
Lake Alexandrina
Goolwa Channel
Goolwa
Hindmarsh Island
Goolwa Barrage Fishway
Mundoo Barrage Fishway
Boundary Creek Barrage Fishway
Ewe Island Barrage Fishway
Murray mouth
Tauwitchere Barrage Fishway
Southern Ocean
Coorong North Lagoon
Goolwa Barrage Fishway
Lucerne Island
Mundoo Barrage Fishway
Marcoe Island
Boundary Creek Barrage Fishwa
Ewe Island Barrage Fishway
Tauwitchere Barrage Fishway
The Coorong Lower Lakes & Murray Mouth
Fishways Location
Name and proposed status
Boundary Creek Barrage
+ vertical slot
Ewe Island Barrage
+ vertical slot
Goolwa Barrage
existing vertical slot
+ vertical slot
+ fish lock
Mundoo Barrage
+ vertical slot
Tauwitchere Barrage
existing rock ramp & vertical slot
+ trapezoidal
Culvert Location
Barrage
Adelaide
N
0
5
Kms

Q: Why do we need additional fishways?

A1: Poor Coverage at Present:

Four existing points of fish passage across 4.2km stretch of barrages. Imagine trying to find the one single turnstile at Adelaide Oval on game day!

A2: Owing to different swimming abilities between body size, different habitats are utilised and fishway designs are typically tailored:

- Large (250-600mm) - **3 FISHWAYS**;
- Medium (100-250mm),
- Small (20-100m) bodied fish **1 FISHWAY**.

Summary of Current Locations

Site	Large Vertical Slot	Dual Vertical Slot	Fish Lock	Small Vertical Slot	Trapezoidal	Modified box culverts
Boundary Creek						
Ewe Island						
Goolwa	E					
Mundoo						
Tauwitchere	E			E		
Spillways						

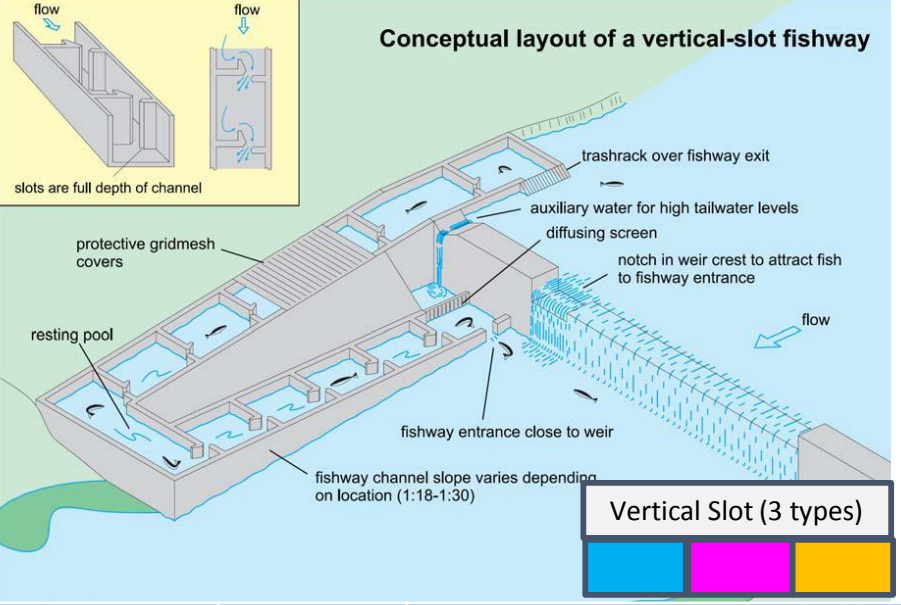
E = existing fishway already installed

Summary of Passage Locations, Designs and Completion Dates

	TYPES OF FISH PASSAGE						
SITE	Large Vertical Slot	Dual Vertical Slot	Fish Lock	Small Vertical Slot	Rock Ramp	# Trapez -oidal	# Modified box culverts
Goolwa	(E) 2015		2015				
Mundoo		2016					
Boundary Creek				2014			
Ewe Island		2015					
Spillways							# (2016)
Tauwitchere	(E)			(E)	(E)	# (2016)	

(E) = existing fishway already installed

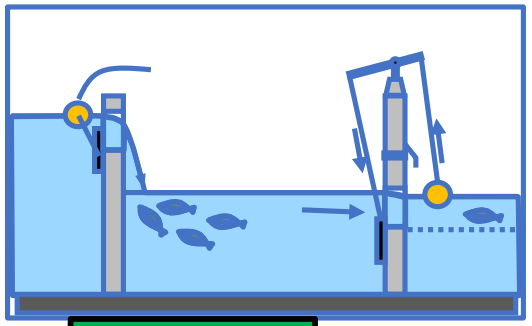
\# = subject to available funds as a result of construction cost savings



Vertical Slot (3 types)

Large–bodied fish	250 - 600 mm	High burst and prolonged swimming speeds.
Medium–bodied fish	100 - 250 mm	Moderate swimming ability.
Small–bodied fish	20 - 100 mm	Very poor swimming ability, requiring very low water velocities and turbulence.

SLOT TYPES FOR SPECIFIC BODY SIZES



Fish Lock

Ecological Objective	Description
High biomass	Facilitate the passage of large migration pulses.
Fish spread over a wide area	Increased spatial extent of passage sites.
Variety of fish species and body size.	Cater for the three groups of fish body size.
Passage of fish at low flows	Passage effectively provided at low flow delivery.
Fish at moderate/high flows	Suitable velocities and attractant flow when moderate to high flows are delivered.
Surface-dwelling fish	Accommodate surface species, such as mullet, which require fishways with high, exposed entrances.
Bottom-dwelling (benthic) fish	Accommodate benthic species, such as congolli, which require fishways with low, submerged entrances.

Trapezoidal

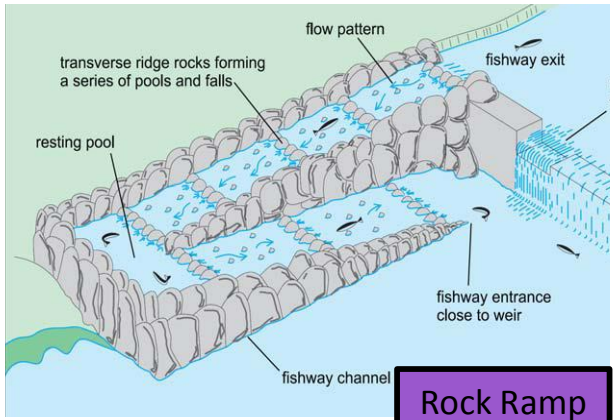
TYPES OF FISH PASSAGE

BARRAGE	Vertical Slot types: Large	Vertical Slot types: Dual	Vertical Slot types: Small	Fish Lock	# Trapez-oidal	# Modified box culverts	Rock Ramp
Boundary Creek			2015				
Mundoo		2015					
Ewe Island		2015					
Goolwa	☆ 2016			2016			
Roadways						# (2016)	
Tauwitchere	☆		☆		# (2016)		☆

Notes:

☆ = existing fishway installed
\# = subject to available funds as a result of construction cost savings

Modified box culverts



Rock Ramp

TAILORED FOR A RANGE OF FISH BODY SIZES		
Size Group	**Size Range**	**Characteristics**
Large–bodied fish	250 - 600 mm	High burst and prolonged swimming speeds.
Medium–bodied fish	100 - 250 mm	Moderate swimming ability.
Small–bodied fish	20 - 100 mm	Very poor swimming ability, requiring very low water velocities and turbulence.

Ecological Objectives

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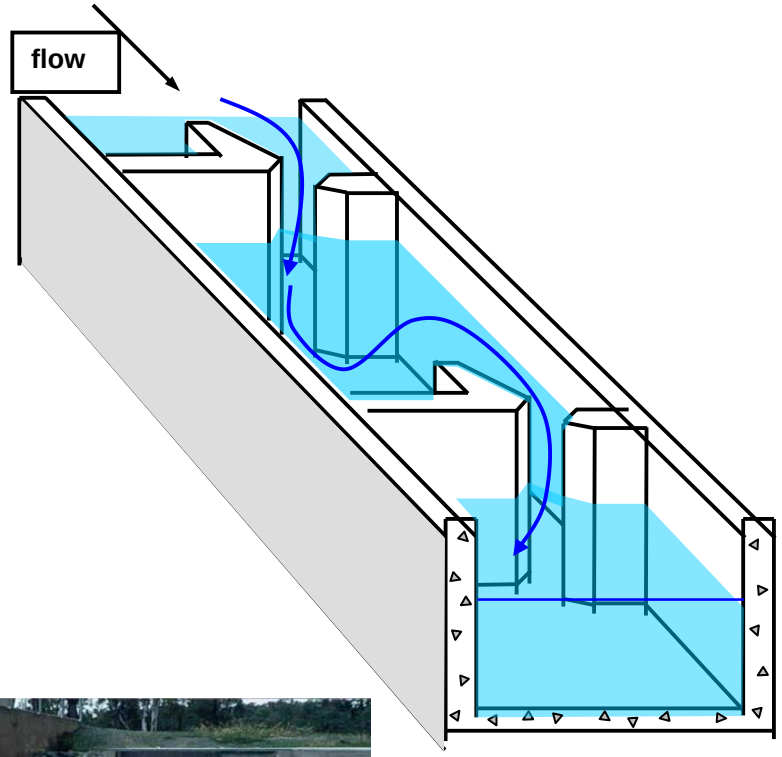
Performance monitoring:

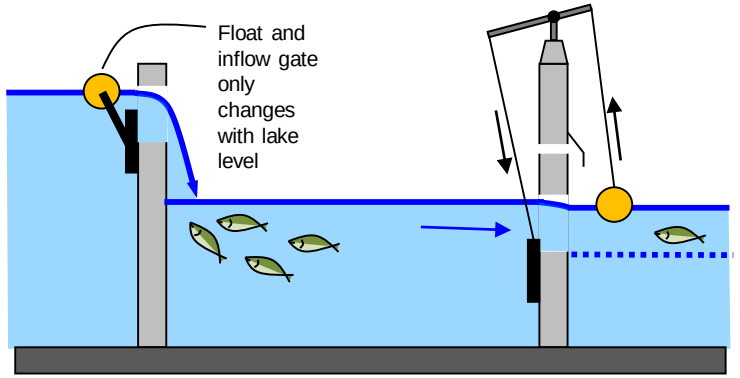
Evidence

to

evaluate

Objectives


flow


Float and
inflow gate
only
changes
with lake
level