

Hydro Power

Project Types

High Dam, High Pressure Power Plants

Low Head, Canal Cascade Power Schemes

Project Development Services

Comprehensive Civil Engineering capability from Pre-feasibility, Consents, Investigation, Design, Construction, Safety Monitoring, Reviews and Remediation.

Benefits

- Damwatch' combined 200 years experience on 35 large dams in New Zealand's active geology.
- Experience as Asset Owner provides an appreciation of the investors perspective of new project development.
- A set life cycle experience from pre-feasibility studies through design, construction to remediation results in a holistic understanding of project issues.
- Track record of integrity and confidentiality on sensitive developments in a political environment.

Project Initiation - Selected Projects

Damwatch staff have gained considerable experience through working on the following projects, from pre-feasibility through to design:

Clyde Dam

102m high, 400 MW, concrete gravity dam, 4,800 cumec spillway

Ruataniwha Dam

53m high, earth dam and concrete gated dam, 4,900 cumec overflow spillway structure

Pukaki Lake Control

61m high, earth dam and upstream blanket, 3,400 cumec concrete spillway

Proposed Schemes

Damwatch, or its staff, have held key roles in the following project investigations:

Project Aqua

Damwatch was canal safety and consenting process advisor. 300 cumec, 6 canal + hydro power station, 400 MW scheme

Chatham Islands Hydro Scheme

Damwatch is technical advisor, feasibility studies. 30m high, earth/concrete dam, 0.5 MW scheme

Mokihinui Hydro Station

Damwatch is engineering consultant for pre-feasibility design and consents. 72m high, RCC dam, 62 MW scheme.

Lower Clutha (feasibility design)

60 m high, RCC dam, 400 MW scheme

Project Construction, Commissioning, Monitoring And Remediation

A number of Damwatch staff held key roles in the following projects:

Clyde Landslides

100m high concrete gravity dam. 13 major reservoir landslides treated with buttresses and drainage tunnels.

Matahina

86m high rockfill dam, 72 MW, 1900 cumec spillway. 1985 post earthquake remedial works. 1995 post earthquake strengthening, and commissioning.

Karapiro

67m high, 830cumec spillway remediation; thrust block strengthening.

Pukaki Canal Inlet

32m high earth dam. Construction supervision, remediation design and management of repairs.

Manapouri Second Tailrace Tunnel

10m dia. 10km tunnel. Owners technical advisor (design)/review board member (construction).

Arapuni Foundation Remediation

Damwatch

