

KPF 2023 OBE Update #5, 4th of August, 2023

Water Flow Rates

- Murray River flows into KPF have continued over the last week, a peak in flow rate at Torrumbarry Weir was seen on the 28th of July at 40739 ML/d.
- A peak water depth was seen in the Thule Ck on the 31st of July before the depth slowly started to decrease, flow depth at the Barber's Ck Regulator seems to have peaked but is yet to drop, and the depth at Sandy's Bridge is still increasing.
- A graph has been supplied that indicates the flows (ML/d) at both the Torrumbarry Weir and Barham township since the 1st of June, the commence to flow thresholds are also depicted on this first graph.
- The second graph supplied depicts the flows in the Murray River, Goulburn River and Campaspe River at key locations since the 1st of June.
- We have another brilliant satellite image from Thursday the 3rd of August- I have included a copy of this image below, however; here is the link to the free website if you would like to have a look yourself.

Sentinel Hub EO Browser (sentinel-hub.com)

- A third graph has been supplied to depict the dissolved oxygen levels (mg/L) in the exit flows from the forest.

Ecological Observations

- The ecological response is now evident throughout the whole forest, with aquatic vegetation booming and the water ribbon (*triglochin sp.*) has even started to flower.
- The water is moving swiftly through the forest and the Dissolved Oxygen levels are remaining high, despite dropping slightly in the Pollack Swamp.
- Aquatic vegetation has emerged in the form of nardoo, juncus, matted starwort, water ribbon and many more, which is great to see given that it is the middle of Winter.
- The diversity of aquatic vegetation in such clear water means that the vegetation looks like a planted aquarium!
- Frog calling is ever increasing.
- Colonial waterbird activity throughout the forest is increasing.

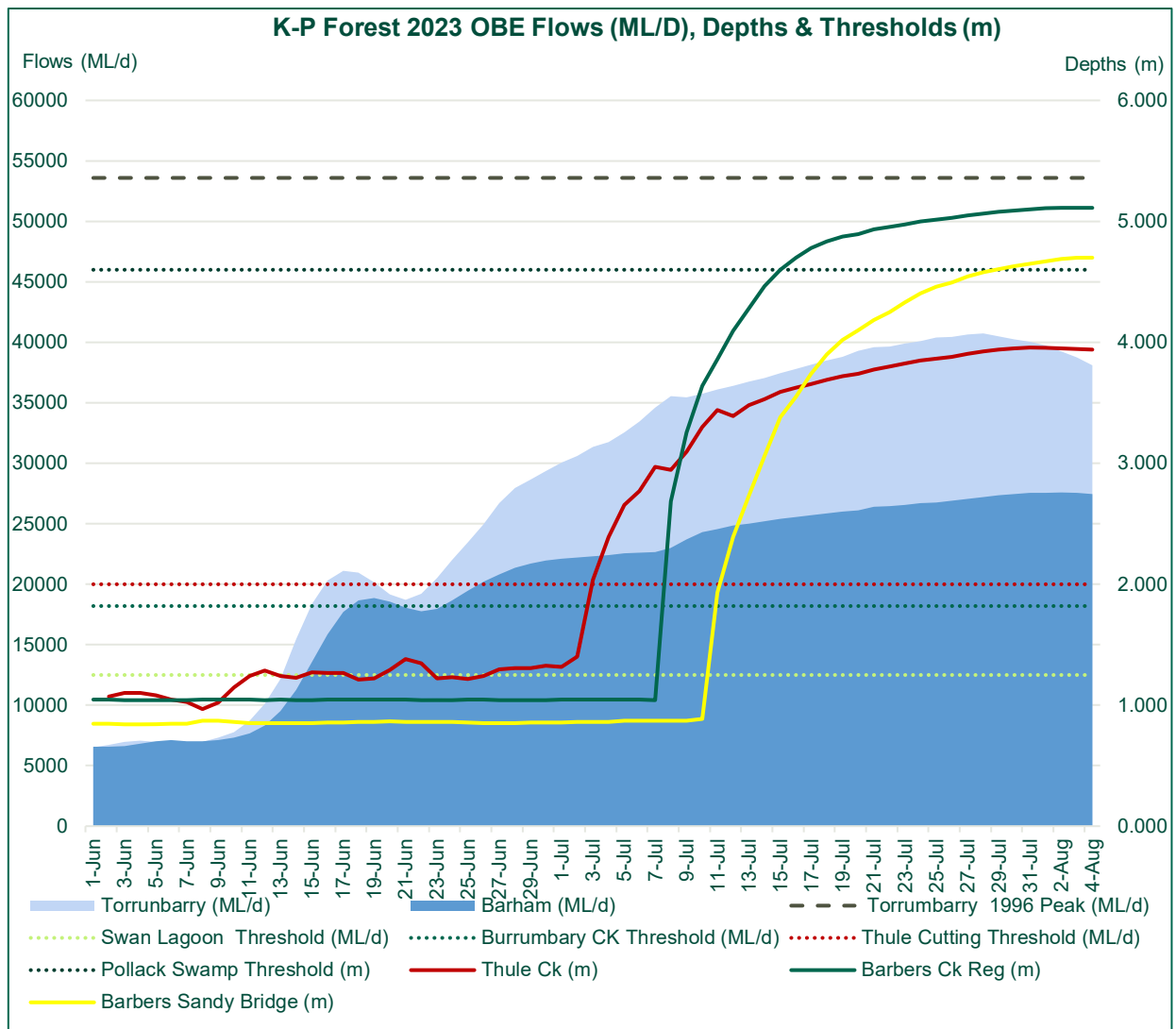


Figure 1: Hydrograph showing Murray River flows (ML/d) and KPF inflow thresholds (ML/d)

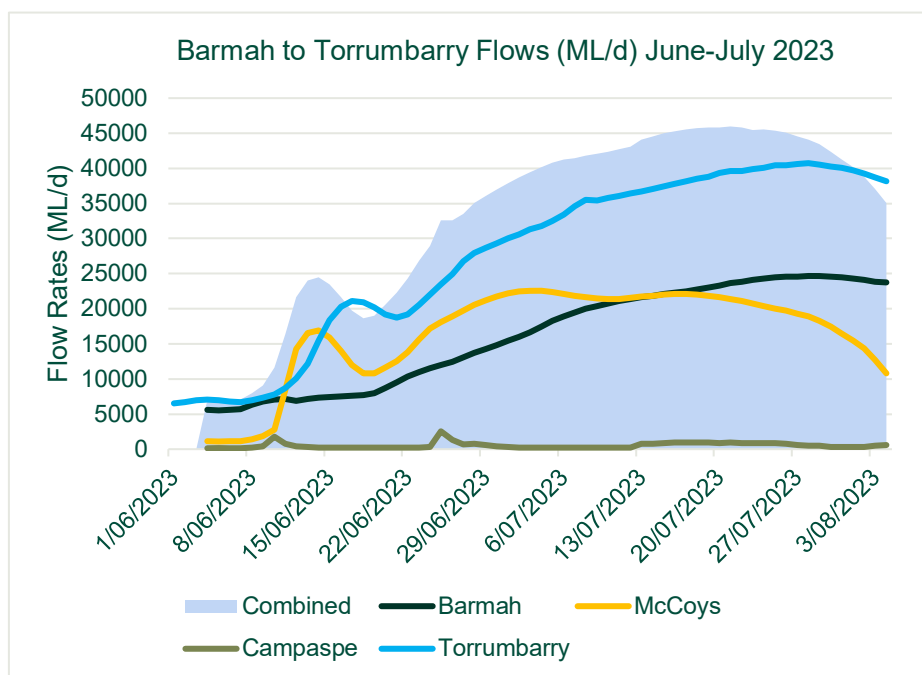


Figure 2: Hydrograph showing River flows (ML/d) in the Murray River, Goulburn River and Campaspe River

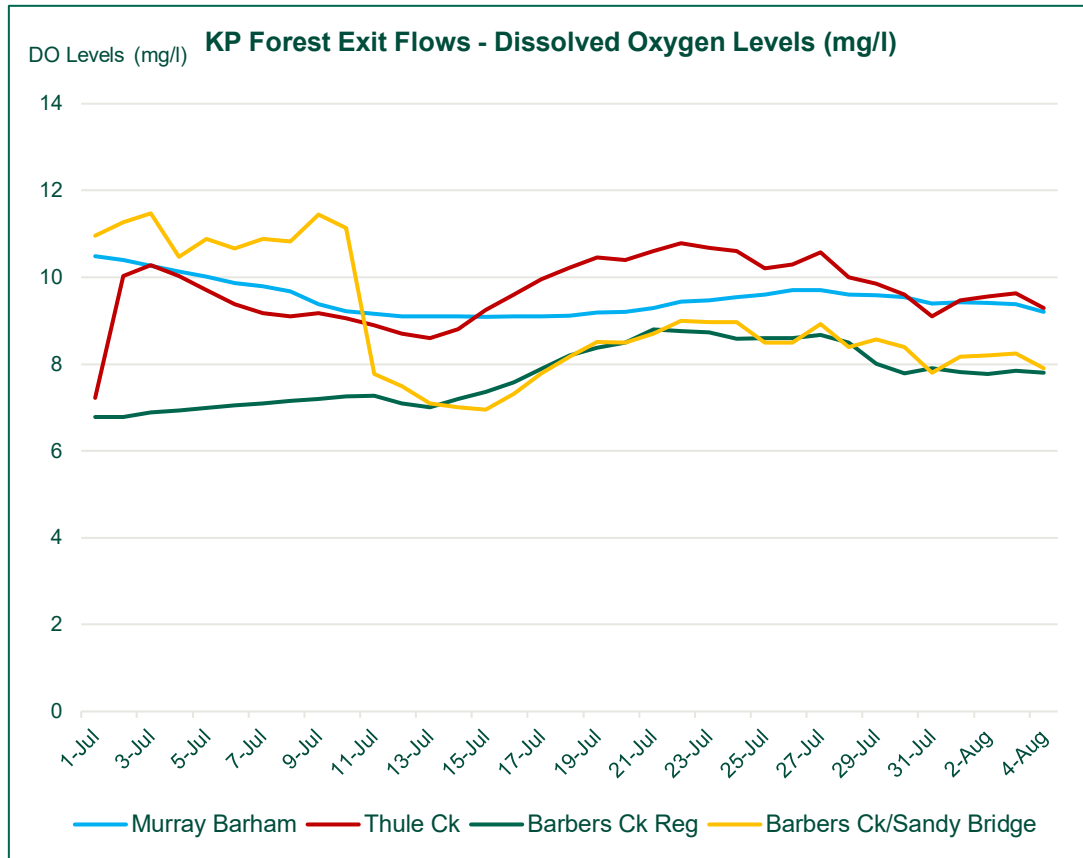
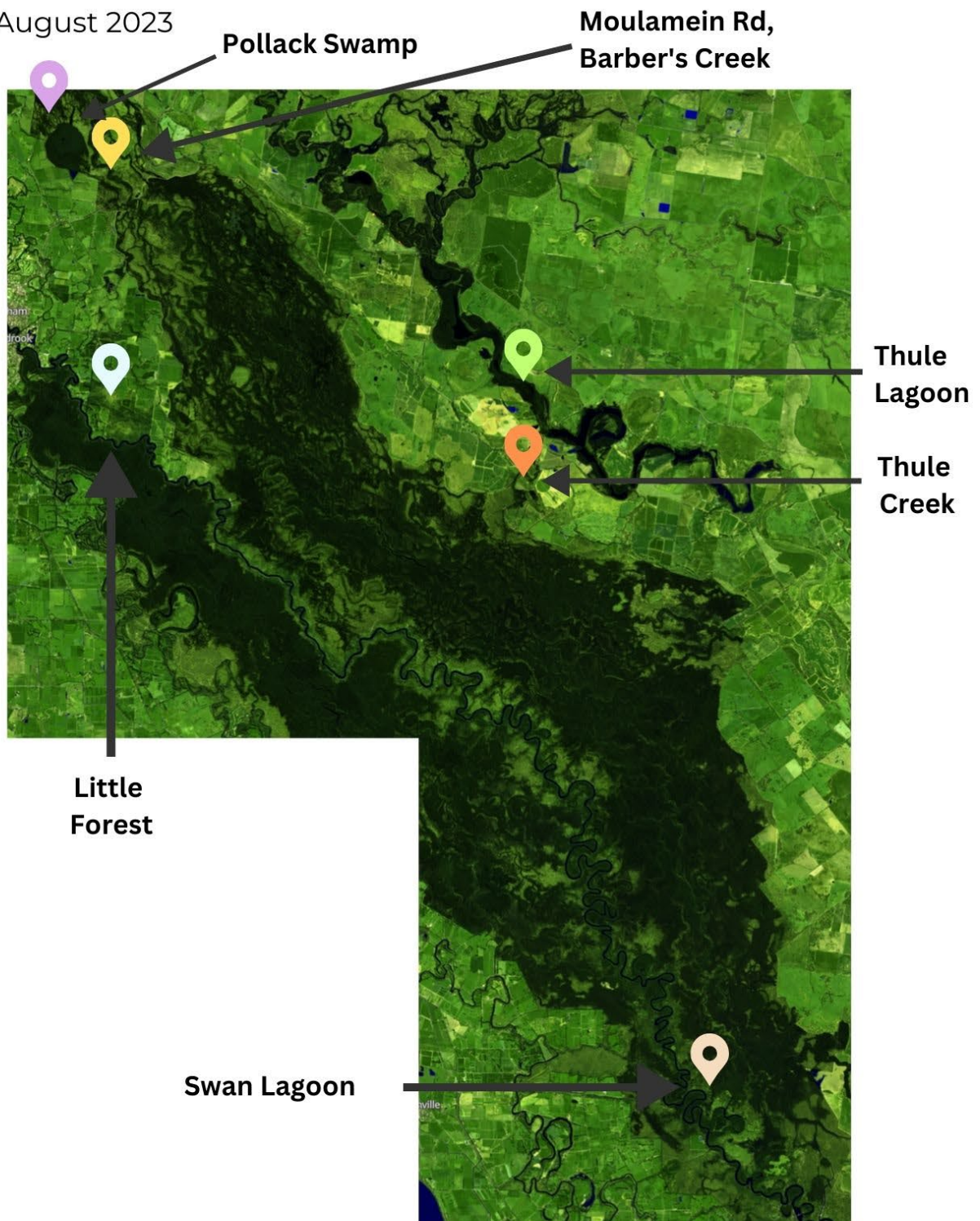


Figure 3: KP Forest Exit Flows, dissolved oxygen levels (mg/L)

KOONDROOK-PERRICOOTA FOREST SATELLITE IMAGERY

3rd August 2023



Sentinel Hub

Maggie McDonald



Figure 3. Water ribbon in flower at Crooked Creek, 03/08/23

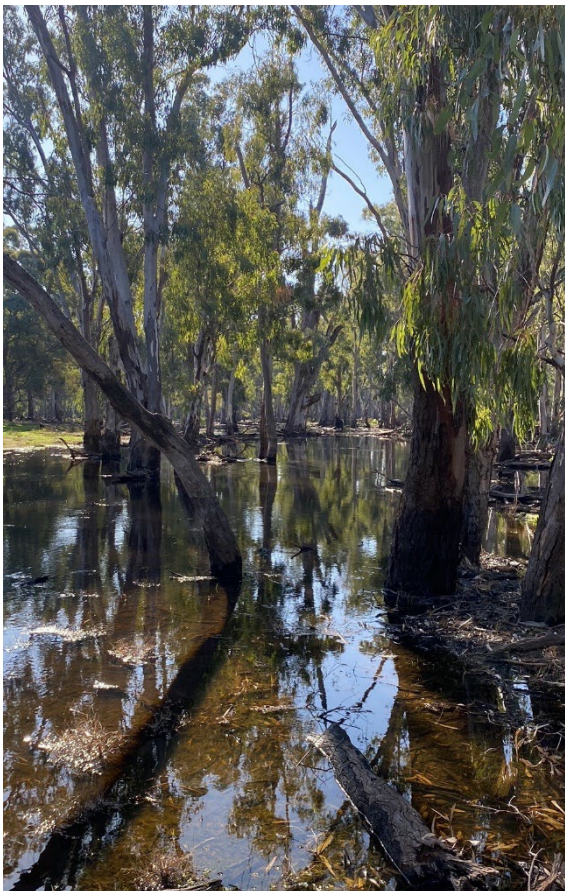


Figure 5. Water running out one of the flood runners at the Pollack Swamp, 03/08/23

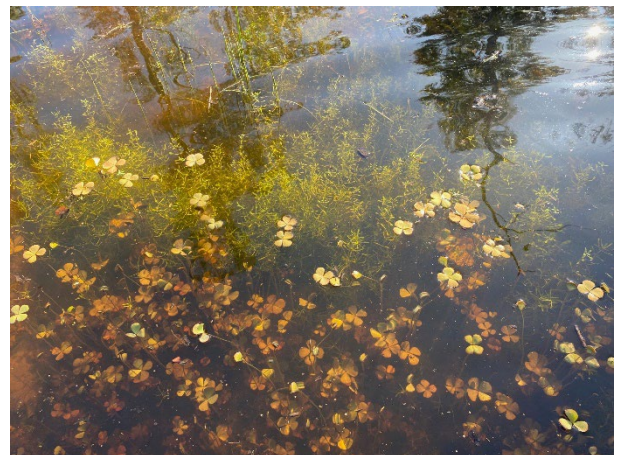


Figure 6. Nardoo and matted starwort in clear water at Belbin's Rd 02/08/2023



Figure 7. Water milfoil in clear water at Belbin's Rd 02/08/2023

Figure 9. Bullock Head Swamp, 27/07/23