Piako Waihou Catchment Trust

TUNA NATIVE EELS

Ancient Travellers of Our Waterways

What are they?

Tuna are New Zealand's native eels - ancient fish that have remained virtually unchanged for millions of years.

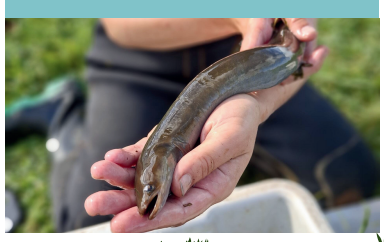
Photo: Jason Burton

Species in Piako Waihou

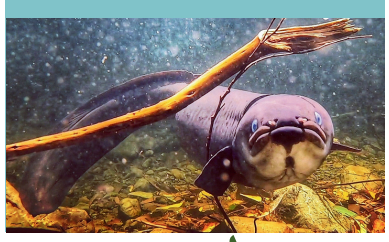
Two main species live in Piako Waihou waters:

- **Shortfin eel (tuna kuwharuwharu)** - More common, yellow-green colouring, found in lakes and lower river reaches
- **Longfin eel (tuna roa)** - Threatened species, can live 80+ years, distinctive long dorsal fin, travel further upstream

Shortfin eel



Longfin eel



Remarkable Life Cycle

- Breed once in lifetime in tropical Pacific Ocean (near Tonga)
- Larvae drift back to NZ on ocean currents
- Glass eels migrate up rivers and streams
- Spend decades growing in freshwater
- Long fin tuna are very slow growing and can take decades to reach tuna heke (silver eels) when they are ready to spawn.
- Mature eels make epic return journey to breed and die

Why are they special?

- **Ancient survivors** - Unchanged for millions of years
- **Ecosystem engineers** - Transfer marine nutrients inland
- **Cultural significance** - Taonga species central to Māori culture
- **Food web role** - Important prey for mātuku-hūrepo and other native species
- **Water quality indicators** - Healthy eel populations indicate clean waterways

PROTECTION ACTIONS

Habitat Enhancement

1. **Maintain fish passage** - Remove or modify barriers like culverts and weirs
2. **Riparian planting** - Establish native vegetation along waterways
3. **Bank stability -** Prevent erosion that damages eel habitat
4. **Deep pool creation -** Maintain or create deeper water areas for large eels
5. **Substrate diversity -** Preserve mix of mud, sand, and rocky areas

Water Quality Management

- **Reduce sediment** runoff
- **Minimise chemical** inputs
- **Manage stock** access to prevent pugging and direct pollution
- **Maintain flow** regimes and preserve natural water patterns
- **Create vegetation** buffers along streams

Migration Support

- **Remove migration barriers** - Work with council on culvert improvements
- **Maintain connectivity** - Between different water bodies
- **Avoid drainage during migration** - Particularly spring glass eel runs
- **Protect spawning areas** - Maintain habitat quality in upper reaches

What to Include in Your Farm Plan

- ☑ Map all waterways and potential eel habitat
- ☑ Identify migration barriers and improvement opportunities
- ☑ Plan riparian restoration with native plants
- ☑ Set water quality improvement goals
- ☑ Include eel passage in infrastructure planning
- ☑ Monitor eel populations through visual surveys

Healthy Eel Populations Support Bitterns

- Healthy eel populations provide essential food for endangered bitterns
- Large eels in wetlands indicate suitable habitat for bitterns
- Eel conservation supports the broader wetland ecosystem

RESOURCES + SUPPORT

- Love Bittern Project: www.lovebittern.com
- Waikato Regional Council wetland support
- QEII National Trust covenant assistance

piakowaihourestoration.org/resources