DRAFT WATER RESOURCES (JERSEY) LAW

EVIDENCE SUBMITTED TO THE SHADOW SCRUTINY PANEL ON BEHALF OF THE JERSEY NEW WATERWORKS COMPANY LIMITED

1. Introduction

The Company has for many years advocated the need to have some form of regulation to enable sustainable management of the Island's water resources; therefore the Company supports the proposed draft Water Resources (Jersey) Law, which will require all fresh water abstractors to be registered, resulting in a better understanding of private water usage and knowledge of the total water volumes available.

2. Background Information

The geology of the Island of Jersey is such that sub-strata is generally impermeable and water is only held within the over-burden and higher fissures of the strata. As a result the ground water aquifer is only a shallow aquifer which supports numerous "perched" water tables of limited volumes of water.

Past reports on the ground water resources in Jersey by the British Geological Survey (BGS) indicate that this water is relatively young (generally less than 20 years old). Ground water in areas of water bearing strata is normally significantly older than that found in Jersey.

The former UK National Rivers Authority classification of aquifers, if applied to Jersey, would deem the Jersey aquifer to be "highly vulnerable". Results from ground water borehole samples in the low lying areas of St Clement and Grouvillle have indicated sea water intrusion, which is a direct result of over-abstraction and confirms the vulnerability of the aquifer.

The public water supply system in Jersey relies primarily on the collection and storage of surface water. The majority of water is available for collection from streams between October and April. Between April and October transo-evaporation losses can be as high as 60%, which significantly reduces the volume of water available for collection.

The ground water resources provide the base flow for surface water streams which are used for the public water supply. Therefore the ground water resources, whilst not used directly for the public water supply, need to be managed and protected to ensure sustainability of the surface water streams.

The Company abstracts a small volume of water from the sand aquifer in the southern part of St Ouen's Bay. The volume of water abstracted is normally not greater than 5% of the total volume of water supplied in the year. Monitoring of ground water levels through adjacent observation boreholes and water quality monitoring is carried out to prevent over-abstraction and possible saline-intrusion.

As a standby resource, the Company has a seawater desalination plant, which can produce up to 6,000 m3 per day (20 to 30% of the daily demand depending on the time of year).

3. The need for a Water Resource Law

As a result of the BGS technical report on water resources in Jersey in 1991, the Public Services Committee commissioned a working party (Chaired by Major John Riley) to consider the need for the States to introduce measures to manage and safeguard the Island's water resources.

The working party's remit included the making of recommendations to the Public Services Committee on how better management and control of water resources could be achieved. The working party consulted with a wide range of stakeholders and took due regard of all categories of water consumers.

A number of recommendations were made by the working party, with one immediate recommendation; that the Public Services Committee should immediately commission the drafting of a Water Law, which would give the Committee powers to safeguard the Island's water resources. This Company supported that recommendation.

The report for the British-Irish Council on climate change scenarios, published in July 2003, indicates that within the next 20-40 years, depending on the degree of world-wide fossil fuel emissions, Jersey may experience significant changes in the rainfall trends. The Island could experience wetter winters and drier summers, which would be a worse-case scenario for water resources. The effect of this would be to increase the stress placed on natural water resources available and increase the risk of saline intrusion into the aquifer. These potential scenarios reinforce the need to have in place adequate water resource management legislation.

4. Summary

In summary we believe that the proposed Water Resources (Jersey) Law is justified for the following key reasons :

4.1 The Island has only a shallow, limited and vulnerable ground water aquifer.

4.2 In 1992 the States commissioned Working Party on Water Resources, consulted with a wide range of stakeholders and recommended that immediate action be taken to provide legislation to protect and safeguard the Island's water resources.

4.3 The resident population of Jersey is about 90,000, which equates to 2,000 people per square mile, which can be considered to be densely populated (UK is 620 people/square mile). The density of the population is such that it places inherent stress on the water resources available.

4.4 There is now the added uncertainty of future climate change which would place additional stress on water resources in Jersey and many other countries.

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