

## SOCIAL EFFECTS OF THE UPPER CLUTHA POWER SCHEME

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### THE MILIEU FOR THE CLUTHA COMMISSION'S TASK

The Clutha Valley differs from all earlier New Zealand hydro-electric power development areas in that its proposals necessarily involve intensively occupied valley floors. When the first dam was built in the Clutha Valley in the 1950s the Alexandra-Roxburgh gorge was selected and the height of the dam determined so as to flood almost the only 30-km length without farms or close settlement.

Inevitably, therefore, proposals for the Clutha developments will need to consider the impact on people more than any previous schemes in New Zealand have done.

World-wide reactions to many power proposals and development projects of the 1960s have in turn in New Zealand produced a strong public mood, critical of large-scale projects of almost any kind. Protests have become part of the way of life of the 1970s for the engineer/power designer's work.

Environmental impact reports were officially accepted as part of all planning procedures for large government works in New Zealand in 1974. Hence a formal investigation, and environmental audit, is an integral part of the planning for the Clutha schemes. Though not directly the job of the Clutha Valley Development Commission, the terms of reference suggested that assistance for this task would be required from the Commission.

Before the Commission began its task, the Clutha Valley had been 'worked over' by engineering surveyors, running levels and leaving pegs, and (worst of all) driving in ominous signs for all to see, high above roads and settlements, indicating future dam levels. Adverse local reactions were not dispelled - remaining as a 'nasty

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feeling' about engineers in general – even by the change of government in 1972, followed by the government's declaration rejecting 'high dams'. Memories of Manapouri were still strong; big developers are not welcome these days in any form.

#### THE COMMISSION'S APPROACH, AND PRINCIPLES ACCEPTED AS GUIDELINES

Accordingly, the Commission has been highly conscious of its task since its first meeting, in respect of the social effects of any decisions and recommendations made. Indeed, its membership in itself indicated a clear desire on the part of the government to ensure that due weight should be given to social issues. The Commission was set up as a group of people involved in community affairs at a responsible level, and each familiar with the way of life in the valley. People came first; people of course need electricity, but much else besides. The Commission was deliberately *not* chosen because of its expertise in engineering related to hydrological resources or electricity generation. Experts in these fields were available for consultation as and when required.

In principle the Commission has worked to achieve enhanced well-being for the communities of the valley, accepting disruption and dislocation of some people's way of life only if it can lead to new opportunities and wider developments bringing greater prosperity to the valley and its people in the year's ahead – remembering that the Clutha schemes will provide for the next generations and not only for the present local people.

In practice this principle has meant:

(i) That raising water levels for power development must at the same time provide opportunities for other uses of the higher water levels, namely irrigation not hitherto economically feasible, and recreational facilities of new types.

(ii) That plans for power development must be paralleled by planning for irrigation and for recreation. These are each to be developed as integral parts of the scheme, no one aspect to be regarded as subservient or consequential to the others.

(iii) That provision of accommodation for the work-force must not be accepted as a temporary matter, but as a long-term contribution to Central Otago and to the Otago region as a whole. Thus the Commission recommended Cromwell as the site of the works, services, administration and accommodation for the six schemes making up the total development plan. Cromwell is to be expanded as far as possible as an integrated whole, and not as a town with a construction camp beside it for a few years.

(iv) That local authorities be involved in planning procedures and in detailed preparation for developments. For this reason the Commission itself has refrained from producing a plan for Cromwell; that is the task of a new joint planning group, made up by the local authorities (borough and county) and the Ministry of Works. Nobody likes dictators, however benevolent.

(v) That continuing association of local people with the development scheme's planning and execution be ensured through an Authority for the Clutha Valley, active in a general role, assessing proposals rather than accepting any wide executive authority, but able to keep in touch with the technical officers and planners working in the power development, irrigation and recreational fields. The Commission regards it as vital that this association be always present through the years of construction and development. The precise terms of reference for such a Clutha Valley Authority have not been spelled out, as there is room for a careful consideration of its role, and perhaps for a later review also, as it develops and demonstrates its value.

(vi) That disruption and dislocation is inevitable in some places and for some people, but in no case should the result be that individuals become worse off by being compelled to accept adverse local conditions because of changes introduced in the national interest. The Commission's best advice made it clear that this principle could only be realized if adjustments could be made to the present law of compensation, and the Commission has recommended accordingly. Studies of how this might best be achieved are continuing. Small people must not be swept aside or trampled on, but be adequately provided for within the scope of the scheme from the start. Suspensory loans for building new homes are recommended, involving no commitment for repayment if the family resides in the new home for seven years after occupation. If sold at any time after two years' occupation, repayment will be required on a sliding scale (one-seventh annual reduction).

#### EXAMPLES OF SPECIFIC LOCATIONS INVOLVING SOCIAL PROBLEMS

##### *The Cromwell Commercial and Shopping Centre*

On the scale of services required for a population estimated to approach 6000 in the 1980s, Cromwell's existing shopping centre could not possibly provide for the extension of shopping and servicing facilities. Unless a second and supplementary shopping and servicing area were to be provided (and this was rejected as quite

unfair to present shopkeepers). the alternative was to build a new commercial centre for Cromwell.

The present Melmore Street business centre is the only part of Cromwell that is sited on the middle terrace level, and though fascinating and historic, the buildings display remarkably few examples of architectural merit.

Thus the need for a new shopping and business centre was accepted, and made to fit in with power requirements so that the water level around Cromwell would be at a height to ensure optimum storage with minimum damage to the community. Under conditions of a 195.0-m flood maximum and a 194.5-m working level, the government will be responsible for the provision of a relocated business/shopping complex for the enlarged urban community, and this will be planned in detail by the new Joint Planning Committee.

It is proposed that present shop owners be given first option on sites in the new complex, which should not provide for the main highway to pass through it (as at present) but should be close beside it and accessible through the provision of adequate car-parking facilities (at present this is in any case badly needed, even before the expansion of Cromwell).

### *Orchards in the Cromwell Gorge*

The fruit-growing community along the Cromwell Gorge makes use of one of the finest natural assets in Central Otago – the fertile terrace soils in the local gorge climate that in fact reduces to a minimum the risk of frost damage.

Though apricots may currently be less profitable than many would wish, the Commission took the view in principle that it is the soil and climate that provide the true asset and that it would be wrong to allow the current price of apricots to modify the recognition of the value of this asset to the community. Accordingly, every endeavour has been made to conserve this asset and to ensure adequate study of the risks involved in taking responsibility for conserving the terraces in the gorge for future intensive cropping. At no time did the Commission accept the loss of any orchard without the most careful consideration.

At the same time it was recognized that improved roading, better irrigation and climatic testing before and after the creation of the long narrow lake above Clyde are essential matters to include in the provisions for development, and to consider because they will vitally affect the fruit-growing community's future, during and after the period of dam construction.

## *Historical and Recreational Facilities*

History and recreation combine particularly well in Central Otago where sunshine, water and gold mining history create strong attractions in most people's minds. Accordingly, water resource development for power must also be so planned as to involve improvements in recreational facilities for their use and enjoyment.

The new Cromwell Lake is to be the main body of water whose shoreline will offer new opportunities for recreation. The Commission reluctantly accepted the need for a 1.5-m weekly range, but would point out that this is closely similar in range to the tidal difference along the Otago sea-coast and estuaries where it helps to scour and clean beaches naturally. The flow from the lakes in many weeks of the year may, however, be such as to make the actual range often much less than this. At a future date it may also prove possible to utilize storage in such a way as to reduce this range substantially.

In the meantime, and accepting the 1.5-m weekly range, the eastern shore of the Cromwell Lake where the shore slopes quite steeply is regarded as the best recreational side, facing the afternoon sun, and offering possibilities for public recreation without occupying good agricultural land. On this side there is the opportunity, because of the inundation involved in a 194.5-m working level, for building a new well-aligned scenic road, where it is proposed it should avoid the water's edge and allow for recreational areas between the new road and the shoreline.

The western shore, on the other hand, will be planned to conserve the good agricultural soils to the maximum, with construction of wildlife islands providing for appropriate naturalist interest in the mudflats and offering feeding and roosting areas for birds. Footpath access only is recommended on this shoreline above Lowburn. The historic Bannockburn sluicings and goldfield sites are strongly recommended for protection under the Goldfields Park proposals.

### *Lowburn*

Lowburn, like Cromwell's Melmore terrace, is to be mostly inundated, and appropriate steps should be taken by the local community for residing it. Again, it is not the wish of the Commission to dictate the detailed terms, but to suggest action to take advantage of the conditions and opportunities. Local people, through their local authorities, should consider the various alternatives, evolve their own appropriate plans and work with the authorities to ensure that the government acts to execute these plans. This historic small

community need not be forced out of existence. Though it will not continue to occupy the same ground under the present proposals, it is quite possible to relocate it in the same general area.

### *Cromwell's Northern Fringe*

The terrace edge overlooking the southern part of the Lowburn tailings offers particularly favourable recreational opportunities. A beach will form at about 30° slope, probably less, in the comparatively soft fine gravel material, which is there capped by wind-blown sand. This gently sloping beach will stabilize to provide good boating and swimming facilities, justifying careful planning for recreational use and effective access from holiday homes located nearby – though preferably not occupying the desirable waterfront itself, which it is hoped will be public land for some distance back from the lake edge.

### CONCLUSION

I have endeavoured to show how the Commission has viewed its task in relation to social questions. I hope I have shown that “Social Effects”, the title under which I was invited to contribute, is in fact a misnomer for the considerations I have placed before you. This term is one suggesting a reaction to engineering proposals and was in fact the term widely used in the days of the Liaison Committee that preceded the Commission and the change of government in 1972. That Committee had been asked to review a number of consequences of a given series of alternative engineering proposals, and it worked within this restricted framework to set down the social effects of the various alternative schemes.

The Clutha Commission has done no such thing, and from its first meeting accepted no such brief. The Commission has taken a wider and much more positive approach, viewing social implications and opportunities as of equal importance with engineering implications and opportunities. The title of this paper therefore should be reworded to read “Social Implications and Opportunities”, since that has been the Commission’s view of its role in relation to the multi-purpose development of the resources of the Clutha Valley. The Commission has regarded its task as one of achieving long-term satisfaction for the communities of the valley, while arranging for the amelioration of short-term disruption and dislocation during the process of substantial change brought about in conjunction with the realization of the opportunities presented in the valley and arising from New Zealand’s power needs.