GEOG309: Research Methods in Geography

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EXECUTIVE SUMMARY

The Horomaka Geopark initiative is designed to promote the significant geologic, cultural and ecological heritage of the Banks Peninsula. In order to assess the operational feasibility of the Horomaka Geopark on a smaller scale, the following research question was developed:

"How would a GeoPark look and work in the Taylors Mistake and Godley Head region of the proposed Horomaka GeoPark?

The aims and objectives of the research were to:

- Put existing data (tracks, signs and infrastructure) for the Awaroa/Godley Head Geosite into ArcMap;
- Add new data from field work and site surveys to propose and assess the need for additional infrastructure ;
- Produce a contextual map of the area;
- Establish walking times and length of tracks.

Both qualitative and quantitative data was collected:

- Desk study of existing geopark operations;
- Intercept surveys of visitors to the region;
- GPS mapping of the proposed Geopark area.

Numerous geosites were identified in the region, along with sites of ecological, historical and cultural significance. These include scoria cones and shore platforms, native bush rehabilitation and marine life7>4004B00480003}TJETBT1 0 0 1 72.024 658.06 Tko1 0 0 1 7Tm[)ta (p2 0e7>4004B

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1.0 INTRODUCTION

Sustainable tourism is growing globally as consumer s motivations increasingly reflect the quality of the environment. The following report covers research conducted by Canterbury University students on a potential GeoPark in the Bank Peninsula region of Canterbury New Zealand. This report has been compiled in order to inform anyone whom it may concern on how a GeoPark would likely look and be run in the Godley Head region. The Horomaka Geopark initiative is designed to promote the significant geologic, cultural and ecological heritage of the Banks Peninsula. The aim of our research is to work in conjunction with our community partner in order to gauge how a Geopark would look and function on Banks Peninsula and display the findings. By focussing on the Taylors Mistake/Godley Head region it will be possible to assess the feasibility of the wider Horomaka Geopark.

Work began on 20/07/2013, after a meeting with our community partner Sam Hampton, who presented the research questions he wanted,

contextual map is to show the features of not only the infrastructure but also the sites of significance to the Geosite.

Proposed GeoPoints and facilities are displayed on a map we have developed and recommendations

- Have joint proposals submitted by public authorities, local communities and private interests acting together, which demonstrate the best practices with respect to Earth heritage conservation and its integration into sustainable development strategies.

The paper by Farsani et al. (2010) sheds light on the idea of a Geopark providing economically sustainable tourism, especially to smaller rural communities. While the proposed area for the Horomaka Geopark is rural it is likely that most of the visiting tourists will be based in Christchurch city which would limit the benefits to smaller rural towns within the region. However some economic benefit could be seen in rural towns further away from the city such as Akaroa, (not in the Godley Head region), which would be a likely place to host potential tourists as the commute is about 2hours from the city.

2.2 Horomaka GeoPark Project

The Horomaka GeoPark Project is a community-driven project with the intention of assessing the feasibility of creating New Zealand s first UNESCO GeoPark. The Horomaka Geopark is a community-driven project with the intentions of assessing the feasibility of creating New Zealand s first Geopark.

Preliminary research has focused on identifying Geopark regions based on geographic locations and accessibility with regard to roading, tourism operations, tracks, walkways, and public access. Following this, Geosites within these regions were determined enabling a database of geological, ecological, archaeological, cultural, and community significances (Hampton, 2013).

The research has exposed the wealth Banks Peninsula has to offer in a range of aspects. The landscape

3.0 DATA COLLECTION METHODS

3.1 GPS (Global Positioning System)

The primary data collection method used throughout this research was GPS. A Trimble Juno GPS was used; with an accuracy of $\pm 2m$. Point, line and polygon data was collected at points of interest within the Awaroa/Godley Head GeoSite. These points of interest can be classified into four different categories:

Existing Signage Existing Facilities Proposed Signage Proposed Facilities

Existing signage consists primarily of WWII related information on the historically significant gun emplacements, battery compound and tunnels. Points for proposed signs were recorded using GPS at locations providing views of significant geological, ecological and historical sites. Existing facilities including main walking tracks, car parking and toilets were also mapped using GPS. This data was then combined with the existing digitised NZTopo50 map from Land Information New Zealand (LINZ, 2011) and Google Earth satellite imagery (Google Inc., 2013). The purpose of this mapping exercise was to create a conceptual map of the Awaroa/Godley Head GeoSite to identify spatial needs for addeonce I21th satellitu

4.2 Survey Results

4.2.1 Quantitative

To recommend the most appropriate way forward, analysis of the geotourism potential, through the analysis of its current use, was necessary (Figure 1). Unfortunately, the low sample number will result in a fair amount of uncertainty. Consequently, only those findings that are felt to be of some validity are reported on.

The majority of visitors were recreational walkers, indicating promise for

a map of global abundance and information of breeding habits. This enables the visitor a chance to gain an in-depth knowledge of the attractions found throughout a geosite.

5.3 Marketing

To market the GeoPark successfully to

5.5 Application to Horomaka GeoPark

The proposed management structure previously discussed is for the entire Horomaka geopark, however it is easily applied to the Awaroa/Godley Head site. Godley Head has particular need for consent from farmers and landowners, as much of the site lies on private land. This has proved to be a touchy subject that we have found to be best left to team from the Horomaka Geopark Project. Since the Christchurch earthquakes, communication with the Department of Conservation has been difficult. Though they have not been difficult to get hold off, a lack of clear answers about potential management of the geosite has made it difficult to establish who is in charge of what. This is mainly due to a current period of transition for the department, with associated job uncertainty and apathy toward the project.

6.0 LIMITATIONS