

Recreational Fishing in Reservoirs - Concept Plan 2018



RecFish SA

The logo for RecFish SA features the text "RecFish SA" in a blue, serif font. Below the text is a stylized blue fish icon with a wavy line representing its tail.

Acknowledgements

The SA Reservoir Recreational Fishing Concept Plan was developed by the RecFish SA Reservoir Sub-Committee. Members of the Working Group are:

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RecFish SA (2018) SA Reservoir Recreational Fishing Concept Plan 2018.

Disclaimer

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Magnificent Aroona Dam near Leigh Creek was opened to fishing in February 2018 and will be stocked with Golden perch and Murray cod in 2019

Introduction

Background

For many years the recreational fishing sector in South Australia lobbied successive governments to allow access to the network of South Australian water supply reservoirs for recreational fishing. Success was achieved in 2014 when the state government announced that it would open 5 reservoirs to recreational fishing. Since this announcement, two SA Water reservoirs - Bundaleer Reservoir near Spalding and Beetaloo Reservoir near Laura in the states mid-north were opened for recreational fishing while fishing access at Warren Reservoir near Williamstown was significantly expanded to facilitate greater recreational fishing access.

An additional reservoir, Aroona Dam near Leigh Creek which is managed by the Department for Environment and Water (DEW) has also been opened to fishing.

Management

RecFish SA entered into a licence agreement with SA Water to participate in the management of Warren, Beetaloo and Bundaleer Reservoirs. The licence agreement provides exclusive rights for RecFish SA to issue access permits for these reservoirs and all persons entering the reservoir reserves are required to procure a permit. RecFish SA is responsible for setting the price of the permit.

Since the licence agreement was established over 2500 permits have been issued to members of the public with most users fishing at Warren Reservoir.

Stocking

A critical element of achieving successful reservoir fisheries is to ensure that sufficient stocks of preferred fish species are available in the reservoir. Since 2016, RecFish SA have stocked over 194,000 trout and native fish at a cost of \$102,000 into four reservoirs to establish sustainable fish stocks for recreational fishing purposes (see Table 1). RecFish SA plans to stock an additional 60,000 fish in 2019 including Australian bass which are proposed to be stocked for the first time in SA into Beetaloo and Warren Reservoirs.

Table 1: Stocking record for four SA Water Reservoirs 2016 - 2018

Reservoir Stocking Record						
Species	Bundaleer	Baroota*	Warren	Beetaloo	Number	Cost
Number	73,100	17,000	69,000	35,000	194,100	\$102,080
Murray cod	3,000	5,000	20,000	5,000	33,000	\$25,710
Golden perch	20,000	10,000	26,000	20,000	76,000	\$35,540
Silver perch	17,000	2,000	21,800	10,000	50,800	\$22,820
Grown On Silver Perch	0	0	1,200	0	1,200	\$1,200
Rainbow trout (fingerling)	29,100	0	0	0	29,100	\$14,550
Brown trout (fingerling)	4,000	0	0	0	4,000	\$2,800
Total Cost	\$36,060	\$9,050	\$37,322	\$19,000		\$102,080

*Yet to be opened to fishing

Stocking Baroota Reservoir in 2016 with over 17,000 Murray cod, Golden perch and Silver perch. Unfortunately, Baroota is yet to be opened for recreational fishing – but the fish are still there!



Opening Up Our Reservoirs

In March 2018, the Marshall Liberal Government was elected and declared its intent to improve recreational fishing access to more South Australian reservoirs. In its policy document entitled; **Opening Up Our Reservoirs**, the SA government declared that it will open up a number of additional reservoirs including South Para, Hope Valley, Happy Valley, Tod, Baroota and Myponga to recreational fishing and other leisure activities including walking, cycling, kayaking, sailing.

To facilitate the process of opening these reservoirs, the SA Minister for Environment and Water, the Hon David Speirs has established a **Reservoir Task Force** which is managed by the Department for Environment and Water (DEW), comprising **Mr John Schutz CEO, DEW, Mr Roch Cheroux CEO, SA Water and Mr Sean Sloan ED, PIRSA Fisheries & Aquaculture**, who are currently investigating options for opening all reservoirs to recreational fishing.

A sub-committee of the **Reservoir Task Force** known as the **Fishing in Reservoirs Working Group** has also been established to understand the aspirations of recreational fishers and provide advice to government on the fish species that should be stocked into each of the target reservoirs to produce a productive and diverse fishing experience for South Australians. RecFish SA is a member of this Working Group which includes representation from two other recreational fishing organisations and many government departments. The **Fishing in Reservoirs Working Group** meets regularly to discuss items relating to the development of reservoir fisheries and is currently the process of developing an action plan to progress the necessary steps in developing these fisheries. It must be recognised that the FRWG, is only an Advisory Group to the **Reservoir Task Force**.

A Vision for our Reservoir Fisheries

The driest state in the driest continent – how many times have you heard that statement! Well, wouldn't it be great for South Australia to be recognised as providing some of the best freshwater fishing in Australia. It can happen and here's our plan for achieving it!

Beauty, diversity and safe, easy access are the three key ingredients that will make our reservoirs special places to go fishing. Combine this with our wonderful wine, beer & food, rich heritage and brilliant weather and we have the recipe for achieving amazing success.

We have a great opportunity to build a sustainable and vibrant recreational fishery which will deliver broad social and economic benefits by providing a suite of diverse fishing opportunities that recognise and respect other users of the resource.

Objectives

- 1. Establish recreational fishing in all reservoirs and other government managed waterbodies**
- 2. Create a diversity of fishing experiences in reservoirs for native fish species and trout**
- 3. Identify projects that complement the development of recreational fishing in reservoirs including the establishment of a reservoir fishing trail**
- 4. Establish infrastructure and access requirements for recreational fishing at all reservoirs**
- 5. Encourage business development based on recreational fishing in reservoirs**
- 6. Encourage city-based fishers and tourism fishers to visit regional recreational fishing destinations**
- 7. Encourage community involvement and custodianship of reservoir fisheries**
- 8. Work in harmony with other recreational users of reservoirs to create outdoor environments which everyone can enjoy**

South Australia; A World Class Fishing Location

Recreational fishing is the largest recreation in the world and in Australia over 5 million people wet a line each year. Recreational fishers are renowned for travelling the globe in search of new and exciting fishing experiences and South Australia has the opportunity to attract greater numbers of fishers by providing diverse and high-quality fishing opportunities.

SA already has some great fishing destinations such as the West Coast, Yorke Peninsula, River Murray and Kangaroo Island and now we have the opportunity to be recognised for our great reservoir fisheries.

Planning the development of recreational fishing in our reservoirs can only be done by ensuring that recreational fishers are involved in the process. This is why RecFish SA have produced this Concept Plan; so that the government can understand what us recco's want for our reservoir fisheries!

One of the great advantages that SA has is that many of our reservoirs are conveniently located close to Adelaide and are easily accessible. Not only can the million residents of Adelaide jump in the car and head for the reservoirs, so can visitors to our state who can be fishing within a couple of hours of landing at Adelaide Airport. This opens the door to a myriad of experiences for residents and visitors alike who can enjoy a mornings fishing followed by a visit to a local winery or restaurant and still be home to watch the footy in the afternoon! No other major city in Australia can offer this experience.

Nature-based tourism is becoming increasingly popular and opening up our reservoirs will enable tourism operators to service this market by providing tours, recreational services and educating people about our unique environment. The reservoirs will provide a much-needed economic boost for regional communities and opening them will also mean that over a million South Australian's who will be only a short drive away from enjoying these beautiful destinations. Driving more tourists into our regions will have enormous spin off benefits for a range of businesses, whether it be for the cellar door operators in the McLaren Vale and Barossa Valley, local restaurants and cafes or any other tourism operator.

Fishing Experiences

Blue Ribbon Trout Fishing

Myponga, Millbrook

Trout are the most popular freshwater fishing species in the world and Australia has some great locations to fish for them which attract thousands of anglers each year from overseas. SA is not widely known for the quality of its trout fishing but developing Blue Ribbon Trout Fisheries in selected reservoirs can change this.

Myponga and Millbrook Reservoirs are ideal locations for developing Blue Ribbon trout fisheries which will attract anglers from near and far. These reservoirs feature broad shallow expanses that trout love and which offer some of the most exciting fishing available. Sight casting to a large Brown trout cruising the productive shallows of Myponga Reservoir on a warm spring morning, is the type of experience that keen fishers will travel a long way for and which can be achieved with some thoughtful planning and the help of the community.

In 2006, a stage of the Australian Flyfishing Championships was held at Bundaleer Reservoir and attracted fishers from all over Australia. Since then South Australia has not hosted any further stages of the championships due to the lack of suitable venues. Developing both Myponga and Millbrook reservoirs will once again put SA in the national spotlight and encourage the staging of events such as the Australian Flyfishing Championships.

Establishing Blue Ribbon Trout Fisheries in Myponga and Millbrook Reservoirs will necessitate the commitment of government to achieve something special. This means establishing a suitable policy for introducing trout into these waterways and financial resources to produce and stock the baby fish. Recreational fishers who see the benefit of establishing such fisheries are very willing to pitch in and get their hands dirty, so mobilising on-ground action for trout stocking will come very readily.

Managing Blue Ribbon Trout fisheries also means introducing sensible regulations that will support their development. Blue Ribbon Trout fisheries are places where big trout are common because they have been managed correctly and have been allowed to grow to their full potential. This means catch and release fishing is the fundamental principle for management.

But Blue-Ribbon trout fisheries do not mean that other fishing experiences aren't available. As is the case with most of our reservoirs,

Redfin are abundant in Myponga and Millbrook and provide a great resource for recreational fishers. Redfin are an introduced noxious species and cannot be returned to the water but they're also a popular little sportfish that taste great and offer the chance for anglers to take home a "feed of fish" and baby Redfin are an ideal food source for large hungry trout.



Site fishing for large trout is on the bucket list for many anglers

Trophy Fishing for Natives

Mt Bold, South Para, Beetaloo, Baroota, Barossa,

Over the past 20 years impoundment fishing for trophy sized native fish has become the fastest growing recreational fishery in Australia and has spawned a whole suite of new fishing and business opportunities for regional communities. Each year, hundreds of reservoirs and impoundments in the eastern states are stocked with millions of native fish such as Murray cod, Golden perch, Australian bass and even Barramundi to support a booming recreational fishery which injects hundreds of millions of dollars into regional economies annually. SA has the chance to cash in on this boom by creating Trophy Native Fisheries in South Para, Mt Bold, Barossa, Beetaloo and Baroota Reservoirs.



These reservoirs are ideal for developing trophy fisheries because they are mainly difficult to access by foot, are relatively large and provide great opportunities for water-based fishing activities. They also are the reservoirs which exhibit the most “Australian” environments and therefore fit the scene of fishing for large native fish. Many of these reservoirs contain reasonable amounts of underwater structure that is so necessary for native fish to thrive, but a program of habitat improvement will really bring these fisheries to life.

Family Fisheries

Hope Valley, Happy Valley, Bundaleer, Tod, Warren

But what if you don't want to chase trout or trophy sized native fish and would prefer to spend a few hours with the family at a local reservoir? Well we've got something for you as well!

Hope Valley, Happy Valley, Tod, Thorndon Park and Warren Reservoirs are safe and easily accessible waterways where families can go and throw a line and still expect to bring home a few fish for the table. Hope Valley, Happy Valley and Thorndon Park are ideally located within metropolitan Adelaide meaning that family fishers can cast a line without having to travel too far. Tod is not far from Pt Lincoln while Warren Reservoir is an easy 30-minute drive from northern Adelaide and is already a hugely popular fishing destination for families and school groups looking to have a great day out.



Creating family fisheries means investing in enough infrastructure and facilities to cater for all age groups and capabilities and also other recreational facilities such as BBQ's, walkways, jetties, picnic benches and other amenities which will contribute to the family experience.

Sustaining Family Fisheries also means ensuring that fish stocks are managed closely and are kept at levels which encourage recreational fishing participation. Most commonly, this is done by creating a Put and Take fishery where catchable sized fish are stocked regularly so that there is always something on offer for the angler. Rainbow trout and Silver perch are an ideal species for put and take fisheries as they can be produced cheaply and grow fast. These reservoirs are also the home of the ubiquitous (but noxious) Redfin perch which also offer a great source of fishing enjoyment.

Mixed Fisheries

Little Para, Middle River, Kangaroo Creek

Some fisheries lend themselves to the development of mixed fisheries where various fish species can co-exist to provide an exciting and diverse fishing experience for anglers. Mixed fisheries are very popular with anglers wishing to pursue a range of fish species using a variety of techniques and provide the added excitement for anglers of not really knowing what will take your bait next.

Planning for Success

Working with other Users

For over 40 years, RecFish SA has led the drive to open up our reservoirs and we will continue to play a critical role in developing them, but we want others to enjoy these wonderful places as well! Our network of reservoirs are fantastic community assets that should be enjoyed by all South Australians and RecFish SA are keen to encourage opportunities for working with others in developing our reservoirs as top-quality recreational assets.

Access

Providing sufficient land based and on- water access to reservoirs is critical to achieving success. This means ensuring that anglers have access to suitable shorelines and fishing platforms for land-based fishing and launching facilities for on-water fishing activities.

Shore-based Access

Recreational fishers require access to adequate areas of shoreline in reservoirs to maximise the quality of the fishery. Providing large areas of shoreline mean that fishers are not confined to small overcrowded areas which detract from the recreational experience. Shoreline access should cater for all people whether they are physically impaired or a strong and fit and capable of traversing difficult terrain. It is this diversity of access that enhances the fishery and attracts all types of fishers.



Recreational fishers also need access to the areas where fish live. There's little point in creating a fishery with abundant fish stocks if they are inaccessible to anglers. Broad shallow areas with abundant aquatic vegetation are great fishing locations particularly for trout while deep holes and steep banks containing snags and other structure provide ideal locations for native fish to shelter and feed. Providing shore-based access to these areas is critical for a successful fishery.

On Water Access

While shore-based fishing provides the opportunity to fish many areas of a reservoir, accessing good fishing spots by water craft opens up a whole new type of fishing experience. The vast areas of water that are beyond the reach of shore-based anglers provide many exciting angling opportunities in the deeper water or less accessible parts of the reservoir for fishers using canoes, kayaks and small boats. Kayak fishing has boomed across Australia in recent years with many competitions and events dedicated solely to this activity and reservoirs provide a great opportunity to further grow this sector of recreational fishing even further.

On Water Priority Access

There are some reservoirs which due to the topography of the surrounding countryside and the lack of roads and other infrastructure are simply too difficult to provide safe large-scale shore-based fishing access and which should be developed as on-water priority access fisheries. Large reservoirs such as Mt Bold which features vast areas of inaccessible shoreline are prime candidates as on-water priority access reservoirs because the only way to practically access the waterbody is by water craft.

Because of their size some on-water priority access reservoirs offer access to the more remote parts of the waterbody which have the potential to provide amazing fishing experiences.



Stocking

Stocking water bodies with suitable fish species to create recreational fisheries has been practiced for well over a century in Australia and more broadly across the world.

Stocking usually involves the placement of large numbers of small fish into waterways where fish stocks are considered insufficient to sustain recreational fisheries. Stocking is practiced in rivers and lakes and is very effective in man-made water bodies such as reservoirs where suitable game fish species do not naturally occur.

South Australia's reservoirs are ideal locations to stock fish for the development of fisheries as they contain no natural game fish species. Many however, contain large populations of introduced species such as Redfin and European carp which successfully breed in these locations. Redfin are an active predator of small fish and have the potential to severely limit the success of stocking programs unless they are designed and implemented correctly.

RecFish SA have had considerable success in stocking native species and trout into three reservoirs in SA and with the support of their large network of members, have high level capability for managing large scale stocking programs.

The on-going stocking of reservoirs requires funding. In most other states of Australia, governments recognise the benefits of creating recreational fisheries through stocking programs and provide adequate funding for this purpose. Many state governments still operate large scale hatcheries to support stocking. In South Australia, this is not the case and all stocking programs undertaken in SA are financed and managed by recreational fishing community groups. Table 1 shows that over the past 3 years RecFish SA have stocked over 194,000 fish into reservoirs to support recreational fishing and 288,000 Murray cod into the River Murray but this pales in comparison with the many millions of fish stocked into SA waterways by the South Australian Fly Fishers Association over the past 60 years.

Recreational fishers want reservoirs stocked with suitable species and are willing to pay for it. In the past two years, RecFish SA have raised approximately \$75,000 from the sale of reservoir fishing access permits which will be spent on developing and stocking reservoir fisheries. These sales come from providing access to only 2 reservoirs, Warren and Bundaleer (Beetaloo is not yet ready to fish) and there is significant potential to raise substantial funds for reservoir fishery development through the sale of recreational fishing access permits.

Our reservoirs will only achieve their full potential as fisheries by implementing well designed and resourced stocking programs.

Table 2: Estimated annual stocking rates of preferred species for SA reservoirs

Estimated Annual Stocking Requirements for SA Reservoirs (5 years)										
	Area (ha)	Volume (GL)	Total Fish	Murray cod	Golden perch	Silver perch	Eel Tail Catfish	Australian bass	Rainbow trout	Brown trout
Myponga	280	27.6	80000						40000	40000
Millbrook	178	16.5	50000						25000	25000
Happy Valley	178	12.7	50000						50000	
Hope Valley	52	2.6	15000						15000	
Little Para	125	20.2	37500	5000	10000			10000	12500	
Middle River	11	0.54	3300					2000	1300	
Kangaroo Creek	103	18.4	30900	5000	5000			10000	10900	
Bundaleer	63	6.4	28000		10000				9000	9000
Warren	105	4.7	35000	5000	10000	5000	5000	10000		
Tod	134	11.3	10000		5000		5000			
Mt Bold	308	46.5	92500	20000	40000			32500		
South Para	400	44.4	120000	20000	60000			40000		
Barossa	62	4.4	18500	3500	5000			10000		
Baroota	63	6.1	18500	3500	5000			10000		
Beetaloo	33	3.2	11000	1000	5000			5000		
Total			602200	63000	155000	5000	10000	129500	163700	74000

Regulations

Reservoir fisheries are unique as they are man-made fisheries that generally do not support self-sustaining populations of target species. Also, they are not subject to commercial fishing pressure and can therefore be managed to primarily support recreational fishing objectives.

In developing reservoir fisheries at Warren, Beetaloo and Bundaleer reservoirs, RecFish SA consulted with recreational fishers to develop a simple suite of bag and size limit regulations that would allow recreational fishers to experience great fishing in the long term without overburdening reservoir fish stocks or the financial resources available to manage these fisheries. Catching and releasing fish is a very well-established method of sustaining fish stocks in recreational fisheries and is practiced widely in existing reservoirs.

RecFish SA believe that recreational fishers are best placed to determine the bag and size limit regulations that apply to each of the species and types of fisheries that are proposed.

Recreational Fishing Species
stocked by RecFish SA




Murray cod Catch and release


Golden perch (Callop) Bag Limit 2
Size Limit >33cm


Silver perch Bag Limit 2
Size Limit >33cm

 
Rainbow trout **Brown trout**
Bag Limit 2 Size Limit >28cm

Noxious Species
must not be returned to the water




Redfin


European carp

Table 3: Summary of proposed reservoir access and stocking options

Reservoir	Type	Area (ha)	Volume (GL)	Land based access	On-water access	Priority on-water access	Stocking
Myponga	Blue Ribbon Trout	280	27.6	✓	✓		✓
Millbrook	Blue Ribbon Trout	178	16.5	✓	✓		✓
Happy Valley	Family	178	12.7	✓	✓		✓
Hope Valley	Family	52	2.6	✓	✓		✓
Little Para	Mixed	125	20.2	✓	✓	✓	✓
Middle River	Mixed	11	0.54	✓	✓		✓
Kangaroo Creek	Mixed	103	18.4	✓	✓	✓	✓
Bundaleer	Family	63	6.4	✓	✓		✓
Warren	Family	105	4.7	✓	✓		✓
Tod	Family	134	11.3	✓	✓		✓
Mt Bold	Trophy Native	308	46.5	✓	✓	✓	✓
South Para	Trophy Native	400	44.4	✓	✓		✓
Barossa	Trophy Native	62	4.4	✓	✓	✓	✓
Baroota	Trophy Native	63	6.1	✓	✓		✓
Beetaloo	Trophy Native	33	3.2	✓	✓	✓	✓

