

CASE STUDY: NOIC

Leader in Farm & Scheme Level Environmental Management

North Otago Irrigation Company (NOIC) is based in Oamaru and holds consents to take up to 8 cumecs of water from the Waitaki River for spray irrigation. Farmer funded and owned, NOIC has been operating since 2006. The scheme currently delivers 4 cumecs of water to approximately 13,500 hectares via an extensive pressurised piped network. Recently the scheme has received consent to expand its command area and deliver the balance of its remaining water allocation. NOIC provides supplementary water to the Waiareka Creek both for abstraction purposes and to maintain the creek's minimum flow to 100l/s.

Since receiving consent to take and use water in 2002, NOIC has prided itself on working collaboratively with its North Otago community and has taken a strong leadership role in terms of environmental responsibility. This approach can be clearly seen in the evolution of the company's environmental management system. NOIC was the first irrigation company in New Zealand to have an operating Environmental Farm Plan (EFP) program in place; the first to have a full time environmental manager on staff; and the first to expand into an Audited Self-Management System (ASM) including the provision of environmental support to shareholders.

To kick-start the ASM process, NOIC worked closely with the Otago Regional Council, Te Rūnanga O Moeraki and the North Otago Sustainable Land Management Group to develop its ground-breaking EFPs prior to 2006. The company recognised early on that irrigation development would lead to land-use intensification and any subsequent environmental impacts would need to be managed. Auditable EFPs for each shareholder were initiated to ensure that good management practices were implemented and maintained. EFPs were only the beginning and NOIC has gone onto develop an ASM framework that includes;

- An over-arching company Environmental Policy
- A water supply agreement including enforcement capability
- Company-level performance objectives
- Performance review processes; and
- Recognition of high achievers.

NOIC most recently has reviewed its environmental management strategy and has now introduced Adaptive Management at both the farm and scheme level creating forums and collaborative processes to introduce even more ways the community can provide feedback to irrigators and the scheme about environmental outcomes.

NOIC's EFPs and ASM framework have been used as a model by the irrigation industry New Zealand wide, with many of NOIC's learning's incorporated by other irrigation projects in the past decade. Representatives from NOIC regularly speak at industry events and provide advice to both developing and existing schemes. Environmental responsibility and performance continues to be fundamental to how NOIC works within its community.

Approach has evolved and adapted over time

2002	Resource consent required farm plans and independent audits
2004–2006	Worked with NOSLM, ORC and Iwi to develop Farm Plan
2007–2008	Paper audits supported by some on-farm visits
2009	Switch to on-farm audits – 1/3 annually
2010	Switch to confidence rating approach Contract environmental support resourced Developed procedures including enforcement
2011	Adopted Environmental Policy Set company-level performance objectives Added Environmental Manager as key staff position
2012	Introduced Environmental Excellence Awards
2013	Change to 1–5 rating rather than pass/fail Modified use consent conditions
2014	Introducing on-farm water quality testing and upgraded BMPs



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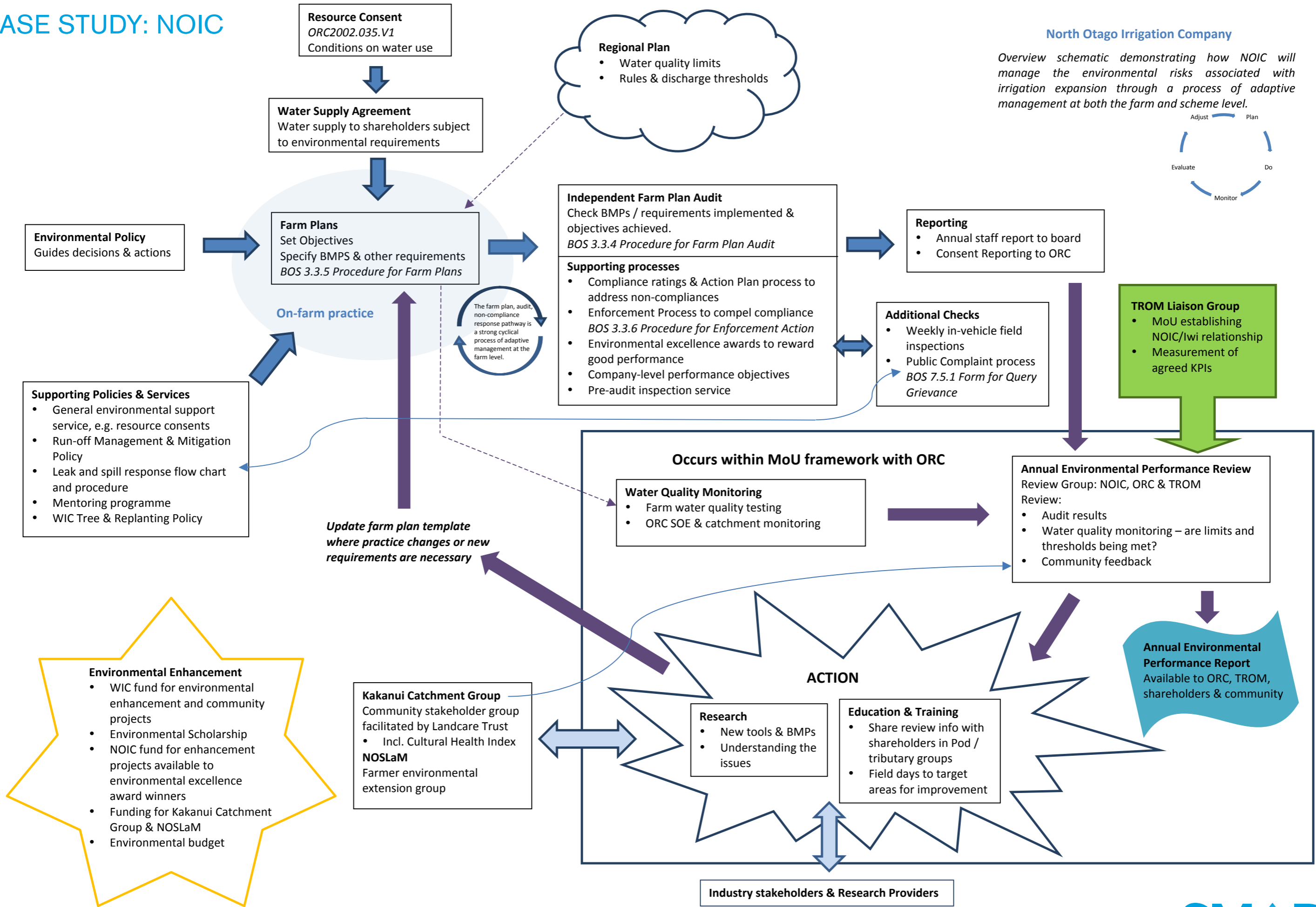
NOIC – 2014 Audit Results

Seventy-five percent achieved rating of 2 or above.

Rating	Number of farms	Percentage compliance
1	13	46%
2	8	29%
3	5	18%
4	2	7%
5	0	–

Overall Compliance Rating	Level of Confidence (LOC) Ratings	Actions Required
1	Generally all high LOC ratings. May include one High-Med LOC rating.	No specific follow-up required. Audit report may still include some minor recommendations for further consideration.
2	Generally may include High or High-Med ratings. May include one Med rating.	Further actions recommended. Farmer must notify NOIC by 30 October of what steps will be taken to address recommendations in audit report.
3	Generally may include High or High-Med ratings. May include one Med rating.	Written action plan to be prepared and copy to be provided to NOIC by 30 October. Action plan to list what steps will be taken to address the recommendations in the audit report. Property to be re-audited next year.
4	Generally may include High, High-med, Med, Med-low. No Low ratings	Written action plan to be prepared and copy to be provided to NOIC within one month of receipt of the audit report. Action plan to list what steps will be taken to address the recommendations in the audit report. Action plan to be approved by NOIC. Property to be re-audited next year.
5	Will include one or more Low ratings &/or three or more Med-low ratings.	Written action plan to be prepared and copy to be provided to NOIC within one month of receipt of the audit report. Action plan to list what steps will be taken to address the recommendations in the audit report. Action plan to be approved by NOIC. Property to be re-audited next year.

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North Otago Irrigation Company

Overview schematic demonstrating how NOIC will manage the environmental risks associated with irrigation expansion through a process of adaptive management at both the farm and scheme level.

