



### OWNER ADVISOR SERVICES

Damwatch can provide the following services to dam owners to assist in asset management:

- Preparing briefs for dam safety related works for engagement of consultants and tender processes
- Consultant and contractor selection for dam safety related works including design, construction and contract supervision.
- Peer Review of design of general dam and dam safety related works.

- Advice to insurance companies for risk and financial evaluation purposes.
- Advice to owners for asset and budget management.
- Advice on monitoring instrumentation and collection of dam safety data.
- Advice on dam safety programmes.
- Audit of dam safety programmes.
- Dam surveillance observer training.
- Assistance with emergency preparedness planning.
- Interpretation of relevant legislation, consent conditions or voluntary dam safety guidelines for owners.

### OWNER ADVISOR EXAMPLES

Damwatch provides owner advisor services to a number of clients, with interests in dams and other hydraulic structures, on dam safety related issues. The following provides examples of advisory services provided by Damwatch to some of our clients.

#### WATERCARE SERVICES LIMITED

WaterCare Services are the owners of 10 water supply dams in Auckland, NZ. Damwatch is involved in regular audits of their dam safety programme for compliance with consent conditions. Damwatch has also peer reviewed a major dam rehabilitation design (Coffeys Dam), an energy dissipator upgrade (Mangatawhiri), and a seismic upgrade of appurtenant structures (Mangatawhiri).

#### COLIBAN WATER

Coliban Water is a water service provider in central and northern Victoria, Australia. They have undertaken an improvement programme for 10 of their dams, which includes decommissioning of three. Damwatch has provided technical assistance in developing the programme and reviewing consultants' studies.

#### MERIDIAN ENERGY LIMITED

Meridian Energy is an electricity generator with a 2320 MW hydro capacity in the South Island of NZ. Damwatch provides a wide range of owner advisor services to Meridian Energy including dam safety and operational policy, monitoring practices, surveying requirements, review of consultants' studies, emergency planning, preparation of study briefs and training.

#### MIGHTY RIVER POWER LIMITED

Mighty River Power is an electricity generator with 1040 MW of hydro-electric capacity on the Waikato River, in the North Island of NZ. Damwatch provides a wide range of owner advisor services to Mighty River Power including dam safety and operational policy, monitoring practices, surveying requirements, review of consultants' studies, emergency planning, preparation of study briefs and training.

#### PT INCO LIMITED

PT Inco is a mining company in Indonesia and operates two hydroelectric schemes (two dams and a canal) producing electricity for its operations. The continuous operation of these plants is critical and the integrity of their structures is vital to company output. Damwatch undertook a strategic review of their dam safety programme and has assisted with the implementation of improvements to this safety programme.

