**Table 1** Types and sources of data used in this research

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| --- | --- | --- | --- | --- |
| **Type of Data** | **Data** | **Resolution** | **Source** | **Periods** |
| Primary  Data | Worldview 3 Image | 0.6 meter | BRIN | 2021 |
| Base Map | 1: 25.000 | BIG | 2000 |
| Secondary  Data | Mangrove Map | 1: 25.000 | BIG | 2021 |
| MPA Map | - | MMAF 2016 | 2016 |
|  | Spatial Plan (TRTW) | 1:250.000 | Local Gov. | 2022 |