

C.V. – LESLIE ANGUS JACKSON

CHARTERED PROFESSIONAL ENGINEER

40 years experience as a qualified **Civil Engineer** (BE Uni of Qld)

35 years specialising in **Coastal and Marine Engineering**.

25 years as a **RPEQ**

PRESENT POSITION:

Executive Engineer,

- International Coastal Management, Australia & UAE
- Ecocoast Contracting LLC, Dubai

Adjunct Research Fellow

- Griffith University, Gold Coast

PREVIOUS POSITIONS:

Principal Engineer; Ecocoast Environmental Consulting, Dubai

Principal Engineer; International Coastal Management, Australia

Director; Beaches, & Waterways; Gold Coast City Council, Australia

Manager; Coastal & Marine Works; Gold Coast City Council, Australia

Special Projects Engineer; Gold Coast City Council, Australia



QUALIFICATIONS / CERTIFICATES:

B.E: Bachelor Engineering Degree (Civil); Uni. Of Qld, 1975

CPENG: Chartered Professional Engineer [R/N 78111]

FIE, Aust: Fellow Institution of Engineers, Australia [M/N 65795]

Member Society of Engineers - UAE [License 31230]

RPEQ: Registered Professional Engineer, Qld. [R/N 2876]

NPER 3: National Professional Engineers Register - Level 3

Misc; Total Quality Management Accreditation / Train the Trainer Accreditation / Diver – Commercial, Scientific & Recreational / Small Vessel Coxwains Certification

KEY AREAS OF TECHNICAL EXPERIENCE AND EXPERTISE

Over 100 technical papers have been published.

https://www.researchgate.net/profile/Leslie_Jackson2/publications

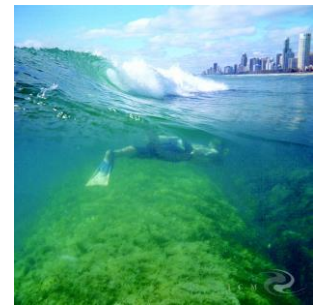
<https://scholar.google.com.au/citations?user=iqsRDGMAAAAJ&hl=en>

- Coastal works design and construction:
 - Coastal protection structures
 - Seawalls
 - Groynes
 - Reef breakwaters
 - Low crested structures
 - Toe structures for perched beaches
 - Dredging, sand bypass and fluidization systems
 - Public Facilities
 - Boardwalks
 - Beach accesses
 - Boat ramps
 - Safety
 - Multi-function reefs – fish / dive / coastal protection
 - Beach and nearshore nourishment
 - Dune stabilisation
- Marine design and construction:
 - Quay walls
 - Harbours
 - Reclamation
 - Piling
- Hydrographic survey methods and Interpretation
- Submarine pipelines design and construction
- Marina, moorings and berths - design and construction
- Waterway and canal maintenance
- Integrated coastal management feasibility studies, master planning, EIS and strategies
- Coastal processes, investigations and modelling [physical and numerical]
- Sand filled Geo-container research, design and construction
- Sea level rise impacts
- Estuary and catchment management
- Ocean effluent disposal
- Counter disaster mitigation and planning

RECENT MAJOR PROJECTS:

A range of projects and research has been carried out in Australia and overseas. These include:

- Coastal Management Master Planning / Impact Assessment Studies / Detailed design
 - Gold Coast Offshore Deepwater Dive Attraction:
 - Site studies and recommendations
 - Propose Built Dive Structure Concept Design
 - R&D into dive site attributes
 - Gold Coast 3 Point Plan for Coastal Protection
 - Seawalls
 - Narrowneck Reef performance review and maintenance plan
 - Dredging
 - Backpassing
 - Future vision
 - Um al Quwain Fishing Harbour design and supervision
 - Sheraton Sharjah safe swimming area
 - Master planning of 2 island resorts in Maldives
 - World Islands of “Australia” and “Siberia” in Arabian Gulf off Dubai
 - Uber luxury island of Nurai off Abu Dhabi – moorings, walls, groynes, reefs, toes & nourishment
 - Island development off Jumeirah, Dubai
 - Al Yasat Ali Island beach improvements, Qatar
 - Northern Gold Coast Beach Protection Strategy
 - Beach nourishment
 - From estuary [1.1Mm³]
 - From building sites [~80,000m³ / yr]
 - Reef breakwater at Narrowneck – sand filled geotextile containers
 - Sand backpassing from Nerang bypass system
 - Public access and boardwalks
 - Dune restoration and stabilisation
 - Seawalls
 - Palm Beach- Beach Protection Strategy
 - Beach nourishment
 - From offshore [370,000m³]
 - From estuary [~40,000m³ / yr]
 - Reef breakwaters (3) – sand filled geotextile containers
 - Groynes (4) – rock existing
 - Public access and boardwalks
 - Dune restoration and stabilisation
 - Seawalls
 - Management of Currumbin Creek entrance and estuary
 - Noosa Beach Restoration Strategy
 - Beach nourishment from offshore and estuary
 - Structures - Reef breakwater, existing groynes & seawalls
 - Elliot Heads Erosion Protection Strategy
 - Seawall – sand filled geotextile containers
 - Groyne – sand filled geotextile containers
 - Byron Bay CMP [preliminary]
 - Sand nourishment
 - Seawalls
 - Groyne
 - Reef breakwaters [2]
- Rock Wall Design
 - Gold Coast seawall design review and certification
 - Breakwater for fishing harbour at Um al Quwain, UAE.
 - Breakwater for beach protection at Sharjah, UAE
- Dredging / Sand Bypassing [design and project management]



CV – Leslie Angus JACKSON

- Nearshore nourishment trials and implementation
- Dredging of sand from Tweed R entrance for sand bypassing, navigation and beach nourishment of Southern Gold Coast beaches [ongoing, 1990 – present; ~5Mm³]
- Maintenance dredging of sand from Port Hacking and nearshore nourishment of Cronulla Beach [~90,000m³]
- Terranora Inlet navigation dredging
- Mooloolaba Entrance bypass dredging
- Evans R entrance bypass dredging
- Clarence R navigation dredging
- Coffs Harbour navigation dredging
- Canal management/dredging strategies; Gold Coast
- Feasibility study, costing and tender for bypassing at Capbreton, France
- Sand bypass tender by dredging for Tweed R entrance
- Feasibility study and trial for fluidisation of Currumbin Creek entrance
- River diversion for Gold Coast Entertainment Centre
 - Dredging of new channels and closure of old channels
 - Boardwalks
 - Revetment walls
 - Public boat ramp
- Noosa R and Spit – design and approvals for protection works
- Erosion protection strategy for Oyster Cove Resort, Qld
- Reclamation trial at Port of Brisbane using mega sand filled containers filled with silts.
- Reclamation feasibility study for Port of Gisborne using mega sand filled containers
- Reef design for beach improvement and protection, Carlsbad, California
- City du Surf Project Advisor, Biarritz, France
- Multi-functional reefs using geo-containers.
- Southport Yacht Club
 - Marina redevelopment options, design & construction supervision.
 - Superyacht Berths
 - Swing Moorings
 - Sheet pile wall repairs
- Feasibility study for coastal protection along French Riviera using submerged geo-container reef breakwaters
- Condition survey of retaining walls and safety ladders along boardwalk, Lake Burley Griffin
- Condition survey of Appel Park wharf for Gold Coast City Council
- Design of recreational boating facilities for Qld Depart. of Transport & Brisbane City Council
- Design of seawall and submarine seawater intake pipeline; Hualien, Taiwan
- Design & construction of sea defenses and beach improvements using mega geo-containers for an island resort. Abu Dhabi, UAE
- R&D [AusIndustry]
 - Sand filled geotextile structures for coastal protection and amenity
 - Seawalls and groynes
 - Stability
 - Construction methods
 - Durability
 - Reef breakwaters
 - Design formulae for salient size prediction, storm cut & stability
 - Marine ecology
 - Recreational amenity – surfing, diving & fishing
 - Construction methods
 - Durability
 - Artificial dive reefs and structures

