

WSD Outbreak Situation Report #9– as of 10 pm Friday 13th January 2017

Ben Diggles
DigsFish Services

This is a summary of developments along the Logan River since my last report of 9th January 2017. The current situation with respect to infected premises and significant sampling events can be found in Figure 1 (over page).

12th January 2017

1. On Thursday 12th January 2017 I attended the Australian Prawn Farmers Association Executive Meeting on the 5th floor of the DPI Building. The meeting was an opportunity for Biosecurity QLD to update the industry on the status of the response to the WSD incursion on the Logan River. Biosecurity QLD reiterated their aim to try to return to freedom from White Spot Disease, then provided updated information on the various findings from their activities and investigations. Some of the information on the CT values of samples taken from *Penaeus monodon* sampled from WSD affected farms is contained in Table 1. Some of the information presented on the CT values of crustaceans sampled from the wild (n = >6900) are contained in Table 2.

Table 1. CT Values for WSSV positive results from *P. monodon* sampled from infected farms on the Logan River.

Farm	Date positive confirmed (BSL)	AAHL confirmed	CT value (range)
1IP	30 Nov 2016	1 Dec 2016	14.00-21.13
2IP	13 Dec 2016	15 Dec 2016	17.1-31.5
3IP	6 Dec 2016	7 Dec 2016	Not reported
4IP	9 Dec 2016	9 Dec 2016	20.2-43.04
5IP	29 Dec 2016	29 Dec 2016	14.00- 26.00

Table 2. CT Values for WSSV positive results from wild prawns and crabs sampled from the Logan River and its drains.

Location	Sampling location details	Date Sampled	Species	CT value
2 IP (adjacent)	Trawl #2	5 Dec 2016	4 <i>Metapenaeus</i>	37.5-39
2 IP (downstream)	Trawl #3	5 Dec 2016	1 <i>Metapenaeus</i> , 1 glass shrimp	37.5-39
7ARP	Drain pond next to road	23 Dec 2016	<i>Scylla serrata</i>	40.46

2. The location of sampling of the 6 wild prawns that were WSSV taken from the Logan River was confirmed to be in the Logan River itself in beam trawl shots #2 and 3 which were taken adjacent to the inlet of 2IP on 5 December 2016 (Figures 1, 2). The vast majority of the locally sourced bait samples tested to date (n = >2000) were negative, only one early batch from the Gem Bait and Tackle being indeterminate (WSSV positive on some tests but not others). The location of capture of the WSSV positive mudcrab in the outlet channel from 7ARP was confirmed to be at the south-western end of the channel (Figure 3), not the eastern end as I was lead to believe (and therefore incorrectly reported in my previous SitRep Report (#8) -my apologies). Serena Zipf did, however, confirm that a large amount of recreational fishing effort also occurred at the site where the mudcrab was sampled as it was immediately adjacent to the road (Figure 3). Areas of recreational fishing access where fishing activity was observed to regularly occur either by myself or through statements from interviews with local residents are shown as red shaded areas in Figures 2 and 3.

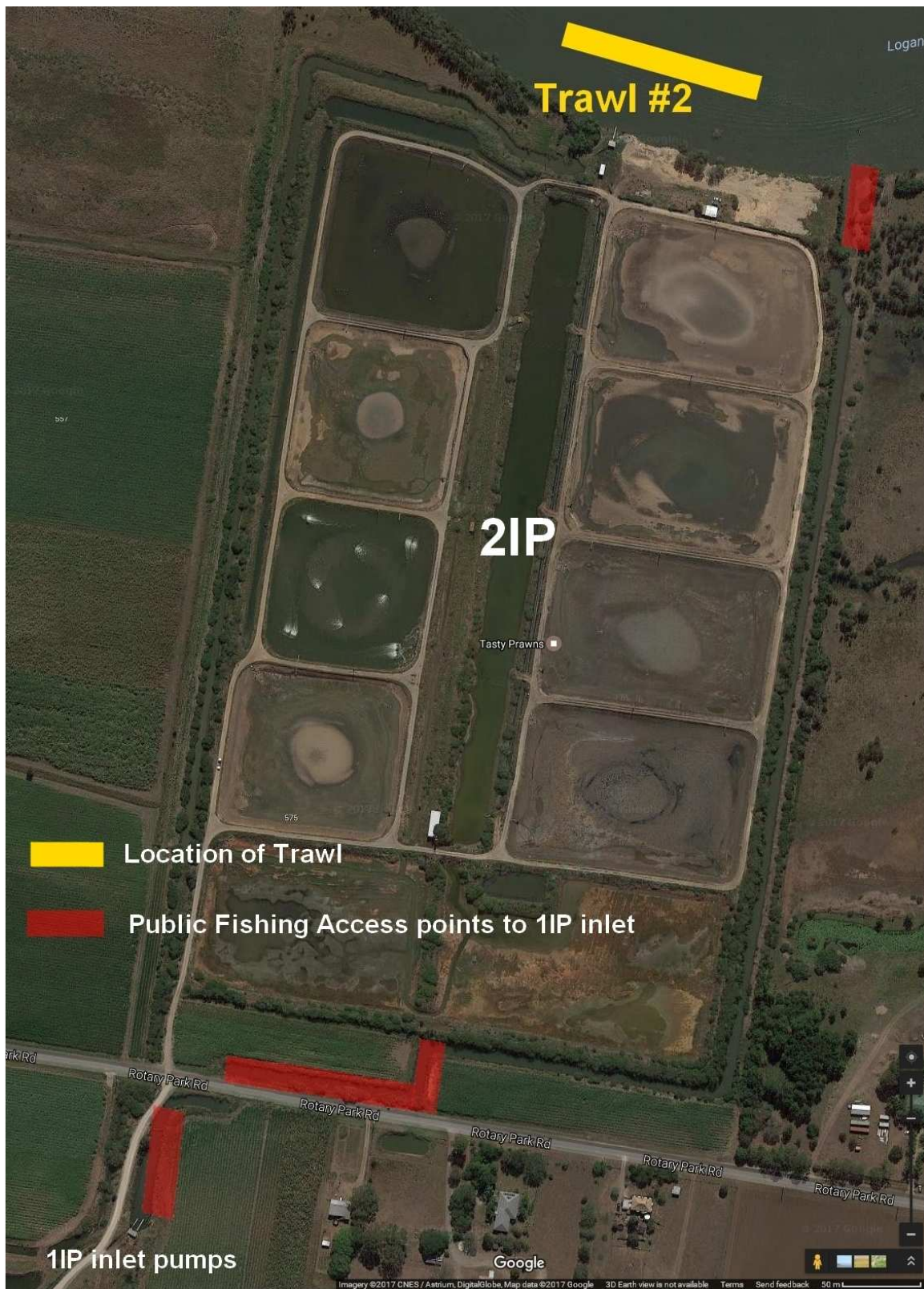


Figure 2. The location of trawl shot #2 taken in the Logan River adjacent to the inlet of 2IP on 5 December 2016 in which 4 wild *Metapenaeus* were detected. A third shot around 500 M downstream (east) of 2IP also collected a single positive *Metapenaeus* and a single positive glass prawn (*Acetes* sp.). Red shading shows public access points on the 1IP inlet where recreational fishing has been observed.



Figure 3. Corrected location of WSSV positive mud crab (X) sampled on 23 December 2016 in the 7ARP discharge channel in relation to a nearby fishing areas (red highlight). For details see Figure 4.



Figure 4. Direct access off public road to 7ARP outlet /intake where WSSV positive mud crab was sampled from the outlet pond (arrow) (= X in Figure 3).

13th January 2017

3. On Friday 13th January 2017 I attended a meeting at the Yatala Motel where prawn farmers met with international experts to discuss their options moving forward for the 2017/18 season. One significant development from this meeting was a report from Warren Truloff that fisheries officers whom he had met near his property had informed him that in the month or so since the area closure had been implemented for recreational fishers on the Logan River, the fisheries officers had detected 6 groups of fishers near the Alberton Boat ramp (top left of Figure 1) using imported raw prawns as bait. Warren reported the officers also indicated that of the 6 bait samples confiscated and tested, 2 had returned “strong positive” results for WSSV infection. While these figures remain to be verified, the fact that recreational fishers operating near the affected prawn farms were caught using WSSV infected imported prawns for bait was officially confirmed by the Federal Department of Agriculture and Water Resources in a media statement as follows;

“In the course of our investigations, the department did come across recreational fishers using imported prawns labelled for human consumption for bait in the Logan River. Subsequent testing of the product did return positive results for the virus. What this tells us is that fishers using infected imported prawns for bait is one possible pathway for this disease to get into our river system and onto prawn farms and is why prawns imported for human consumption should never be used for bait.” The Federal Department also stated *“We are still looking at a number of pathways that may have resulted in the white spot disease incursion in Queensland, including imported feed or probiotics, contaminated equipment, or even discarded uncooked prawns - or bits of prawns - that were purchased to eat”*.

4. Nick Moore also mentioned at the meeting that he expects the last of the ponds on his farm to be chlorinated today. After the meeting I was guided by Luke Rossman to two creeks/drains on their cane property between 4IP and 5IP that appear to be strategically positioned as sampling locations where WSSV may have possibly been concentrated in recent times during northerly wind events. The locations were a floodgate /bridge over sandy creek (27°42.978 S, 153°18.176 E) and a drain named Flood Structure 34 (27°43.153 S, 153°18.585 E). The Biosecurity Sampling team were contacted to see if they had sampled these locations. They had not, but informed me they expect to be able to sample them over the next few days.

5. After viewing these potential sampling sites, I drove to the 7ARP outlet where the exact location where the WSSV infected mudcrab was ascertained with Murray Zipf – it was collected from the outlet pond nearest the public road access point (Figures 3, 4) which was a body of water around 80 x 20 meters in dimension with minimal/no water flow. Again, both Murray and Serena informed me that members of the public regularly fished both the inlet and outlet drains, including since the warning signs were erected. As the outlet was chlorinated I took 2 plankton samples (1 x 100 µm and 1 x 15-20µm) from the southern end of the inlet drain, fixed the samples in 70% ethanol and left these in the fridge at the office at 7ARP, before returning home.

Erratum:

6. It has been brought to my attention that there is a possibility that the tiger prawns sampled from the 5IP intake during earlier crustacean distribution studies (reported in SitRep Reports #7 and #8) were possibly not *P. monodon*, but could be *P. esculentus* or *P. semisulcatus*. Until such time as more detailed taxonomic study of the ethanol fixed samples archived at 5IP are undertaken, the prawns referred to as *P. monodon* in Table 2 and Figure 8 in SitRep Report #7, and Table 2 in SitRep Report #8 should be referred to as *Penaeus* sp. until their identities are confirmed.