Southern Rockies Ecosystem Project, 2008). SREP maintains a database of wildlife migration patterns that have been composed as “habitat connectivity models.” These models are utilized to predict wildlife habitat linkages, thus assisting public and government planners in devising solutions and alternatives to the road-related problems they confront concerning wildlife.

SREP identified over 170 linkages across the state with those most critical linkages receiving a high priority rating.



As the illustration above indicates, the local Durango to Pagosa linkage is top-ranked for ecological significance, opportunity, and safety concern in the state of Colorado. As seen on SREP’s linkage poster⁷³, the proposed Grandview connection runs right through this high priority linkage. The Durango to Pagosa linkage runs parallel to U.S. highway 160. As stated in the Phase II Report on this critical linkage, the central goal is to “maintain and improve connectivity for the migratory and resident elk and mule deer herds traveling between the San Juan Mountains to the north, across the Florida Mesa and the HD Mountains and south into New Mexico” (Southern Rockies Ecosystem Project 2006, 1). The main causes for concern in this area are the “high incidences of animal-vehicle collisions [that] are indicative of frequent animal crossings” that occur along U.S. 160

⁷³ http://restoretherockies.org/pdfs/top_linkage_poster.pdf

(Southern Rockies Ecosystem Project 2006, 1). The chart below illustrates the number of animal-vehicle collisions along U.S. 160 near Durango (SREP Linkage Assessment 14).

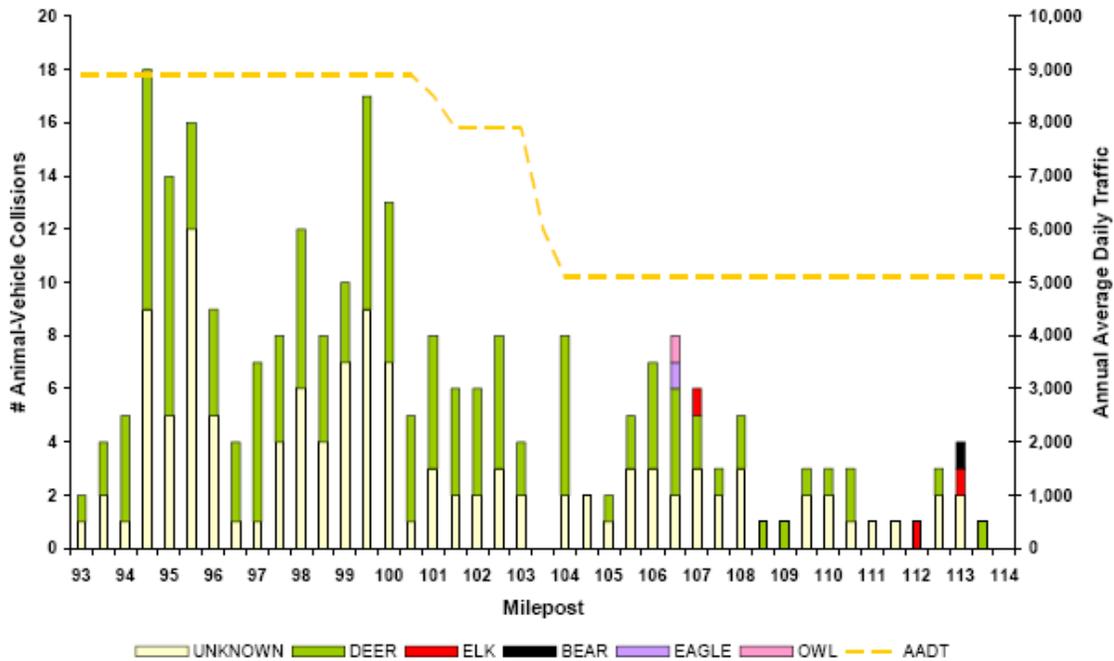


Figure 1: Recorded animal-vehicle collisions (1993-2003) and average annual daily traffic (2004) between MP 93 – 114, Durango to Yellowjacket Pass.

SREP highlights further concern with the “ongoing residential development throughout the linkage and proposed oil and gas development in the HD Mountains threaten wildlife habitat connectivity in the San Juan basin” (Southern Rockies Ecosystem Project 1).

Of particular concern in the local wildlife linkage are three species: Elk, Mule Deer, and the Black Bear.⁷⁴ See pgs. 67 – 69 of this report for specific information. The

⁷⁴ SREP lists the following as “target species” in the Durango-Pagosa linkage: **Elk (*Cervus elaphus*)**: “The Durango- Pagosa Linkage was ranked as a linkage of very high importance for elk. The functionality of this linkage for elk is considered constrained. While elk are moderately tolerant of human activity, connectivity through this linkage is highly threatened by future development along the highway corridor and increasing traffic flows” (Southern Rockies Ecosystem Project 2006, 3). **Mule Deer (*Odocoileus hemionus*)**: “This linkage was identified as a very important and irreplaceable linkage for mule deer during the expert workshops hosted by SREP. Contiguous habitat on either side of the roadway helps facilitate deer movement through the linkage, although highway traffic and residential development along the highway corridor create a tenuous connection between core habitat areas north and south of the highway”

report notes that “in the western-most portions of the linkage [in the area of the proposed Grandview connection], development on the Florida Mesa threatens to impact both seasonal and year-round habitat for several wildlife species between Durango and Bayfield. Animal-vehicle collisions in this area are the highest for the entire linkage” (Southern Rockies Ecosystem Project 2006, 27). As evidenced by the subject of this study, the western section of this linkage is experiencing “on-going development pressures” (Southern Rockies Ecosystem Project 2006, 10) that without the types of mitigation efforts suggested by the Linking Colorado’s Landscapes Program, “threaten[s] to shift major migratory movements westward” (Southern Rockies Ecosystem Project 2006, 10).

Though no legal obligation to accommodate the suggestions of the Linking Colorado’s Landscapes program exists, other locally implemented or anticipated projects are integrating these findings and making accommodations accordingly.⁷⁵ In addition, a number of local and regional land trust organizations are actively working to assist local projects accommodate the findings of SREP and preserving these critical wildlife

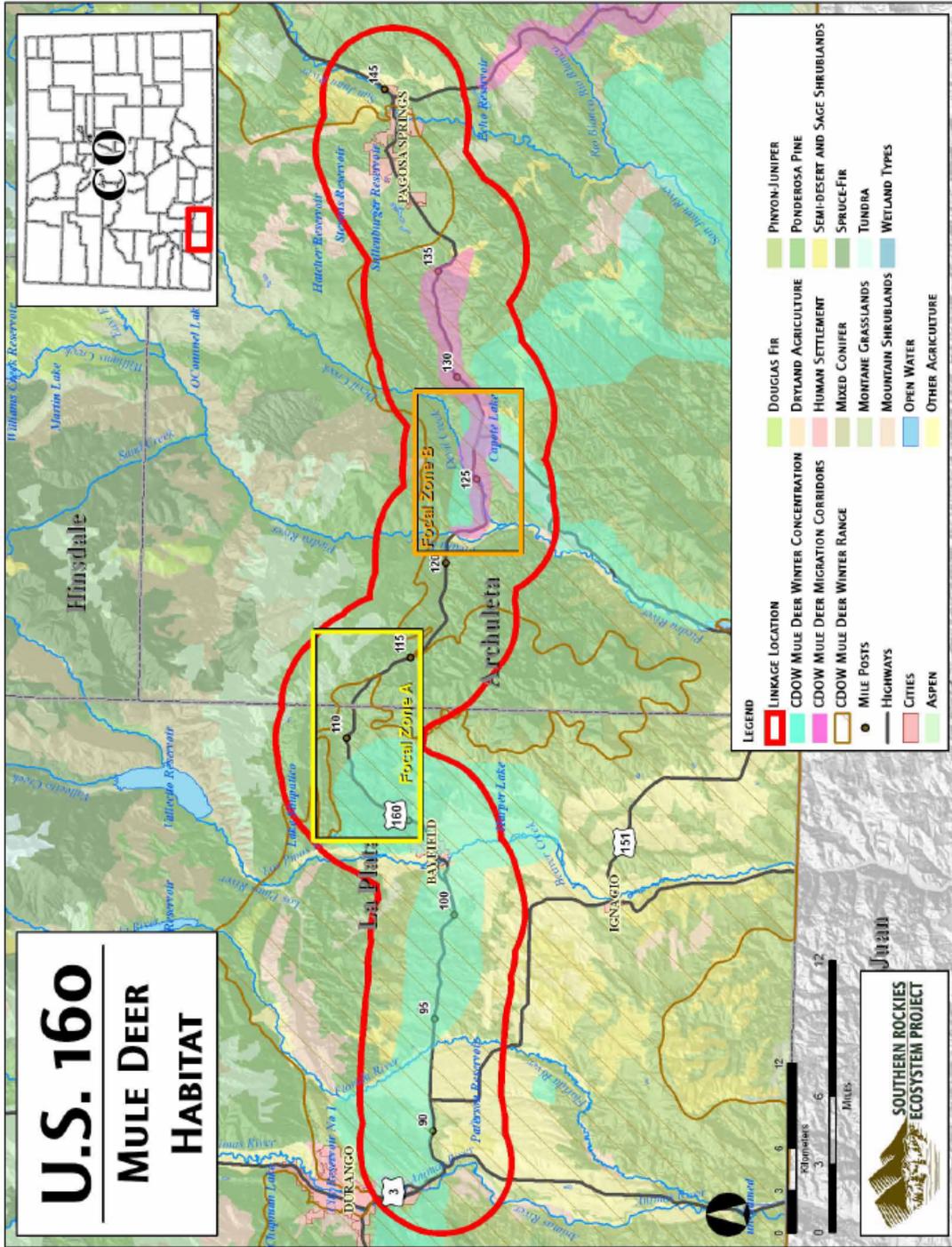
(Southern Rockies Ecosystem Project 2006, 7). **Black Bear (*Ursus americanus*):** “The Durango-Pagosa Springs Linkage provides important breeding, migration and dispersal habitat for black bears moving between the San Juan and HD Mountains (Map 4). While bears can be found foraging through much of southwestern Colorado, important summer and fall concentration areas occur across the lower-elevation mountains and drainages north and south of Highway 160, including areas such as the broad Beaver Creek drainage that parallels Highway 160 for nearly ten miles of this linkage. In addition, the Devil Creek drainage has been identified as an important concentration area providing access to habitat in the Devil Creek State Wildlife Area. The SREP expert workshops ranked the Durango- Pagosa Springs Linkage as a linkage of very high importance for black bears (Southern Rockies Ecosystem Project 2006). The functionality of this linkage for black bears is considered constrained due to highway traffic and increasing development and human activity in these lower elevation drainages” (Southern Rockies Ecosystem Project 2006, 7).

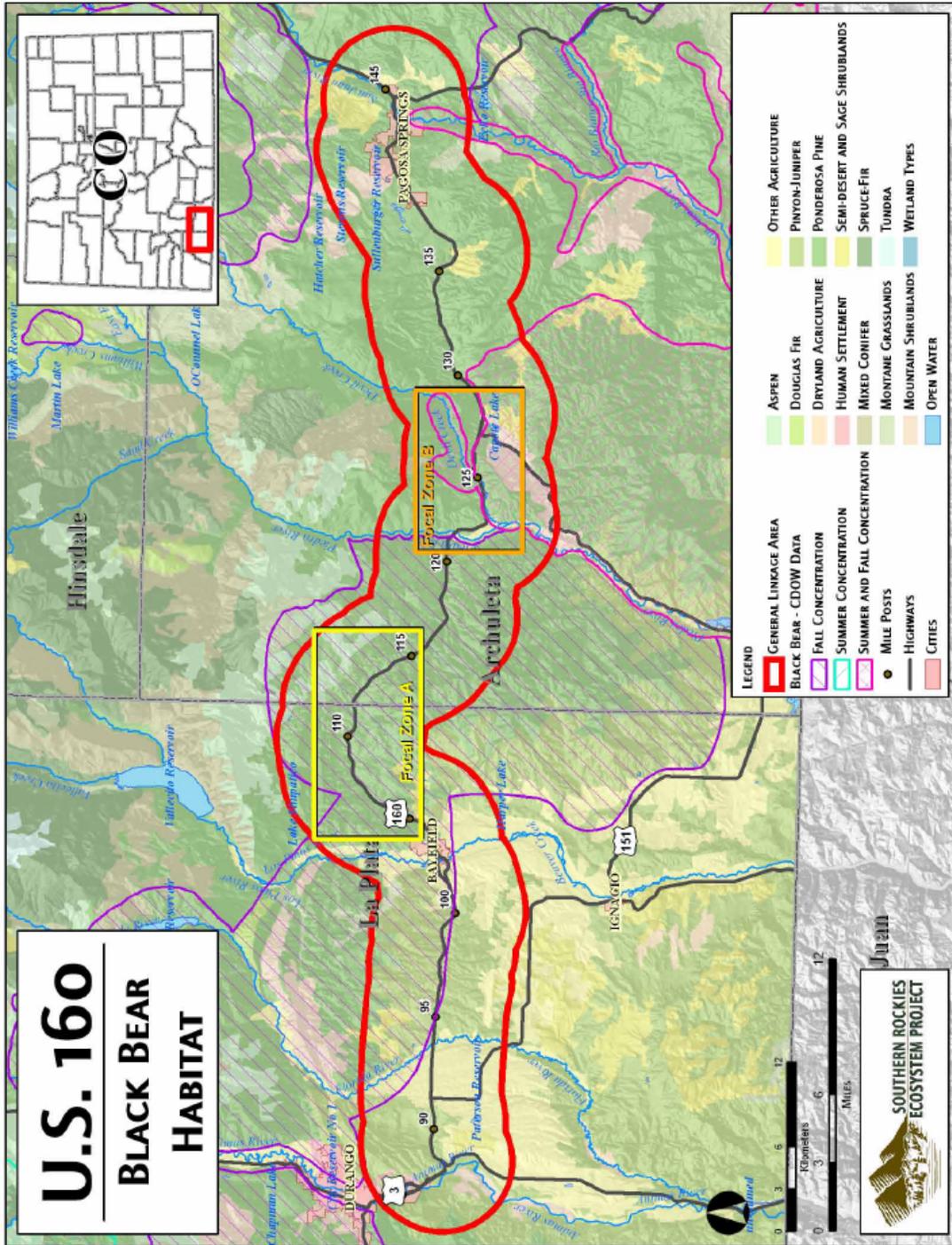
⁷⁵ As noted in SREP’s Phase II Report of the highway 160 linkage, “the Bayfield District’s comprehensive plan (a sub-plan within the county’s comprehensive plan) explicitly states open space preservation and retention of the rural atmosphere as one of its goals and wildlife corridors along Highway 160 are specifically identified as a potential measure for protecting wildlife populations (Bayfield District Land Use Plan 1997). Similarly, the Archuleta County Community Plan states that new developments should be designed and located to avoid or minimize damage and disruption to wildlife habitat” (Southern Rockies Ecosystem Project 2006, 3).

linkages.⁷⁶ This study strongly recommends that wildlife linkages and migration patterns be considered prior to the construction of the Grandview connection. Although SREP's report locates the problem areas as being right along U.S. 160, it is fair to assume that lands adjacent to this highway – as is the case for the prospective Grandview connection road – are also frequented by migrating wildlife; thus, any development in the area presents the same risks of animal-vehicle crashes as have been experienced on U.S. 160. Measures should be taken to mediate the dangers to wildlife posed by the existence of busy roadways that bisect their movements within their natural habitat.⁷⁷ The following three pages are maps of the linkage habitat for the Elk, Mule Deer, and Black Bear respectively (SREP Linkage Assessment 10, 11, 12).

⁷⁶ “Several land trusts are active in this linkage, and communications with them are necessary to encourage property acquisitions and easements in high priority linkage approaches. These land trusts include both local and regional organizations. In addition local offices of state and federal agencies, local municipalities and counties may also be engaged. Local Organizations: Animas Conservancy, La Plata Open Space Conservancy, Southwest Lands Alliance Regional Organizations: The Conservation Fund, The Nature Conservancy, Trust for Public Land” (Southern Rockies Ecosystem Project 2006, 27).

⁷⁷ It is worth mentioning that the applicability of this program is not limited to the south alignment; any new construction in the region should account for wildlife movements.





How Might a Road Impact Fort Lewis College's Land Holdings in the Horse Gulch Area?

This study was initiated by students in ENV5 495 at Fort Lewis College to determine how proposed development plans in the Horse Gulch area might affect the College's future plans for the lands it owns in Horse Gulch. Combined, the land owned by the College amounts to over 700 acres on the northern border of the Horse Gulch area and is held between two entities, the Board of Trustees and the FLC Foundation. Though the most likely of any future road developments through this area (the Grandview Connection, Southern Alignment to service Grandview/Three Springs and Ewing Mesa) will not require passage through any of FLC's land, the impacts of such an endeavor will certainly affect these properties. According to our interviews with current FLC representatives who oversee these properties in Horse Gulch, the College may do one of two things, either sell the land and use the returns to fund various projects across the campus, or hold on to the land in an effort to preserve its resources and cultivate an "outdoor classroom." The contribution of this study is to detail the advantages and disadvantages associated with the prospective developments throughout Horse Gulch as they relate to the future plans of the College.

According to interviews conducted by participants in this study (e.g., FLC President Bartel, FLC Foundation member Don Ricedorff, Kevin Hall with the City, and Erick Aune with the County) the two bodies that govern the College's lands in Horse Gulch express two distinct options that are currently being entertained.

Option 1: sell the land:

It is no secret that the College has been experiencing on-going budget cuts, and the recent national economic crisis has only made the situation worse. However, because

of the financial climate (both nationwide and locally), the sale of FLC's land will not attract the full market value. All of this points to waiting to sell until the market rebounds. If this option is to be selected, the following must first be considered:

Who are the prospective buyers?

- City of Durango: The City might be interested, but cannot afford to pay top-dollar for the land. An advantage of selling to the City would be that the College could enter an agreement (if they wish) to dedicate the land to open space and preservation programs and negotiate rights to access the property for education purposes.
- Developer(s): While a developer might be willing to pay the full market value for the College's property, this is unlikely to happen until the economy strengthens. Depending on the developer's plans for the land, they might be concerned that some of the land is not suitable for development (some of these reasons will be raised in the following sections of the study).
- Private buyer(s): It seems unlikely that a private buyer would be interested in the entirety of the College's land unless they intended to develop the area. The potential of selling to private buyers seems more likely if the College's acreage is divided into smaller plots that could be sold to multiple buyers. However, caution should be taken because the future plans of the area could be altered drastically if there are multiple owners each having a 35-acre plot, who are not subject to local government oversight. (Can the Board of Trustees and the FLC Foundation divide their land into 35-acre plots like the Pautsky family has done?)

How might the Grandview connection south alignment impact the sale of FLC's land?

- If looking to sell to the City: If the City desires to preserve the land, then the threat of the road could speed the sale for fear that further development may impose on the area. However, if the road is built before the College sells the land to the City, the land could become less appealing to them if their intention was to dedicate it to open space.
- If looking to sell to developers or private buyers: The presence of the road (or a commitment to its construction) could raise the appeal (and thereby increase the price) of the College's land because the enduring challenge of access to the area would be less of an issue than it is at present.

Option 2: do not sell the land:

Much of Fort Lewis College's land in the Horse Gulch area is frequented by academic departments and extracurricular club groups at the college, and is utilized for both educational and recreational purposes; in fact, the college markets this "outdoor classroom" to prospective students. According to a 2000 study of the Horse Gulch Area compiled by FLC faculty, a wide range of academic disciplines utilize this resource for educational purposes including the Geology, Biology, Psychology, English, Physics, Exercise Science, Archaeology, and Anthropology departments.⁷⁸ In addition the Athletics program utilizes this area, including the nationally-recognized FLC cycling/mountain-biking teams train on a number of the trails in the Horse Gulch area. Even with the South Alignment Road Option being on the opposite side of the Horse Gulch area from the College's land, its presence will impact some of the natural resources of the outdoor classroom because wildlife and bird habitats will be disturbed

⁷⁸ Horse Gulch Study Group (2000).

and there is a risk that the archeological and geological resources will be removed or disturbed.

Key Issues to be Resolved:

The Grandview Connection roadway seems to qualify for annexation according to the City and County IGA. What is the likelihood of this road being annexed to become a city roadway? What would the implications be if the Grandview Connection was a city roadway (i.e. would anything change regarding the sources of funding? Would the fact that it is classified as a city roadway trigger any new permitting requirements)?

What is the likelihood of the BLM transferring the ownership of their parcel of land in the Horse Gulch area to La Plata County? If so, will the developers choose to ignore CDOT's suggestions and not conduct an EIS because there will be no legal obligation to do so?

At the rate that the housing units in the Three Springs development are currently selling, how long might it be until the threshold necessitating the Grandview Connection is met? Will this be the point at which the construction project moves forward or will the road need to be completed before the threshold is met?

Recommendations on Behalf of Our Study:

According to the findings of this study, the most likely of prospective buyers for Fort Lewis College's land would be either the City of Durango or a developer. Of these two, the land will sell for a much higher price if it goes to a developer because the City would be purchasing the land for a price that is under the market value. However, it is the recommendation of this study that the College not pursue any options to sell the land,

instead viewing it as an invaluable educational resource and an investment in the future of the institution.

Possible Avenues for Preservation Efforts:

Colorado State Register of Historic Places:

It is likely that a number of sites in the Horse Gulch area would qualify for protection under Section 106 of the NHPA by virtue of being listed on the State Register of Historic Places. Nominations can be initiated by the land owner or the local government; the details of what documents must be submitted to nominate a site can be found on the Colorado Historical Society's website.⁷⁹ Though listing on the Colorado State Register of Historic Places does not guarantee preservation of an area, it does ensure that any actions taken by state agencies that will impact a listed site are given consideration in the planning process (Colorado Historical Society, 2008).⁸⁰

*Colorado Natural Areas Program (CNAP)*⁸¹:

According to the text of the Colorado Natural Areas Act, an area can be recommended to the Board that governs CNAP by any one of the following: "state agencies, counties, municipalities, [and] institutions of higher education" (Colorado State Parks 2008). Designation under the CNAP⁸² provides the following benefits: "providing opportunities for research, restoration, and education and keeping species from becoming

⁷⁹ Please see: <http://www.coloradohistory-oahp.org/FAQ/list.htm> and <http://www.coloradohistory-oahp.org/programareas/register/1503/sr.htm>.

⁸⁰ For further evidence of the statewide commitment to the preservation of our historical heritage, please refer to the Statewide Historic Preservation Plan: "Colorado Preservation 2010" available at <http://www.coloradohistory-oahp.org/publications/pubs/1507web.pdf>.

⁸¹ See also the section on the Colorado Natural Areas Act of 1977 on pg. 54 of this report.

⁸² To be designated by the CNAP, an area must satisfy the definition of a "natural area" as described in the Colorado Natural Areas Act: "a physical and biological area which either retains or has reestablished its natural character, although it need not be completely undisturbed, and which typifies native vegetation and associated biological and geological features or provides habitat for rare or endangered animal or plant species or includes geologic or other natural features of scientific or educational value" (Colorado State Parks, 2008).

formally endangered or extinct” (Colorado State Parks, 2008).⁸³ This program operates by coordinating with land owners and establishing land management plans. Because there are several different land owners in the Horse Gulch area, this might be a program that many would be interested in participating which could lead to partnerships in the preservation cause.

Colorado State Trails Program:

As described on the website, since 1971 this program has “actively encouraged the development of a variety of trails” (Colorado State Parks, 2008). There are also funding opportunities available through the Colorado State Trails Grants Program.⁸⁴

Great Outdoors Colorado (GOCO) Grant:

Great Outdoors Colorado offers a number of grant programs, and it has been suggested to the members of our study that the Horse Gulch area would be a good candidate for a GOCO Legacy grant.⁸⁵ This type of grant is “marked by strong partnerships that cross political and jurisdictional boundaries, and include federal agencies, non-profit organizations, landowners and the private sector” (Great Outdoors Colorado, 2008). Another feature of work on these regionally important, large-scale legacy projects is the aim to “preserve land and water, enhance critical wildlife habitats, create new state and local parks, construct trails, and provide environmental education” (Great Outdoors Colorado, 2008).

⁸³ The CNAP website is:

<http://parks.state.co.us/NaturalResources/CNAP/AboutCNAP/BenefitsofDesignation/>.

⁸⁴ The website for both the Colorado State Trails Program and the Grant Program is:

<http://parks.state.co.us/trails/>.

⁸⁵ Descriptions of the various grant programs can be found on the GOCO website at

<http://www.goco.org/GrantPrograms/Legacy/tabid/125/Default.aspx>.

APPENDIX 1 – Operational Definition of the Horse Gulch Area

APPENDIX 2 – Potential Horse Gulch Opportunity: Crader

APPENDIX 3 – Newspaper Articles

These articles were sent to me by Kathy Szelag through E-mail correspondence. The articles end on the latest article that was sent to me.

- 1) Durango Wage Earner: November 24, 1898 Page 3. A reward is offered for evidence that will lead to conviction of the person/s who vandalized the British Oak Coal Mine in Horse Gulch
- 2) Durango Democrat: October 4, 1899 Page 4. The Rocky Mountain Coal Company asked for a right of way for a short line railroad spur to be built into the mouth of the Horse Gulch.
- 3) Durango Democrat: January 4, 1901 Page 3. Superintendent George Logan was working hard on finishing the work of laying rails for the new tramway to bring coal from the City Coal Mine to the mouth of the Horse Gulch.
- 4) Durango Democrat: March 5, 1901 Page 1. George Logan will commence track laying for the tramway in the mouth of the Horse Gulch on Saturday.
- 5) Durango Democrat: April 25, 1901. Front Page. A telephone line being built from the mouth of the Horse Gulch to the City Coal Mine required attention, and would “afford added convenience for the Gold King management”.
- 6) Durango Democrat: May 22, 1901. Front Page. The mayor favors infant industry and wants to sell water to the Gold King Coal locomotive line that will soon be completed at cost.
- 7) Durango Democrat: July 18, 1901. Page 4. Land owner John Hurley contemplates drilling for gas, oil, or water on his land in the Horse Gulch, where he owns 280 acres.
- 8) Durango Democrat: December 22, 1901. Page 3. Mentions the Horse Gulch Short Line and Champion Mine Spur.
- 9) Durango Democrat: January 28, 1902. Page 3. Pete McClelan purchased a stone sawmill plant in Denver and is bringing it back to Durango, to either be used at the Horse Gulch Quarry or at the Gold King Coal mine
- 10) Durango Democrat: May 4, 1902. Page 1. The Durango School District embraces the Horse Gulch section to the east of town.
- 11) Durango Democrat. September 19, 1907. Page 1. The three Cook children were killed in a flash flood in the Horse Gulch narrows.
- 12) Durango Wage Earner. September 19, 1907. Page 1. The story of the “appalling catastrophe of the three drowned Cook children”.

13) Durango Democrat. April 15, 1908. Page 1. The body of Julia cook, one of the Cook children who drowned in the Horse Gulch, is discovered in La Posta.

14) Durango Democrat. October 10, 1908. Page 3. The Cook family reports a horse lost or stolen in the Horse Gulch.

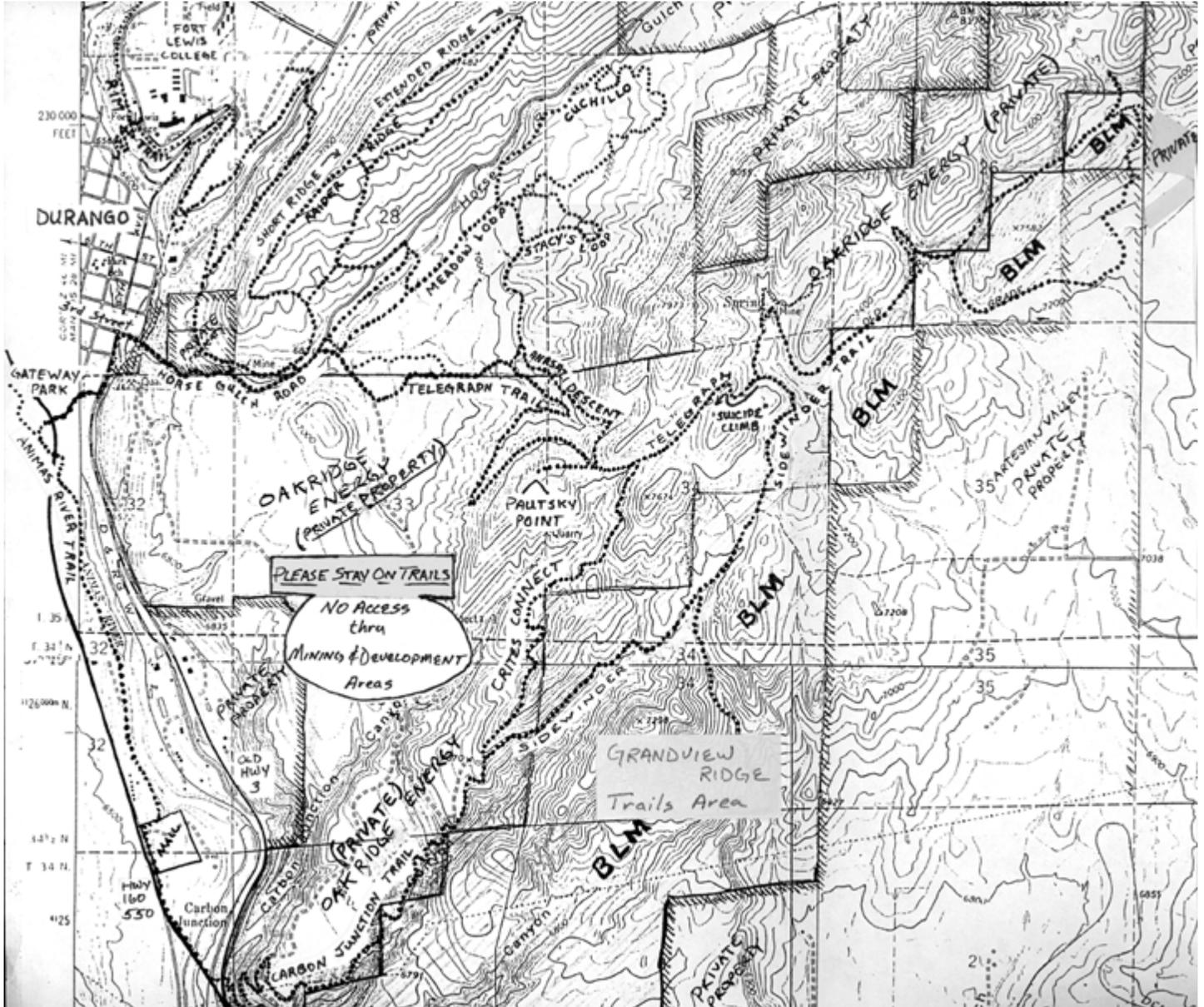
15) Durango Wage Earner January 13, 1910. Page 3. The article mentions the Royal Coal Mine in Horse Gulch.

16) Bayfield Blade October 12, 1911. Front page. Floods badly damaged the Durango area, but the bridge over the Florida River in the Horse Gulch stayed standing.

17) Bayfield Blade. August 29, 1913. Front page. County Commissioners decided to build a new road on the east side of the Animas River to the mouth of the Horse Gulch.

APPENDIX 4 – La Plata County GIS Map

APPENDIX 5 – Trails 200 – Telegraph Trails



APPENDIX 6 – Durango Comprehensive Plan Update – Future Land Use Map

APPENDIX 7 – Oakridge Energy GIS Map

APPENDIX 8 – Recommended 2030 Roadway Network

APPENDIX 9 – Table C, Sec 81, La Plata County Municipal Codes

BUILDING PERMIT APPLICATION – WORKSHEET

Information on this application is Public Information and is subject to public access and review. (Colorado Open Records Act)

Building Department 382-6250

Identify Work Covered By This Permit: _____

_____ Application Accepted

By: _____

Valuation: _____

(text)

(text)

(text)

Legal Description of Land Parcel Number _____

Address of New Building _____

Subdivision: _____

****IF ADDRESS IS NEEDED CALL 382-6265****

(text)

(text)

(text)

Are there ANY existing dwelling units on this property?

Yes _____ No _____

Describe _____

(: Yes) Unchecked

(: No) Unchecked

(text)

(text)

Owner

Owner Name

Mailing Address

City/State/Zip

Home Phone _____ Work Phone

_____ Cell Phone _____

(text)

(text)

(text)

(text)

(text)

(text)

Contractor Is Owner Contractor? Yes _____ No _____

Corp Name

Contractor Name (First/Last)

Mailing Address

City/State/Zip

Office Phone _____ Fax Phone Number

Cell Phone Number _____

(: Yes) Unchecked

(: No) Unchecked

(text)

(text)

(text)

(text)

(text)

(text)

(text)

Mobile Home Size _____ x _____

Make _____ Year Manufactured

Serial # _____

Previous Owners & Location

(text)

(text)

(text)

(text)

(text)

(text)

Building Information

Square Footage

First Floor _____

Second Floor _____

Third Floor _____

Basement _____

Garage _____

Carport _____
 (text)
 (text)
 (text)
 (text)
 (text)
 (text)
 Method of Construction
 Conventional Log Straw Steel Modular Mobile
 Adobe Other _____
 (: Conventional) Unchecked
 (: Log) Unchecked
 (: Straw) Unchecked
 (: Steel) Unchecked
 (: Modular) Unchecked
 (: Mobile) Unchecked
 (: Adobe) Unchecked
 (: Other) Unchecked
 (text)
 Minimum Setbacks in Feet
 Front Setback Rear Setback
 Right Setback Left Setback
 Basement Finished Yes _____ No _____
 Fire Sprinkler System Yes _____ No _____
 I have included site plan
 (checkbox) Unchecked
 (checkbox) Unchecked
 (checkbox) Unchecked
 (checkbox) Unchecked
 (checkbox) Unchecked
 No. of Buildings _____
 No. of Stories _____
 No. of Bedrooms _____
 No. of Baths _____
 (text)
 (text)
 (text)
 (text)
 Type of Sewage Disposal: San Juan Basin Health 247-5702
 Public or Private Individual (Septic Tank, etc)
 Authorization _____
 Permit _____ Finaled _____
 (: Pub_Private) Unchecked
 (: Individual) Unchecked
 Type of Water Supply: Colo Division of Water Resources 247-1845
 Public or Private Company Individual (Well Cistern)

Authorization _____
Permit _____ Finaled _____

(: Pub_Private) Unchecked

(: Individual) Unchecked

Driveway Permit: La Plata County Engineering 382-6363

Authorization _____

Permit _____ Finaled _____

Mobile Home Transportation Permit: La Plata County Eng 382-6363

Authorization _____

Permit _____ Finaled _____

AGREEMENT

PERMISSION IS HEREBY GRANTED _____ OWNER NAME _____ AS OWNER
AND/OR _____ CONTRACTOR NAME _____ BEING THE CONTRACTOR OR
OWNER'S AGENT TO CONSTRUCT THE STRUCTURE AS DETAILED ON
PLANS AND SPECIFICATIONS SUBMITTED TO AND REVIEWED BY THE
BUILDING
DEPARTMENT.

IN CONSIDERATION OF THE ISSUANCE OF THIS PERMIT THE UNDERSIGNED
HEREBY AGREES TO COMPLY WITH ALL BUILDING CODES AND LAND USE
REGULATIONS ADOPTED BY LA PLATA COUNTY PURSUANT TO
AUTHORITY GIVEN IN 30-28-201 C.R.S. AS AMENDED. THE UNDERSIGNED
FURTHER

AGREES THAT IF THE ABOVE SAID ORDINANCES ARE NOT FULLY
COMPLIED WITH IN THE LOCATION ERECTION, CONSTRUCTION AND USE
OF THE

ABOVE DESCRIBED STRUCTURE. THE PERMIT MAY THEN BE REVOKED BY
NOTICE FROM THE COUNTY AND THAT THEN AND THERE IT SHALL
BECOME

NULL AND VOID.

THE ISSUANCE OF A PERMIT BASED UPON PLANS, SPECIFICATIONS AND
OTHER DATA SHALL NOT PREVENT THE BUILDING OFFICIAL FROM
THEREAFTER

REQUIRING THE CORRECTION OF ERRORS IN SAID PLANS,
SPECIFICATIONS, AND OTHER DATA OR FROM PREVENTING BUILDING
OPERATION BEING

CARRIED ON THEREUNDER WHEN IN VIOLATION OF THIS CODE OR ANY
OTHER ORDINANCE OR REGULATIONS OF THIS JURISTITION.

THE REVIEW OF THE SUBMITTED PLANS AND SPECIFICATIONS AND
INSPECTIONS CONDUCTED THEREAFTER DOES NOT CONSTITUTE AN
ACCEPTANCE

OF ANY RESPONSIBILITIES OR LIABILITIES BY LA PLATA COUNTY FOR
ERRORS, OMISSIONS OR DISCREPANCIES. THE RESPONSIBILITY FOR THESE
ITEMS

AND IMPLEMENTATION DURING CONSTRUCTION RESTS SPECIFICALLY
WITH THE ARCHITECT, DESIGNER, BUILDER AND OWNER. COMMENTS ARE

INTENDED TO BE CONSTRUCTIVE AND IN SUPPORT OF THE OWNER'S INTEREST.

THIS PERMIT BECOMES NULL AND VOID IF WORK OR CONSTRUCTION AUTHORIZED IS NOT COMMENCED WITHIN 180 DAYS, OR IF CONSTRUCTION OR

WORK IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AT ANY TIME AFTER THE WORK IS COMMENCED. I HEREBY CERTIFY THAT I HAVE READ AND EXAMINED THIS APPLICATION AND KNOW THE SAME TO BE TRUE AND CORRECT ALL PROVISIONS OF LAWS AND ORDINANCES GOVERNING

THIS TYPE OF WORK WILL BE COMPLIED WITH WHETHER SPECIFIED HEREIN OR NOT THE GRANTING OF A PERMIT DOES NOT PRESUME TO GIVE AUTHORITY TO VIOLATE OR CANCEL THE PROVISIONS OF ANY OTHER STATE OR LOCAL LAW REGULATING CONSTRUCTION AND THAT I MAKE THIS

STATEMENT UNDER PENALTY OF PERJURY.

NOTICE

IN ACCORDANCE WITH SECTION 109 OF THE IBC AND R109 OF THE IRC THE OWNER OR PERSON DOING THE WORK IS OBLIGATED TO CALL FOR THE FOLLOWING INSPECTIONS: (1) FOUNDATION INSPECTIONS (2) ROUGH PLUMBING/MECHANICAL (3) FRAMING INSPECTION (4) FINAL INSPECTION. MORE THAN ONE INSPECTION MAY BE NECESSARY FOR EACH OF THE ABOVE.

APPLICANT SIGNATURE REQUIRED BELOW

CONTRACTOR OR AGENT _____

DATE _____

OWNER _____ DATE _____

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