Micro-plastic pollution in the Knysna estuary – impacts on Syngnathids

The Knysna Basin Project (<u>www.knysnabasinproject.co.za</u>) and UKZN are looking for an interested Masters student (2 year degree) to investigate the potential impact of micro-plastics on syngnathids in the Knysna estuary.

The Knysna estuary is considered South Africa's most important in terms of conservation importance, with an estimated 42 % of South Africa's estuarine biodiversity found within this system. This estuary also contains the largest eel grass (*Zostera capensis*) beds in South Africa, an important nursery habitat for fish. The Knysna estuary is one of only three estuaries where the endangered Knysna seahorse (*Hippocampus capensis*) can be found, which naturally occurs in eel grass beds, together with the Longsnout pipefish (*Syngnathus temminckii*).

Relatively little is known about the potential impact from microplastics on syngnathids, and this project will aim to answer the following questions:

- 1. Do micro-plastics accumulate in eel grass beds, and does this have an impact on the nursery function of the eel grass?
- 2. Do syngnathids ingest micro-plastics, and if so, through which pathways?
- 3. Do micro-plastics negatively affect syngnathids?
- 4. Should micro-plastics be considered a threat to syngnathid populations in seagrass habitats?

The project will be based in Knysna and managed by the Knysna Basin Project. The student will be registered for an MSc at UKZN. Priority will be given to students with free-standing bursaries, who would be able to relocate to Knysna for extensive fieldwork. A Skippers ticket (Level R), and snorkeling experience (with gear) will be an added advantage.

For more information or to apply please contact:

Louw Claassens (Knysna Basin Project): kyss.louw@gmail.com

Dr David Glassom (UKZN): Glassom@ukzn.ac.za

Applicants must be in possession of an Honours degree in biological sciences or related fields. Applications should include an academic record, CV and the names of two academic referees.