



## Case Study Allan Walters Lake

Skellerup Containment Systems can offer a variety of liner systems for decorative ponds and lakes.

Due to the complex curves and an island located in the centre of the lake a polypropylene geomembrane was the preferred material for this project.

Polypropylene's flexibility allowed it to conform to the curved sides and the changing base and slope contours.

The large polypropylene rolls covered an area of 1,140 square metres which allowed for efficient installation, minimising onsite seam welding.

Fusion Wedge welding was the primary method for seaming the liner. The hot wedge creates a weld by heating the facing overlapped surfaces and then pressing them together while in a molten state.

Wedge welders produce a double track weld; between these two welds is an air channel which can be used to pressure test the integrity of the entire weld seam.

The jetty construction involved fabricating pipe penetration seals around each support post. A polypropylene collar is heat formed around the post and an extrusion welder is used to seal the base of the collar to the main liner. This method is also used for inlet and outlet pipes.

For perimeter securement an anchor trench was utilised and rounded rocks were carefully placed on the crest and upper section of the slope to provide a more natural look.

### Details

**Project:** Wai-Iti Decorative Lake

**Location:** Nelson

**Application:** Decorative Lake

**Earthworks:** Allan Walters

**Liner Area:** 2,700 M<sup>2</sup>

**Installer:** Skellerup Containment Systems

**Date:** 2007

**Material:** 1.0mm Proflex Polypropylene

When reliability matters