**Environmental GeoSpatial Consulting**

*Progress Report: Freeman Ranch*

1. **Introduction**

**Purpose**

The purpose of this project is to expand the geodatabase for The Freeman Center. The primary goal of this project is to determine the grazable acreage available for use at Freeman Ranch. Secondary goals for this project are to create detailed map of the elevation at Freeman Ranch that will include information of park facilities, and to create an aspect map. The last objective of this project will be to create a map with information pertaining to the ranch’s utilities to serve as a guideline in case of any incidence. This project is designed to enable further development of Freeman Ranch and provide insight into its potential for livestock. This project will also provide several thematic maps useful to Freeman Ranch associates. Our findings will help Freeman Center stakeholders and researchers to better understand the property.

**Scope**

The scope of this project encompasses the Freeman Center property, approximately 4,200 acres. This area is located between Wimberley and San Marcos, TX. The timespan for the project is approximately 3.5 months.

1. **Projects Tasks**

**Task 1: Freeman Ranch Grazeable Land Area**

The primary objective of this project is to determine the amount of grazeable land available at Freeman Ranch.

 **Previous Period**

So far we have gathered all of the data necessary in order to complete this task, and we have processed this data into the correct format for running analyses. These variables include vegetation, rock cover, and water access points. The data has been broken down into individual layers that will later be combined into a final map of grazable acreage.

 **Current Period**

This month (March) we are working on running different analyses on our data to determine which will return the most accurate results. We are improving the quality of current elevation data to make it more compatible with our study. As we complete this step, we will are beginning to run analyses that are providing us with more up-to-date maps of the grazeable land area.

 **Next Period**

Once we have satisfactory weights and a clean elevation data set we will run our final analysis and be able to determine the grazeable land for Freeman Ranch. From this we should be able to tell how much grazeable land are available as well as present thematic maps of our findings. We estimate that we will have completed all tasks and have the grazeable land area map ready by the 2nd of May, which puts us right on schedule.

**Task 2: Thematic Maps**

Our nextgoal is to create an elevation model of Freeman Ranch; we have reprioritized the creation of a 3D elevation map, as per instruction from our last meeting. We will also focus on creating a map of water and electric utilities locations, and a map of aspect.

 **Previous Period**

We have collected all the necessary data to create a 3D elevation model of Freeman Ranch. We were also able to create a rudimentary aspect map using elevation data.

 **Current Period**

Presently we are in the process of applying our data into a 3D model, and familiarizing ourselves with the process. We are also in the process of improving the quality of our data in order ensure the accuracy of our final product. We are also in the process of acquiring utility information in order to complete a thematic map of Freeman Ranch utilities.

 **Next Period**

The next step will be to put our information together into a coherent easily understood map with utility information. We have completed our 3D model of elevation and added cultural and physical features. A final aspect map will be completed.

**Task 3: Final Write Up**

We are currently progressing towards our final write up at the pace we anticipated. A few changes from our original proposal were necessary, and we have implemented these changes in our project as well as our write up.

**Previous Period**

After some minor adjustments our project goals, requested during our presentation, we have re-prioritized the 3D map as our secondary objective, while finding the amount of grazeable land remains our primary objective.

**Current Period.**

We currently are updating our write up to reflect our new set of goals as well as our current progress. We have made the 3D map our Secondary objective, and updated our project and report accordingly.

**Next Period**

Once all our work is complete and our goals reached we will compile them into a final report. This report will contain all of our methodology, resources, and goals. We will have the report prepared and ready for examination by the 2nd of May.

1. **Conclusion**

So far we have not encountered any problems, and we do not foresee any major obstacles in the future. We believe we will be able to meet all of our major objectives, and we anticipate completing this project on schedule at the beginning of May. Further details on our findings will be presented in our final report.