

OLD WORLD

WATER RESOURCES

Untapped Wealth

THE trouble with water in Britain, as far as industry is concerned, is that it falls at the wrong time and in the wrong places. The alternative to transporting water to the cities is to attract industry to regions where water is plentiful. This is the approach now being used by the Eastern Borders Development Association (EBDA) which has realized that the great wealth of river water (from the Tweed) and underground water available near Berwick could be a carrot in persuading industry to develop the England-Scotland border region of Berwickshire, North Northumberland, and the County of Roxburgh.

From 1945 to 1966 the population of this region declined at 10 to 11 per cent in each ten year period, and by 1966 even the population of the towns was declining. EBDA was set up to counter this flow and has already succeeded in that an overall decline in population of only 6 per cent is projected for 1966-76, with the population of the towns actually increasing.

Colonel J. I. M. Smail, chairman of EBDA, said this week that conservative estimates indicate that ten million gallons of water can be extracted daily from the Tweed, and replaced after processing. In addition, underground water of great purity is also available. Existing boreholes supply 600,000 gallons daily, and it seems that further drilling could produce another 1.5 million gallons each day. This high quality water is particularly suitable for chemical and pharmaceutical processes, because it is not only pure but also has a high degree of temperature consistency and is free from turbidity.

But what of the effect of industry on the environment of the region? The area is one of considerable natural beauty and historic interest—indeed one of EBDA's long term projects is the development of a tourist industry. It seems, however, that local authorities are in close touch with EBDA and that a careful eye will be kept on the kind of industry allowed into the area. Also, the size of factory which the association wishes to encourage is planned to fit in with the social requirements of the region. The association is also operating a scheme whereby skilled workers who have been forced to leave the region are informed of new developments. So far 1,800 families have indicated a desire to return to the border region—some from as far away as Detroit—if work is available.

Will the guarantee of water be more successful than the other inducements to regional development?

INFORMATION RETRIEVAL

Only Connect

A SERVICE designed to give companies the benefit of the 40,000 technical reports written annually in research establishments in Britain and abroad is to be put on a self supporting basis. The service—known as Techlink—has been available free of charge for the last three years from the Technology Reports Centre, Orpington, to 5,000 companies. The Department of Trade and Industry, which is responsible for the service, has decided to make it available to all British companies on a subscription basis.

One page summaries of reports which may have industrial applications are prepared by a team of four technical experts and made available under 40 subject headings. Companies can then subscribe to as many of these categories as they wish at a minimum subscription

of £6 a year. For £25 a year they can receive all 40 categories. Over the past three years, Techlink has been issuing about five summaries a week and it is intended to increase the output.

It is expected that the service will become self supporting over the next three years and an advertising campaign intended to reach 42,000 companies is to be launched at the end of January to recruit subscribers.

Each of the summaries gives the source of the information and a name for further contact which, if a very popular process becomes available, could prove a strain on the laboratory responsible. The reports will be drawn from government laboratories, universities and research establishments, particularly in Britain and North America. The service should provide a cheap and efficient means for companies to keep up with innovations in their field without having to examine all the published reports.

Salary Slide

MANY graduate engineers seem to have lost the salary advantage that they had over graduate chemists in 1968, and the salaries of graduate engineers in general still lag behind those of physicists. These are two of the conclusions to be drawn from a survey conducted by the Council of Engineering Institutions (*The 1971 Survey of Professional Engineers*, £2.50), the latest of several surveys published recently by professional bodies such as the Royal Institute of Chemistry (*RIC Remuneration Survey 1971*, Pt. 1, 1971; £1.00) and the Institute of Physics (*Physics Bulletin*, 22, 663; 1971).

ment, re-training and the distribution of engineers by field of work. At the time of the survey (June 1971), national unemployment was running at about 3.3 per cent, but the proportion of engineers—both graduate and non-graduate—out of work was one per cent. Engineers over fifty years old were rather worse off, and 1.6 per cent of them were seeking re-employment.

In the preamble to the survey, the council singles out the disappointing level of re-training for special comment: "In a profession where technology is changing so fast, the fact that less than 7 per cent of engineers were subject to re-training and updating (between June 1970 and June 1971) should

Table 1 Median Salaries of Graduate Engineers, Chemists and Physicists in 1971

Age group* years	Engineers £	Chemists £	Physicists £
26-30	1,900	2,080	2,005
36-40	3,000	3,080	3,213
46-50	3,700	3,910	4,080
56-60	4,002	4,000	4,223
61-65	4,027	4,000	4,407

*In the survey of engineers the age groups were 25-29 and so on.

The median salaries of graduate engineers, chemists and physicists in 1971 are shown in Table 1. Engineers over the age of forty-five now earn about the same as or slightly less than chemists of the same age, by contrast with the situation in 1968 when engineers between fifty-five and sixty-five earned £200 to £300 more than their chemist colleagues. Graduate physicists now earn about 7 per cent more than graduate engineers.

Other matters covered in the engineering survey include unemploy-

be viewed with some concern".

The council also expresses concern that there are signs of a decrease in the proportion of engineers working in what it terms the "investment" areas of the economy—machine tool manufacture, research and education—which is matched by an increase in the number working in service industries such as transport and communications. The proportion of engineers employed in education fell from 8.5 per cent in 1968 to 8.1 per cent in 1971.