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PRESERVATION OF THE ROTORUA GEYSERS : CONFLICTS AND ISSUES

R.G. Allis and T. Lumb

DSIR, P O Box 1320, Wellington, New Zealand

ABSTRACT

The geothermal activity at Rotorua, New Zealand, has always been noted for its special cultural, tourist, and scientific values. A gradual increase in the drawoff of geothermal fluid through wells since the 1950s raised national concerns in the early 1980s when spring and geyser activity significantly declined. A government-funded monitoring programme began in 1982 to establish the rate and cause of the decline in activity, as well as the magnitude of the drawoff. No new wells were permitted within 1.5 km of the geyser area. By late 1985, the monitoring programme confirmed that drawdown of the geothermal field was linked to the drawoff by geothermal wells. It recommended that the drawoff could be reduced by 75% by well sharing and efficiency increases. The link between well discharges and the activity of thermal decline was disputed by the Rotorua Geothermal Users Association. By late 1986, the continuing decline in field pressure was considered to be serious, so the Government recommended compulsory closure of wells within 1.5 km of the geysers, and imposed a charging policy for geothermal usage elsewhere in Rotorua. The closures were battled in the High Court, and subsequently there was also considerable local resistance and publicity to the forced entry onto private land by authorities trying to cement up wells. The combination of enforced well closures, and what was considered by some to be punitive charges for geothermal usage, resulted in an 80% reduction in geothermal well discharges by late 1989. Some of hot spring activity has returned, and geyser activity is more intense. Recently, some residents have been concerned that cooled former thermal areas near houses may be heating up again, and that the well closures have also caused a dangerous build up in gas pressure near surface. This claim is presently being investigated. The dissemination of geothermal public information from rumour to media to formal documents has, and continues to play an important role in the conflicts and issues.