The Minister
Department of Forestry Fisheries & the Environment
Environment House,
Cnr. Steve Biko (previously Beatrix Street) and Soutpansberg Road,
473 Steve Biko,
Arcadia,
Pretoria, 0083

RE: RECOMMENDED CHANGES TO MANAGEMENT MEASURES FOR THE WHITE STUMPNOSE FISHERY WITHIN SALDANHA BAY AND LANGEBAAN LAGOON

The Saldana Water Quality Forum Trust (SBWQFT) is a voluntary non-profit organization that represents various organs of State, local industry and other relevant stakeholders and interest groups in Saldanha Bay. Since its inauguration in 1999, the SBWQFT has played an important role in guiding and influencing management of the Bay and in commissioning scientific research aimed at supporting informed decision making and sustainable management of the Saldanha Bay/Langebaan Lagoon ecosystem. Monitoring important ecosystem indicators in Saldanha Bay And Langebaan Lagoon was initiated by the Saldanha Bay Water Quality Forum Trust (SBWQFT) in 1996. This ecosystem monitoring culminated in the "State of the Bay" report series, which began in 2006, and which has been produced annually since 2008. This report series serves to draw together all available information on the health status and trends in a wide range of parameters that provide insights into the health of the Saldanha Bay and Langebaan Lagoon ecosystem. Research undertaken by the SABWQFT has highlighted a number of important issues pertaining to ecosystem health and management in Saldanha Bay and Langebaan Lagoon, one of which pertains to the fishery for white stumpnose (*Rhabdosargus globiceps*) in the Bay, which is the reason for this letter.

We would like to express our strong support for changes to regulatory measures for the white stumpnose (*Rhabdosargus globiceps*) fishery, specifically aimed at better protecting the depleted and overfished population within Saldanha Bay and Langebaan Lagoon. We believe there is an urgent need for sustainable management practices to be introduced to ensure the long-term optimal exploitation of this species which is of significant ecological, commercial and recreational importance. Recommended measures include a reduction in the allowable daily catch for recreational fishers (from 10 to 5 fish per person per day) and an increase in the minimum legal catch size from 25-30 cm total length for all sectors of the fishery. We believe that both of these harvest restrictions are critical steps toward protection of spawner biomass and recovery of white stumpnose populations to optimal levels. These efforts align with best practices in fisheries management and conservation biology, ensuring the recovery of the species while promoting ecosystem stability.

Nationally, 34% of South Africa's fish stocks are depleted or heavily depleted, and many of the fish that utilise the Saldanha-Langebaan system to some degree (e.g., white stumpnose) continue to be overfished and are overexploited (DFFE 2023). White stumpnose is the main angling target species within the Saldanha-Langebaan system and it helps support large shore angling, recreational and commercial boat linefisheries which contribute significantly to the tourism appeal and regional economy of Saldanha Bay and the Lagoon. In addition to the importance of the area for commercial and recreational fisheries, the sheltered, nutrient rich and sun warmed waters of the Bay provide refuge from the cold, rough seas of South Africa's western coast for this, and many other, marine species. The Saldanha-Langebaan Lagoon system is therefore considered a critical nursery area for early life stages of numerous West Coast fish species, that are integral to ecosystem functioning.

Over the past three decades, white stumpnose population in Saldanha Bay and Langebaan Lagoon has experienced a significant decline due to a combination of overfishing, habitat degradation, and

environmental changes. Results from angler surveys undertaken in Langebaan during the early 2000s indicated that approximately 92 tonnes of white stumpnose were landed by anglers each year (Næsje et al. 2008). Parker et al. (2017) provided an updated analysis of angler survey data which conclusively demonstrated substantial declines in both adult and juvenile abundance estimates in the decades since. Increased fishing pressure, particularly by the recreational sector, has led to growing concerns regarding the sustainability of the local white stumpnose exploitation. While it is acknowledged that there is inter-annual variation in successful recruitment of white stumpnose, driven by environmental variations amongst other factors, sustained declines have been observed throughout the system and it is the consensus that recruitment overfishing is the likely cause. Recruitment overfishing can be defined as overfishing of the adult population so that the number and size of mature fish (spawning biomass) is reduced to the point that it does not have the reproductive capacity to replenish itself. Data from the Saldanha-Langebaan boat fishery and per-recruit modelling estimated that spawner biomass in the Bay at the time of study (2006-2008) was less than 25% of pristine levels (Arendse 2011); and this picture is decidedly worse in recent years. The target reference point for optimally exploited stocks is 40-50% of pristine biomass, and Arendse (2011) calculated that a 20% reduction in fishing mortality within Saldanha-Langebaan was required to achieve this target.

The SBWQFT have undertaken annual 'State of the Bay' monitoring within the Saldanha-Langebaan system for over 15 years, and we have been monitoring populations of juvenile surf zone fish since 2005 (see Clark et al. 2024 for example). Our results have repeatably shown that there has been a notable, sustained, decrease in numbers of juvenile white stumpnose throughout the Saldanha-Langebaan system. Furthermore, the white stumpnose population in Saldanha Bay benefits from more favourable life history traits (rapid growth and early maturity (Attwood et al. 2010), and the presence of the West Coast National Park Marine Protected Area complex, which, together, have helped mitigate some of the declines observed at the national level; however, despite these advantages, the low abundances in the last decade suggest that the Marine Protected Area alone may not be enough to prevent ultimate stock collapse (Arendse 2011, Parker et al. 2017). It is our belief that should any recovery happen in white stumpnose recruitment this would be undermined by overfishing once the individuals reach adulthood, and further regional management within this fishery is needed to rebuild white stumpnose stock (Horton et al. 2019).

Specifically, the recommended changes to regional management of this fishery that we support are as follows:

- A reduction in daily bag limit from 10 to 5 fish per person per day for recreational fishers
- An increase in size limit of retained white stumpnose from 25 cm to 30 cm Total Length (TL) should be implemented for all fishery sectors

Fisheries stock assessment modelling has demonstrated that reducing the daily bag limit for white stumpnose from 10 to 5 fish per person per day in conjunction with an increase in size limit to 30 cm TL would alleviate sufficient fishing pressure on the population, allowing the white stumpnose stock to recover to optimal levels (>40 % of pristine biomass). While increasing the minimum size limit for retained white stumpnose from 25 cm to 30 cm Total Length (TL) would allow more individuals to reach sexual maturity before being harvested, improving spawning potential and population resilience. This measure supports stock recovery, enhances recruitment success, and contributes to the long-term sustainability of the fishery.

Regional species-specific fishery management has precedence elsewhere in South Africa (e.g. Breede River night-fishing ban to protect dusky kob *Argyrosomus japonicus*). White stumpnose in Saldanha Bay appear to be an isolated stock (Kerwath et al. 2009) and there is good on-site management presence in the form of SANParks and the DFFE. And regional species-specific fishery management has precedence

elsewhere in South Africa (e.g. Breede River night-fishing ban to protect dusky kob *Argyrosomus japonicus*). We therefore think this regional species-specific fishery management approach would work well in the Saldanha-Langebaan system.

Although population levels are low, the stock is not extirpated, and the situation is reversible. Reductions in fishing mortality can be achieved by effective implementation of more conservative catch limits and have an excellent chance of improving the stock status, catch rates and the size of white stumpnose in the future fishery. We strongly believe the proposed measures will have a demonstrable positive impact on white stumpnose population within Saldanha Bay and Langebaan Lagoon and will help rebuild this heavy depleted species. We commend the Department for prioritizing the conservation of this species and urge the Government to move forward with these regulatory changes. Furthermore, we encourage continued collaboration with stakeholders, including scientists, fishers, and conservation organizations, to ensure that these measures are effectively implemented and monitored.

Thank you for your dedication to marine conservation.

Kind regards,

Prof Jacques Bezuidenhout

Chairperson: SBWQFT

Referenced literature:

Arendse CJ (2011) Aspects of the early life history and a per-recruit assessment of white stumpnose Rhabdosargus globiceps (Pisces: Sparidae) in Saldanha Bay with recommendations for future research and monitoring. University of Cape Town, Cape Town

Attwood CG, Næsje TF, Fairhurst L, Kerwath SE (2010) Life-history parameters of white stumpnose Rhabdosargus globiceps (Pisces: Sparidae) in Saldanha Bay, South Africa, with evidence of stock separation. African J Mar Sci 32:23–35.

Clark BM, Rees A, Hutchings K, Bovim LA, Dawson J, Malan A, Schmidt KM, Gammon E, Payne RP, Ho Y, Christensen Z, Biccard A, Rajeev H, Parker A, Conrad J, Wright A (2024) The State of Saldanha Bay and Langebaan Lagoon. Anchor Environmental Consultants Report no. 2183.

DFFE (2023) Status of South African Marine Fishery Resources 2023. Cape Town.

Horton M, Parker D, Winker H, Lamberth SJ, Hutchings K, Kerwath SE (2019) Age, growth and per-recruit stock assessment of southern mullet Chelon richardsonii in Saldanha Bay and Langebaan Lagoon, South Africa. African J Mar Sci 41:313–324.

Næsje TF, Attwood CG, Kerwath S, Cowley PD, Keulder F, Arendse C (2008) Patterns and volumes of commercial and recreational harvest of white stumpnose in Saldanha Bay: an assessment of the fishery. In: *A Decade After the Emergency: The Proceedings of the 4th Linefish Symposium*. p 224–231

Parker D, Kerwath SE, Næsje TF, Arendse CJ, Keulder-Stenevik FJ, Hutchings K, Clark BM, Winker H, Cowley PD, Attwood CG (2017) When plenty is not enough: an assessment of the white stumpnose (Rhabdosargus globiceps) fishery of Saldanha Bay, South Africa. African J Mar Sci 39:153–166.