



# North Otago Irrigation Co. (NOIC)

**Jock Webster**  
**Ex. Chairman**

# Overview

- North Otago
  - Mean Rainfall 490mm – 530mm
  - Irrigable Area – 33,000ha
- Waitaki River
  - Mean Flow 360m<sup>3</sup>
  - High summer flows
  - Multiple storage
  - Controlled



# Area map



## Waitaki Catchment - NOIC

### Legend

- Regional Boundary
- North Otago Irrigation Scheme
- Irrigation Areas
- Waitaki Catchment

*Note: Irrigation areas are indicative only.*

0 5 10 20 Kilometres

1:700,000

### Disclaimer

While every effort has been made to ensure the accuracy of the information contained in this map, the authors and developers accept no responsibility for any omissions.

Map Projection: New Zealand Map Grid

New Zealand Image supplied by Geographix Ltd.



# NOIC Scheme

- 1992 New Irrigation Committee formed
- 1998 Board investigates Waitaki
  - Farmer buy in
  - 17,000Ha @ \$12.50
  - Pod groups – communities of interest
  - Advisors and consultants used to inform
  - NOIC obtained Requiring Authority
  - Options for Easements

# NOIC Scheme (Cont.)

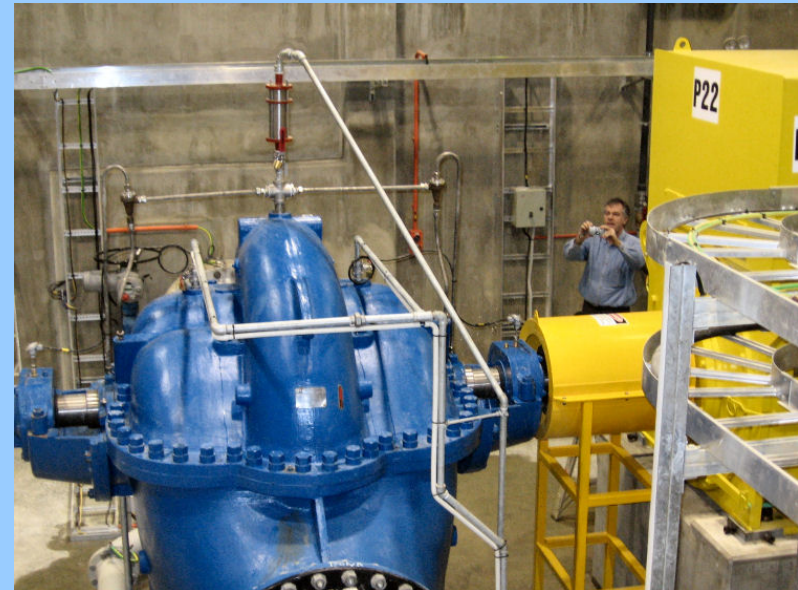
- Resource consent process for water progressed – 8m<sup>3</sup> granted in 2003
- 20,000Ha @ 0.4 l/s
- 24/7 supply of 3.5mm / day (24.5mm / week)
- Communicated with affected parties early in process
- Problems solved early before application lodged with ECAN/ORC

# NOSLAM

- North Otago Sustainable Land Management Group (NOSLAM)
- ISO accreditation for environmental farm plans
  - Requirement of consent
  - Support from ORC
- Plans include - Irrigation efficiency, fertiliser, soils, stock / crops, riparian fencing
- Audited annually

# Cornerstone Shareholders

- Meridian
  - Under wrote first 10,000 Ha
  - Allowed 33% extra capacity to be built in Stage One
- Waitaki District Council
  - Loan of \$10M



# Costs

- Funding
  - \$18.5M Farmers
  - \$37.5M ASB Bank
  - \$10M Waitaki District Council
- Annual Charges per Ha



	2006	2008
	\$	\$
Fixed	365	365
Annual Variable	130	210
Water Charge (Power)	<u>170</u>	<u>195</u>
Total	665	770

# Scheme Description

- Command Area – 30,000Ha
  - Stage One – 10,000Ha
  - 0.4 L/s delivered to farm boundary @ 50m
  - All irrigators paid same price
  - Spray irrigation
- Scheme augments Waiareka Creek – from dry in summer to 100 L/s Minimum flow – allowed to raise to 1,000 L/s

# Scheme Description

- Construction began Jan 2005
  - Issues:
    - Consents – Regional Council and farmers
    - Electricity
    - Didymo
    - Snowstorm
    - Commissioning
    - Cavitation in main pumps



# Take Home Messages

- Farmer Education – bottom up
- Good Communication
  - Pod Group (Farmers with common interest)
  - Newsletters
- Ownership – have money at risk
- Environmental farm plans
- Resource consent
  - Made most of the opportunity
  - Consent for water has 100% reliability
- Extra capacity built into scheme



# Looking ahead

- Stage Two
  - Buy in and financing extra capacity
  - Water reliability
    - Meridian
      - New consent for North Bank tunnel
        - » Non complying with Waitaki Allocation Plan (WAP)
        - » Different minimum flow conditions (150m<sup>3</sup> vs 110m<sup>3</sup>)
      - SOE should support community, existing use
- Waitaki used as a model integrating; *Storage, Electricity Generation, Irrigation, Recreation and Environment*