

**A REPORT ON THE HERITAGE SENSITIVITY OF THE LOWER ORANGE
RIVER REGION BETWEEN 20° EAST AND THE FISH RIVER CONFLUENCE**

Prepared for

Ninham Shand Consulting

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1 Introduction

The Archaeology Contracts Office of the University of Cape Town was appointed by Ninham Shand Consulting Services on behalf of Lower Orange River Consultants to conduct a literature and information review to establish the archaeological sensitivity of the Lower Orange River from immediately west of Augrabies National Park to the confluence of the Orange and Fish Rivers (South African territory only). The purpose of the study is to provide input into screening of potential options for a dam.

2 Terms of Reference

The terms of reference provided by Ninham Shand Consulting Services are as follows:

- conduct a desktop study highlighting known sites of archaeological or heritage importance, which would preclude dam sites from being developed.
- study area is between the 20 degree line of longitude and the confluence of the Fish and Orange Rivers
- only the south bank needs to be studied. The north bank is being studied by a Namibian archaeologist
- liaise with Albany and Macgregor Museums

2.1 Method

No fieldwork has been conducted during this study, the findings described in the following pages are based entirely on reliable anecdotal observations by other archaeologists, published documents, dissertations and unpublished reports and papers. Sources of information have been the South African Heritage Resources Agency (SAHRA) library, the University of Cape Town libraries (African Studies Section), the Archaeology Contracts Office records, and interviews with archaeologists based at Albany Museum, Grahamstown (Dr Lita Webley) and the McGregor Museum, Kimberly (Mr David Morris). Associate Prof Andrew Smith (UCT) who has worked on the Middle Orange River was also interviewed. The three organizations mentioned are those that have had research involvement in the area during the last 20 years.

2.1.1 Restrictions

Despite fairly exhaustive enquiries, information with respect to the study area is virtually non-existent. Virtually every area that has been subject to any research lies outside the study area. There are *no* site records and no one has completed any formal documented surveys. The information available is limited to a few casual observations on sites that have not been mapped or afforded reliable co-ordinates. The lack of published information is further exacerbated by the fact that material housed in the SAHRA library (the organization that stores unpublished accounts of archaeological findings reported to that organization by law) is not accessioned and difficult to obtain at short notice. Curiously, parts of the upper, middle and Richtersveld stretch have been surveyed and well documented. This means that we have had to extrapolate what is known about areas to the east and west of the study area to make what amounts to a prediction of possible sensitivity. Regrettably, we find ourselves unable to provide any precise site locations or define any conclusive restrictions in terms of development activities without an initial field investigation.

3 Available information

3.1 Historic Records

The Orange (Gariep) River is a permanent source of water within an arid landscape populated continuously during prehistoric times, and within the last 2000 years by Khoekhoen Herders and San Hunter Gatherers. The river provided a conduit by which a number of early European travelers ventured into the interior of the country. Many of the travelers kept detailed diaries in which they documented the conditions they encountered as well as details of animals and people they met. Colonel Robert Jacob Gordon traveled up the west coast to the mouth of the Orange River in 1779 where he encountered groups of people living off shellfish. Further up the



A Korah kraal by the Orange River in 1804 (Daniel, S African scenery and animals. London: "The artist" in Smith AB Einiqualand)

river he encountered groups of herders with their kraals situated close to the banks where the riverine pasture was available for their sheep and goats. Studies of the accounts of these early travelers, especially Gordon and Wikar have revealed that there were a number of large social groupings of Khoekhoen people who's transhumant lives were closely linked with the river. Northern Namaqualand and southern Namibia was occupied by the Great Namaqua who kept goats, sheep and cattle. The Namnykoa (a highly riverine group) and Einiqua occupied the area close to and east of the Augrabies Falls (Middle Orange River) while another stock keeping community, the Korana occupied the Middle-Upper Orange River. Interspersed with these groups were smaller San communities and other "Hottentot" groups who resided in an uneasy relationship with their more powerful neighbours. All of these groups spoke a related language with 2 main dialects having been recorded in historic times. The politics of the area were complex with groups forming and dissolving alliances frequently, sometimes with antagonism as they competed for the meager resources that the river and surrounding landscape had to offer.

By the 1770's *trekboers* had penetrated the interior of the country, and so began a vicious frontier war with these indigenous groups culminating in full-scale rebellion against the government by 1799. By the early 19th century, various missionary groups began to exert their influence along the Orange River and the descendants of the Khoekhoen were limited to mission land in various parts of Namaqualand and the marginal lands of the Richtersveld where their language, Nama is still spoken today.

The historic record points to a landscape well populated by people whose livelihood depended on the Orange River. It was their only source of permanent water and grazing and as such exerted a strong gravitational pull over people's lives, affecting their social relationships over space and dictating their settlement patterns. There is little doubt that before Europeans made these observations during historic times, and before the arrival of the Khoekhoen groups into Southern Africa 2000 years ago, prehistoric people were equally attracted to the river.

3.2 Lower Orange River

All reliable observations are restricted to the area between the Mouth of the Orange to the Richtersveld west and including the confluence of the fish and Orange Rivers. Pete Robershaw (1978) accompanied by Simon Hall worked in the confluence of the Fish and Orange River observing and documenting the layout of herder archaeological sites. They observed dense fishbone middens with lots of ceramics and stone artifacts, some of which were archaeologically sampled. Hall (pers comm.) remembers seeing many burial cairns of presumably Nama or their ancestors. Webley, having completed MA and Phd dissertations on Namaqualand archaeological material conducted an archaeological survey along the banks of the Orange River in the Richtersveld locating two dense archaeological sites at Jakkalsberg (near Sendelings Drift). These sites contained a unique collection of artifacts which she has attributed to ancestors of Nama herders. Radio carbon dates indicates that the site was occupied around AD 1400.

Between 1996 and 2002 Halkett and Hart of the ACO conducted surveys in diamond mining concession areas in the Richtersveld commissioned by Trans Hex Mining. This resulted in some 40km of a 1 km wide strip of the southern bank of the river (between Sendelings Drift and Baken) being surveyed in detail revealing the presence of Early, Middle and Late Stone Age archaeological material. The kinds of sites located are as below:

- **Early Stone Age** sites were found in and on river gravel terraces and were even noted a considerable distance from the river on the Namibian side within the *Sperregebiet* (courtesy of NAMDEB).
- Scattered **Middle Stone Age** material was found on river terraces, on ridges overlooking the river as well as on the higher slopes of hills.
- **Late Stone Age** sites were mostly confined to riverine silt bodies. A number of herder sites were located, some of which have now been radiocarbon dated and sampled. Also present are Mid-Late Holocene sites, one of which contain a microlithic industry and have been radio-carbon dated to circa 3000 BC.
- **Rock engravings** are prolific within the river valley and tributaries. Most of these are etched onto blue dolomite. The designs tend to be abstract, yet consistent. Human and animal figure are rare but present. The age of the engravings is unknown. Some appear to be fairly fresh while others are so worn and patinated that they must be of considerable age – possibly some thousands of years. The meanings of the enigmatic designs remain unknown and their significance is unclear.
- **Historic sites** within areas surveyed today include the foundations of the historic mission church at Sendelings Drift, places on the river where early copper mines in the Richtersveld shipped copper ore onto river barges for transport down river. The stone burial mounds of Nama herders were noted throughout the study area.
- **Ethno-archaeological sites** consist of remains of herder encampments that are not necessarily protected by heritage legislation but are important, as they are the last physical remnants of a traditional lifestyle that is thousands of years old and rapidly changing in the 21st century. These sites are of interest to anthropologists, ethno-archaeologists and architects who have mapped and documented the layout of these

encampments in attempts to understand changes and traditional values within Nama society.

3.3 Middle Orange River

The area immediately west of the Augrabies falls has been subject to archaeological research by Professor Andrew Smith who has conducted informal surveys within the National Park and on river-bordering farms in the Kakamas area. He excavated at a number of caves (Zoovoorbij, Droegrond, Waterval) which produced sequences containing both Middle and Later Stone age material. As a result of his research it became apparent to him that Khoekhoen herders were dependent on being close to the comparatively resource rich Orange River while San hunter gatherers lived in refuge situations deeper in the hinterland. The Richtersveld, on account of its low economic value became the last place where descendants of the Orange River Khoekhoen could practice their traditional herding lifestyle, all other arable land being taken over by private land owners for commercial stock farming.

David Morris (Pers. comm. McGregor Museum Kimberly) has reported the presence of archaeological sites in the Riemvasmaak area including a number of significant fish bone and pottery rich sites close to the river, which appear to be similar to herder sites excavated by Webley and others in the Lower Orange River. No precise location information is available at this time. He has pointed out that the archaeology of the river has within the last 10 years been severely impacted by vineyard cultivation.

Prof Allan Morris (Dept Anatomy UCT) excavated and analysed a collection of burials from the Kakamas area, some of which he excavated himself in 1984 and other from a collection of 56 individuals exhumed by Dreyer and Meiring in 1936. The burial cairns, typically Khoekhoen in form were thought to date to Korana or !kora herders of the Middle Orange River. The graves contained grave goods such as red ochre and trade beads. The analysis of the remains revealed that although there were Khoisan morphological trends, the skeletons also showed Negroid characteristic reflecting movement up people up and down the river making contact with Thlaping people in the interior of the country.

3.4 Upper Orange River

The Archaeology of the Upper Orange River was studied in detail in the 1960's and early 70's by Prof C. Garth Sampson, when, as a PhD Student at the University of Cambridge he received funding to research the archaeology of areas that were to be impacted by the three dams of the Orange River Scheme. The archaeology of the Orange River was extremely dense and profoundly complicated. After working for several years on the Orange River Scheme he published a series of books in which he formulated the first detailed stone age sequence of the Southern African interior. During the 1980's Sampson surveyed the western catchment area of the Zeekoe River, a tributary of the Orange. Sampson recorded over 10 000 archaeological sites within the extent of the single tributary. These ranged in age from over several hundreds of thousands of years old to recent encampments of hunter-gatherers as well as kraals of Khoekhoen herders who were reliant on the permanent water pools of the Zeekoe River.

4 The Study Area

The archaeology of the study area is to all intents and purposes, unexplored and unknown.

A little bit is known about the history of the area thanks to the work of early travelers such as Gordon and Wikar and in depth historical research by Nigel Penn (Dept History UCT).

Information obtained from the SAHRA library indicates that there are:

Skuitdrift: Historic river crossing, German military outpost built in 1901, ruins and graves;

Pella: Highly important regional historic site, museum and tourist attraction. Catholic mission church built in 1878, date plantations;

Onseepkans: Declared National Monument, mission and church, historic bridge;

Goodhouse: Graves and church, historic buildings;

Daberas: Ruins;

Poffadder: Historic mission station, declared monument;

Riemvasmaak: Archaeological sites identified by David Morris (McGregor Museum);

Maps of the area indicate presence of numerous historic ruins, kraals and hot springs; these will have to be field verified and significance established.

4.1 *An estimation of sensitivity*

Although very little is known about the archaeology of the study area, it is bracketed by zones where some archaeological research has been conducted. The Richtersveld to the west is known to be very archaeologically sensitive in terms of the unique herder sites that have been identified along its banks. This is the only area in South Africa where these sites have been identified. Similar sites have been identified along the Middle Orange River to the east so it would seem reasonable to assume that the chances of such occurring within the study area is very likely. Similarly we would also expect a variety of historical, para-historical, and pre-colonial sites ranging from Early to Late Stone Age.

In essence our predicted sensitivity of the different landscape with the study area is as follows:

Immediate river bank, silt deposits. Buried and exposed pottery and fish bone rich sites of ancestors of the Nama, burial cairns of Nama. Experience has shown that highly sensitive areas, are often located at the confluence of tributaries leading into the Orange. Older San and other Holocene sites have also been documented on the silt flats and in any small rock shelters or overhangs close to the river.

Flat rocky outcrops, especially dolerite. It is almost guaranteed that there will be rock engravings on such outcrops.

Old river terraces, ridges. These may hold general scatters of archaeological material, especially Early and Middle Stone age.

Tributaries and steep sided valleys. Such areas are likely to be archaeologically sensitive, especially if they contain shelters and overhangs as well as pools or fountains of permanent water.

Historic and ethnographic sites. There are likely to be encampments abandoned by Nama herders along the banks of the river. Furthermore, within the maximum flood level, there will be historic buildings (early farms, missions), graveyards, possible places of conflict (Anglo-Boer war and Korana uprising).

5 Conclusion

- Extrapolating what is known from localities to the east and west of the study area, we can reasonably predict that any identified possible dam site within the study area will cause extensive heritage impacts. Mitigation will be necessary and in all likelihood, massive.
- The historic mission station of Pella should be excluded from dam construction in the earliest planning stages.
- The Richtersveld is archaeologically rich; inundation of the river valley will constitute a significant loss to the National Estate.
- It clear that a preliminary field assessment is going to be necessary before we can get any idea of the kinds of impacts that may be involved. As a first step, a physical inspection of the area and a strategy to “sample” portions of land representative of topography, geology and at differing distances from the river to get an idea of the range of sites, their relative density from place to place and the degree of loss that a large development such as this will cause to the National Estate.
- Some detailed archival research may also be necessary to identify places of conflict as well as help establish the significance of any sites found.

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