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Sustainable future fishing for trout and native fish

## A PROPOSAL TO IMPROVE THE EFFECTIVENESS OF TROUT STOCKING IN NSW LAKES THAT SUPPORT A REDFIN AND / OR NATIVE FISH POPULATION.

This proposal is prepared by the Monaro Acclimatisation Society Inc for presentation at the Trout Allocation Committee meeting of 2015. The proposal highlights a need to change the trout stocking policy for lakes that have a redfin population and / or a native fish population where the current trout stocking practice has proved to be ineffective.

The onset of the millennium drought in the early 2000's saw many trout fisheries across NSW and Victoria subject to very low water levels which severely hampered and in some cases wiped out the existing trout fisheries in many lakes. While the millennium drought had a significant impact on trout fisheries, the expansion of redfin into many trout waters has also had a detrimental effect on trout populations.

When the millennium drought broke, NSW and Victorian Fisheries managers embarked on different paths when it came to re-stocking trout. Victoria adopted an enhanced stocking strategy that essentially doubled the previous stocking rates for two years which provided a boost to degraded trout fisheries. The vast majority of the stocking used yearling rainbow and/or brown trout. NSW, on the other hand, continued business as usual with a very limited increase in stocking rates and stocking was conducted with trout fry and / or fingerlings.

In 2011 word started to filter out of Victoria that trout fishing in stocked lakes was very good. In issue 109 of Freshwater Fishing noted angler and writer Philip Weigall wrote "Return of the Lakes" where he stated "Once-in-a-lifetime rains backed by a remarkable stocking effort have created a confusion of choice for central Victorian fly fishers". More articles soon followed in the angling press highlighting the phenomenal resurgence of Victorian trout fisheries. The angling press was consumed by articles on a wide range of lakes such as, but not limited to Newlyn, Wendouree, Bolac, Rocklands, and Toolondo. Significantly not only were these lakes producing outstanding trout they were also producing redfin in significant quantities.

Over the same period not one NSW trout water in a similar situation was mentioned in the angling press as having made a come-back from the drought. Instead anglers were very concerned about the down-turn in fishing at Lake Eucumbene, the establishment of redfin and the disappearance of trout in Oberon Dam and the loss of trout and the inability of Pejar Dam to return as a trout venue, to name just a few concerns.

The significant difference between the two states seems to revolve around the size of fish stocked in waterways that contain redfin and native species. As mentioned earlier Victoria almost exclusively stocks with yearling trout, described as trout in the 40 to 100 gram range. NSW stocks with either fry or fingerling, described as trout less than 20 grams.

The NSW practice of stocking smaller trout in lakes also occupied by native fish seems, in some cases to produce the same results as stocking in redfin infected lakes. Pejar

Dam in NSW has been stocked with bass and fingerling trout since the breaking of the drought. The first two years saw good growth rates for trout, but since then the trout fishing has failed to reach significant levels despite 5,000 brown and 10,000 rainbow trout fingerlings stocked annually into Pejar since the end of the drought. In Victoria, lakes Bullen Merri and Purrumbete have been successfully stocked with bass and yearling trout. Each species seems to have thrived in these lakes. Recently Victoria has started stocking yearling atlantic salmon in these dams and they also are doing very well.

A similar situation seems to be occurring in Welby Dams. The Berrima District Acclimatisation Society commissioned a survey "Fish Population Assessment for Welby I, Welby II and Berrima Reservoirs" (Stocks J.R., Rodgers M.P. and Walsh C.T. Batemans Bay Fisheries Centre, PO Box 17, Batemans Bay NSW 2536). This survey noted that there were no redfin found in the Welby dams, but bass and trout have been stocked. The stocking figures for the dams are listed below at Table 1 and despite very high numbers of trout being stocked along with bass no trout were detected in the survey. Anecdotally it may be argued that the bass, being more efficient predators, are having an impact on the small trout stocked. The number and species of fish located are listed at Table 2

Table 1 - Number of fish stocked 2001 to 2013

Welby 1		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
	Bass	1250	2262	2250		8000		2545	2500	2250		1950	2000		25007
	B.Trout			10,000	5,000	6,000	6,000	6,000					3,000	1,000	37,000
	R. Trout	20,000	10,000			4,000	4,000	4,000	4,000		4,000	4,000	7,000	4,000	75,000
Welby 2	Bass	1250	2262	2250		5772		2545	2500	2250		1950	2000		22779
	B. Trout			10,000	10,000	6,000	10,000	10,000					500		46,500
	R. Trout		20,000			4,000	4,000	4,000	4,000		4,000	4,000	1,000	2,000	47,000

**Table 2** - *Number and species for Welby Dams* 

	Welby 1	Welby 2
Bass	12	12
Goldfish	23	27
Eastern Gambusia	34	6
Yabby	5	
Total	74	45

While Victoria has established an impressive list of trout waters since the drought, NSW has not recovered a single trout fishery. The list of NSW stocked trout waters that are not producing any worthwhile trout fishing is depressing. All of these waters have been stocked with significant numbers of trout over the last 10 years, but each has failed to produce fishing consistent with the stocking numbers. Table 3 outlines those waters known to MAS, but it is probably not the definitive list.

It is the MAS view that the current approach of stocking only fry or fingerlings can no longer be sustained in our lakes that have redfin present. While the bass / trout

interaction is less clear there is enough anecdotal evidence to suggest that there is a negative effect on trout by bass. To ameliorate this situation the MAS is proposing that NSW Fisheries modifies its trout raising and stocking regime to see if a better outcome can be achieved.

**Table 3** – Rainbow trout fingerlings and fry stocked in some NSW Waterways that have redfin or bass present and are no longer considered good trout fisheries.

W aterway	RT since 2010	Redfin		
Ben Chifley Dam	55,000	Yes		
Blowering Dam	95,000	Yes		
Burrinjuck Dam	52,500	Yes		
Carcoar Dam	55,000	Yes		
Googong Dam	100,000	Yes		
Khancoban Pondage	105,000	Yes		
Oberon Dam	100,000	Yes		
Pejar Dam	50,000	No	Bass Present	
Talbingo Dam	30,000	Yes		
Welby Dam 1	18,000	Νo	Bass Present	
Welby dam 2	10,000	No	Bass Present	
W yangala Dam	105,000	Yes		

Based in the Victorian experience it will be worthwhile to adopt a trout stocking policy reflective of the Victorian approach. Stocking larger trout will allow the fish to compete better against redfin and to hold their own with native fish. The MAS is of the opinion that this is easily achievable, but some adjustment to how the hatcheries operate may be required. Numbers will also need to be settled. The MAS is of the opinion that stocking rates with larger fish can be significantly less than the current fingerling / fry numbers, but this is essentially a number shifting game it does not require the production of any additional fish.

## The MAS recommends that:

- 1. A sub-committee of the Trout Allocation Committee makes an official visit to Victoria's Snobs Creek Hatchery to undertake an investigation of their trout raising regime.
- 2. A sub-committee of the Trout Allocation Committee consults with Victoria Fisheries on their stocking policy to establish density stocking rates of larger fish for various sized impoundments.
- 3. NSW Fisheries trials the stocking of yearling trout into selected waterways.
- 4. Redfin infested dams should be a focus of the trials but at least one bass stocked dam should be included.
- 5. NSW Fisheries in conjunction with angler groups monitors these stockings to establish the validity of the approach.
- 6. If the trial proves successful NSW Fisheries adopts the methodology of stocking larger trout into all mixed fishery dams.

Lastly, for all our volunteers and Fisheries staff it is disappointing and sad to see small trout released into waterways in which they cannot survive and thrive. Without moving to a larger sized fish it will be difficult to continue trout stocking in many of these waterways as it will not only be seen as inefficient and wasteful, but also unethical. Trout anglers will respond favourably to this initiative which is directed at improving the fishery. The MAS has always viewed stocking as a pathway to creating fisheries not just an exercise in dumping fish and we view this as our best chance to improve trout fisheries for anglers.

President Monaro Acclimatisation Society Inc 24/03/2015