



ACT
Government

Australian Capital Territory Fisheries Management Plan:

Fish Stocking 2022–2027



Yuma

***Dhawura Nguna Dhawura Ngunnawal
Ngunnawalwari dhawurawari
Nginggada Dindi yindumaralidjinyin
Dhawura Ngunnawal yindumaralidjinyin***

Hello

***This is Ngunnawal Country
We always respect Elders, male and female
We always respect Ngunnawal Country***

We acknowledge the Ngunnawal people as traditional custodians and recognise any other people or families with connection to the lands of the ACT and region. We acknowledge and respect their continuing culture and the contribution they make to the life of this city and this region.

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Contents

1. Rationale for a Fish Stocking Plan	1
2. Legislative Framework for Planning and Management of Water Resources	3
2.1 Planning and Management of Water Resources.....	3
2.2 Threatened Species.....	4
2.3 Water Use and the Territory Plan.....	4
3. What are the Angling Fish Species?	4
4. Who Manages Fish Resources?.....	5
5. Current Fisheries Management	6
5.1 The Urban Lakes.....	6
5.2 The Natural Streams	8
5.3 Water Supply Reservoirs.....	9
5.4 Other Introduced Species	9
5.5 Fish Stocking in Private Waters.....	9
5.6 Stocking for Conservation Purposes	9
5.7 Stocking for Research Purposes.....	10
5.8 Cultural Releases	10
5.9 Non-government and Illegal Stocking	10
5.10 Funding for Fish Stocking.....	11
6. Guiding Principles for Fish Stocking	11
6.1 Urban lakes	11
6.2 Googong Reservoir.....	11
6.3 Natural streams and water supply reservoirs	11
6.4 Fish stocked for conservation purposes	12
6.5 Fish stocked for recreational purposes	12
6.6 Fish stocked for research purposes	12
6.7 Fish stocked for cultural purposes	12
7. The Proposed Fish Stocking Program For Urban Lakes	13
7.1 Species and Numbers to be Stocked.....	13
7.2 Source of Fish to be Stocked.....	13
7.3 Size of Fish Stocked.....	14
7.4 Timing of Stockings.....	14
8. References	15



1. Rationale for a Fish Stocking Plan

Native fish have cultural significance to the Ngunnawal and traditional custodians of the ACT region. The ACT Government and the Ngunnawal community are developing a Ngunnawal Cultural Resource Management Plan (CRMP) to guide access to and collection of Ngunnawal cultural resources, including fish and other aquatic species. Objectives developed under the CRMP may influence stocking of fish for cultural purposes in the future.

Native freshwater fish have declined in distribution and abundance in south-eastern Australia since the time of European settlement. Many factors have contributed to this decline including habitat degradation, introduction of exotic species, overfishing and disruption to natural water delivery.

The names for fish are discussed through the Plan with the common name, the Ngunnawal name in italics courtesy of the Winnagay Ngunnawal Language Group, followed by the scientific name italicised in brackets when the species is first referred to.

In the ACT, surveys carried out by the ACT Government have shown that Trout Cod *Gudu* (*Maccullochella macquariensis*), Murray Cod *Mangi* (*Maccullochella peelii*), Macquarie Perch *Gubay* (*Macquaria australasica*) and Silver Perch *Dhingur* (*Bidyanus bidyanus*) are now either significantly less common in the ACT section of the Murrumbidgee River than they were 40 years ago or no longer occur. Both Trout Cod *Gudu* and Silver Perch *Dhingur* have become extinct in the ACT and are listed threatened species under both the Commonwealth [Environment Protection and Biodiversity Conservation \(EPBC\) Act 1999](#) and the [ACT Nature Conservation Act 2014](#).

Canberra is the largest inland city in Australia and residents are only a few minutes from the Murrumbidgee River, other major streams and urban lakes. Urban expansion encroaches upon these rivers and streams. Fish populations in these waters have been affected by a combination of factors including:

- a rise in the number of anglers as Canberra's population has grown
- increased efficiency of angling practices, as modern technology has improved rods, reels and lures
- habitat modification associated with the impact of urban development in the catchments of rivers and lakes
- the introduction of pest fish and diseases.

The stocking of recreational fish species in Canberra's urban lakes aids in the conservation of native species by relieving fishing pressure on the more fragile rivers and streams in the ACT. Stocking lakes with certain fish species also helps to establish a balanced ecosystem in waters where fish may have been depleted artificially or (in the case of new development lakes) were not present. For example, heavy metals leaching from the Captains Flat mine killed all the Murray Cod *Mangi* which previously inhabited the Molonglo River. Consequently, when Lake Burley Griffin was formed in 1964 there were no large predatory fish species remaining. Stocking of Murray Cod *Mangi* has restored the fishery in the lake to a more balanced state by providing a predator for other fish species. Stocked fish may also help in the control of nuisance species such as mosquitoes and leeches.

The developing needs of fisheries management and changes in community expectations and attitudes are reflected in *Recreational Fishing in Australia – 2011 and Beyond: A National Industry Development Strategy* (Fisheries Research and Development Corporation), which has the vision that 'All Australians have the opportunity to enjoy the benefits of a sustainable, healthy and diverse recreational fishing experience.' The National Recreational Fishing Survey currently in progress will inform fisheries managers if the strategy needs revision.

The increase in fishing pressure combined with declining fish populations means that better fisheries management is required to ensure future generations of anglers will have viable fishing opportunities. This Australian Capital Territory Fisheries Management Plan: Fish Stocking 2022-2027, sets out a key aspect of the approach to recreational fisheries management in the ACT. It provides a schedule of species to be stocked in each of the relevant water bodies as a planning tool for fisheries managers and suppliers.



Figure 1. Stocking of Golden Perch fingerlings into Lake Tuggeranong

2. Legislative Framework for Planning and Management of Water Resources

2.1 Planning and Management of Water Resources

Planning and management of water resources in the ACT is controlled by both Commonwealth and ACT legislation. The overarching Commonwealth legislation is the [Australian Capital Territory \(Planning and Land Management\) Act 1988](#) which, through the National Capital Plan, sets the broad framework for land use within the Territory. The Commonwealth is directly responsible for planning and management of land within the Central National Area, including Lake Burley Griffin, through the National Capital Authority. The ACT Government is responsible for water abstraction licencing from Lake Burley Griffin.

For most of the ACT, including rivers and urban lakes, responsibility for planning and management of water resources resides with the ACT Government. Broad legislative responsibilities are stated in the [Planning and Development Act 2007](#) and the Territory Plan. The Act requires that management plans be prepared for all 'Public Land' areas, which include the urban lakes, most urban streams and the Molonglo, Murrumbidgee and Cotter rivers. The [Canberra Urban Lakes and ponds Land Management Plan](#) presents a framework to guide the management of Canberra's urban waterbodies. Recreational activities and supportive management appropriate to the water bodies under ACT Government management are described in the Plan and includes recreational fishing (ACT Government 2022)

The lower part of the Cotter Catchment, formerly under pine plantation, is now included in the Public Land area under the land use category 'protection of water supply'. Other relevant legislation and policy includes the [Water Resources Act 2007](#), the [ACT Environmental Flow Guidelines 2019](#) and the [ACT Water Strategy 2014–44: Striking the Balance](#).

Under the Nature Conservation Act the ACT Government also has responsibilities to protect the biological resources of lakes and streams in the Territory. While the Act does not apply to fisheries generally, it does protect threatened native fish species. The local fish species currently protected under the Act are Trout Cod *Gudu*, Silver Perch *Dhingur*, Macquarie Perch *Gubay*, Two-spined Blackfish *Wagar* and Murray River Crayfish *Murunung*.

Murray Cod *Mangi* are listed as threatened under the Commonwealth [Environment Protection and Biodiversity Conservation Act 1999](#) (EPBC Act). In the ACT they are not listed as threatened but do have special protection status because of the EPBC listing. Recreational fishing and take of Murray Cod *Mangi* in the ACT is permitted under the [ACT Fisheries Act 2000](#). Management of Murray Cod *Mangi* in the ACT as a recreational angling species is outlined in the [Murray Cod Conservation Plan 2017](#).

This document is a Fisheries Management Plan under the [Fisheries Act 2000](#). The Act is regularly updated to reflect changes in understanding of fish management and to incorporate zoning changes. This legislation enhanced protection for native fish species. Additional measures were added to improve protection of key habitats such as snags, improve sustainability of wild fish populations and prohibit the use of opera house nets. The Act provides for the development of a Fisheries Management Plan detailing how fish and fisheries may be appropriately managed and includes stocking fish into waters. This Plan will be reviewed in June 2027.

2.2 Threatened Species

The [ACT Aquatic and Riparian Conservation Strategy](#) was published in 2018. The central focus of the strategy is on biodiversity and habitat conservation for rivers and riparian zones, with consideration of water resource management and recreation (especially recreational fishing) because of their importance in relation to habitat and threatened species conservation. The strategy contains action plans for species that are declared threatened under the Nature Conservation Act.

2.3 Water Use and the Territory Plan

The [ACT Territory Plan Water Use and Catchment General Code \(2009\)](#) waters of the ACT into three primary water uses: conservation, water supply, and drainage and open space. Within each of these categories, secondary uses are allowed provided they are generally compatible with the primary use. Such secondary uses or values include recreation (fishing, boating, swimming), aquatic habitat, irrigation, stock water supply and stormwater discharge.

The Water Use and Catchment General Code (2009) identifies the primary use of the lakes and majority of streams in the urban area as drainage and open space, with recreation (including fishing) and aquatic habitat identified as secondary uses or values. The majority of the non-urban rivers and streams have conservation as their primary water use with secondary uses and values including recreation, aquatic habitat and stormwater discharge. When evaluating the potential water usage of a particular location, the potential downstream impacts of activities must also be considered. For example, fish stocked into urban lakes may be washed downstream and end up in the Murrumbidgee River, which has a different primary water use to the urban lakes. The Cotter River system is identified as water supply catchment with conservation, waterscape and controlled recreation as secondary uses or values.

3. What are the Angling Fish Species?

Only a relatively small number of fish species are sought by anglers in the ACT. This low number is mainly due to the relatively high altitude of the ACT and its inland location, rather than being a coastal drainage system. Consequently, no naturally occurring fish species are present that require access to the sea during their life cycle (for example, Australian Bass (*Macquaria novemaculeata*) or eels).

Four species indigenous to the ACT have substantially declined in abundance in the last 15–20 years and some are now very rare or extinct in the ACT. These species are Trout Cod *Gudu*, Macquarie Perch *Gubay*, Silver Perch *Dhingur* and Murray River Crayfish *Murunung*. These species are totally protected in the ACT and may not be targeted or kept by anglers.

Three of these species (Trout Cod *Gudu*, Macquarie Perch *Gubay* and Silver Perch *Dhingur*) are classified as nationally threatened. Of this group, only Silver Perch *Dhingur* are currently hatchery bred in significant numbers for recreational fishing purposes, usually in impoundments. Substantial numbers of Silver Perch *Dhingur* were released in Lake Burley Griffin and Lake Ginninderra in the late 1970s and early 1980s but few were caught by anglers. However, stocking of Silver Perch *Dhingur* in Googong Reservoir by the NSW Government has proven successful.

The mainstays of recreational fishing in the streams and lakes of the ACT are the native species, Murray Cod *Mangi* and Golden Perch, and the introduced species, Brown Trout (*Salmo trutta*) and Rainbow Trout (*Oncorhynchus mykiss*). Two other introduced species also sought after by some sectors of the angling community are Redfin (*Perca fluviatilis*) (or European Perch) and Carp (*Cyprinus carpio*).

Early experimental releases of two additional fish species, the native Freshwater Catfish (*Tandanus tandanus*) and the introduced Brook Trout (*Salvelinus fontinalis*), were unsuccessful and have not been continued.

4. Who Manages Fish Resources?

The Office of Nature Conservation (ONC) within the Environment Planning and Sustainable Development Directorate (EPSDD) manages fish stocks in the ACT for the ACT Government and conducts regular monitoring of the recreational fish stocks in Canberra's urban lakes (Lake Ginninderra, Lake Tuggeranong, Yerrabi Pond and Gungahlin Pond).

Formal responsibility for management of the Lake Burley Griffin fish population lies with the National Capital Authority (NCA), with ONC funded by the NCA to stock and monitor the fishery and provide advice for its management.

The fish population in Googong Reservoir is managed by the NSW Department of Primary Industries, Fisheries and Aquaculture Branch (NSW DPI) in conjunction with the ACT Government. The fishery is managed under the provisions of NSW legislation, in particular the [Fisheries Management Act 1994](#). In the 2019/20 stocking year, NSW DPI stocked 20,000 Murray Cod *Mangi*, 30,000 Golden Perch, 20,000 Silver Perch *Dhingur* and 1,000 Rainbow Trout into Googong Dam.

ONC also undertakes fisheries research in the ACT and has a program to investigate the distribution and abundance of fish species in the Territory.¹

The ACT Government has produced a series of signs and illustrated pamphlets to help anglers identify and release accidentally caught threatened fish. The signs have been erected at popular fishing locations on the Murrumbidgee and Cotter rivers. The pamphlet is available in seven languages from tackle shops, ACT Government shopfronts and the ACT Government website, <https://www.environment.act.gov.au/nature-conservation/fish/recreational-fishing-in-the-act>.

¹ Further information on the recreational stocking and monitoring can be found at <https://www.environment.act.gov.au/nature-conservation/fish>.



Figure 2. ACT Government research staff monitoring urban lakes fish populations

5. Current Fisheries Management

5.1 The Urban Lakes

Lake Burley Griffin on the Molonglo River floodplain is the centrepiece of Walter Burley Griffin's plan for the national capital. Subsequent outlying town centre and residential development included lakes and ponds that have integrated a water quality control purpose aimed at protecting ACT streams from the impacts of urban development. Some of these lakes and ponds are on streams too small to support fisheries.

Many fish species, particularly native species, do not have the necessary environmental conditions in urban lakes for successful breeding (for example, flowing water, suitable habitat) and so populations must be maintained by regular stocking. Consequently, the existing fisheries in Canberra lakes have been created artificially by stocking a variety of native and introduced species with the aim of providing a mixed recreational fishery that is easily accessible to most Canberrans.

Smaller ponds are designed for sediment retention purposes and are generally not stocked with fish. Consideration may be given to establishing a native fish population in newer large ponds. Coombs Ponds was stocked in 2018.

Upper Stranger and Isabella Ponds have been stocked with native fish since 2018 to help restore the aquatic ecosystem and for mosquito control after the ponds were drained and Carp removed.

The ACT Government stocks approximately 50,000 fish each year in Canberra lakes. More than 600,000 fish have been stocked in the last 10 years (Table 1).

Table 1. Species and number of fish stocked into Canberra lakes between 2020 and 2022

Year	Lake	Murray Cod	Golden Perch	TOTAL
2021/22	Lake Ginninderra	17,000		64,000
	Isabella/Upper Stranger/Fadden	1,000	4,000	
	Lake Burley Griffin	14,000		
	Lake Tuggeranong		13,000	
	Gungahlin Pond		8,000	
	Yerrabi Pond		7,000	
2020/21	Lake Burley Griffin		22,222	52,055
	Lake Ginninderra	25,000		
	Isabella/Upper Stranger/Fadden	1,500	3,333	
2019/20	Lake Tuggeranong		19,250	66,894
	Isabella/Upper Stranger/Fadden		8,250	
	Yerrabi Pond	6,667		
	Gungahlin Pond	6,667		
	Lake Burley Griffin	22,727		
	Isabella/Upper Stranger/Fadden	3,333		
2018/19	Yerrabi Pond		3,000	59,017
	Gungahlin Pond		3,000	
	Lake Ginninderra		15,545	
	Lake Burley Griffin		27,272	
	Lake Tuggeranong	5,000		
	Isabella/Upper Stranger/Fadden	2,000	3,200	
2017/18	Isabella/Upper Stranger/Fadden	1,000	1,000	42,223
	Lake Ginninderra	21,310		
	Lake Burley Griffin	18,413		
	Coombs Ponds (x4)		500	
2016/17	Lake Burley Griffin	30,610		62,845
	Yerrabi Pond	8,163		
	Gungahlin Pond	8,163		
	Lake Tuggeranong		15,909	
2015/16	Lake Tuggeranong	13,000		106,210
	Lake Ginninderra		25,000	
	Yerrabi Pond		7,000	
	Gungahlin Pond		5,000	
	Point Hut Pond		4,000	
	W. Belconnen Pond		4,000	
	Lake Burley Griffin		48,210	
2014/15	Lake Burley Griffin	29,000		68,000
	Lake Ginninderra	39,000		

Year	Lake	Murray Cod	Golden Perch	TOTAL
2013/14	Gungahlin Pond		20,636*	50,366
	Yerrabi Pond	11,000*		
	Lake Tuggeranong	18,730*		
2012/13	Lake Ginninderra		31,533*	106,880
	Lake Tuggeranong		12,000	
	Yerrabi Pond		6,500	
	Lake Burley Griffin		44,067*	
	Point Hut Pond		3,390#	
	W. Belconnen Pond		3,390#	
	Gungahlin Pond	6,000		
2011/12	Point Hut Pond		4,523#	55,628
	W. Belconnen Pond		4,000#	
	Lake Ginninderra	10,000		
	Lake Burley Griffin	37,105*		
Total		356,388	377,730	734,118

* Partially funded by Canberra Fisherman's Club

Fully funded by Canberra Fisherman's Club

Following the establishment of Lake Burley Griffin in 1964, the emphasis was on the introduced species Rainbow Trout and Brown Trout. However, it was evident by the mid-1980s that the trout in the urban lakes and in nearby rivers showed poor survival and growth rates. As native fish became commercially available, the emphasis on stocking of trout stopped and switched to native species instead. Declines are likely from reductions in water quality, decline of lake biotic production post filling, presence of pest species and increasing lake water temperatures.

Rainbow Trout are still stocked in Googong Reservoir by NSW DPI and are present as naturally reproducing populations in some of the smaller streams and rivers in the ACT.

5.2 The Natural Streams

Fish stocking is not undertaken in natural streams in the ACT. The fish populations in the natural streams are the remains of native fish populations that existed at the time of European settlement. Some stocking of introduced species was carried out by acclimatisation societies and individuals in the latter part of the 1800s and early 1900s but stocking of streams is no longer practised in the ACT except in special circumstances (for example, a release or relocation of a threatened species for conservation purposes). The main reasons stream stocking is not undertaken:

- Most of the native fish species sought by anglers in the ACT are migratory and able to move long distances. These migratory life cycles make it extremely unlikely that stocked fish will remain where they are released, so no local improvement in fishing is likely.
- The ACT has only limited funds for fish stocking. Funds are prioritised to areas where there is the greatest opportunity for Canberra anglers to go fishing—the urban lakes.
- Fish species may become uncommon or decline, which may be an indication of problems in that river that require attention. Stocking is known to be ineffective and, in many cases, detrimental to natural fish populations as it can interfere with local adaptations and oversupply a life stage that can't be supported by the ecosystem. Also, the stocking of artificially bred fish into rivers, if successful, may mask the true conservation status of our native fish populations and destroy an important measure of whether our river management is adequate or not.

→ Some rivers in the ACT support remnant populations of threatened fish species such as Macquarie Perch *Gubay*, Murray Cod *Mangi*, Two-spined Blackfish *Wagar* and Murray River Crayfish *Murunung*. These species are threatened because of loss of suitable habitat or competition from and predation by introduced fish species. The release of large numbers of stocked fish could impose further competition and stress on these threatened species.

5.3 Water Supply Reservoirs

The three water supply reservoirs located on the Cotter River in or adjacent to Namadgi National Park (Cotter, Bendora and Corin reservoirs) are not stocked. The water supply reservoirs are managed for water supply and to maintain good water quality. These reservoirs are also fish conservation zones within Namadgi National Park and fishing is prohibited. These waters contain populations of three threatened fish species: Macquarie Perch *Gubay*, Trout Cod *Gudu* and Two-spined Blackfish *Wagar*.

5.4 Other Introduced Species

Two major undesirable exotic species, Carp and Redfin, have become established in ACT waters in the last 25 years. Neither Carp nor Redfin are stocked in the ACT but many anglers actively fish for them. There are no bag limits or seasonal closures to fish for these species. Moving of these species between waterways is illegal.

5.5 Fish Stocking in Private Waters

The Fisheries Act requires a licence for importation of fish into the ACT and to release fish into public or private waters of the ACT. Landholders who wish to stock their farm dams must apply for a licence, free of charge, and can obtain advice from EPSDD.

NSW DPI has a Hatchery Quality Assurance Scheme (HQAS) (see s. 7.3 below). Licences for private stocking in the ACT require that fish be purchased from accredited private hatcheries under the NSW HQAS.

5.6 Stocking for Conservation Purposes

Occasionally a threatened fish species may be stocked or translocated into a stream, river or impoundment as part of a conservation action. Macquarie Perch *Gubay* have been introduced into the Cotter River from Cataract Reservoir to improve the genetic diversity of the Cotter population so it is more resilient to threats such as climate change. A population of the endangered Trout Cod *Gudu* was stocked into the Murrumbidgee and Cotter catchments between 1990 and 2007 as part of a regional effort to re-establish the species, which had become extinct in the Murrumbidgee Catchment.

Translocations in the ACT (including stocking) of threatened fish listed under the Nature Conservation Act require approval from the Conservator of Flora and Fauna, as outlined in the Conservator Guidelines for the Translocation of Native Flora and Fauna in the ACT.² Other conservation stockings should also follow these guidelines and require approval of the Conservator under the Fisheries Act.

² These guidelines and the approval process can be found at

<https://www.environment.act.gov.au/nature-conservation/conservator-of-flora-and-fauna/translocation-of-native-flora-and-fauna-in-the-act>

5.7 Stocking for Research Purposes

Occasionally, a research project may require an experimental stocking of fish. Examples could include the stocking of a farm dam to establish a population of known age fish, or stocking to examine the suitability of water quality for sustaining aquatic life. Such stockings may not satisfy guidelines for recreational or conservation-oriented fish releases so special consideration is required for each proposal of this type.

5.8 Cultural Releases

The practice of releasing captive-reared fish into the wild for religious or other cultural reasons has become more common in the ACT in recent years. Cultural and life releases (sometimes called karma releases) have the potential to have serious impacts on native aquatic species from the spread of introduced species and pathogens. The ACT Government welcomes Traditional Custodian and other cultural releases of fish if it occurs within the guidelines set out in this document. The release of live fish into ACT waters outside of these guidelines is illegal and may be counterproductive to the intention of the release. If an inappropriate species is chosen for the release it may soon die due to unsuitable habitat conditions or its inability to obtain food for itself. Golden Perch and Murray Cod *Mangi* are the species most suited to cultural release and permits in keeping with this policy can be applied for.

5.9 Non-government and Illegal Stocking

Monitoring of Canberra's urban lakes regularly detects the presence of species that are not endemic to local waterways and have not been stocked as part of the ACT Government's fish stocking program. Recreational anglers also report non-endemic captures. These fish are usually the result of illegal stocking, translocation or intentional or inadvertent release of fish; the presence of these species poses a major risk to the ACT's fisheries and environment.

Illegal stockings are discouraged due to the biosecurity risk and the possibility of competition with local species. It is acknowledged, however, that some stocking events outside of the ACT Government program may be permissible where there will be no likely negative impact on existing fish populations, amenity or the environment. Proponents of these stocking events should apply for permission through the ACT Government [Licensing and Compliance](#). Stocking into public or private waters without a permit is prohibited.

Approval for non-government stocking will be granted on consideration of the principles in this policy (Section 6):

- Species
- Reason for stocking
- Source of fish
- Biosecurity risk
- Suitability of waterway
- Benefit to anglers/environment
- Stocked by individual or organisation

5.10 Funding for Fish Stocking

The ACT Government provides funding for the stocking of a select number of Canberra urban lakes and the National Capital Authority funds stocking of Lake Burley Griffin. This expenditure is often supplemented with funding from ACT recreational fishing organisations. In recent years the Canberra Fisherman's Club has provided a regular financial contribution to the stocking program through fundraising efforts including raffles and Carp fishing competitions. These contributions have either increased the number of fish stocked as part of the ACT Government's stocking program or provided additional stocking into the smaller waterbodies of West Belconnen and Point Hut ponds.

NSW DPI provides the fish for Googong Reservoir as part of their program of stocking NSW waterbodies for recreational angling.

6. Guiding Principles for Fish Stocking

The following principles will guide any decision by the ACT Government to stock or grant approval for another party to stock fish in ACT public waters:

6.1 Urban lakes

- I. Fish may be stocked for conservation, recreation and research purposes.
- II. Only native fish indigenous to the ACT region may be stocked for recreational purposes.

6.2 Googong Reservoir

Stocking will be managed and authorised by NSW DPI.

- I. Indigenous and non-indigenous species can be stocked for recreational purposes in the Googong Reservoir.
- II. Silver Perch *Dhingur* stocked into Googong Reservoir are to be sourced from a NSW DPI hatchery (see s. 7.2 below).
- III. Rainbow Trout can be stocked in Googong Reservoir.

6.3 Natural streams and water supply reservoirs

- I. Fish may be stocked for conservation and research purposes.
- II. Only native fish indigenous to the ACT region may be stocked.

6.4 Fish stocked for conservation purposes

- I. All conservation fish stockings must follow the [Conservator Guidelines for the Translocation of Native Flora and Fauna in the ACT](#). Native fish may be stocked for conservation purposes where:
 - a. there is an approved translocation proposal
 - b. there is a need to maintain or enhance the conservation status of a species
 - c. stocking will not put at risk the ACT conservation status of other fish or native species and
 - d. there is a reasonable expectation the fish will survive.

6.5 Fish stocked for recreational purposes

- I. Fish may be stocked for recreational purposes where:
 - a. the water to be stocked is categorised as a 'public water' and 'urban lake' that is open to recreational fishing
 - b. stocking will not put at risk the ACT conservation status of native fish or other native species
 - c. there is a reasonable expectation there is suitable and sufficient habitat and water quality available for survival and growth and
 - d. the level of natural recruitment is insufficient to support a fishery.

6.6 Fish stocked for research purposes

- I. Research fish stockings should follow the Conservator Guidelines for the Translocation of Native Flora and Fauna in the ACT, where applicable. Fish may be stocked for research purposes where:
 - a. stocking will not put at risk the ACT conservation status of other native fish or other native species and the stocking is part of a recognised research program
 - b. the project and applicants have appropriate approvals including, but not limited to, animal ethics, Fisheries and/or Nature Conservation Act permits.

6.7 Fish stocked for cultural purposes

- I. Fish may be stocked for the purpose of cultural or life release where:
 - a. a free permit is obtained from the ACT Government
 - b. local native species are released
 - c. the fish are obtained from accredited suppliers and
 - d. the fish are released into approved waterbodies.

7. The Proposed Fish Stocking Program For Urban Lakes

7.1 Species and Numbers to be Stocked

Two native fish species, Murray Cod *Mangi* and Golden Perch, are considered to be suitable for stocking in Canberra's urban lakes.

At Googong Reservoir, Silver Perch *Dhingur* is considered suitable for stocking in addition to these species. Silver Perch *Dhingur* is listed as a vulnerable threatened species in NSW under the NSW Fisheries Management Act. The NSW Species Impact Statement: Impact of Recreational Fishing for Stocked Silver Perch *Dhingur* led to a Ministerial Order allowing recreational fishing to continue in certain specified stocked impoundments including Googong Reservoir. This was on the grounds that the potential impact on wild populations from recreational fishing in these stocked impoundments would be negligible.

The ACT Government will maintain a program of stocking native species indigenous to the Canberra region on a rolling 2-year rotation, with a single species stocked each year into each water body; that is, each species is stocked every second year.

The number of fish stocked in each water body is dependent on several factors including the species to be stocked, the size of the water body, monitoring of survival and previous success of stocking. The results of the regular monitoring of fish populations in Canberra lakes will also be used to guide stocking intensity. Budgetary factors will also affect the numbers of fish stocked.

7.2 Source of Fish to be Stocked

The ACT Government does not have facilities or the expertise to carry out fish breeding and rearing. It is not cost effective for the ACT to develop such facilities or expertise given the relatively small numbers of fish required and the proximity of commercial fish farms. The ACT Government will continue to purchase fish from commercial fish suppliers.

Fish will be purchased on a competitive tender basis with several factors considered when choosing suppliers. Such factors include hatchery accreditation under the NSW Hatchery Quality Assurance Scheme (see below), cost of supply and delivery, disease history of the supply establishment, facilities for transporting fish, previous reliability in supplying fish, and size and quality of fish supplied.

NSW DPI has a [Hatchery Quality Assurance Scheme \(HQAS\)](#) aimed at ensuring all fish stocked within NSW waters comply with the statutory environmental, genetic and health requirements set out in the [NSW Fisheries Management Strategy](#). Given ACT waters are connected to those in NSW, it is appropriate that the ACT Government also source fish from hatcheries accredited under the NSW HQAS and stock fish from the relevant Golden Perch and Murray Cod *Mangi* genetic zones.

Googong Reservoir is a specified impoundment that can be stocked with Silver Perch *Dhingur* that are produced at NSW DPI hatcheries only. Under the NSW HQAS, private hatcheries are not allowed to stock Silver Perch *Dhingur* into any public waters in NSW given almost all Silver Perch *Dhingur* produced at private hatcheries are produced for aquaculture purposes and may be second or third generation hatchery fish rather than produced from wild brood stock.

7.3 Size of Fish Stocked

Native fish species are generally available as ‘fingerlings’ (35–45mm long) as it is costly to obtain a larger size. Additionally, domestication and loss of predator avoidance behaviour is known in fish that spend additional time growing in a fish farm.

7.4 Timing of Stockings

Native fish species indigenous to the Canberra region generally spawn from spring to early summer, with the fingerlings generally commercially available between late December and March.

The proposed stocking program for 2021–2027 is presented in Table 2. The stocking rotation is undertaken to deliver the optimum result for the available budget. While every effort will be made to ensure the proposed program is followed, it should be recognised that fisheries are dynamic ecosystems and unforeseen changes or events may require the stocking program to be altered. The program is dependent upon availability and cost of fish from the commercial fish farms.

Species and number stocked into Googong Reservoir will be guided by NSW DPI stocking programs, which provide for a larger number of impoundments and rivers and may change due to availability and priorities. For this reason, Googong is not included in Table 2.

Table 2. Fish species proposed for stocking in ACT urban lakes.

NB fish stocked into Lake Burley Griffin are dependent on National Capital Authority funding availability.

Year	Lake Burley Griffin [#]	Lake Ginninderra	Lake Tuggeranong	Gungahlin Pond	Yerrabi Pond
2021–22	Murray Cod	Murray Cod	Golden Perch	Golden Perch	Golden Perch
2022–23	Golden Perch	Golden Perch	Murray Cod	Murray Cod	Murray Cod
2023–24	Murray Cod	Murray Cod	Golden Perch	Golden Perch	Golden Perch
2024–25	Golden Perch	Golden Perch	Murray Cod	Murray Cod	Murray Cod
2025–26	Murray Cod	Murray Cod	Golden Perch	Golden Perch	Golden Perch
2026–27	Golden Perch	Golden Perch	Murray Cod	Murray Cod	Murray Cod

8. References

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