

Giant Murray cod makes waves at Arcadia Native Fish Hatchery



A striking symbol of Australia's largest freshwater fish

In 2024, Victorian Fisheries Authority embarked on an ambitious project to transform the entrance to Arcadia Native Fish Hatchery and create a landmark destination. Their vision? A 16-metre-long giant Murray cod sculpture as a striking centrepiece, attracting attention and reflecting the significance of this iconic species.

Natureworks was honoured to be chosen to design and construct this monumental piece, now one of Australia's newest Big Things. Blending artistry with environmental education, the giant cod is a unique, memorable symbol for the hatchery.

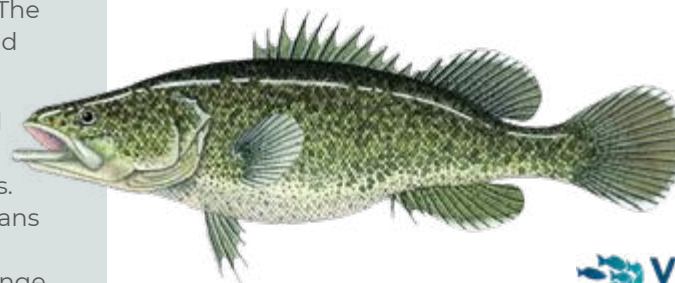
The Murray cod: an Australian icon

The Murray cod (*Maccullochella peelii*) is Australia's largest freshwater fish. Its average size and weight varies from 60 cm long and 2–5 kg in small streams up to 100 cm and 15–20 kg in large waterways. The biggest recorded specimen was 1.83 m long and weighed a whopping 113 kg.

Found in the Murray-Darling Basin, Murray cod are apex predators that play a critical role in maintaining the balance of aquatic ecosystems. They have a varied diet, from fish and crustaceans to amphibians and water birds. Often found in slow-flowing waterways, they can adapt to a range of habitats such as lakes and small streams. If not caught by anglers, they typically live for 30–35 years (although some may live much longer).



The giant Murray cod sculpture has a gaping mouth, which creates a dramatic photo opportunity for visitors



A Murray cod's colour varies from brown or olive green to yellow-green with mottling on the upper body, sides and fin bases (image: Victorian Fisheries Authority)



At 16m long, our larger-than-life replica of a Murray cod is many times bigger and heavier than the real thing. It's designed to be caught on camera, not on a fishing line!



An ancient species with cultural and ecological value

Fossils of fish identical to the modern Murray cod have been dated to 26 million years ago. Once an extremely common fish in the Murray-Darling system, Murray cod were a major food source for local indigenous people for over 50,000 years.

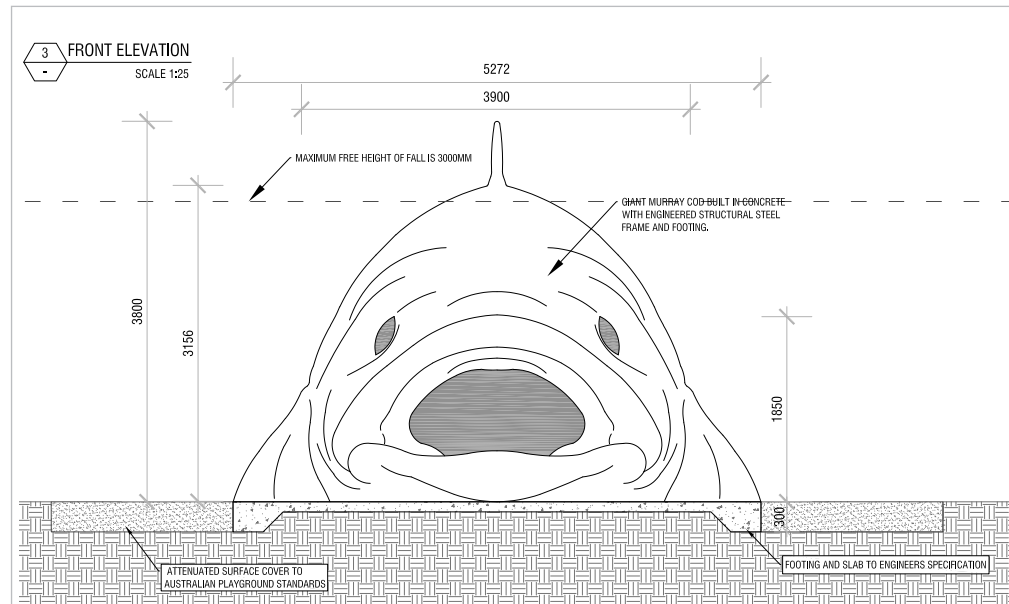
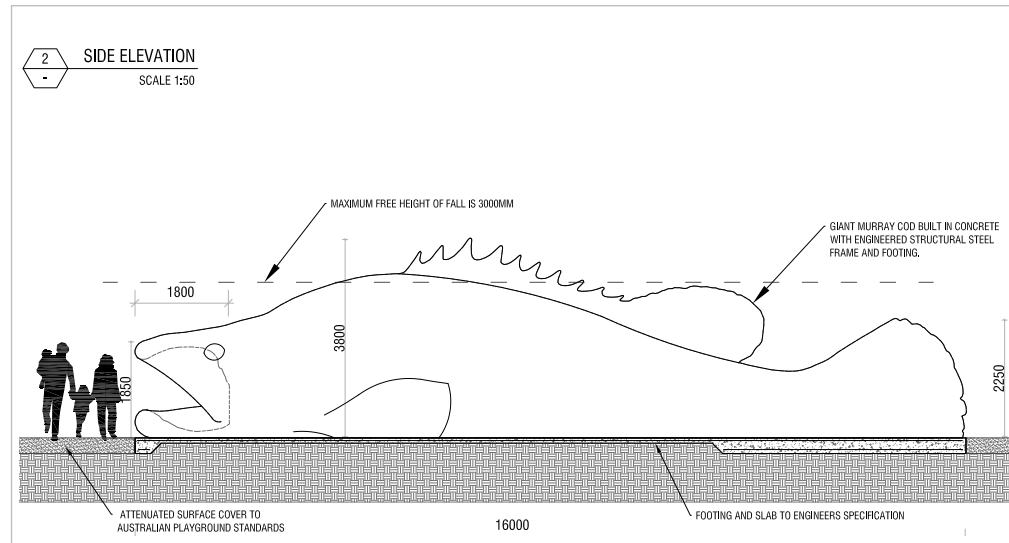
Wild stocks of Murray Cod are now estimated to be less than 10% of the level before European settlement, although restocking from hatcheries appears to be helping to reverse this decline. It is in the 'Vulnerable' category of the threatened species list under Australia's Environment Protection and Biodiversity Conservation Act.

Supporting conservation efforts

To address challenges to Murray cod numbers from overfishing, habitat loss and river flow changes, the Victorian Fisheries Authority is undertaking conservation efforts. Arcadia Fish Hatchery's role in breeding fingerlings for river and lake stocking is vital to the species' recovery and sustainability.

Arcadia's Visitor Centre provides information on native fish breeding, fishing catch limits, and the cultural significance of native fish to Indigenous Victorians. The centre also provides an opportunity for visitors to fish in a sustainably stocked pond and learn about fish production.

The giant Murray cod sculpture supports Victorian Fisheries' conservation and education efforts. It helps promote awareness of the Arcadia hatchery's activities, encouraging visitors to learn about sustainable fishing and aquaculture.



Concept drawings showing the scale of the sculpture



Murray cod fingerlings at the hatchery (top & middle) and an adult cod (below). Images: Victorian Fisheries

"We've stocked more fish than all other Australian states and territories combined, including more than 3 million Murray cod each year." Travis Dowling, Victorian Fisheries Authority



Design for authenticity

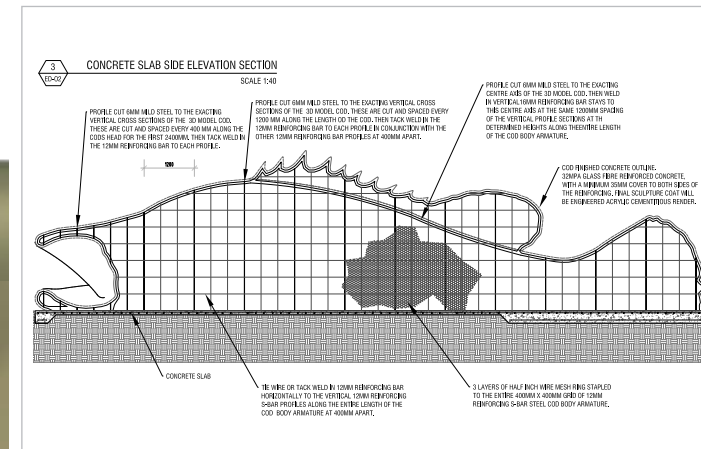
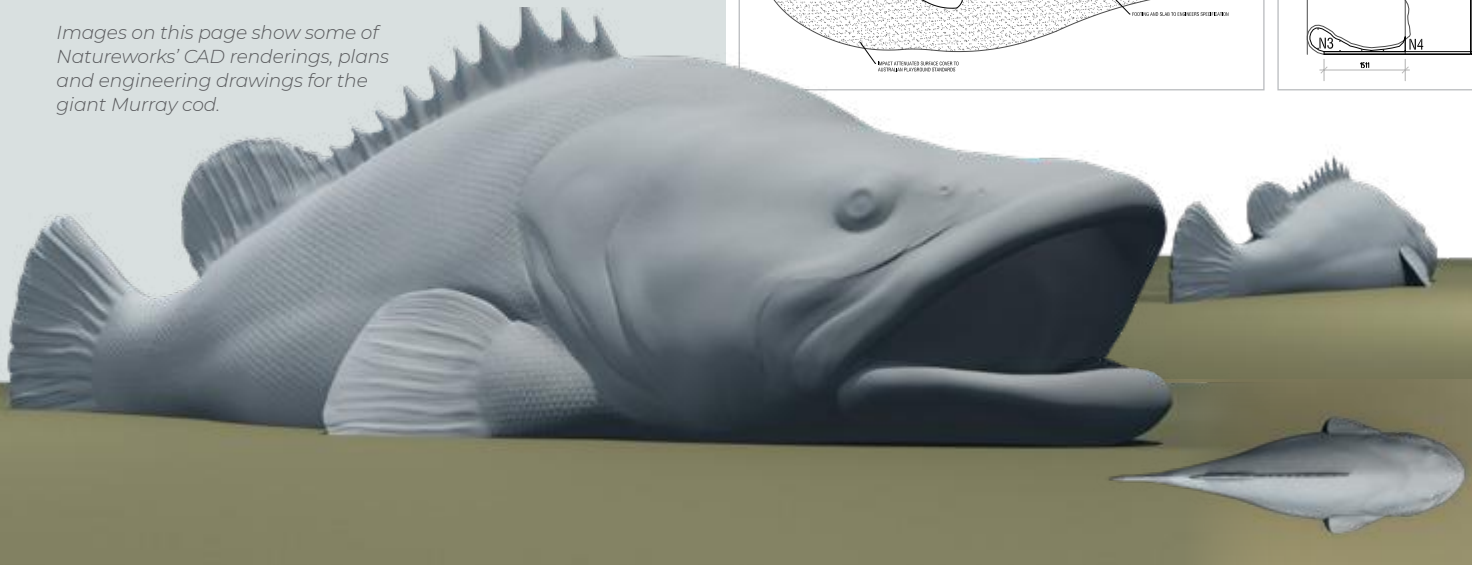
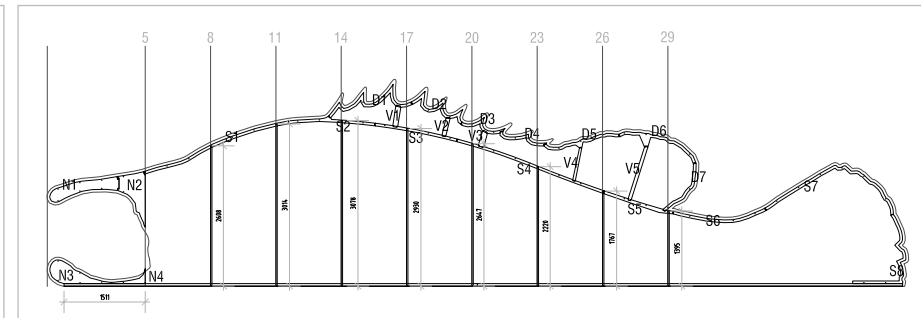
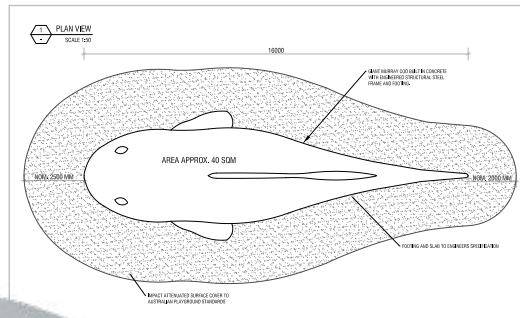
Victorian Fisheries envisioned a sculpture that would embody the realism of the Murray Cod without the caricature found in some Big Things statues. Natureworks embraced this challenge by creating a design that stayed true to the cod's natural appearance, while avoiding time-consuming details that would add to the project cost and complexity.

Our artists researched the Murray cod's physical features to design the sculpture's shape, proportions, anatomic details, colouring and skin patterns.

Engaging visitors

Bearing in mind the sculpture's role as a tourist attraction, we designed the cod with an open mouth for visitors to step inside and pose for selfies. This provides a unique photo opportunity, making the visit a fun, memorable experience for people to share on social media.

Images on this page show some of Natureworks' CAD renderings, plans and engineering drawings for the giant Murray cod.





Constructing the giant Murray cod: engineering meets artistry

Building a sculpture of this magnitude required meticulous planning, advanced engineering and sculptural techniques, and commitment to quality.

Natureworks followed a step-by-step process to ensure the structure's integrity and visual impact. Watch the [time-lapse video](#) on our website or YouTube channel for a fast-forward view of the build.

The images on this page show the structural stages of the build, from concrete slab to steel framework and wire mesh.



Design & construction process

1. Conceptualisation and scaling

- A 3D model was created to visualise the design and check it against client specifications
- The model was 3D-printed at a 1:20 scale to refine the details before moving to full-scale construction (16 metres long and about 6.5 metres wide)

2. Steel framework

- Steel templates were laser-cut from 6mm steel plate to define the fish's profile
- Templates were assembled over a concrete slab, providing a robust skeletal structure
- 8mm mild steel bars were welded at regular intervals to create the body's shape, forming "cutlets" that mimic the cod's contours

3. Sculptural detailing

- A wire mesh was stapled to the steel frame and profiled for a 50-60mm cover of glass-fibre-reinforced concrete (GFRC)
- Both the interior and exterior were sprayed with GFRC for durability
- A 50mm layer of polymer-modified cement was rendered and intricately sculpted to replicate the cod's skin

4. Finishing Touches

- The final render was sealed and painted to match the exact colouration of the Murray Cod. An anti-graffiti low sheen finish was added to the final painted details
- A 'pond' of rubber crumb soft-fall material was installed around the sculpture to provide safety for visitors, anticipating its irresistible appeal to climbers.



Sculptural detailing

These images show the sculptural stages of the build – spraying the mesh with GFRC, adding and rendering a layer of cement, and sculpting the cod's skin texture and features.





Finishing touches

These images show the final stages of construction, which involved preparing and painting colours and features, adding the final finish and installing a soft-fall surround.





A community and tourism asset

The Giant Murray Cod now stands proudly at the hatchery entrance, creating a striking “WOW” factor for visitors. It complements the site’s other attractions, which include a stocked dam where guests can catch cod and yellowbelly fish, as well as picnic facilities and a playground.

The sculpture symbolises the importance of conserving native species while promoting regional tourism and pride in Australia’s natural heritage.

An iconic Big Thing

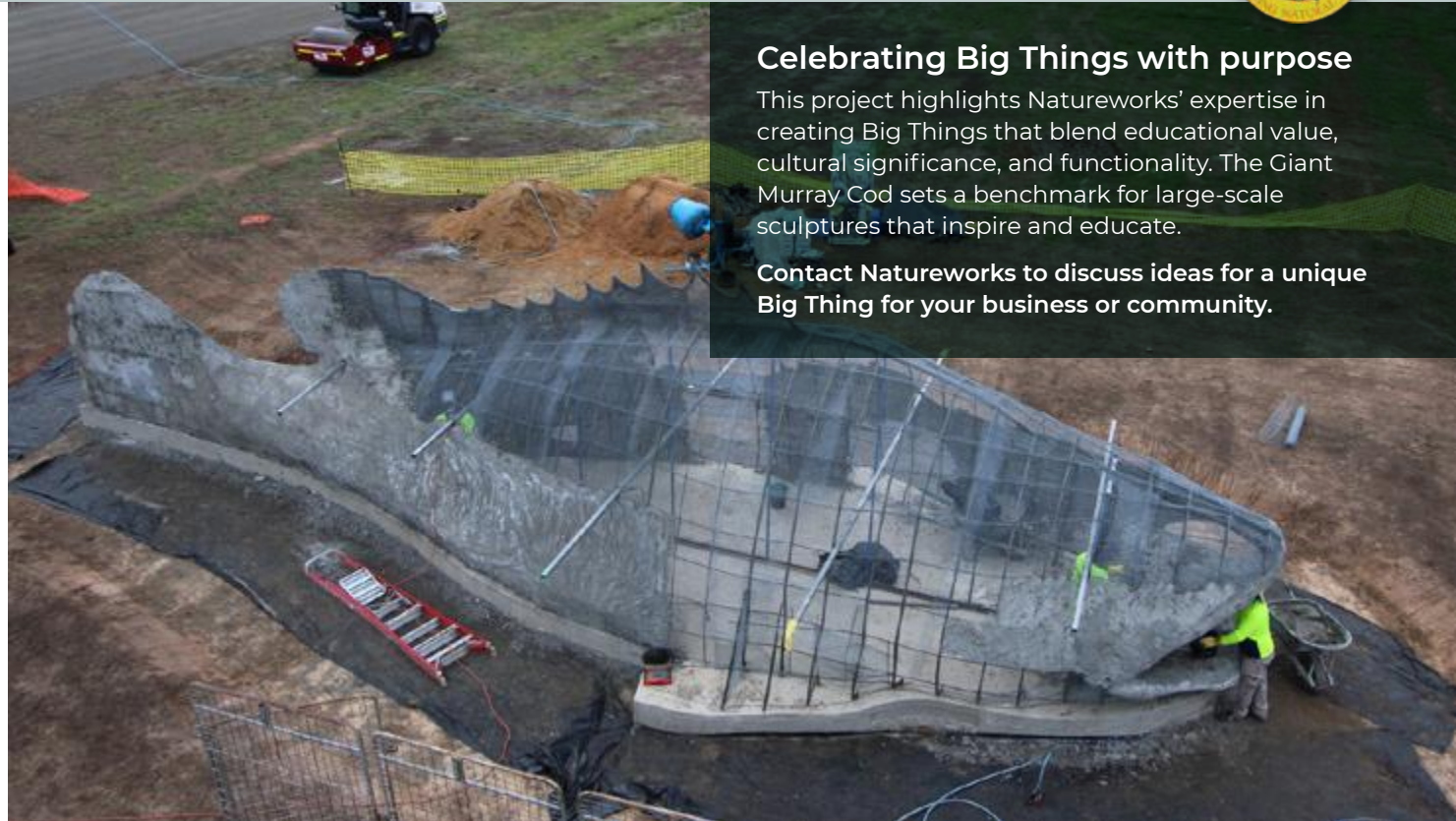
Natureworks remains committed to crafting iconic pieces that celebrate Australia’s unique wildlife and environment. The Giant Murray Cod is not just a sculpture — it’s a symbol of conservation, community, and the enduring appeal of Australia’s natural heritage.

A collaborative effort

Natureworks is immensely grateful for the collaboration with Victorian Fisheries and the cheerful professionalism of our staff and subcontractors. We worked with a number of suppliers in the Shepparton area to bring the project together and support the local community.

We also appreciate the expertise of Time Lapse IT who documented the build using [time-lapse video](#), (see it on our website and YouTube channel).

*Top: a still from the time-lapse construction video
Bottom: the completed Murray cod sculpture*



Celebrating Big Things with purpose

This project highlights Natureworks’ expertise in creating Big Things that blend educational value, cultural significance, and functionality. The Giant Murray Cod sets a benchmark for large-scale sculptures that inspire and educate.

Contact Natureworks to discuss ideas for a unique Big Thing for your business or community.

“That looks better than I could ever have imagined, incredible job. Exceptional.”

Travis Dowling, Victorian Fisheries Authority CEO

