

11.0 Conclusion and Recommendations

The proposed Kilgwyn Bay Hotel development project is slated to increase the room offerings of the island, thereby creating jobs and economic benefits, growing the tourist clientele and in the process enhance and diversify the Tobago tourism product.

On the contrary, the degradation, loss and adverse effects of natural habitats as well as impacts on the noise climate, air quality and solid waste facilities, are some of the potential negative impacts of the project.

These concerns are highlighted through the stakeholder involvement and public interviews conducted for the purposes of this EIA. The implementation of the recommended mitigation measures detailed in this EIA, as well as the various environmental management and monitoring programmes, will assist in reducing these negative impacts.

However, it should be acknowledged, that the developers have provided designs and site plans that do indicate and adopt the Building with Nature (BwN) footprint at Kilgwyn Bay; maintaining the sensitive Kilgwyn Bay Mangrove and swamp footprint. This build concept at Kilgwyn Bay is an integral coastal zone management approach that provides coastal resilience by combining smart engineering and ecological rehabilitation, while introducing sustainable land-use practice. It offers an alternative to conventional hard-infrastructure approaches to coastal security. Instead of 'fighting' nature, BwN solutions work with and along the dynamics of nature. In fact, the drainage designs, mitigation and environmental management plans will only serve to improve the overall health of the current mangrove environment and nearshore marine system at Kilgwyn Bay and extending further west and east of the proposed site for hotel development.

Flooding of this mangrove basin has plagued the surrounding communities for decades and has threatened the health of the mangrove ecosystem and nearshore environment. Solutions to this flooding has to be addressed within the framework of

the hotel design which in turn provide the positive hydro-morphological impact required to alleviate this flooding issue.

The environmental benefits of such an approach to this development enables more productive and multi-functional land-use. Local stakeholders – including disadvantaged communities – are involved in design, construction and maintenance of measures. This renders the approach financially, institutionally, environmentally, technically as well as socially highly sustainable.

The inherent socio-cultural benefits outweigh the current commerce and investment climate locally and regionally.

At many places across the world, including Kilgwyn Bay, mangrove coasts are eroding and have been eroding for several decades, with the result that large amounts of sediment have been lost from these coastal systems. Bringing back the sediments by natural processes takes time. Thus, it may take several years, even decades for the mangrove forests to recover. It is therefore essential to adopt a phased, long-term master planning method for BwN projects.

It is therefore recommended that such a hotel development plan contain the following elements:

- A detailed description of the (original) ecosystems and the social and biophysical processes that take place across the coastal landscape. This is covered in this EIA and associated baseline data.
- A description of changes that have occurred as a result of anthropogenic disturbances; EMP and Monitoring Plan. The latter will also provide mitigation against the cumulative impacts identified within this EIA.
- A description of how natural processes can be used for restoring the coastal system. This includes the identification of appropriate engineering and ecosystem restoration measures in a design and engineering plan. Using the EIA baseline data to integrate into the final design and construction.

- A monitoring plan, which is required as input to the adaptive and learning-by-doing BwN approach.
- A maintenance plan so that the structures remain functional long enough to have a chance to be effective.
- A training and capacity building plan to make the BwN approach familiar to authorities and communities as this method is still novel.
- A socio-economic plan for the sustainable use of the coast after recovery
- Support from NGOs, Stakeholders and Government to ensure that the best interest of environment and investment

Once the aforementioned recommendations are adhered to, the implementation of the preferred Project Alternative 2 (Refer to **Section 10.2**) will provide a sustainable hotel development in the environmentally sensitive Kilgwyn Bay area and further mitigate against medium and long-term concerns of cumulative impacts.

Finally, for adequate planning and design of hotel development projects, it is vital to ensure that stakeholders are equipped with thorough understanding of the hotel concept, site-specific systems understanding, design instructions and lessons learned by means of technical guidance, engagement, courses and practical training. It should be emphasized that the success of hotel projects to a large extent depends on the active involvement of communities in planning and implementation. Thus, local communities also need to be equipped with knowledge and financial means and work side-by-side with their government, contractors and hotel developers.