Rotorua Lakes Boat Biosecurity & Access Control System

Summary of the Lakes Community Board presentation by Neil Oppatt — 15 September 2026

Overview

Neil Oppatt, representing Watson Security and the Lake Okareka Community Association (LOCA), presented an update to the Lakes Community Board on a new automated biosecurity system for boat ramps across the Rotorua lakes. The goal is to stop invasive pests — gold clam, hornwort, catfish, and similar threats — from being carried between waterways on boats, trailers, and gear, while making it as easy as possible for regular lake users to keep launching their boats.

This system is being trialed first at Lake Okareka, with the intention of rolling it out to Lake Rotoiti and the other Rotorua lakes, and potentially nationwide.

How the system will work

1. Automated gate access

Each controlled boat ramp will have a staging area with a barrier, camera number-plate readers (reading both the vessel's and the tow vehicle's plates), and a receiver that talks to an electronic "e-seal" fitted to compliant boats and trailers. If the system recognises your boat and confirms it hasn't been to an uncontrolled waterway, the gate opens automatically — no attendant needed, 24 hours a day.

2. The e-seal

An e-seal is a small transceiver unit fitted to both the boat and the trailer. It automatically detects when a boat is lifted off its trailer (meaning it may have gone into another body of water) and resets to "unarmed" until the boat is decontaminated or otherwise cleared. Key points for members:

- Expected cost: under $50 per unit, likely offered free initially, with an annual membership-style fee later.
- Battery life: at least 3 years, possibly up to 5.
- A companion phone app will allow boat owners to "re-arm" their e-seal themselves — for example, after launching from a private jetty or lakefront property — using geo-fencing around the coastline and controlled lakes.
- Boats that move between their own lake and the ocean and back, without ever entering another controlled lake, are not expected to need routine decontamination.

3. The "unknown pathway" fallback

If the system cannot confirm where a boat has been (no e-seal, or a break in its tracked history), the default rule is that the boat must be decontaminated before launching. This is a deliberate, conservative safety fallback: no data means no assumptions are made.

4. Decontamination stations

Vessels are grouped into three risk categories: jet skis, outboards/stern-drives, and inboards with ballast tanks (the highest risk). Jet skis go through a heated flush-and-wash tank; outboards and inboards will go through an automated spray system, both using water heated to around 50–60°C for a set time ("dosage") proven to kill pests such as gold clam larvae. This dosage standard is still being finalised through ongoing research with Earth Science New Zealand.

A trial decontamination centre is being built in the Tarawera / Te Ngae Road / Vaughan Road area, intended to become the largest permanent freshwater decontamination facility in the region. Smaller, lower-hours facilities are planned for some other lakes, including a possible site at Rotoiti.

Timeline

- November 2026 — a working model of the access control and decontamination system will be set up at Lake Okareka to test and refine the equipment.
- Aim: have the Lake Okareka access control and decontamination system operating by 26 December 2026.
- Ongoing prototyping and trials are expected to continue through to around June 2027, when a settled design for the in-town decontamination centre should be ready.

These dates reflect the presenter's stated goals as of September 2026 and may shift as trialling reveals issues that need to be worked through.

Cost and funding

The access control equipment and supporting computer system (built on Gallagher Security's Control 7000 platform, also used by US military bases) costs roughly $170,000 per site — around $100,000 of which is the physical control gates. This is funded through a $250,000 Bay of Plenty Regional Council grant, with the remaining $80,000 going toward decontamination centre costs.

Longer term, a national funding model is proposed modelled on the TB-Free animal disease programme, split roughly:

- 40% central government
- 30% unitary/regional councils
- 30% users

A National Freshwater Biosecurity Agency, run as an incorporated society with a national governance board, is proposed to oversee this consistently across the country — so a boat compliant in one region would be recognised anywhere.

The presenter asked Lakes Community Boards to consider contributing their $25,000 discretionary funding toward the hot-water boiler system needed for decontamination (a large heat pump and storage tank setup, cost circa $100,000+), with a possible funding-swap arrangement between Okareka and Rotoiti communities already discussed.

Requested Actions for Lakes Community Board member Associations

Run boat-usage surveys at your local ramp during peak periods (Christmas/New Year, Easter, Waitangi, and Labour Weekend) to help size the access control system needed.

- Support the search for a site for the main decontamination centre in the Tarawera/Te Ngae Road/Vaughan Road area — including lobbying the Rotorua Lakes Council if the Vaughan Road depot becomes available.
- Start planning and budgeting now for your own lake's boat ramp upgrades, so funding cases can be prepared.
- Help communicate this system to lake communities once explanatory materials (website, video, and app information) are ready.

Questions raised and clarified at the meeting

- Boats that leave a controlled lake, go to the ocean, and return without coming off the trailer generally will not need to decontaminate each time.
- Boats without an e-seal will need to decontaminate every time they enter a controlled lake, because the system has no way of confirming where they have been.
- A boat that goes to an unmonitored water body (e.g. the Waikato River) and returns will be flagged as "unarmed" / non-conforming and must decontaminate, even with an e-seal fitted, because the seal detects it left the trailer without a recognised, monitored re-entry.
- Consideration is being given to adding number-plate readers at some Waikato River boat ramps to add another layer of detection, pending discussion with Waikato Regional Council.
- The system is being designed to handle up to 2 million vessel registrations and 680 controlled boat ramps nationally, and there is reported strong support from Biosecurity New Zealand and multiple regional councils following a recent workshop.
- Weather stations are planned for each lake, viewable via the app, to help boaties choose which lake to visit and avoid wasted decontamination trips if conditions turn.
- Resource consent is not expected to be a barrier for the Lake Okareka site, as decontamination is proposed on a road reserve.
- Wastewater from decontamination is fully recirculated and treated so that all pest organisms are killed before it goes to a sand filter — nothing untreated re-enters the environment.

This summary has been prepared from a recording of the 15 September 2026 Lakes Community Board meeting for the information of our lake membership. Details are still evolving as design, trialling, and funding discussions continue, and dates and figures given above should be treated as current intentions rather than final commitments.