







# **CASE STUDY 1**

Disciplines

**Coastal Engineering** 

**Construction Management** 

# **BUSSELTON FORESHORE**

### Scope:

The scenic coast of Geographe Bay is a sandy coastline that is naturally dynamic. The shoreline is sensitive to changing environmental conditions, and cycles of accretion and erosion. There are more than 50 coastal protection structures along the Geographe Bay foreshore. While coastal protection structures have stabilised the shoreline for many of the populated areas of the Geographe Bay foreshore, many areas of higher variability and erosion remain, particularly downdrift (east) of longer groynes or harbours and on beaches adjacent to migrating transverse sand bars. Multiple areas of the coast are vulnerable to damage or inundation during significant storm events.

### Challenges:

A "whole of coast" approach to coastal management is required along Geographe Bay. We have worked together with the City of Busselton to develop and implement a 10-year program to encourage a strategic effective and sustainable approach to coastal management and adaptation.

#### Outcome:

We have delivered more than 70 coastal projects for the City of Busselton over a period of more than 12 years.

- Coastal and Maritime Planning: Strategic boat ramp planning, storm surge response planning and coastal management planning.
- Coastal Engineering: monitoring, investigation and design for sand nourishment, seawalls and groynes
- Construction Management: approvals, procurement, site supervision for coastal works including sand nourishment, seawalls (rock, buried GSCs, concrete), groynes (rock, GSCs, timber), boat ramps and jetties, sand and wrack bypassing.

### **CLIENTS**

City of Busselton