



Snobs Creek Advisory Board

Snobs Creek Annual Report 2020



Victorian Fisheries Authority

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Aboriginal acknowledgement

The Victorian Government proudly acknowledges Victoria's Aboriginal community and their rich culture and pays respect to their Elders past, present and future.

We acknowledge Aboriginal people as Australia's first peoples, and as the Traditional Owners and custodians of the land on which we work and live.

We recognise the strength of Aboriginal people, Traditional Owners and their communities, and value the ongoing contribution of Aboriginal people to Victorian life, through their daily work, their application of Aboriginal knowledge and practice, and at key events; we recognise how this enriches us all.

We recognise that Aboriginal cultures and communities are diverse, and should be celebrated.

We acknowledge that the land and water is of spiritual, cultural and economic importance to Aboriginal people. We embrace the spirit of reconciliation, guaranteeing equality of outcomes and ensuring an equal voice.

We have distinct legislative obligations to Victorian Traditional Owner groups, related to cultural and natural heritage, that are paramount in our responsibilities in managing Victoria's resources in partnership with Traditional Owners.

Message from our Chief Executive Officer



"The past year has been challenging for all of Victoria, I am proud of the Snobs Creek team who have exhibited resilience and a dedication to improving fishing outcomes. Indeed the team have not let the impact of a pandemic overshadow their achievements in 2019-20."

The Snobs Creek hatchery has been growing fish for Victoria's world class waterways since its establishment in 1948. The Victorian Fisheries Authority recognises fishing's social and economic importance to all Victorians, which is why Snobs Creek is undergoing a redevelopment, the first major upgrade at the site since 2000. The redevelopment will provide a modernised workplace for more than 20 people and create valuable space to further increase fish production at Snobs Creek so more Murray cod can be stocked into popular fisheries across the state including Lake Eildon, the Goulburn River and Lake Eppalock.

This year, under challenging conditions, we exceeded stocking targets and continued operational improvement in the areas of Risk Management and Occupational Health and Safety. We continue to push boundaries and strive for excellence in how we operate and are committed to leading the way in the development of innovative new production methods. The Victorian Fisheries Authority will continue to increase fish production without jeopardising the health and quality of the fish being produced.

I thank the Snobs Creek team, volunteers and the fishing community for their efforts in 2019-20 improving fish stocking outcomes across Victoria. I look forward to working with you all closely to meet the ambitious target of stocking 10 million fish by 2022.

Travis Dowling Chief Executive Officer – Victorian Fisheries Authority

Meet the Snobs Creek Advisory Board



David Kramer - Chair

David works in the recreational fishing industry as General Manager of two of Australia's largest fishing tackle stores. A Director of the Futurefish Foundation since 2006, David also hosts a weekly recreational fishing television program in Melbourne.

David has previously held roles on the Victorian Government Fisheries Co-Management Council, Fisheries Revenue Allocation Committee and Statewide Fisheries Roundtable, and has extensive experience in fisheries management and policy development.



Anthony Forster

Anthony has worked for the Victorian Fisheries Authority for twenty-three years and currently manages the Victorian Fisheries Authority's Inland Fisheries program. Majoring in aquaculture, Anthony graduated from Tasmania University in 1986 and worked for almost a decade as one of the pioneering trout and salmon farm managers on the south east coast of Tasmania.

He then went on to work as a fisheries consultant to Victoria's trout farming sector before joining Western Australian Fisheries as an Aquaculture Extension Officer. During this time, he helped developed WA's burgeoning abalone farming sector. Anthony joined Fisheries Victoria in 1996 as an Aquaculture Development Officer. Since then, he has managed the VFA's Aquaculture Program, Snobs Creek Hatchery, and delivered a long list of significant recreational and aquaculture projects.

Anthony is tasked with the important job of leading the development and construction of the VFA's new native fish hatchery in Arcadia.



Barbara Power

Barbara has had a long and successful career as an international research scientist working on cancer treatments with CSIRO, antibody therapies with Patrys, Stem Cells with The University of Melbourne, and international companies. She is currently Director of her own Cheesemaking company, PowerHouse Cheese.

Barbara holds a Master of Science (Immunology), and a Master of Education (Management). She is also a Graduate Member of AICD Member of AICD (Australian Institute of Company Directors), and has been guiding several organisations in governance and compliance over the last few years.

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Her previous board memberships include:

- Board member at Patrys Limited (2007-2010), an International antibody development company for cancer treatment;
- Secretary at Stem Cells Australia (2013-2017), an Australian-wide research consortium;
- Director at AntibOZ (2007-2013), scientific consultants and International conference organisers;
- Board member at Go Girls Foundation (2016-2018), a non-for-profit organisation to help disadvantaged women.

Barbara is also a keen angler who has travelled around the world chasing different fresh and salt water species. She is passionate about ensuring the recreational fishing opportunities she enjoyed as a child continue to be available to young people today and in the future.

Dr Cleola Anderiesz

Cleola is the Deputy Chief Executive Officer at Cancer Australia - the Australian Government's national cancer agency. She is an experienced senior executive who has worked across the academic, not-for-profit, and public sectors and has held a number of positions on state, national, and international committees.

Cleola is a medical researcher by training with qualifications in health economics and business administration, and is a graduate of the Australian Institute of Company Directors.

Cleola is a passionate recreational angler with over 30 years fishing in Victoria's marine and freshwater fisheries. She is an avid fly fisher, fishing locally and internationally. Cleola has great respect for the social, cultural and economic benefits of recreational fishing and is a strong advocate for supporting women in recreational fishing.



Brian Mottram

Brian has worked for the Victorian Fisheries Authority (formerly Fisheries Victoria) for fourteen years and is currently the Director of the Recreational Programs division. After studying Agricultural Science at Longerenong, Brian began his career in farm retail sales before stepping up to the role of Senior Agronomist at Tasco Rural in 1994. Three years later, he joined the Victorian Department of Primary Industries and has since spent the last two decades working within government in various management and executive roles in agricultural, environmental and fisheries project planning and implementation.

During Brian's time with the Department he has continued to engage in learning opportunities covering project management, executive training and a Graduate Diploma in Sustainable Agriculture with Charles Sturt University.



Brian brings a wealth of diverse expertise including, stakeholder relations and engagement experience, and high-level project management skills to the Snobs Creek Advisory Board. He is a calm and effective leader, and a strategic thinker with proven experience administering multi-faceted, complex projects that improve recreational fishing opportunities.



Rob Loats

Rob is a primary production business manager from rural Victoria. He has extensive knowledge of natural resource and water management legislation, and decades of experience working with government and non-government agencies to represent the needs of local, regional and state based anglers and regional communities.

Rob is the current Chair Victorian Recreational Fishing Peak Body VRFish and has provided long-term representation for his local club as president and secretary, long term representation of two local angling associations as president. He is a current member of the Grampians Wimmera Mallee Water Recreational Water Committee, Murray Darling Basin Murray Cod Fishery Advisory Group, the North Central Catchment Management Authority Community Leaders Group and is the regional representative at both the North West and South West Victoria Fish Stock and Cons meetings.

He is a current member of the DELWP Riparian Advisory Group and Life Member of the Mid Northern and Wimmera Angling Associations and Donald Angling Club. Rob's efforts have also earnt him the Recfish Australia National Mal Ramsay Lifetime Achievement Award in 2012.



Dylan White

Dylan joined the Victorian Fisheries Authority in November 2019 as the Program Manager of the Snobs Creek Hatchery after previously being part of the Snobs Creek team 10 years earlier. After completing a Bachelor degree in Fisheries Management and Aquaculture Dylan has worked with various salt and freshwater oyster pearls, barramundi, yellowtail kingfish, southern bluefin tuna and all species grown at the Snobs Creek Hatchery.

Dylan brings with him a wealth of knowledge about fish production and as Program Manager leads guides the Board on operational matters.



Future directions

Over 2020-21 we will:

Continue to work with the Future Fish Foundation, VRFish, the Australian Trout Foundation, Native Fish Australia and other recreational fishing stakeholder groups to continue to improve stocking outcomes.

- Complete the staffing complex and visitation amenities upgrade.
- Support and promote fishing tourism of the region surrounding Snobs Creek.
- Actively seek out new waterways to expand stocking outputs as we move towards the ambitious target of stocking 10 million fish by 2022.
- Further develop our Snobs Creek hatchery risk plan and ensure staff safety is always put first.
- Continue to drive improvement and build on best practice principles.
- Increasing production and stocking resources to meet our stocking target of 8 million fish.

Victorian Fisheries Authority

Welcome to Snobs Creek Hatchery

"Our mission is simple: to rear and stock native and salmonid fish in the most effective way possible to improve recreational fishing opportunities for all Victorians."

Brian Mottram, Director - Recreational Programs, Victorian Fisheries Authority.



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Snobs Creek Hatchery is a freshwater fish production facility that was established in 1948 that is owned by the State Government and managed by the Victorian Fisheries Authority. Today, we continue to develop and implement the latest expertise and technology to produce native and salmonid fish that are stocked in over 200 locations across the state.

Located in north east Victoria alongside Snobs Creek, the site was originally chosen because the cool, clean water of the creek, and gradient of the landscape ensured a constant flow of water through the system without pumping. Over the past 72 years, the site infrastructure has changed significantly, new equipment has been installed, and advances in technology and techniques have allowed us to draw water from the Goulburn River (when needed) and increase our production capacity.

Snobs Creek has two hatcheries onsite – a native fish hatchery and a salmonid hatchery. In our native hatchery, we successfully breed Murray cod, Macquarie perch, and Trout cod. We are continually researching ways to improve breeding native freshwater fish species. In our salmonid hatchery, we successfully breed rainbow trout, brown trout, and Chinook salmon.

Every year, we stock fish from the Snobs Creek Hatchery into many of Victoria's inland lakes, impoundments, and rivers to support the conservation of threatened species and to improve recreational fishing opportunities. The direction of annual stockings is informed with input from key stakeholders and representative angler groups. These groups include the Victorian Recreational Fishing body (VR Fish), the Australian Trout Foundation (ATF), Native Fish Australia (NFA), Water Management Authorities, Catchment Management Authorities (CMAs), Department of Environment, Land, Water and Planning Primary Industries (DELWP), other Recreational Fisher Groups and Local Government shires. We also run annual open days at Snobs Creek and Fishing Festivals to show anglers and their families where licence fees go and how we're working hard to provide them with more fishing opportunities.

Snobs Creek has a legacy of innovation and success. From pioneering native fish breeding techniques, to bringing endangered species back from the brink of extinction, we pride ourselves on being at the forefront of improving Victoria's freshwater fisheries. This year, we continued to build on the success of last year's record result as we delivered on the State Government's Target One Million commitment to stock 6 million fish in the 2020 financial year.

This year was a particularly exciting time for staff at Snobs Creek with the addition of Dylan White who brought with him a wealth of experience to the Program Manager Snobs Creek position and Adele Moyes joining in the role of Fish Production supervisor. Both staff hit the ground running and have implemented efficiencies across the hatchery. The future looks bright for Snobs Creek.



The team



Dylan White, Program Manager

Dylan joined the Snobs Creek team as Program Manager in November 2019 after previously being at Snobs 10 years earlier. Dylan has a Bachelor degree in Fisheries Management and Aquaculture. Dylan has experience working with oyster pearls, barramundi, yellowtail kingfish, southern blue fin tuna and species grown at Snobs Creek.

Dylan has a wealth of knowledge with the aquatic world and has returned to Snobs Creek from SEALIFE Melbourne aquarium where he managed many aquatic creatures including a 5m crocodile, weedy sea dragons and the critically endangered spotted hand fish.



Adele Moyes,

Farm Supervisor Native Fish – Snobs Creek Fisheries

Adele joined the Snobs Creek team as Farm Supervisor in March 2020. Adele has her Masters in Marine Biology and Ecology in which she focused on the relationship between fish farming and the environment. She has worked in the Aquaculture industry and research sector for the past 6 years in diverse roles across Eastern Australia and New Zealand. Her experience in coastal monitoring and husbandry of marine fish, salmonids, crustaceans and algae have transitioned smoothly into the freshwater space. Passionate about conservation and aquatic life, Adele is eager to dive into the 2020/21 native stocking season.



Neil Hyatt, Program Leader

Neil has been working at Snobs Creek for more than 16 years and leads salmonid production at the hatchery. Neil has decades of experience within the Australian aquaculture industry with various species including everything from Australian bass to abalone, and a stand out career in the salmonid field.



Rhiannon Atkinson, Fish Stocking Coordinator

Rhiannon joined the Snobs team in June 2019 and has a degree in Catchment and Land Management, Environmental Science (Marine Biology), and Environmental Science (Honours). Rhiannon has experience in freshwater and marine science, both within the laboratory and out in the field, where she focused on understanding the importance behind habitat on fish assemblages for her honours project. She has already drawn on her prior experience to hit the ground running with the management of the logistics of stocking millions of fish across the state.

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Will Ingram, Technical Officer

Will has been with us for just over 3 years and is a key member of the production and stocking team. When he's not diligently tending to our native and salmonid fish or assisting in stocking deliveries, he's taking great snaps of all our operations to be shared on social media with all our fishers.

Will has been offered an exciting opportunity within the VFA Enforcement business unit in 2020-21.



Lee Carpenter, Technical Officer

Lee has extensive fish farming experience, particularly in the local area where he managed the Eildon Trout Farm for well over a decade. Lee is an exceptionally competent aquaculture professional and brings significant expertise to the role.



Brooke Conrad, Technical Officer

Brooke joined the Snobs team in 2019 and has a degree in Environmental Science majoring in fisheries aquaculture management and natural resources management. Prior to becoming an important member of the Snobs team Brooke worked in the private sector working in both Murray cod and salmonid production.



Nick Taylor, Farm Hand

Nick has been with us for over eleven years. A plumber by trade, he has great practical ability and knows the farming operations at Snobs Creek like the back of his hand. He leads essential weekend duties and assists with every aspect of production in both the salmonid and native fish hatcheries. Nick is a great operator and a go to for getting things on the ground done.



Jason Wolle, Farm Hand

Originally from Alaska, Jason spent seven years researching wild salmon for the Alaskan Department of Fish & Game before moving to Australia in 2010. Jason joined us in 2015 and brings a wealth of fisheries knowledge to his role of overseeing native fish and salmonid production. A positive and enthusiastic member of the team, Jason is always happy to help wherever he is needed in the hatchery.



Dean Read, Technical Officer

Dean joined the Snobs team in September 2020 after having worked with SEALIFE Melbourne aquarium for 2 years where he predominately worked with sea jellies. As a passionate recreational fisher Dean has displayed strong enthusiasm to his new role and is excited to contributing to growing fish production at Snobs Creek.



Peter Barnes

Peter joins the Snobs team as a replacement for Will Ingram who has been successful in obtaining a secondment within the VFA. Peter brings with him a wealth of experience in truck driving and logistics, which he is excited to draw on as he contributes to the stocking of Victorian waters.

Fish stocking targets in 2019-20

"Guided by the Snobs Creek Advisory Board, we have navigated a practically challenging year to deliver on our commitments in 2019-20. In 2021 we will continue to grow and optimise our operations as we continue to move towards the ambitious target of stocking 10 million fish by 2022. Here are some of the highlights we're celebrating in 2020."

Brian Mottram, Director - Recreational Programs, Victorian Fisheries Authority.

Stocking target	Result	Account
Stock 6 million fish	Over 6.1 million fish stocked	This outstanding achievement was a result of several environmental and economic factors including improved production conditions at Snobs Creek, and increased survival in the grow out phase.
Stock 213 waterways in Victoria	203 waterways in Victoria	We are continually reviewing locations for stocking. This year due to water level and quality issues some waters were unsuitable for stocking fish.
Stock 888,400 salmonids in Victorian waters in 2019/20	1,000,793 salmonids stocked	Increased availability of salmonids from private hatcheries provided an opportunity to increase salmonid stocking.
Stock 5,095,000 native fish into Victorian waters in 2019/20	5,131,235 native fish stocked	Good conditions for rearing native fish in Victoria and New South Wales provided an opportunity for the VFA to cover supply shortages of golden perch with other native species.



Defining success at Snobs Creek

"Success requires hard work, perseverance, learning, and sacrifice. This year the Snobs Creek team took a challenging year and turned it into a success."

Brian Mottram, Director - Recreational Programs, Victorian Fisheries Authority.

Stocking OUR Victorian waterways with over 6 million fish

As part of *Target One Million* Phase 2, the State Government committed to increasing fish stocking to 10 million fish per year by 2022. This season (2019-20), the Snobs Creek Hatchery stocked more than 6.1 million fish. Below is a breakdown of what we stocked.



Salmonid Fish 2019 Species and Region Breakdown

Species	Barwon South West	Gippsland	Grampians	Hume	Loddon Mallee	Port Phillip	Grand Total
Brown trout	86,750	14,500	78,560	113,726	113,511	5,010	412,057
Cheetah trout	2,450						2,450
Chinook salmon	50,000						50,000
Rainbow trout	162,450	30,000	108,644	140,340	54,871	39,981	536,286
Salmonids total	301,650	44,500	187,204	254,066	168,382	44,991	1,000,793

Native Fish 2019-20 Species and Farm Breakdown

Species	Barwon South West	Gippsland	Grampians	Hume	Loddon Mallee	Port Phillip	Grand Total
Australian bass	5,000	352,300				1,000	358,300
Estuary perch	32,000	125,000				75,000	232,000
Golden perch	100,000		213,500	882,606	908,152	32,426	2,136,684
Macquarie perch				1,920			1,920
Murray cod	496,095		105,000	927,150	485,059	21,683	2,034,987
Silver perch			105,000	40,000	135,000	60,450	340,450
Trout cod				26,894			26,894
Natives total	633,095	477,300	423,500	1,878,570	1,528,211	190,559	5,131,235



In the last year, more than 1 million trout and salmon were released alongside over five million native fish such as Murray cod (2 million), golden perch (2.1 million), Australian bass (358,300), silver perch (340,450) and Trout cod (26,894).

Over 1.5 million of the trout and Murray cod stocked were grown at our Snobs Creek Hatchery, near Eildon, which is funded by fishing licence fees and *Target One Million*.

Lakes Eildon (125,260), Bullen Merri Lake (93,000), Tullaroop Reservoir (59,474), Hume (55,161) and Purrumbete (42,450) received 375,345 trout and salmon, most of which were one-year-old fish.

Over four million Murray cod and golden perch fingerlings, only a few months old and averaging one gram each, were stocked into lakes and reservoirs such as Eildon (776,714), Rocklands (573,960), Goulburn River (411,000), Hume (300,000) and Eppalock (280,000).



We also stocked many other lakes and waterways across Victoria in 2019-20, for a full list of fisheries stocked in 2019-20, please visit: https://vfa.vic.gov.au/db



Producing fish at Snobs Creek

In 2019-20 the VFA Snobs Creek Hatchery grew 703,679 native fish and 883,704 salmonid fish that were stocked into public waters. In addition the VFA purchased 4,544,645 mixed species of fish that were stocked into various locations across Victoria. Fish were stocked into over 203 locations including over 20 sites that were either new or new species stocked for the first time. Over the past 12 months our Snobs Creek team spent over 477 person days on the road and travelled 205,740 kilometres. Fish were stocked into over 203 locations including over 20 sites that were either new or stocked for the first time with a new species. For the first time we stocked 38,200 on grown Murray cod and golden perch into 14 urban waterways. We have record stockings of 542,114 Murray cod into Lake Eildon and 473,960 Murray cod into Rocklands Reservoir.



Salmonid production data 2019

	Brown trout	Rainbow trout	Chinook Salmon
Female brood stock	720	600	125
Male brood stock	120	70	102
Eggs	900,000	780,400	230,000
Fingerlings produced & used for stocking	402,316	431,388	50,000



Fish management, favourable weather conditions combined with great spawning numbers resulted in a great year for Murray cod production at Snobs Creek. Pond harvesting begun late December and over the following 4 months Snobs Creek Produced 674,827 Murray cod fingerlings which exceeded our target of 450,000.

Native fish production data 2019-20

	Trout cod	Murray cod	Macquarie perch	Additional information
Spawned broodfish	2	37	8	Macquarie perch females came from Dartmouth and the Yarra River
Eggs	45,500	1,418,500	71,000	
Larvae purchased from private supplier		1,200,000		
Fingerlings produced at Snobs & used for stocking	26,894	674,827	1,920	



Performance Reporting

Performance Strategy	Result			
#1 Evaluate, improve and	Achieved.			
optimise native species production	In 2020 the Snobs Creek team began implementation of a new real time data reporting system to remove the need for paper reporting.			
	Forward planning by the team identified the need for additional broodstock to meet future production targets. New fish have been added to our breeding program, more fish will be required for continue growth with particular species (Trout Cod and Macquarie Perch)			
#2 Evaluate, improve and	Achieved.			
optimise salmonid species production	Installation of a liquid oxygen system to the salmonid hatchery is complete and will be used over the summer months to maintain the required diluted oxygen levels at the salmonid hatchery.			
	A private lease in late 2019 of a second salmonid hatchery has provided an opportunity to produce up to 75,000 ongrown salmonids fish for the 2021 season. This frees up valuable space at Snobs Creek for increased production.			
	Snobs Creek has benefited from installation of a Van Gaalen egg sorting machine. Capable of processing 100,000 salmonid eggs per hour the machine uses modulated infrared lights to scan the eggs transfer all viable eggs are collected and placed into hatching trays. Any nonviable eggs are discarded by the are removed with 99 per cent accuracy.			
#3 Implementation of key	Achieved.			
recommendations from Snobs Creek Masterplan	Revitalisation of Snobs Creek Administration building underway.			
#4 Evaluate, improve	Achieved.			
and optimise stocking operations	Increased forward planning has supported efficiencies in trip planning. Additional stocking truck with improved features has been procured and will begin operation in late 2020.			
#5 Implement the annual planning and reporting template	Achieved.			
#6 Identify and prioritise risk assessment and	Achieved.			
develop mitigation strategies	A comprehensive review and recording of new and existing risks have been undertaken resulting in the Snobs Creek Risk Plan being developed. This plan is reviewed monthly and reported quarterly to the Snobs Advisory Board.			
#7 Maintain an effective	Achieved.			
and well-trained workforce	The Snobs Creek team are supported by a culture of personal development and learning. Currently staff are enrolled in Equarist, Leadership Management, driver training, first aid and Project Management courses.			

Safety First



The VFA is committed to ensure all staff remain safe and healthy at work. In 2019-20 we built on this by identifying and implementing priory safety projects.

Safe Work Manual

In 2019-20 the VFA undertook a full review of the Snobs Creek Safe Work Manual with the aim of improving procedures and safe work methods, to create a safer workplace for all staff.

Risk Plan

The VFA built on our commitment to putting safety first with the implementation of the Snobs Creek Risk Plan. The plan identifies risks, assess risks and develops strategies to manage known risks. The VFA will continue to review the plan periodically to understand potential risks and identify new ways to minimise their impacts.

Safety performance

In 2019, the VFA engaged with Pericorp to build a new incident reporting system to replace the legacy system. The new incident reporting system, Periscope, was launched on 1 October 2019. The new system allows staff to complete real time reporting via their mobile devices or desktop. We now receive accurate reports from staff re injuries/illnesses, hazards, near misses and environmental incidents. A summary of the Snobs Creek incident reports are found below:

Incidents –	No. of incidents	3
Snobs Creek 1 October 2019 –	No. incidents requiring first aid or further medical treatment	0
30 June 2020	No. of hazards reported	0

Supporting environmental outcomes

Breeding Macquarie Perch and trout cod

Macquarie perch and Trout cod were once, one of the most abundant and popular Australian native freshwater fish in south-eastern reaches of the Murray–Darling River System. Impacts from a variety of factors including habitat loss, stream barriers, coldwater discharges, diseases and exotic species have contributed to a decline in the range and abundance of Macquarie perch and Trout cod.

In 2019 the VFA established a trial program to develop innovative breeding techniques to produce Macquarie Perch and Trout cod at the Snobs Creek hatchery. The program has successfully spawned both Macquarie Perch and Trout Cod used for stocking Victorian waterways. Trout cod are produced using 'natural spawning' on site with pond held broodstock. Natural spawning relies on adult fish laying and fertilising eggs in earthen ponds without interference by hatchery staff. This process minimises handling stress on adult fish and better ensures that parent fish will persist in ponds and spawn over several seasons. This reduces VFAs reliance on wild caught fish and minimises impact on existing populations. The husbandry of Trout cod early development stages is very similar to Murray cod. Therefore as we work to increase production numbers, work in the hatchery is readily managed.

Current breeding of Macquarie perch relies on wild caught broodfish. Hatchery staff are working towards fine tuning the methods required to ensure healthy development of early life stages leading up to stocking. The priority for 2021 is to identify and address knowledge gaps that will allow us to successfully transition into a Captive Breeding Program for this species.

In 2021 the VFA will seek infrastructure investment to upgrade existing facilities to establish a Macquarie Perch Captive Breeding Centre and dedicated Trout cod ponds capable to producing approximately 400,000 fish annually. Increased captive breeding would reduce the reliance on collecting wild fish from existing populations, which have been predicted to be further impacted from climate change and severe weather events such as reduced freshwater flows, increased siltation and increased frequency and magnitude of bushfires and floods.



Native Fish Channel Relocations

In July 2019 the VFA partnered with Goulburn Murray Water (GMW) and electrofishing experts from Austral Research Group to rescue close to 1700 native fish from irrigation channels in northern Victoria. The channels are part of a vast network located in the Goulburn Valley near Cobram, and the salvage was carried out ahead of scheduled maintenance by GMW.

Most of the salvaged fish were released into local lakes, rivers and creeks to boost recreational fishing in the Goulburn Valley, with some transported to become broodstock at our Snobs Creek and Arcadia hatcheries. The majority of fish were Murray cod, with 1,279 of the iconic species up to 95cm salvaged. In addition to the cod, 192 golden perch (up to 50cm), 199 river blackfish and one silver perch were taken from the channels.

Snobs Creek and our future Arcadia facility received 43 Murray cod and 51 golden perch as broodstock. The Goulburn River near Shepparton scored 959 Murray cod, 71 golden perch and 199 river blackfish. The remainder of the cod and golden perch went to the Broken River near Benalla, Broken Creek between Nathalia and Katamatite, Seven Creeks at Euroa and Craigmure and Kialla lakes.



VFA Big Build

Revitalisation of Snobs Creek Administration building



On 21 April 2020 the VFA launched the VFA Big Build, a series of projects to deliver the biggest capital infrastructure investment in VFA sites in 20 years. The flagship project of the initiative is a comprehensive refurbishment of the Snobs Creek Administration complex, the first at the fish hatchery since the year 2000.

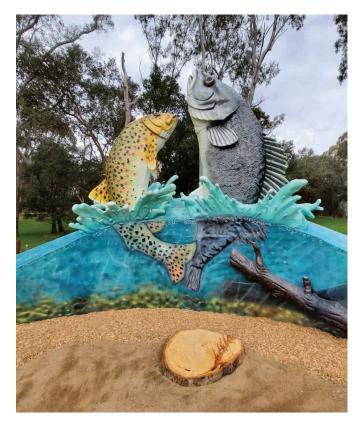
In everything we do at the VFA, we put safety first, support our people and demonstrate professionalism, leadership and accountability. This 'Big Build' is no exception. This is an investment in our staff, their safety and work environment. It will create a welcoming environment for diversity at the VFA and positions us as an employer of choice.

A significant refurbishment of our Snobs Creek administration complex has been designed to create a modern, fit for purpose workplace that supports diversity. The new design includes new modern male and female change rooms and bathroom facilities, a separate accessible shower and bathroom, new staff kitchen and breakout area, new workstation and office layout, modern fish inspection laboratory and new office entrance. The project, being delivered by a local Shepparton builder through a competitive tender process is a significant investment in local jobs. The project commenced in July with works expected to be completed in early 2021.

Growing the region

The upper Goulburn region is well recognised as one of the most popular and important recreational fishing destinations in Victoria. With this in mind, the VFA have focused on growing the regions profile as a fishing mecca by creating fishing tourism experiences for recreational anglers or all ages year-round.

In 2020 as part of the VFA Big Build, the Goulburn region will benefit from the VFA's new giant trout cod and brown trout sculpture located at the Snobs Creek Hatchery. Standing at 6 metres tall and 10 metres wide and open to the public year-round, the sculptures aim to encourage more families to get out and experience what the Goulburn region has to offer.



Arcadia Fish Hatchery

The State Government has committed \$7 million to build a new native fish hatchery in northern Victoria as part of its Target One Million plan to get more people fshing, more often. The Victorian Fisheries Authority (VFA) is delivering this project. In December 2019, after an exhaustive search, the VFA purchased a property at 200 Ross Road, Arcadia. The property is ideal for fish farming because it has high quality groundwater and surface water, channel water, plenty of clay for building ponds, a large header dam and two houses.

The hatchery will help us breed, millions of threatened native fish each year including, Murray cod, golden perch and freshwater catfish that will be stocked in more than one-hundred Victorian public waterways. This will help us recover native fish populations and, build exciting recreational fisheries for families to enjoy. The hatchery at Arcadia will reduce our reliance on purchasing native fish from private hatcheries in New South Wales. Our hatchery will 'future proof' the recovery of native fish in Victoria.

Our plans

Our plans for Stage 1 include the construction of 32 ponds, most of which measure 30 metres x 60 metres. Twenty of these ponds will be used to "growout" newly hatched fry to the fingerling stage (40 mm). While in these ponds, juvenile fish feed on zooplankton for about 8 weeks. They are then harvested, salt treated and loaded into fish transport vehicles, ready for stocking. The remaining 12 ponds will be used to hold large Murray cod and golden perch broodfish which will be fed on a diet of carp, other fish and yabbies. We've been busy collecting and holding hundreds of large Murray cod and golden perch to use at the hatchery as future broodfish. We also plan to erect several low-profile buildings at the property that will be used to hatch fish, hold broodstock, and to store equipment, cool rooms and freezers. Stage 2 would essentially double the number of ponds and increase fish production to more than 3 million fish each year. The design of our native fish hatchery is based on leading eco-friendly fish farming technology and, will re-use of water by filtering it through a wetland full of native aquatic plants. No waste water will be discharge to surrounding waterways. We are investigating the use of solar power on the farm and, are developing plans to restoring the property's food plain to its original condition. Through the hatchery, we have a special opportunity to rebuild threatened native fish populations of the Goulburn River. We place a high value on ensuring the farm is managed to a high level of environmentally sustainability that the community can be proud of.

Progress to date

Since acquiring the site, we've been busy doing surveys, repairing fences, assessing buildings, installing video surveillance, signs, maintaining the gardens, removing rubbish and, replacing pumps and pipes. We recently engaged engineering expertise to help us finalise the hatchery design and work through the approvals processes. We are also undertaking a cultural heritage due diligence assessment with input from representatives of the Yorta Yorta community. We have applied for a bore construction licence which will require a period of public consultation and advertisement in local newspapers. Subject to those approvals, we hope to start earthworks for pond construction in late spring or early summer. If all goes to plan, were aiming to have the hatchery (earthworks and buildings) completed by October 2021.

Stocking success story – Ouyen Lake

Ouyen is a small town located in the Mallee region, 100 kilometres south of Mildura. It has a population of around 1000 people. In 1998, the shift away from open air gravity-fed irrigation channels to the Northern Mallee Pipeline and Wimmera Mallee Pipeline resulted in the decommissioning of the Timberoo Lake Reserve, and the disappearance of many other recreational waters. The loss of recreational water hit the local community hard. In response, Ouyen Inc a community peak body representing residents started working with the State Government, Local Government, catchment management authorities, water authorities, local businesses and not-for-profit groups to identify a suitable location for a new lake. While other locations were scoped, the old Ouyen Reservoir site was selected for development.

In March 2018 the Victorian Fisheries Authority released the first 2000 golden and silver perch fingerlings into the newly created Ouyen Lake much to the delight of the Ouyen community. Stocking of Ouyen Lake has continued annually with golden and silver perch stocked every summer since. Excitingly, in June 2020 Ouyen Lake was stocked with 500 rainbow trout for the first time to provide more year-round freshwater fishing opportunities for people in the state's far northwest. Ouyen has proven itself a success in 2020 with anglers reporting catches of golden and silver perch measuring up to 45 centimetres. With more community fishing events planned for the lake in 2021, the future looks bright for this stunning recreational water.





Snobs Creek Hatchery Financial Report 2019-20

The operation of the hatchery at Snobs creek and the purchase and delivery of all fish across the state is funded from a combination of state government revenue and funds raised from the sale of recreational fishing licences.

The table below summarises the key areas where funds are spent and the revenue sources.

Expenditure type	RFL Trust Account	State Revenue	Total
Fish Purchases	\$1,541,737	\$764,963	\$2,306,700
Employee and Salary related expenses	\$500,645	\$112,911	\$613,556
Hatchery Operating Costs (Rent, Maintenance)	-	\$106,389	\$106,389
Agency Staff	-	\$4,496	\$4,496
Feedstock	\$21,455	\$151,847	\$173,302
Laboratory, Farm & Livestock Expenses - Misc	-	\$2,708	\$2,708
Contractors	\$33,847	\$120,468	\$154,315
Farm Inventory & Supplies	\$757	\$8,866	\$9,623
Vehicle Costs (Registration, Insurance, Fuel, Tolls, Maintenance and Repair)	-	\$47,304	\$47,304
Communications	-	\$9,074	\$9,074
Asset < \$5,000	-	\$18,784	\$18,784
Consultation Services	-	\$573	\$573
Total	\$2,098,441	\$1,348,383	\$3,446,824

Note: The total 2019-20 operational expenditure for Snobs Creek came in under the \$4.28 million budget set by the VFA.



"Our vision is to make fishing in Victoria better tomorrow than it is today."

> Travis Dowling, CEO, Victorian Fisheries Authority





Target One Million More Victorians fishing, more often

