



Curriculum Vitae

Peter Horton

Coastal Engineer & Water Engineer

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Peter Horton is a civil engineer with 26 years of coastal engineering and water engineering experience. In May 2016, he formed the company Horton Coastal Engineering Pty Ltd.

Peter has particular experience in coastal processes studies, coastal hazard definition, coastal engineering aspects of cost benefit analysis, risk assessment and emergency management in coastal studies, environmental assessment and design of coastal protection works, and climate change adaptation. He has developed an innovative methodology for defining beachfront setbacks based on 'acceptable risk', and is at the forefront of probabilistic coastal hazard definition.

Peter also has extensive experience in numerical modelling (hydrodynamics, waves, sediment transport, dredge plumes, water quality, near field outfall jet/plumes). He also has experience in port studies, river and estuarine engineering, environmental assessments in the coastal zone, floodplain risk management, water resources, and water quality monitoring, and has skills in GIS.

Peter worked at the Water Research Laboratory of UNSW from 1992 to 2000. He then worked at Patterson Britton & Partners from 2000 to 2007, before that firm was acquired by WorleyParsons. After continuing in WorleyParsons, he joined Haskoning Australia as Principal Coastal Engineer in March 2012, working there until April 2016. Peter has project managed about \$6 million worth of studies in the last 14 years.

Nationality

Australian

Languages

English

Office Location

Beacon Hill, Sydney, NSW, Australia

Professional Memberships

- Member of Engineers Australia (MIEAust) since 1989
- Chartered Professional Engineer (CPEng) registered on (Australian) National Engineering Register (NER) since 1998
- Member of National Committee on Coastal & Ocean Engineering of Engineers Australia (since 2013)
- Member of NSW Coastal, Ocean & Port Engineering Panel of Engineers Australia (since 2008)
- Registered on Asia Pacific Economic Co-operation (APEC) Engineer Register (APEC Engineer)
- Registered on International Professional Engineers Agreement (IPEA), IntPE(Aus)
- Member of the End User Reference Group (EURG) of the National Climate Change Adaptation Research Facility (NCCARF) from 2015-2017
- Member of American Geophysical Union (2001-2014)
- Member of American Shore & Beach Preservation Association (2006-2014)
- Member of PIANC (World Association for Waterborne Transport Infrastructure) since 2019



**National
Engineering
Register**



Professional History

- 2016-ongoing:** Director & Principal Coastal Engineer, Horton Coastal Engineering, Sydney
- 2016-2017:** Senior Specialist Coastal Engineer, City of Gold Coast, Gold Coast
- 2012-2016:** Principal Engineer, Haskoning Australia (Royal HaskoningDHV), Sydney
- 2007-2012:** Principal Engineer, WorleyParsons, Sydney (also Manager of the Coastal Group in Sydney from 2009 to 2011)
- 2000-2007:** Senior Engineer, Patterson Britton & Partners, Sydney
- 1995-2000:** Senior Engineer, Unisearch Ltd, Water Research Laboratory (WRL), UNSW, Manly Vale
- 1992-1995:** Engineer, WRL, Manly Vale

Education

- 1989-1992:** Bachelor of Engineering in Civil Engineering with Honours Class One, UNSW
- 1993-1995:** Master of Engineering Science majoring in Water and Coastal Engineering, UNSW

Professional Experience

COASTLINE HAZARD DEFINITION AND VULNERABILITY (INCLUDING CLIMATE CHANGE)

- Recent major local government studies in NSW: Manly Ocean Beach & Cabbage Tree Bay Coastline Hazard & Ecosystem Health Management Options Study; Whiting Beach (Yamba) erosion processes study; Gosford Coastline Hazards; Pittwater Coastline Hazard Definition & Climate Change Vulnerability Study; Review of Coastline Hazard Lines for Collaroy-Narrabeen Beach & Fishermans Beach; 2010 revision of Evans Head Coastline Hazard Definition Study (for Richmond Valley Council)
- Coastal engineering expert in Land & Environment Court, *Johnston v Wollongong City Council* (2017), *Throsby v Pittwater Council* (2015), *Neill Miller v Waverley Council* (2010)
- Invited speaker at Gosford Council Climate Change Cross-directorate Working Group (2011)
- Peer review of Shoalhaven coastal studies (2010)
- NSW Coastal Lands Risk Assessment (for NSW government)
- Many locations listed below involved preparation of coastal engineering reports for development applications
- North Coast of NSW - Kingscliff, Belongil, Byron Bay, Lennox Head, Evans Head, Hearn Lake, Emerald Beach, Sapphire Beach, Sandy Beach, Park Beach, Old Bar, Diamond, Lake Cathie, Boomerang and Blueys Beach
- Central Coast of NSW – Port Stephens (Jimmys Beach, Taylors Beach), Norville (Elizabeth Drive, Budgewoi Road & Gomul Street at Hargraves Beach), The Entrance North (Curtis Parade & Hutton Road), Blue/Toowoona Bay (Werrina Parade, Binburra Avenue)
- Gosford beaches: Forresters (Kalakau Ave, South Scenic Drive), Wamberal (Calais Road, Ocean View Drive, Pacific Street), Terrigal, North Avoca, Avoca, MacMasters, Pearl, Patonga, St Huberts Island, Booker Bay
- Sydney's north: Palm, Whale, Avalon, Sandy (Pittwater), Bilgola, Mona Vale, Basin, Long Reef, Collaroy-Narrabeen, Fishermans, Long Reef, Dee Why, North & South Curl Curl, Freshwater, Manly Ocean, Fairy Bower, Spit East
- Coastal engineering assessment of Collaroy Accessibility Tourism Precinct
- Sydney Water Corporation & Anor ats Bennett (Supreme Court, relating to Manly Beach)
- Sydney's south: Bondi, Tamarama, Waverley Coastal Study, South Bronte Community Centre, Bumborah Point cemetery, Lady Robinsons (beach nourishment), Silver, Bonnie Vale, Bundeena, Gunnamatta Bay
- South Coast of NSW – Wollongong City, Thirroul, Waniora Point (Bulli), Warilla, Shellharbour, Jervis Bay (Callala, Hyams), Surfside (Batemans Bay), Bawley Point, Tathra, Pambula, Eden (Yallungo Cove, Cattle Bay, Legges Beach), Boydtown
- *Shoalhaven City Council v Prochilo* (Land & Environment Court)
- Portland Bay, Victoria
- Fiji Hilton Resort, Denarau Island, Viti Levu
- Lihir Island, Papua New Guinea
- Northern Gold Coast Beach Protection Strategy
- Santubong Peninsula, Kuching, Sarawak, Malaysia
- Sebangon Bajong, Malaysia
- Beach protection and harbour design, Brunei
- Advice on SLSC redevelopments: MacMasters, Whale, Avalon, Newport, Mona Vale, South Narrabeen, Collaroy, Long Reef, Manly, Pambula

COASTAL ZONE MANAGEMENT, RISK MANAGEMENT AND EMERGENCY MANAGEMENT

- Assessment of acceptable risk for beachfront development: Mona Vale SLSC; Long Reef SLSC; Bilgola and Basin Beach (Pittwater); Old Bar; Collaroy-Narrabeen Beach & Fishermans Beach
- Advice on beach scraping and sand relocation at Spit East for Mosman Council (2015)
- Bilgola and Basin Beach Coastal Zone Management Plan (CZMP) for Pittwater Council (2015-2017)
- Advice to Waverley Council on June 2016 coastal storm damage
- Options to Manage Recession of Whiting Beach, Yamba
- Lord Howe Island Coastal Management Study (2012-2014)
- Collaroy-Narrabeen & Fishermans Beach CZMP (2012-14, updated 2016)
- Mosman CZMP (2012)
- Coastal engineering expert on Manly Warringah Pittwater Emergency Consultants Panel (2010-present)
- Coastal Erosion Emergency Action Subplans for Bilgola and Basin Beach (for Pittwater Council), Warringah Council, and Wamberal Beach (for Gosford Council)
- Manly Ocean Beach Coastline Management Plan (for Manly Council), including Coastal Erosion Emergency Action Plan
- Bate Bay Coastline Management Plan – Beach Management System review
- Forresters Beach Coastal Management Plan Review (Land and Environment Court)

COASTAL AND OCEANOGRAPHIC PROCESSES, AND METOCEAN ANALYSIS

- Surfers Paradise Sand Backpassing (2016)
- Advice on management of erosion at Sandy Beach (Palm Beach) and Paradise Beach (Avalon) (2016)
- Assessment of placing nourishment sand to enhance surfing on Gold Coast (2016)
- Investigation of causes of storm damage at 1150 Pittwater Road Collaroy and Collaroy Services Beach Club for insurance purposes (2016)
- Old Bar Sediment Tracing Study
- Sydney Region Aviation Capacity Study for Department of Infrastructure and Transport, coastal engineering advice relating to potential airport sites offshore of Sydney

- Skeletal steel artificial reefs offshore of South Head, Sydney – coastal processes and input into structural design
- Port Chinde, Mozambique
- Sierra Leone River estuary, for African Minerals
- Sinking of ex-HMAS Adelaide offshore of Terrigal – review of constraints and site selection (for Department of Lands)
- *Robert El Khoury & Ors ats Robert Laoulach*, coastal engineering expert opinion on Botany Bay processes (NSW Supreme Court)
- Location selection, constraints mapping and assistance with Environmental Assessment for offshore artificial reefs from Newcastle to Port Kembla (for NSW Fisheries)
- Bulk Liquids Berth No. 2, Port Botany
- Sydney to Guam submarine cable
- Warriewood and Bondi Ocean Outfalls

ASSISTANCE WITH COASTAL ENGINEERING ASPECTS OF ECONOMIC STUDIES (COST BENEFIT ANALYSIS & BENEFIT DISTRIBUTION)

- Campbells Beach cost benefit and distribution analysis for protection works (2017-2018)
- Collaroy-Narrabeen Beach coastal protection works benefit distribution analysis (2016)
- Surfers Paradise sand backpassing economic threshold analysis (2016)
- Cost-benefit analysis of options to protect Old Bar from coastal erosion (2014)

ESTUARINE/FORESHORE RISK, WATER LEVELS, WIND WAVES, WASH AND INUNDATION

- St George Skiff Club (2017)
- Addison Road, Manly (2016)
- Estuary Hazards Risks and Management Options Assessment for Clontarf and Bantry Bay (Manly)
- Merimbula Airport and Merimbula Lake
- Royal Hobart Hospital, peer review
- Myall Downs, Port Stephens
- Pittwater (numerous studies including at Avalon, Careel Bay, Church Point, Clareville, Elvina Bay, Scotland Island and Palm Beach)
- Sydney Harbour – Balmain East, Birchgrove, Cammeray, Point Piper, Pyrmont, Rose Bay, Rozelle Bay, Watsons Bay, Woolloomooloo Marina
- *Minister ats Consolidated Development Pty Ltd* (Land and Environment Court)
- Cockrone Lagoon, MacMasters Beach

- Shanghai Yacht City
- Church Street, Ulladulla

COASTAL CLIFF/BLUFF ASSESSMENTS WITH GEOTECHNICAL ENGINEERS

- Numerous studies including at Norville (Roslyn Place), Blue Bay (Ocean Parade), Palm Beach (Rock Bath Road, Whale Beach Road / Little Head), Whale Beach (Whale Beach Road, Rayner Road), Avalon (Marine Parade, Watkins Road), Bilgola (The Serpentine / Bilgola Head), Newport (Bungan Head / Barrenjoey Road / Bungan Beach), Mona Vale (Hillcrest Avenue), Warriewood (Narrabeen Park Parade at Turimetta Beach & Warriewood Beach) and Thirroul

PORT STUDIES

- Assistance to Scope Global in recruitment of port specialist for Nauru Port project (2018)
- Expert reviewer to assist Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) with review of Environmental Impact Statements, including Port of Weipa Long Term Maintenance Dredging, Western Basin Dredging Project, and Port Hedland Outer Harbour
- Port of Hastings Container Terminal Expansion (Victoria), Technical Lead on Hydrodynamics (2014-2015)
- Investigation of engineering feasibility of three port sites on Norfolk Island (for Norfolk Island Government)
- Port of Melbourne Sediment Transport and Dredge Option Modelling
- Port Waratah Coal Services Terminal 4 development
- Port Chinde, Mozambique
- Port Kembla Coal Terminal Upgrade
- Bulk Liquids Berth No. 2, Port Botany
- EIS for dredging of South Arm, Hunter River
- Oakajee Port, Western Australia
- East Arm Port, Darwin (for Sinclair Knight Merz)

WAVE CLIMATE ANALYSIS AND WAVE TRANSFORMATION MODELLING

- The Skillion, Terrigal
- Yallungo Cove, Eden
- Collaroy-Narrabeen Beach
- Manly Ocean Beach

- Elliott Lake
- Norfolk Island
- Ulladulla Harbour
- Offshore of Hunter River, Newcastle
- Blue Fish Point, North Head, Sydney
- Santubong and Sebangang Bajong, Malaysia
- Bate Bay
- Kinghorn Point

BANK EROSION AND FORESHORE REHABILITATION STUDIES

- Roy Hill project, Port Hedland, seawall design verification
- Dunningham Park Seawall and Park Concept Plan (for Sutherland Council)
- Cooks Cove development (Cooks River), mangrove establishment
- Rowland Reserve Foreshore Stabilisation (for Pittwater Council)
- Elliott Lake Foreshore Stabilisation (for Shellharbour Council)
- Narrabeen Lagoon Foreshore Rehabilitation Plan (for Warringah and Pittwater Councils)
- Shoalhaven Estuary Foreshore Definition Study
- Parramatta River long-term monitoring (for NSW Maritime)
- Williams River bank erosion

COASTLINE AND RIVERINE STRUCTURES

- Peer reviewer of AECOM advice to Torres Strait Island Regional Council for various coastal hazard assessment and mitigation projects, including review of seawall designs (including for Boigu, Iama, Masig, Poruma, and Warraber)
- Development application (DA) including concept design (with structural engineer) and Statement of Environmental Effects (SEE) for coastal protection works (vertical wall) at Wetherill-Stuart Street in Collaroy (2018)
- Coastal engineering design and construction advice for concrete block seawall repair at Collaroy (2018)
- Coastal engineering advice for structural design of seawall at Florence Terrace Scotland Island (2018)
- Coastal engineering advice on sand-filled geotextile container revetment at Bonnie Vale (2018)
- Hill Road, Wentworth Point, seawall design (2017)
- DA including concept design and SEE for rock revetment at Flight Deck in Collaroy (2017)

- Coastal engineering advice for structural design and construction of seawall at Paradise Beach Avalon (2017)
 - Coastal engineering advice on sand-filled geotextile container revetment at Sandringham in Botany Bay (2017)
 - DA including concept design and SEE for rock revetment at Stuart-Ramsay Street Collaroy (2017)
 - *Horton Coastal Engineering v NSW Coastal Panel* (Land & Environment Court, 2016-2017)
 - Specialist adviser on 'fish friendly' coastal protection works to Cassowary Coast Regional Council, Qld (2017)
 - Coastal engineering advice for foreshore structures at Woolooware Bay, Taren Point (2017, 2018)
 - DA including concept design (with structural engineer) and SEE for sandstone block seawall with piled toe at Wamberal Beach (2018)
 - DA including concept design (with structural engineer) and SEE for rock revetment with piled toe at Wamberal Beach (2017)
 - DA including concept design and SEE for rock revetment at Wamberal Beach (2016)
 - Coastal engineering advice relating to Sunshine Skyway Bridge seawall, Florida (2016)
 - Coastal engineering advice for structural design of protection works at The Beach Club Collaroy (2016)
 - Coastal engineering advice for structural design of seawall at Riverview Parade Avalon (2016)
 - Designer and site engineer for upgrading of rock revetment at Frazer Street in Collaroy (2016)
 - Site engineer for construction of emergency sand-filled geotextile container revetment at Collaroy (2016)
 - Review of Gold Coast revetment design (2016)
 - Palm Beach Shoreline Project, Gold Coast (2016)
 - Review of groyne condition assessments on Gold Coast (2016)
 - Coastal engineering advice on coastal protection works (reinforced concrete vertical wall with wave return and rock toe) at Waverley Cemetery, Sydney (2016-2017)
 - Shell Cove: rock stability in overflow chute (2016)
 - Collaroy Beach rock revetment detailed design, technical specification & construction supervision (2015)
 - Spit East protective works and beach access design (2015)
 - Barangaroo rock revetment design (2015)
 - Advice on seawall at North Harbour in Balgowlah (2015)
 - North Byron Beach Resort, Belongil estuary protection works (2015)
 - Advice on Prince Street seawall at Cronulla (2015)
 - Rock revetment concept design, Narrabeen Beach (2014)
 - *Annette Watson Broadfoot ats Warringah Council*, Land & Environment Court, advice regarding illegal seawall
 - Wave forces – Merewether Ocean Baths, Ramsgate Ave North Bondi, Ocean View Dr Wamberal, Hudson Pde Clareville, Fiji Hilton chapel, Riverview Pde Avalon
 - Design and construction advice for sand-filled geotextile container revetments, Belongil Spit (for Byron Council)
 - Gibson Island (Brisbane River), bed scour and rock blanket
 - North Harbour – rock revetment
 - Thevenard, South Australia – rock revetment
 - Rowland Reserve – 'environmentally friendly' rock revetment incorporating mangroves and saltmarsh, plus beach nourishment
 - Fiji Hilton, Denarau Island - rock revetment
 - Elliott Lake southern entrance foreshore – rock revetment
 - Shellharbour Foreshore - design advice for jetty, boardwalk, boat ramp and cycleway/footway
 - Seawall reconstruction, Spurway Street Ermington
 - Seawall Filter Cloth Stability – Sydney Parallel Runway
- MARINA AND WATERWAY STUDIES**
- Navigation assessment, Barangaroo
 - Floating pontoon assessment for Milsons Point, Sydney Harbour (for NSW Maritime)
 - Stockton Marina
 - Upper Shoalhaven River waterway users study
 - Physical modelling of floating Sea-Slip marina units
- ESTUARY STUDIES**
- Beach nourishment at Snapperman Beach, Pittwater
 - Estuarine Artificial Reefs in Pittwater, Sydney Harbour and the Port Hacking – location selection and constraints mapping (for NSW Fisheries)
 - Environmental Water Requirements to Maintain Estuarine Processes (for Environment Australia)
 - Curl Curl Lagoon Rehabilitation

HYDRODYNAMIC AND WATER QUALITY NUMERICAL MODELLING

- Port of Hastings Container Terminal Expansion (Victoria), Technical Lead on Hydrodynamics (2014-2015)
- Port of Melbourne Sediment Transport and Dredge Option Modelling
- Port Waratah Coal Services Terminal 4 development
- Assessment of 1000-year ARI scour levels adjacent to sheet pile wall in Hunter River, Newcastle (for BHP Billiton)
- Hunter River South Arm, hydrodynamic modelling and analysis of water level data for BHP Billiton
- Barangaroo development, Darling Harbour, Sydney (for Lend Lease)
- Sierra Leone River estuary, for African Minerals
- Hunter River, Newcastle (South Arm EIS)
- Manly Lagoon
- Harrington Lagoon, Manning River
- Darwin Harbour (for Department of Lands, Planning and Environment)
- Project Manager – International Atomic Energy Agency Regional Training Course on Environmental Modelling
- Oakajee Port, Western Australia
- East Arm Port, Darwin (for Sinclair Knight Merz)
- Hong Kong Harbour (for Hong Kong Environment Protection Department)
- Mary River, Northern Territory
- Rouse Hill Wetland, Sydney
- Penrith Lakes Scheme

ENVIRONMENTAL AND WATER QUALITY MONITORING

- Environmental monitoring scope for Northern Beaches and Palm Beach Shoreline Projects, Gold Coast (2016)
- Baseline and near-field monitoring of turbidity, conductivity, pH, temperature and water level in:
 - Hunter River (Newcastle Coal Infrastructure)
 - Botany Bay (Sydney Desalination Water Delivery Alliance & Energy Australia Cable laying)
 - Port Hedland for WorleyParsons' Perth office

ENVIRONMENTAL AND WATER QUALITY ASSESSMENTS

- Approvals for Northern Beaches Shoreline Project, Gold Coast

- Dredging Hickey/Dart Island and beach nourishment at Whiting Beach in Yamba, Preliminary Review of Environmental Factors
- Barangaroo development (Sydney Harbour), including liaison with NSW Government on environmental approvals
- Crown Hotel development, Barangaroo
- Expert reviewer to assist Commonwealth Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) with review of Environmental Impact Statements (particularly providing advice in coastal processes, sediment transport, dredge plume modelling, hydrodynamic modelling, wave modelling and dredging)
- SEWPaC studies include Port of Weipa Long Term Maintenance Dredging Permit, EIS Report for Western Basin Dredging Project, EIS for Chevron Wheatstone LNG project, EIS for Ichthys Gas Field Development (hydrodynamic, wave and sediment transport modelling, EIS for Port Hedland Outer Harbour, and review of drill cuttings and muds discharge modelling for ConocoPhillips 2011/2012 exploration drilling campaign
- Lady Robinsons Beach, assistance with preparation of Review of Environmental Factors for beach nourishment works at Sandringham (for Rockdale Council)
- Collaroy SLSC, review of environmental assessment and coastal engineering review
- Rezoning of Australand and Breen sites at Kurnell: coastal engineering, flooding, groundwater and climate change considerations
- BHP remediation site, Hunter River (silt curtain)
- Rowland Reserve foreshore stabilisation, Review of Environmental Factors
- Manly Golf Course redevelopment, Statement of Environmental Effects, Controlled Activity Approval and all consent documentation
- Elliott Lake foreshore stabilisation, Statement of Environmental Effects
- Bass Point Loading Terminal, construction of a new dolphin, Review of Environmental Factors
- Manly Lagoon low flow pipes water quality
- Stormwater pollution boom performance enhancement
- Experimental study of freshwater wetland hydrodynamics

NEAR FIELD AND RANDOM WALK MODELLING, AND OCEAN OUTFALL STUDIES

- Barangaroo heat exchange thermal plumes, Sydney Harbour
- Barangaroo treated water discharge, Sydney Harbour
- Gunns Pulp Mill, Tasmania
- BTEX modelling, Yolla gas field, Bass Strait
- Sydney Deepwater Outfalls Environmental Monitoring Program (for NSW EPA)
- NSOOS Pipeline – ocean receiving waters study
- Modelling of Malabar Outfall discharge options
- North West New Territories, Pillar Point, Yuen Long and Kam Tin Sewage Outfalls, Hong Kong
- Burwood Beach Outfall (Duckbill Valves)
- “Hydraulics of ‘Duckbill’ Elastomer Check Valves”, paper in Journal of Hydraulic Engineering, ASCE, Vol. 124, 1998
- “Comparison of Numerical Models that Simulate the Near-Field Region of Jet/Plume Behaviour” (prize winning Masters Thesis)

SEDIMENT TRANSPORT AND DREDGING

- Port of Melbourne Sediment Transport
- Offshore disposal of dredged material for Caltex maintenance dredging in Botany Bay
- Kooragang K7 Expansion, Hunter River
- Dredge plumes for cable laying project in Botany Bay for Energy Australia
- Fiji Hilton, Denarau Island - Technical Specification for dredging and onshore placement
- EIS for proposed dredging of South Arm, Hunter River
- Sea Dumping Permit for offshore disposal of materials dredged from South Arm, wave modelling aspects (for Port Waratah Coal Services)
- Concurrence under Coastal Protection Act:
 - Newcastle Bulk Liquids Berth (for Stolthaven)
 - Hunter River Remediation Project Capital Dredging (BHP Billiton), including wave modelling
 - Capital Dredging of Kooragang Berths 8 and 9 (for Newcastle Coal Infrastructure Group)
 - Newcastle Maintenance Dredging Permit (Newcastle Port), including wave modelling
 - Construction of K2 Dolphins and capital dredging, Review of Environmental Factors (Newcastle Port)
- Cullen Bay Marina, Darwin – numerical modelling
- Darwin Naval Base – numerical modelling (GHD)
- Ok Tedi, PNG – numerical modelling (Dredco)
- Sediment thermals in stratified fluids research

FLOOD STUDIES

- DA Flood Risk Management reports for Bayview (2017, 2018), Barrenjoey Road and Ocean Road at Palm Beach (2017), Whale Beach (2016), Bilgola (2015) and Newport (2005) properties
- Advice on tailwater levels for McCarrs Creek, Mona Vale and Bayview Flood Study (2015)
- Culvert system at Jurong Island, Singapore
- Evans River
- Manly Golf Course
- Pasadena, Church Point, assessment of floodgate solutions
- NSW flood and floodplain risk management studies: Lower Hawkesbury River, Karuah River, Cooks River, Wardell & Cabbage Tree Island, Bungendore, Wentworth, Hastings River, Bombala and Murrumbidgee River (Darlington Point)
- Hydrological investigation of 1998 Wollongong storm
- Cooks River motorway crossing (for Transfield).

STORMWATER DESIGN AND WATER MANAGEMENT

- Manly Golf Course
- Walana Crescent, Mona Vale
- Kiaora Road, Double Bay

LEGAL/COURT COASTAL ENGINEERING EXPERT WITNESS EXPERIENCE

- Land and Environment Court of NSW: *Mohammad Morad v Inner West Council* (2018), *Johnston v Wollongong City Council* (2017), *Horton Coastal Engineering v NSW Coastal Panel* (2016-2017), *Throsby v Pittwater Council* (2015), *Annette Watson Broadfoot v Warringah Council* (2011-2012), *Neill Miller v Waverley Council* (2010)
- NSW Supreme Court: *Robert El Khoury & Ors v Robert Laoulach* (2010)
- Supreme Court of Victoria: *Murray v Parks Victoria* (2018)

UNSW University Prizes

- 1989-1992:** Civil Engineering Industry Scholarship
- 1991:** Crawford Munro Prize for Water Resources
- 1992:** Welding Technology Institute Prize
- 1995:** Maunsells Project Prize for Masters Thesis

Selected Publications

Carley, James T; Cox, Ronald J and Peter R Horton (2005), "Is the NSW Coast Eroding and is it Likely to Get Worse?", *14th NSW Coastal Conference*, Narooma

Cox, RJ and PR Horton (1998), "Managing Climate Change in the Coastal Zone", *1998 Australian Global Warming Conference, "Turning Down the Heat"*, Yamba

Cox, Ronald J and Peter R Horton (1999), "Implications of Climate Change on Coastal Management", *Fifth International Conference on Coastal and Port Engineering in Developing Countries, Proceedings of the COPEDEC V*, Cape Town, South Africa, April 19–23, Vol. 1, pp. 568–579

Cox RJ and PR Horton (1999), "Managing Sea Level Rise & Climate Change in the Coastal Zone", *Integrated Coastal & Marine Resource Management, Proceedings of International Symposium*, edited by J Rais et al, National Institute of Technology Indonesia, 25-27 November 1997, pp 249-259

Cox RJ, Horton PR, Peirson WL, Cox DR and PM Tate (1998), "Environmental Monitoring and Modelling from Catchment to Ocean", *The Australia-Korea Joint Seminar on Environmental Technology*, Korea, November

Cox, RJ, Horton, PR and SH Bettington (1999), "Double walled, low reflection wave barriers", *Coastal Engineering 1998*, 26th International Conference on Coastal Engineering, Copenhagen, Denmark, June 1998, Volume 2, American Society of Civil Engineers, Reston, Virginia, pp 2221–2234

Folan, Anthony; Fischer, Justin; Waltham, Nathan and Peter Horton (2019), "Flying Fish Point Rock Revetment Upgrade: Application of 'Green Engineering', Fish Friendly Features and Other Innovative Measures", *Coasts & Ports 2019*, Hobart

Horton, Peter (2000), "Environmental Flows and the Richmond River Estuary", presentation at *3rd International River Management Symposium*, Brisbane

Horton, Peter (2010), "National and International Approaches to Coastal Emergency Management",

presentation at NSW Maritime Panel Half Day Seminar, 23 August

Horton, Peter (2011), "Management of Coastal Erosion Emergencies in Local Government Areas", presentation at NSW Maritime Panel Half Day Seminar, 15 August

Horton, Peter (2012), "Preparation of a Coastal Zone Management Plan in Sydney Harbour – the Mosman experience", presentation at NSW Coastal, Ocean and Port Engineering Panel (COPEP) Half Day Seminar, 20 August

Horton, Peter (2013), "Construction of an environmentally friendly seawall in Pittwater at Rowland Reserve", presentation at NSW Coastal, Ocean and Port Engineering Panel (COPEP) Half Day Seminar, 19 August

Horton, Peter (2014), "Defining acceptable risk for beachfront development", presentation at NSW Coastal, Ocean and Port Engineering Panel (COPEP) Half Day Seminar, 18 August

Horton, Peter (2015), "Defining Beachfront Setbacks Based on 'Acceptable Risk' – Reactions to this New Approach", *24th NSW Coastal Conference*, Forster

Horton, Peter (2016), "Ecological Engineering Case Studies: A Coastal Engineer's Perspective", presentation at Ecological Engineering Forum, convened by City of Sydney Council and the University of Sydney, Sydney, 26 May

Horton, Peter (2016), "Dealing with Landowners in the Aftermath of the June 2016 storm", presentation at NSW COPEP and PIANC Australia Annual Seminar, Sydney, 15 August

Horton, Peter (2017), "The June 2016 storm at Collaroy-Narrabeen Beach & Wamberal Beach – Lessons for Coastal Management in Australia", *Coasts & Ports 2017*, Cairns

Horton, PR, Cox, RJ and DL Wilkinson (1995), "Stormwater Pollution Boom Performance Assessment and Enhancement", *Australian Water and Wastewater Association 16th Federal Convention Proceedings*, Volume 2, pp. 755–762

- Horton, Peter R, Lee, Joseph HW and Jeffrey R Wilson (1997), "Near-Field JETLAG Modelling of the North West New Territories Sewage Outfall, Urmston Road, Hong Kong", *Coasts & Ports 1997*, Christchurch, NZ, Volume 2, pp. 561-566
- Horton, Peter R, Airey, Peter L and Jeffrey R Wilson (1997), "Radioactive and Dye Tracer Studies for the NWNT Sewage Outfall, Hong Kong, and Comparison to Near-Field Modelling", *Conference Handbook, 2ICI, Second International Conference on Isotopes*, Sydney, Australian Nuclear Association Inc., Paper 11/180, p. 11
- Horton, Peter; Cameron, Daylan; Dickinson, Todd and Leonie Maddigan (2011), "Coastal Erosion Emergency Action Subplan For Beaches in Warringah – The Story Behind the Story", *20th NSW Coastal Conference*, Tweed Heads
- Horton, Peter and Jaap Flikweert (2012), "Adapting the coastal zone: sharing solutions between Australia, The Netherlands and Great Britain", presentation at *Coast to Coast 2012, Australian National Coastal Conference*, Brisbane
- Horton, Peter and Daylan Cameron (2012), "Removal of an Unlawful Seawall from a Sydney Open Coast Beach – The Steps to Success", *21st NSW Coastal Conference*, Kiama
- Horton, Peter; Britton, Greg and David Kelly (2013), "Lord Howe Island – Unique Coastal Processes and Challenging Coastal Management", *Coasts & Ports 2013*, Sydney
- Horton, Peter; Britton, Greg and Angus Gordon (2013), "Collaroy-Narrabeen Beach & Fishermans Beach CZMP: Can Both Sensible Development and Public Beach Amenity Be Achieved?", *22nd NSW Coastal Conference*, Port Macquarie
- Horton, Peter; Britton, Greg; Gordon, Angus; Walker, Bruce; Moratti, Mark and Daylan Cameron (2014), "Drawing a Line in the Sand – Defining Beachfront Setbacks Based on Acceptable Risk", *23rd NSW Coastal Conference*, Ulladulla
- Horton, Peter and Greg Britton (2015), "Defining Beachfront Setbacks Based on 'Acceptable Risk' – Is it the New Approach?", *Coasts & Ports 2015*, Auckland, New Zealand
- Horton, P; Rajaratnam, N; Daley, M and S Whitelaw (2018), "Cost-benefit analysis for coastal management decisions – A case study and lessons learned from Campbells Beach, Coffs Harbour", *27th NSW Coastal Conference*, Merimbula
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