SUBMISSION 15
RECEIVED 24/08/2017

Rodger Schifferle
[redacted]

Relevant Experience

- 5 years' professional fisherman in the Fly River Basin Papua New Guinea.
- Expert witness for Slater and Gorton in 4-Billion-dollar law suit against BHP over environmental damage by OKTEDI mine submitting 5 years of official catch records and other relevant data.
- Dairy farmer and irrigator on Tyntynder flats.
- Small boy spending most of his time wading through swamps on both sides of the Murray, collecting bird eggs and making pets of everything I could catch.

Black Water

When the explorer Major Mitchel first mapped this area he described in his diary **major rivers in a treeless landscape** then described daily events, particular locations, and the difficulty in mapping without trees to mark the rivers. **To put it simply, the trees were not here.**

I watched the invasion of the red gum forests in flood years of 1964, 1973, 1974, 1975 and 1981, first excitedly as a young bird watcher, before noticing the wildlife had little interest in them. (They had become a monoculture forcing out everything else).

In July 1981 a rare rise to flood level, followed by a sharp drop (enclosed river levels and hydrographs) pulled water from the young, healthy, recently watered forests in 1973, 1974 and 1975 causing a local fish kill as witnessed by professional fishermen Billy Donelly and Barry Shackles. I irrigated on August 15th killing all clover pasture and ruining my dam. I flushed the dam fortnightly for ten years without success in restoring it fit for any use. This event is also remembered well by my water ballif, Barry Smith.

This event has not occurred to any bodies' knowledge before or since until environment watering's in 2011 and was in any case impossible before the arrival of red gum forest on mass.

As a professional fisherman I fished the entire Fly River Basin in Papua New Guinea for 5 years in which time I had regular visits from environmental biologists.

In 1993 Ross Smith a marine biologist who used my boat for larger samples so he could concentrate on finer mesh catchers for biomass stats, came to me asking why there were no fish in Lake Kaka. I said fish travel through to the lake at the rear but are dead in the nets when I trap them coming back. Locals in our presence described a single event around 1975 that I described in

1981 on the Murray a rapid fall in the River height following an unusual high. Ross collected mud samples and concluded a specific forest toxin was to blame. The Lake was always open at one end to the river but never recovered.

I asked his opinion on the events here on the Murray in 1981. He said the Murray event could be more toxic being from a monoculture of 100% Red gum as opposed to 4% Rose wood, 2 % cedar and nothing else more than 1% in the rainforests outside swamps in Papua New Guinea.

Regardless, in both cases the toxin remained in the mud killing for 20+ years from a single event of black water.

Ross Smiths credentials can be verified by Tim Flannery as they were close mates at the time.

The Present

Absolutely not a living thing in the Murray or Wakool Rivers here since environmental watering commenced in 2011. Gone that were all here 7 years ago – all crustaceans 5 species of water beetle, water snail, 3 species of muscle, the miniature frogs that live in the mud cracks, 2 other species of frog, 2 species of water rat, platypus from Wakool and Merrin, water spiders and tiger snakes. The native fish and birds are gone as well and they won't be back as there is absolutely nothing to eat except each other in the case of fish. Introduced hatchlings are no answer, as they are not breeders (born with a different genetic memory). Even the possums have moved on.

In the past when waders and sea birds nested in their millions, they all had a hardie head minnow in their mouth. They have been completely wiped out as well.

In the case against BHP, the OKTEDI mine was dumping an average of 332,000 ton per day or 67 million ton per year of mine waste into the system plus 19 shipping containers of cyanide were lost in the river, yet they did less damage than this environmental watering.

What Needs to Be Done

-All environmental water holding to be frozen and remain in the river.

-Checks should be done and published on qualifications of all Advisers and Consultants involved in this $13 billion industry (especially if they belong to the Wentworth group)

-Checks should be done and published on all names involved in water sales to environment.

-Saw milling need to return to profitably control forest and tidy them up.

-South Australia to stop bleating or open their end for the ocean to manage (maybe brine shrimp will return to lower lakes, and delta will carve itself).

Regards, Rodger Schifferle.

Year	Monthly Flows '000 m/l [only significant monthly events recorded] May	June	July	August	September	October	November	December	Torrumbarry ml/d	Murray River Barham Peak flows Ml/d	Swan Hill ml/d	Year	Loddon River Laanecoorie Peak monthly	Peak 7 day	Peak one day	Height Murray R. Swan Hill	Metric AHD
	Major Dam storage and levee bank era. L Hume dam in service																
1955		30	41	262	73	33			62,000	30,000	29,000	468	262	112	39	14' 10"	67.45
1956	106	96	243	142	127	68			65,000	34,000	31,000	811	243	100	48	15' 4"	67.6
	Cairn Curran [Loddon] & Eilden [Goulburn] in service - Levee failures Benjeroop area.											Rank 1			Rank 4	Rank =5	
1960	73	80	127	106	236	32						694	236			14' 8"	67.4
	No hydrographs available																
1964					96	161			59,000	32,000	29,000	385	161	85	33	14' 6"	67.35
	Major levee bank reconstruction commenced on Pental Island																
1973		51	89	126	142	117			59,000	32,000	32,000	644	142	72	32	15' 4"	67.6
	Levee failure Benjeroop area -Winlation Depression											Rank 5				Rank =5	
	Cause - Pyramid Creek dredged for improved irrigation service																
1974	57	17	40	127	102	66			55,000	32,000	31,000	487	127	45	22	15'	67.5
	Winlaton Depression Levee failure Benjeroop not repared in time.																
1975					102	281	89		59,000	35,000	35,000	563	281	115	41	15' 8"	67.7
	Eastern Pental Island Little Murray River levee failures - app.7,000 ml stored for some 5 days												Rank 4		Rank 5	Rank 2	
1981			27	294	21	23			55,000	34,000	33,000	467	294	124	30	15' 6"	67.65
	No levee failures - Pental Island levees remodelled to comply with Interstate NSW/Vic. Levee Agreements												Rank 3			Rank 3	
1993	N/A	Hydrographs not avaiable			Flood Ev.	Flood Ev.										15' 4"	67.6
	New Loddon Floodway Spilway operating - S H Murray Downs Creek closed															Rank =5	
2010/11	N/A				Flood Event			Flood Event						Rank 1 >	194	15'	67.5
	Hydrographs not available - major flooding of all northern slopes river floodplains with 200 levee failures above																
	Loddon and Avoca R junctions saving the Swan Hill region from levee failures and flooding																

General Comment

The most interesting is the 30% reduction in peak daily flow through Torrumbarry following construction of Hume, Eilden and Dartmouth Dams - Capacity 10,000,000 m/l

By comparison with the above the downstream impact of Loddon Dams with a storage capacity of only 228,000 ml is noted.

The similarity of peak Murray River flows through Barham and Swan Hill after inflow from the Loddon and Avoca Rivers and outlow via Waddy Forest to Merran Cr is noted.

The January 2011 event for the Loddon River was 4 times greater than 1956 and almost 5 times greater than 1975 making the disasterous outcome inevitable

The similarity of the 2011 Loddon event to 1909 impact on FL at Swan Hill is noted

The similarity of summer 2010 & 2011 Loddon event to the summer 1933 flood event is noted

1909 & 2011 impact on the Swan Hill Murray River region was cushioned by Loddon and Avoca floodplain temporary storage of more than 100,000ml compared to 7,000ml 1975

As Laanecoorie, Torrumbarry, Barham, Swan Hill hydrographs for 1993, 2010, 2011 become available new light on the issues will become available

Fully levee bank contained flood level at Swan Hill is estimated to rise by 4.5cm above 1975 FL per 1,000ml increased flow. [1991 SH/TF Flood Study]

Swan Hill Modelled 40,000ml/d event = 67.99mAHD or 1975 FL plus 29cm, 50,000ml/d event = 68.80m AHD or 1975 plus 109cm [1991 SH/TF Flood Study]