



Snobs Creek Advisory Board

Snobs Creek Annual Report 2021



Your fishing
licence fees
at work

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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 First Peoples and Traditional Owners and Custodians of the land and water on which we rely.

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 acknowledge and respect that Aboriginal communities are steeped in traditions and customs built on a disciplined social and cultural order that has sustained 60,000 years of existence. 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.

Message from our Chief Executive Officer



"I am proud of the Snobs Creek team who under challenging circumstances continue to grow fish stocking each year. With a myriad of improvements at the fish hatchery made in 2020-21, I am excited for what the team can achieve in 2021-22."

The Victorian Fisheries Authority recognises that 2020-21 has been a challenging time for all of Victorian's dealing with the impacts of COVID-19. For some fishing is a chance to escape and reflect, for others it's an opportunity to connect with family and friends, whatever your motivation there are both physical and mental health benefits to getting out there fishing. The importance of fishing to Victorian's is what drives the team at the Snobs Creek Fish Hatchery to continue to over deliver on expectations and work together to improve fishing outcomes in Victoria.

At the Victorian Fisheries Authority we know that our people are our most important asset, the Snobs Creek team are our biggest resource and are our ambassadors as they travel across Victoria to stock your fish. That is why in 2020-21 the Snobs Creek Fish Hatchery has undergone its biggest upgrade in over 20 years and the Snobs Creek team are reaping the benefits. We have upgraded the Snobs Creek administrative complex, the redevelopment which was completed in May 2021 has turned the administrative complex into a modernised workplace and meeting facilities, providing an improved working environment for the hatchery team.

This year, we exceeded our stocking targets stocking a record 8.3 million fish into Victorian waters. We continue to build a culture that inspires creativity, innovation and experimentation, and fosters courageous and pioneering leaders. It is this culture that will allow the Snobs Creek Fish Hatchery to delivery on its vision to be a world leader in sustainable and ethical fish production and stocking, driving innovation in the field of aquaculture.

I thank all the Snobs Creek team, our partner organisations, volunteers and the fishing community for their contribution over 2020-21. It is an exciting time to be working at the Victorian Fisheries Authority as we target another record year with the stocking of 10 million fish in 2021-22.

A handwritten signature in black ink, appearing to read 'Travis Dowling'.

Travis Dowling

Chief Executive Officer – Victorian Fisheries Authority

Future directions

Over 2021-22 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 improve stocking outcomes.
- ✓ Seek to grow and invest in our threatened species recovery program.
- ✓ Implement the Snobs Creek Strategic Plan.
- ✓ Support and promote fishing tourism across Victoria.
- ✓ Partner with Northern Native Fish Hatchery staff to share native fish production knowledge and expertise.
- ✓ Review and enhance our Snobs Creek Fish Hatchery risk plan and ensure staff safety is always put first.
- ✓ Continue to improve fish production and stocking infrastructure and technology.
- ✓ Increase production and stocking resources to meet our stocking target of 10 million fish.



Meet the Snobs Creek Advisory Board



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 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 40 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.



David Kramer

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 works in media as host of Talking Fishing TV on Melbourne community television station C31 and the Talking Fishing program on Melbourne radio station 3MP.

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



Anthony Forster

Anthony has worked for the Victorian Fisheries Authority for twenty-four 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 develop 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 Fish 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.



Joseph Dunleavy

Joseph arrived in Melbourne from the United Kingdom in 2018. He is an associate member of the Chartered Institute of Management Accountants with 9 years' experience working for investment banking and technology firms. Currently a Revenue Analyst for Catapult Sports, one of the largest sports technology companies in the world, Joseph has significant experience working on user growth projects with high levels of investment expenditure.

Joseph has diverse fishing experience, from Piranhas in the Amazon to taking advantage of the bountiful fish stocks in Australian waterways. He is keen to secure the future of indigenous fish populations in Victoria through the work being completed at Snob's Creek Hatchery.



Cara Cummings

Cara is a leader in the VFA's 'Women in Recreational Fishing' (WIRF) network and is driven to encourage women, children and families to engage in the sport and immerse themselves amongst the benefits of the positive lifestyle it offers. As a mother to two young children and a recreational fisher, Cara is passionate about ensuring healthy waterways are maintained for future generations to come.

Cara is a writer for several fishing publications and has a sustainable seafood cooking segment on a recreational fishing television program in Melbourne. Cara is a building company director and also has a background in hospitality management and event planning. Cara has a long history of volunteering her time, knowledge and expertise to non-for-profit organisations in roles such as Vice President, general committee member and has assisted in the organisation of charity events and fundraisers.



Brian Mottram

Brian has worked for the Victorian Fisheries Authority for fifteen 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 VFA 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.



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 guides the Board on operational matters.

Welcome to Snobs Creek Fish Hatchery

"Our mission is simple: to improve recreational fishing opportunities for all Victorians through fish stocking."

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



Snobs Creek Fish 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 73 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 Fish 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. In the 2020 fish stocking year we continued to build on the success of last year, stocking a record 8 million fish, to deliver on the State Government's Go Fishing Victoria commitment.

This year we continued our growth in endangered species production, successfully increasing production of Macquarie perch by 2800% year on year. This achievement would not have been possible without the dedication of the Snobs Creek team and Arthur Rylah Institute. We are excited at the prospect of continuing the important work rebuilding and recovering threatened populations in the wild.



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 2021-22 native stocking season.



Neil Hyatt, Program Leader

Neil has been working at Snobs Creek for more than 17 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 standout career in the salmonid field. Neil's fish farming skills are essential to the team at Snobs Creek as he oversees our salmonid fish production and mentor's new staff in the art of fish health and production.



Rhiannon Atkinson, Fish Stocking Coordinator

Rhiannon joined the Snobs Creek 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.



Matt Beattie, Senior Technical Officer

Matt joined the Snobs Creek team in March 2021. Matt has a diverse range of work experience having been employed in agriculture, the Australian military, and the water industry. Matt has also completed a Bachelor of Science (Honours) majoring in fields of aquatic science and Zoology. After spending the last 14 years working in the water industry Matt is enjoying this change in career and is making the most of the opportunity to apply his formal education to all aspects of native and salmonid hatchery work. Matt is particularly interested in fish health and its management at Snobs Creek.



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.



Nick Taylor, Farm Hand

Nick has been with us for over twelve 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 Creek 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 contribute to growing fish production at Snobs Creek.



Lauren McPherson, Technical Officer

Lauren joined the Snobs Creek team in May 2021. Prior to joining the Snobs Creek team Lauren worked at Melbourne Water and the Department of Environment Land Water and Planning as a seasonal Firefighter for four years. In the Winter months Lauren was employed by Yarra Valley Caviar based in Rubicon, taking part in the overall care, production and harvest of eggs from Brook trout, Rainbows and Atlantic Salmon. Having studied Conservation and Land Management and working for several years in field work, Lauren is excited for her ongoing career within the Victorian Fisheries Authority and is eager to contribute to the management and population of fish species in our Victorian waterways.



Stuart Hill, Technical Officer

Stuart joined the Snobs Creek team in June 2021 having previously worked on a Port Fairy abalone farm for the past 4 years. Stuart has a Bachelor degree in Fisheries and Aquaculture and is also a keen recreational fisherman. Stuart is excited to be working at Snobs Creek helping contribute to the stocking of Victorian waterways.



Mark Little – Technical Officer - Youth Employment Program

Mark joined the Snobs Creek team as part of the Youth Employment Program making a lifelong dream a reality. Mark holds a Diploma in Conservation and Land Management and prior to joining the VFA had been working as an environmental contractor for Victorian government departments in bushland, river and Creekside rehabilitation, wetland construction and as an environmental consultant.

Since joining the VFA Mark has contributed to both the native and salmonid hatcheries, and has recently obtained his heavy vehicle licence which has allowed him to travel across Victoria to stock pristine waters. Mark is a passionate recreational fisher with aspirations to become a compliance officer in the future.



Frances Walpole – Technical Officer - Youth Employment Program

Frances joined the Snobs Creek Fish team in November 2020 as part of the Youth Employment Program following her completion of a Bachelor's degree in Zoology and a Masters in Environment & Sustainability at Monash University.

Since joining the Snobs Creek team Frances primary focus has been in the Native Fish Hatchery. She has made a real impact since joining the team with her work assisting with production and recovery of Macquarie Perch.



Fish stocking targets in 2020-21

"In 2020-21 the Snobs Creek team celebrated yet another record stocking year having stocked 8.3 million fish into Victorian waters. Work is already underway to build on this year's record stocking to meet the ambitious target of stocking 10 million fish in 2021-22."

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

Stocking target	Result	Account
Stock 8 million fish	Over 8.3 million fish stocked	This outstanding achievement was a result of positive environmental conditions for rearing salmonids and increased native stock availability at private hatcheries.
Stock 226 waterways in Victoria	209 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 1,261,800 salmonids in Victorian waters in 2020-21	1,305,701 salmonids stocked	Positive conditions at the Snobs Creek and increased capacity at additional leased sites contributed to a 30 per cent increase in the number of salmonids stocked compared with 2019-20.
Stock 6,740,050 native fish into Victorian waters in 2020-21	7,071,720 native fish stocked	'Go Fishing Victoria' initiative funding provided an opportunity to increase production at Snobs Creek and purchase increased numbers of native fish from private hatcheries.



Defining success at Snobs Creek

"2020-21 brought with it some challenging production conditions, fortunately the dedicated Snobs Creek team sought opportunities to create success. Here are some of the successes we are celebrating this year."

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

Stocking OUR Victorian waterways with over 8 million fish

As part of Go Fishing Victoria Phase 2, the State Government committed to increasing fish stocking to 10 million fish per year by 2022. This season (2020-21), the Snobs Creek Fish Hatchery stocked more than 8.3 million fish. Below is a breakdown of what we stocked.



Salmonid Fish 2020 Species and Region Breakdown

Species	Barwon South West	Gippsland	Grampians	Hume	Loddon Mallee	Port Phillip	Grand Total
Brown trout	104,400	124,500	72,610	312,553	92,878	10,500	717,441
Cheetah trout	1,251						1,251
Chinook salmon	102,200						102,200
Rainbow trout	109,300	81,000	57,850	84,092	90,405	60,905	483,552
Tiger trout	1,257						1,257
Salmonids total	318,408	205,500	130,460	396,645	183,283	71,405	1,305,701

Native Fish 2020-21 Species and Farm Breakdown

Species	Barwon South West	Gippsland	Grampians	Hume	Loddon Mallee	Port Phillip	Grand Total
Australian bass	5,000	362,750				1,000	368,750
Dusky Flathead		47,000					47,000
Estuary perch		284,100					284,100
Golden perch	450,000		161,000	1,222,800	1,174,500	50,000	3,058,300
Macquarie perch				54,000			54,000
Murray cod	659,993		113,000	1,173,645	865,300	42,000	2,853,938
Silver perch			75,000	45,332	182,000	83,000	385,332
Trout cod				20,300			20,300
Natives total	1,114,993	693,850	349,000	2,516,077	2,221,800	176,000	7,071,720

In the last year, more than 1.3 million trout and salmon were released alongside over 7 million native fish such as Murray cod (2.8 million), golden perch (3.05 million), Australian bass (368,750), silver perch (385,332) and Trout cod (20,300).



Over 1.7 million of the trout and Murray cod stocked were grown at our Snobs Creek Fish Hatchery, near Eildon, which is funded by fishing licence fees and Go Fishing Victoria.



Lake Eildon (137,256), Bullen Merri Lake (75,000), Tullaroop Reservoir (61,993), Lake Hume (79,200) and Lake Purrumbete (64,708) received 418,157 trout and salmon, most of which were one-year-old fish.



Over 5.9 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 (1,084,645), Rocklands (1,009,797), Goulburn River (473,100), Hume (200,000) and Eppalock (499,000).

We also stocked many other lakes and waterways across Victoria in 2020-21, for a full list of fisheries stocked in 2020-21, please visit:

<https://vfa.vic.gov.au/db>

Producing fish at Snobs Creek

In 2020-21 the VFA Snobs Creek Fish Hatchery grew 516,500 native fish and 1,265,693 salmonid fish that were stocked into public waters. In addition the VFA purchased 6,494,228 mixed species of fish that were stocked into various locations across Victoria. The Snobs Creek Fish Hatchery team also grew 101,000 Murray cod at an offsite hatchery in Ballarat. Fish were stocked into over 209 locations including over 15 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 215,146 km's to deliver our fish.



Salmonids

Eildon experienced increased rainfall in 2020 calendar year with 969.8 mm of rain falling over the 12 months to December. The increased rainfall and cooler temperatures from March through August made for good salmonid production and stocking conditions. Installation of a liquid oxygen system to the salmonid hatchery completed in early 2020 was utilised over the summer months to maintain the required diluted oxygen levels.



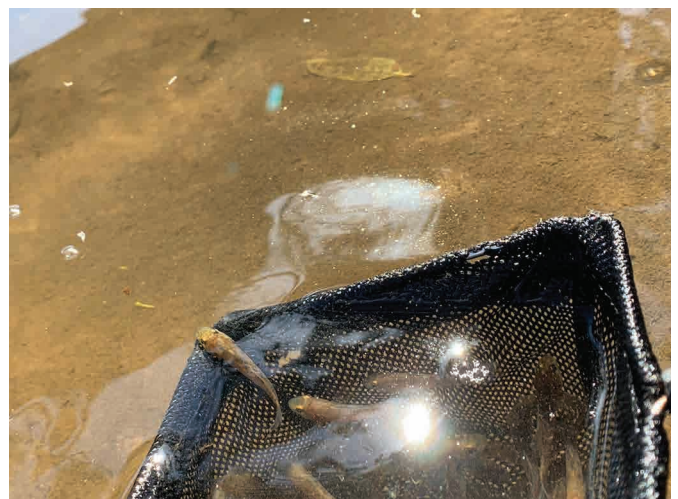
Salmonid production data 2020

	Brown trout	Rainbow trout	Chinook Salmon
Female brood stock	3,000	2,000	350
Male brood stock	800	550	250
Eggs	1,000,000	600,000	150,000
Produced & used for stocking	682,441	481,052	102,200

Native species

A warm start to spring in 2020 encouraged Trout cod and Murray cod spawnings in early October. Unseasonal cold and wet weather in early December deterred fish from continuing to produce large numbers of eggs into summer. Pond harvesting began just before Christmas 2020 and continued for native species until March 2021. Over January and February 2021 unseasonal cold weather and some extenuating pressures on hatchery resources meant that fish spent a longer than optimal time in grow-out ponds. This factored into lower than anticipated yield (%) at harvest. The Snobs Creek team's resilience and dedication resulted in an output of 455,600 Murray cod fingerlings produced at the Snobs Creek Fish Hatchery, slightly above the expected 450,000. A further 101,000 Murray cod fingerlings were produced at an additional VFA leased site in Benalla as part of a production trial.

A partnership with the New South Wales Department of Primary Industry saw Snobs Creek staff trial a new approach to Macquarie perch spawning this year with great success. The new approach included a trial of three hormone treatments and modified existing methods to reduce handling of fish and increase survival at each production stage. The successful production season allowed 2,000 Macquarie perch fingerlings to be retained at the Snobs Creek Fish Hatchery for grow out trials as part of our commitment to captive breeding.



It was a challenging production season for Trout cod in the 2020-21 season. Increased production capacity of Trout cod remains a priority for the VFA with an increase in available brood ponds and stock committed for the 2021-22 season and beyond.

This year was a fantastic effort by the team, and we look forward to a great season in 2021-22 as we work together to grow and stock 10 million fish in Victorian waters.

Native fish production data 2020-21

	Murray cod	Trout cod	Macquarie perch	Additional information
Broodfish	179	25	64	
Total Spawnings	32	3	12	
Eggs	1,250,890	50,000	218,000	
Larvae produced from broodstock	721,786	29,927	218,000	
Larvae purchased from private providers	500,000			150,000 larvae were utilised at Snobs Creek Fish Hatchery and 350,000 went offsite to leased ponds in Benalla, Victoria.
Fingerlings harvested at Snobs Creek	455,600	20,330	61,000	
Average Pond Yield %	63%	68%	28%	
Fingerlings produced at Snobs & used for stocking	543,200*	20,300	54,000	<p>* 101,000 Murray cod were on grown offsite in Ballarat using larvae purchased from a private supplier.</p> <p>Harvest vs stocking differential explanation:</p> <ul style="list-style-type: none"> • 2,000 Macquarie perch provided to NSW as part of stocking partnership. • 2,000 Macquarie perch kept at Snobs Creek Fish Hatchery for Future Broodstock • 2,000 Macquarie perch kept at Snobs Creek Fish Hatchery for Grow out Trials • Fish loss during transportation

Performance Reporting

Performance Strategy	Result
#1 Evaluate, improve and optimise native species production	<p>Achieved.</p> <p>In 2021 the Snobs Creek team worked with Freshwater Fisheries Management to secure funding for increase production capacity in the Native Fish Hatchery. Specifically targeted at Macquarie perch, the allocation will provide specialised infrastructure to minimise the occurrence and impact of incidents during delicate production stages.</p> <p>In a continued effort to maximise production of endangered/threatened species additional Trout cod brood stock were introduced to the brood stock at Snobs Creek.</p> <p>The data handling platform transition to digital recording this year has involved transition of historical Native production data. Benchmarking performance levels for production stages has contributed to improved management and planning.</p> <p>In response to the 2020-21 season review and increased reporting of all production outcomes, hatchery staff have identified key areas for improvement. Snobs Creek staff have initiated works to increase holding capacity in larval rearing (new tanks), upgraded existing facilities to meet OH&S standards and have plans to optimise functionality of available space.</p>
#2 Evaluate, improve and optimise salmonid species production	<p>Achieved.</p> <p>Installation of a liquid oxygen system to the salmonid hatchery in 2020 was utilised in the summer months to ensure optimal production conditions.</p> <p>A transition to digital data recording and collation of historical salmonid production data has contributed to improved management and planning.</p>
#3 Implementation of key recommendations from Snobs Creek Masterplan	<p>Achieved.</p> <p>Revitalisation of Snobs Creek Administration is complete with the team now occupying the building.</p>
#4 Evaluate, improve and optimise stocking operations	<p>Achieved.</p> <p>The Snobs Creek Fish Hatchery has continued to review and develop its processes to assist in logistics management in 2020-21. The addition of a new stocking truck in 2020-21 will begin operation in 2021-22 and will enhance the stocking capability and capacity as we move towards stocking 10 million fish in 2021-22.</p>
#5 Implement the annual planning and reporting template	<p>Achieved.</p> <p>The Snobs Creek team have made significant progress towards digital record keeping and data collection. This has been implemented in the native fish hatchery and has streamlined reporting and will assist with benchmarking in future years.</p>
#6 Identify and prioritise risk assessment and develop mitigation strategies	<p>Achieved.</p> <p>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 and reported to the Snobs Creek Fish Production and Stocking Advisory Board quarterly.</p>
#7 Maintain an effective and well-trained workforce	<p>Achieved.</p> <p>The Snobs Creek team have continued to be supported by a culture that encourages and supports personal development and learning. New staff have received specialist 4 x 4 driver training and truck driver training from experienced professionals to manage risks associated with being on the road.</p>

Safety First

The VFA is committed to ensure all staff remain safe and healthy at work. The VFA in 2020-21 initiated the 'Towards Zero' awareness campaign which seeks to achieve zero injuries and zero lost time resulting from workplace injury. This campaign has been supported by the introduction of VFA policies and procedures that seek to guide the VFA as we aspire to be an exemplar in safety and wellbeing management across the public sector. The policies supporting our safety first initiative include:

- VFA Occupational Health & Safety Policy
- Driver Safety Policy
- Department of Transport Safety and Wellbeing policy

Risk Plan

The VFA built on our commitment of putting safety first with the implementation of the Snobs Creek Risk Plan. The plan identifies risks, assesses 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

2020-21 was the first full year utilising the VFA's new incident reporting system, Periscope, which was launched on 1 October 2019. The new system allows staff to complete real time reporting via their mobile devices or desktop. A summary of the Snobs Creek Fish Hatchery incident reports is found below:

Incidents – Snobs Creek 1 July 2020 – 30 June 2021	No. of incidents	8
	No. incidents requiring first aid or further medical treatment	1
	No. of hazards reported	7



Supporting environmental outcomes

Recovering 'at-risk' species

Over the last 70 years, Snobs Creek Fish Hatchery has made a huge difference to inland fishing. Breeding, transporting and stocking millions of fish into hundreds of waters every year has created wonderful fishing opportunities. Snobs Creek Fish Hatchery has also led efforts to recover threatened native fish, many of which were once widespread and popular among recreational fishers.

There are over 25 freshwater fish species listed as threatened or endangered under State or Commonwealth legislation. They include many of our most popular and iconic native recreational fish species, such as Murray cod, Trout cod and Macquarie perch.

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, cold-water 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 Fish Hatchery. The programs aim is to rebuild and secure fish populations through innovative production methods. In 2020-21 the program has successfully spawned the largest numbers ever of Macquarie perch 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 and requires staff involvement across each stage of the process. Therefore, as we work to increase production numbers, work in the hatchery is planned and managed carefully.



Hatchery Infrastructure Program

Minor works – small changes making a large impact

New Larval Rearing tanks

In 2020-21 the VFA purchased additional fiberglass larval rearing tanks for the Snobs Creek Fish Hatchery native fish building. The new larval rearing tanks will increase holding capacity and mitigate the risk of incidents in over-crowding fish prior to stocking in ponds during the 2021-22 season. The long shallow tanks are traditionally used for larviculture of Trout and Murray cod. The addition of 10 tanks and stands will allow hatchery staff to spread larvae thinner, improve chance of survival, support easier traceability of spawnings and provide contingency for grow out of additional stock.

Artemia Room Upgrade

Artemia, or brine shrimp, are supplied as first feed to larvae of all culture species. The room in the native fish building allocated to hatching and harvest of Artemia cyst at Snobs Creek received a refurbishment this year. The refurbishment included an installation of new flooring and doorframe, and fabrication of new stands of the culture vessels to replace outdated wooden frames.

New fish inspection room

The redevelopment of the Snobs Creek administrative complex presented an opportunity to completely redesign a new fit for purpose fish inspection room in the main building. The new fish inspection room is practically designed and fitted with the required equipment to allow staff to conduct fish inspections and monitor water quality.

Revamped broodstock ponds

Leading up to the 2021-22 native production season, hatchery and facilities staff have worked together to refurbish and repurpose existing brood ponds at Snobs Creek. This is in support of production plans to increase capacity of Trout cod brood fish at Snobs Creek as Murray cod breeding expands to Arcadia. Brood pond 13; previously home to Golden perch, and brood pond 14; a shallow pond traditionally for yabby culture, were excavated and re-shaped over several weeks before being re-filled and conditioned over the summer of 2020-21.

In previous years Snobs Creek has allocated two brood ponds to Trout cod parent fish. Increased collection of wild Trout cod with Arthur Ryler Institute in March-April 2021 has provided Snobs Creek with ample broodstock to stock these additional three ponds as well as top-up the existing two ponds. Plans are underway for fabrication and purchase of additional nesting boxes to accommodate what we anticipate will be an increase in natural spawnings in future years.



Driving recreational fishing tourism through stocking

Stonker Rainbow trout Stocking

In 2020-21 eighteen Metropolitan Family Fishing Lakes are were stocked with over 500 'stonker' rainbow trout to bolster recreational fishing fun with some big catches. The trout weighed 4kg each and complemented the large number of catchable size trout already stocked into Family Fishing Lakes.

We also stocked more than 1,350 stonkers into the Goulburn River, allowing regional fishers the chance to travel to the Eildon region and land the fish of a lifetime.



Tiger trout stocking

10,000 more Tiger trout have been stocked into the Crater Lakes this year, with 7,000 for Lake Purrumbete and 3,000 for Lake Bullen Merri! Tiger trout are produced when a female brown trout is crossed with a male brook trout. The species cross has prominent striped markings indicative of a tiger and have the potential to grow large due to hybrid vigor. The tiger trout that have been released into Lake Purrumbete over the last two years and have performed well with specimens to 2.3kg caught by excited fishers who have revelled in their sportfishing qualities and as a table fish for the family too. The stocking trial at Lake Purrumbete began in 2019 and has seen more than 11,000 tiger trout and 7,400 cheetah trout released to date. Cheetah trout are a cross between a rainbow trout and a brook trout, and feature markings along their back resembling the patterns of the African cat. Lake Purrumbete and Bullen Merri are already stocked annually with Chinook salmon, brown and rainbow trout. Now the challenge is on to see who can catch the 'salmonid grand slam' of each species, including a tiger or cheetah trout!



Australian bass

This season over 360,000 Australian bass were stocked into waters all across Gippsland from Cann River to Traralgon. The La Trobe River received its first ever lot of bass this year with a total of 20,000 fingerlings, including 10,000 at Willow Park in Rosedale and 10,000 at Sand Banks Reserve in Traralgon. Lake Glenmaggie had a record stocking with a total of 63,250 bass for the season. Glenmaggie has been getting stocked with bass since 2002 and is producing great catches for anglers with plenty of surface action and fish to 40cm regularly being caught. The bass stocking in Gippsland over the past 19 years has been a tremendous success to both rebuild the endemic bass populations that have been impacted by low recruitment due to climate variability, as well as create new and enhance existing fishing opportunities for anglers. The Gippsland Bass trail is now recognised as a destination fishery in Victoria.



Record stockings into Lake Eildon and Rocklands Reservoir

With the boost of fish stocking into waterways since the late 1980s, there are plenty of opportunities to catch a fish all year round across Victoria. Lake Eildon and Rocklands Reservoir are popular getaway locations for camping and on water activities over the summer months. Native fish have been stocked into Lake Eildon since before the 1990s, with Rocklands Reservoir on its way to become the next mega fishery for golden perch and Murray cod since its first stocking of native fish in 2017.

Last year both Lake Eildon and Rocklands Reservoir received record stockings (over 1 million each) of Murray cod and golden perch. This included over 500,000 Murray cod and golden perch for Lake Eildon, and more than 600,000 Murray cod and 400,000 golden perch for Rocklands.

Many long hours have been worked and many kilometres driven by our incredible staff at the Snobs Creek Fish Hatchery to reach this amazing outcome. It has been no easy task to reach such numbers and would not be achievable without the help of local Fisheries Officers and amazing stakeholders. A big thank you to everyone that was involved in this process with special thanks to members of the Balmoral Angling Club and Mansfield & District Flyfishers.

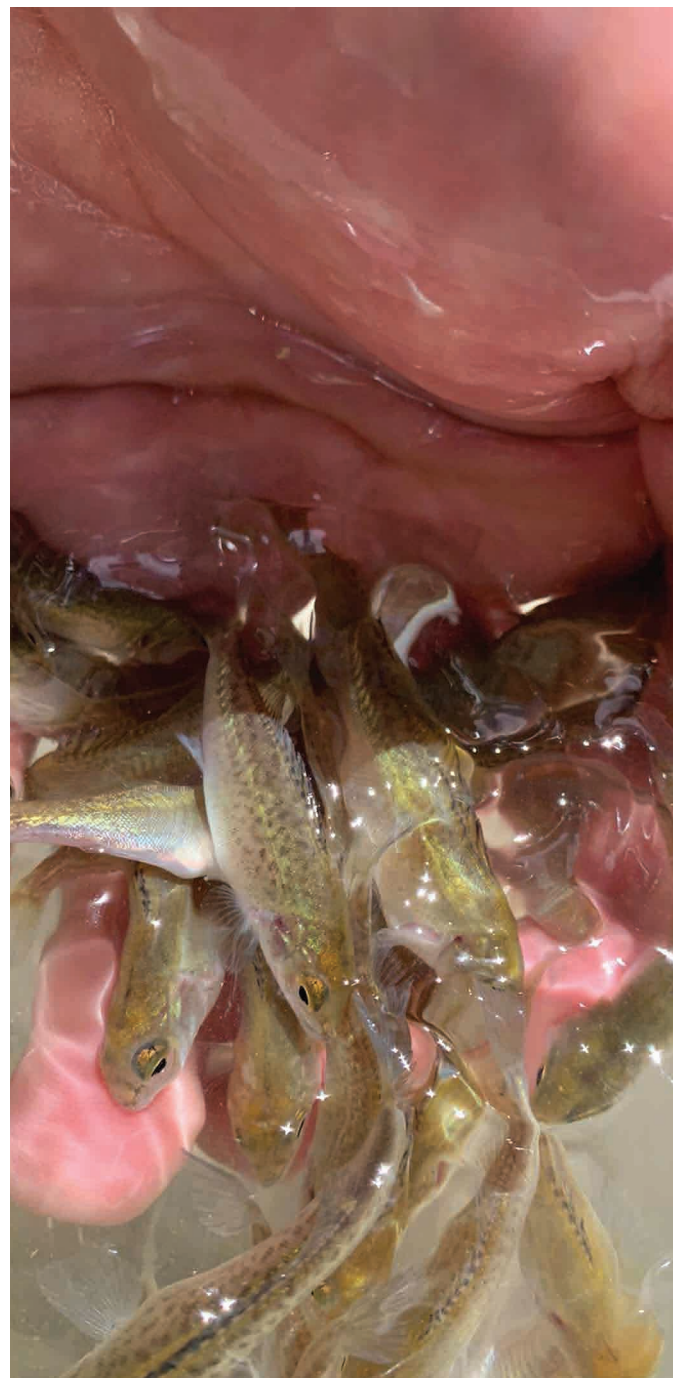


RECREATIONAL FISHING LICENCE TRUST ACCOUNT - 20TH ANNIVERSARY

Victoria became the first Australian state to introduce a recreational fishing licence in 1999, and the following year the Fisheries Act 1995 was amended to establish the Recreational Fishing Licence Trust Account on April 1, 2001. Ever since then funds from the sale of recreational fishing licences have been used to fund programs and hundreds of worthwhile projects delivered by fishing clubs, community groups and government agencies.

Two decades on and \$8.5 million is raised annually from the sale of fishing licences, reinvested into fish production at Snobs Creek Fish Hatchery and the state-wide stocking program, better facilities and more fish habitat through the Recreational Fishing Grants programs, advocacy on behalf of recreational fishers through VRFish, and a range of educational initiatives.

Landmark projects funded by fishing licence fees over the 20 years include developing Lake Eildon into a premier Murray cod fishery, buying back commercial fishing licences in inland waters and Gippsland estuaries, deploying recreational fishing reefs in Port Phillip, Gippsland and near Torquay, establishing a Wild Trout Management Program and funding more fisheries officer positions.



Snobs Creek Hatchery Financial Report 2020-21

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 unaudited financial statement below summarises the key areas where funds are spent and the revenue sources.

Expenditure type	RFL Trust Account	State Revenue	Total
Fish Purchases	\$1,769,426	\$2,096,173	\$3,865,599
Employee and Salary related expenses	\$605,718	\$378,223	\$983,941
Hatchery Operating Costs (Rent, Maintenance)	-	\$231,378	\$231,378
Feedstock	-	\$204,852	\$204,852
Laboratory, Farm & Livestock Expenses - Misc.	-	\$10,099	\$10,099
Contractors, Research, Development, Surveys and Trials	\$65,154	\$290,136	\$355,290
Farm Inventory & Supplies	-	\$228,713	\$228,713
Vehicle Costs (Registration, Insurance, Fuel, Tolls, Maintenance and Repair)	-	\$84,622	\$84,622
Communications	\$282	\$8,375	\$8,657
Asset < \$5,000	-	\$21,807	\$21,807
Total	\$2,440,580	\$3,554,378	\$5,994,958

Note: The total 2020-21 operational expenditure for Snobs Creek came in under the \$6.4 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



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More people fishing, more often

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