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## Gold and electricity

Archaeological survey of Bullendale, Otago

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# Gold and electricity

## Archaeological survey of Bullendale, Otago

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### ABSTRACT

Bullendale was a small community that existed in the upper reaches of the Right Branch of Skippers Creek, near Arrowtown, Otago, New Zealand, from about 1862 until 1907. Initially called 'The Reefs', it was the home of the local gold miners and their families. In 1866 a total of 13 mining companies were working the local reefs, but by 1889 the whole field was held by the Phoenix Mining Company, owned by George Bullen after whom Bullendale was named. In 1884 the Phoenix Company made the decision to drive their stamper battery using hydroelectric power generated by two dynamos in the Left Branch of Skippers Creek, with a power line running over the intervening Southberg Spur. The equipment started operation in February 1886. It was the first industrial use of hydroelectric power in New Zealand, and there was a great deal of interest in the operation at the time. The mine closed for the last time in 1907, but its remote and rugged situation prevented the removal of much of the heavy equipment. Importantly, the original 1885 dynamos and electric motor were left on site. The centenary of the commissioning of the power plant was celebrated in 1986, and the dynamos were restored to their original positions. In 1996 an archaeological survey was carried out, recording the whole mine system in some detail, and revealing that the original electric motor had survived. This report presents the results of the 1996 survey, with some more recent (2002, 2005) research and observations.

Keywords: Bullendale, Skippers Creek, Shotover River, Otago, New Zealand, gold mining, hydroelectric power

# 1. Introduction

Bullendale was the name of a small settlement in the headwaters of Skippers Creek, a tributary of the Shotover River, Otago, New Zealand. It existed solely to service several gold mines, of which the Phoenix Mine (later known as the Achilles Mine, after a change in ownership) was the largest and longest lasting. This archaeological survey of Bullendale and the associated gold mines was commissioned by the Department of Conservation in 1996. It was a response to the potential threat that modern gold mining exploration posed to the historic sites in the area in the mid-1990s, as well as the need to formulate a management programme for the historic remains.

Bullendale is located within the Mount Aurum Recreation Reserve near Queenstown (Fig. 1). The general area is being increasingly utilised by the tourism industry, with the main emphasis on rafting, jetboating and bungee jumping on the Shotover River. The Skippers School and the Mount Aurum Homestead have been restored by the Department of Conservation; the former now being used as a small museum of local history. It is therefore an area with growing recreation, tourism and heritage interests.

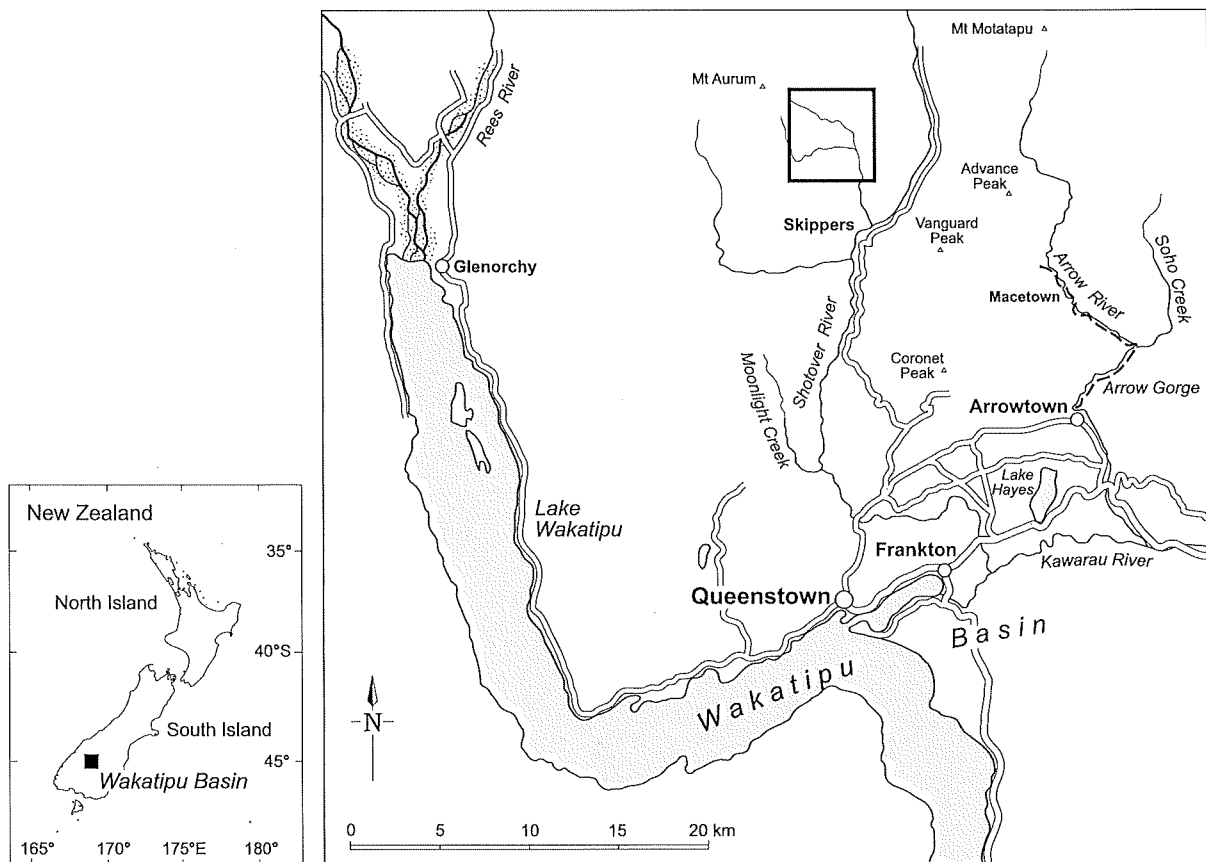


Figure 1. Map showing location of Mt Aurum Recreation Reserve and Bullendale (box—see Fig. 2) and main geographical features of the area.