

Environmental Impact Assessment (EIA) for the proposed construction,
operation and decommissioning of the Saldanha Regional Marine Outfall
Project of Frontier Saldanha Utilities (Pty) Ltd. at Danger Bay
in the Saldanha Bay region

FINAL EIA REPORT

CHAPTER 10: REFERENCES



CHAPTER 10. REFERENCES

- Adams, S.M., Brown, A.M. and R.W. Goede (1993). A quantitative health assessment index for rapid evaluation of fish condition in the field. *Transactions of the American Fisheries Society*, 122: 63-73.
- Ahsanullah, M. (1982). Acute toxicity of chromium, mercury, molybdenum and nickel to the amphipod *Allorchestes compressa*. *Aus. J. Mar. Freshwater. Res.*, 33: 465-474.
- Ahsanullah, M. and A.R. Williams (1986). Effect of uranium on growth and reproduction of the marine amphipod *Allorchestes compressa*. *Marine Biology*, 108: 59-65.
- Ahsanullah, M., Mobley, M.C. and P. Rankin (1988). Individual and combined effects of zinc, cadmium and copper on the marine amphipod *Allorchestus compressa*. *Aus. J. Mar. Freshwater. Res.*, 39: 33-37.
- Airoldi, L., and F. Cinelli (1997). Effects of sedimentation on subtidal macroalgal assemblages: an experimental study from a Mediterranean rocky shore. *Journal of Experimental Marine Biology & Ecology* 215: 269-288.
- Al-Agha, M.R., and R.S. Mortaja (2005). Desalination in the Gaza Strip: drinking water supply and environmental impact, *Desalination*, 173: 157-171.
- Allen, Y., Matthiessen, P., Scott, A.P., Haworth, S., Feist, S. and J.E. Thain (1999). The extent of oestrogenic contamination in the UK estuarine and marine environments – further surveys of flounder. *The Science of the Total Environment*, 233: 5-20.
- Amiard, J.C. (1976). Experimental study on the acute toxicity of cobalt, antimony, strontium and silver salts in some Crustacea and their larvae and in some Teleostei. *Revue Internationale d'Océanographie Medicale*, 34(3): 239-245.
- Amiard, J.C. (1976). Phototactic variations in crustacean larvae due to diverse metallic pollutants, demonstrated by a sublethal toxicity test. *Marine Biology (Berlin, Germany)*,
- Anderson, B.S., J.W. Hunt, H.R. McNulty, M.D. Stephenson, F.H. Palmer, D.L. Denton and M. Reeve (1994). Marine Bioassay Project seventh report: Refinements of effluent toxicity testing protocols for four marine species. Report No. 94- 2WQ, January 1994, State Water Resources Control Board. Sacramento, CA, p 104.
- Anderson, E.P. and D.L. Mackas (1986). Lethal and sublethal effects of a molybdenum mine tailing plume on marine zooplankton: mortality, respiration, feeding and swimming behaviour in *Calanus marshallae*, *Metridia pacifica* and *Euphausia pacifica*. *Mar. Environ. Res.*, 19: 131-155.
- Arfi, R., Champalbert, G. and G. Patrì (1981). Systeme planctonique et pollution urbaine: Un aspect des populations zooplanctoniques. *Marine Biology*, 61: 133 - 341.
- Atkinson, L., Hutchings, K., Clark, B., Turpie, J., Steffani, N., Robinson, T. and A. Duffell-Canham (2006). State of the Bay 2006: Saldanha Bay and Langebaan Lagoon. Technical Report. Prepared for Saldanha Bay Water Quality Trust, 93 pp. + Appendices.
- Atkinson, S., Atkinson, M. and A.M. Tarrant (2009). Estrogen from Sewage in Coastal Marine Environments. *Environmental Health Perspectives*, 111(4): 531 – 535.
- Avery, G & Klein, R.G. (2009). Spreewal: an Upper Pleistocene Wetland on the Western Cape Coast, South Africa. *SASQUA 2009, Programme & Abstracts*, p. 11.
- Avery, G., Halkett, D., Orton, J., Steele, T. & Klein, R. (2008). The Ysterfontein 1 Middle Stone Age Rockshelter and the evolution of coastal foraging. *South African Archaeological Society Goodwin Series* 10: 66-89.

- Awad, A.A., Griffiths, C.L. and J.K Turpie (2002). Distribution of South African benthic invertebrates applied to the selection of priority conservation areas. *Diversity and Distributions*, 8:129-145.
- Bailey, G.W. (1991). Organic carbon flux and development of oxygen deficiency on the modern Benguela continental shelf south of 22°S: spatial and temporal variability. In: Tyson, R.V. and T.H. Pearson (Eds.), *Modern and Ancient Continental Shelf Anoxia*. Geol. Soc. Spec. Publ., 58: 171–183.
- Bailey, G.W. (1999). Severe hypoxia and its effect on marine resources in the southern Benguela upwelling system. Abstract, International Workshop on Monitoring of Anaerobic processes in the Benguela Current Ecosystem off Namibia.
- Bailey, G.W. and P. Chapman (1991). Chemical and physical oceanography. In: Short-term variability during an Anchor Station Study in the southern Benguela Upwelling system. *Prog. Oceanogr.*, 28: 9-37.
- Bailey, G.W., Beyers, C.J. De B. and S.R. Lipschitz (1985). Seasonal variation of oxygen deficiency in waters off southern South West Africa in 1975 and 1976 and its relation to catchability and distribution of the Cape rock-lobster *Jasus lalandii*. *S. Afr. J. Mar. Sci.*, 3: 197-214.
- Bally, R. (1987). The ecology of sandy beaches of the Benguela ecosystem. *S. Afr. J. mar. Sci.*, 5: 759-770.
- Bamber, R.N. (1995). The influence of rising background temperature on the effects of marine thermal effluents. *J. Therm. Biol.*, 20(1/2):105-110.
- Barkai, A. and G.M. Branch (1988). Contrasts between the benthic communities of subtidal hard substrata at Marcus and Malgas Islands: a case of alternative states? *S. Afr. J. mar. Sci.*, 7: 117-137.
- Barlow, M.J. and P.F. Kingston (2001). Observations on the effects of barite on the gill tissues of the suspension feeder *Cerastoderma edule* (Linne) and the deposit feeder *Macoma balthica* (Linne). *Mar. Pollut. Bull.*, 42: 71-76.
- Barlow, R., Sessions, H., Balarin, M., Weeks, S., Whittle, C. and L. Hutchings (2005). Seasonal variation in phytoplankton in the southern Benguela: pigment indices and ocean colour. *African Journal of Marine Science*, 27: 275-287.
- Barnabe, G. (1989). *Aquaculture*. Volume 1. New York, Ellis Horwood. 528 pp.
- Barry, M.J. and B.J. Meehan (2000). The acute and chronic toxicity of lanthanum to *Daphnia carinata*. *Chemosphere*, 41: 1669-1674.
- Bateman, P. (1946). Archaeological notes on the Saldanha Bay district. *South African Archaeological Bulletin* 1: 41-45.
- Bau, M., Peter Möller, P. and P. Dulski (1997). Yttrium and lanthanides in eastern Mediterranean seawater and their fractionation during redox-cycling. *Mar. Chem.*, 56: 123-131.
- Bayne, B.L. (1965). Growth and delay of metamorphosis of larvae of *Mytilus edulis* L. *Ophelia*, 2: 1-47.
- Beiras, R. and E. His (1995). Effects of dissolved mercury on embryogenesis, survival and growth of *Mytilus galloprovincialis* mussel larvae. *Mar. Ecol. Prog. Ser.* 126: 185-189.
- Berg, J.A. and R.E. Newell (1986). Temporal and spatial variations in the composition of seston available to the suspension-feeder *Crassostrea virginica*. *Estuar. Coast. Shelf. Sci.*, 23: 375–386.
- Bergen, M., Weisberg, S.B., Smith, R.W., Cadien, D.B., Dalkey, A., Montagne, D.E., Stull, J.K., Velarde, R.G. and J. Ananda Ranasinghe (2001). Relationship between depth, sediment, latitude and the structure of benthic infaunal assemblages on the mainland shelf of southern California. *Marine Biology* 138:637-647.
- Berger, L.R. & Parkington, J.E. (1995). A new hominid-bearing Pleistocene locality at Hoedjiespunt, South Africa. *American Journal of Physical Anthropology* 98: 601-609.

- Best, P.B. (2007). Whales and dolphins of the southern African subregion. Cambridge University Press, Cape Town. pp 336
- Bingler, L.S., Byrne, R.H., Vargo, G.A. and C.R. Tomas (1989). Rare earth element uptake by the marine diatom *Skeletonema costatum*. Chem. Speciation Bioavailability, 1: 103-110.
- Bishop, M.J., Underwood, A.J. and P. Archambault (2002). Sewage and environmental impacts on rocky shores: necessity of identifying relevant spatial scales. Marine Ecology Progress Series, 236: 121 – 128.
- Blaber, S.J.M. and T.G. Blaber (1980). Factors affecting the distribution of juvenile estuarine and inshore fish. Journal of Fish Biology, 17: 143-162.
- Blaber, S.J.M. and T.G. Blaber (1980). Factors affecting the distribution of juvenile estuarine and inshore fish. Journal of Fish Biology, 17: 143-162.
- Bolsch, C.J. and G.M. Hallegraeff (1993). Chemical and physical treatment options to kill toxic dinoflagellate cysts in ship's ballast water. Journal of Marine Environmental Engineering, 1: 23 - 29.
- Bolton, J.J. (1986). Seaweed biogeography of the South African west coast - A temperature dependent perspective. Bot. Mar., 29: 251-256.
- Bolton, J.J. (1986). Seaweed biogeography of the South African west coast - A temperature dependent perspective. Bot Mar, 29, 251-256.
- Bombace, G., Fabi, G., Fiorentini, L. and S. Speranza (1994). Analysis of the efficacy of artificial reefs located in five different areas of the Adriatic Sea. Bulletin of Marine Science, 55: 559-580.
- Borowitzka, M.A. (1972). Intertidal algal species diversity and the effect of pollution. Australian Journal of Marine Freshwater Research, 23: 73 - 84.
- Boyd, A.J. and G.P.J. Oberholster (1994). Currents off the west and south coasts of South Africa. S. Afr. Shipping News and Fish. Ind. Rev., 49: 26-28.
- Branch, G.M. (2008). Trophic Interactions in Subtidal Rocky Reefs on the West Coast of South Africa . In: McClanahan, T. and G.M. Branch (eds). Food Webs and the Dynamics of Marine Reefs. New York: Oxford University Press, 2008. Oxford Scholarship Online. Oxford University Press. pp 50-79
- Branch, G.M. and C.L. Griffiths (1988). The Benguela ecosystem part V: the coastal zone. Oceanogr. and Mar. Biol. Ann. Rev., 26: 395-486.
- Branch, G.M., Griffiths, C.L., Branch, M.L., and L.E. Beckley (2010). Two Oceans. Struik Nature, Cape Town, South Africa, revised edition, 456pp.
- Bricelj, V.M. and R.E. Malouf (1984). Influence of algal and suspended sediment concentrations on the feeding physiology of the hard clam *Mercenaria mercenaria*. Mar. Biol., 84: 155–165.
- Brouwer, S.L., Mann, B.Q., Lamberth, S.J., Sauer, W.H.H. and C. Erasmus (1997). A survey of the South African shore angling fishery. South African Journal of Marine Science, 18: 165-178.
- Brouwer, S.L., Mann, B.Q., Lamberth, S.J., Sauer, W.H.H. and C. Erasmus (1997). A survey of the South African shore angling fishery. South African Journal of Marine Science, 18: 165-178.
- Brown, A. C. and A. McLachlan (1990). Ecology of sandy shores, pp. 1-328 Amsterdam, Elsevier.
- Brown, A. C. and A. McLachlan (1990). Ecology of sandy shores, pp. 1-328 Amsterdam, Elsevier.
- Brown, A.C., Stenton-Dozey, J.M.E. and E.R. Trueman (1989). Sandy beach bivalves and gastropods: a comparison between *Donax serra* and *Bullia digitalis*. Adv. Mar. Biol., 25: 179-247.

- Brown, P.C. (1984). Primary production at two contrasting nearshore sites in the southern Benguela upwelling region, 1977-1979. *S. Afr. J. mar. Sci.*, 2: 205-215.
- Brown, P.C. and J.L. Henry (1985). Phytoplankton production, chlorophyll a and light penetration in the southern Benguela region during the period between 1977 and 1980. In: SHANNON, L.V. (Ed.) *South African Ocean Colour and Upwelling Experiment*. Cape Town, SFRI : 211-218.
- Brüchert, V., Barker Jørgensen, B., Neumann, K., Riechmann, D., Schlösser M. and H. Schulz (2003). Regulation of bacterial sulphate reduction and hydrogen sulfide fluxes in the central Namibian coastal upwelling zone. *Geochim. Cosmochim. Acta*, 67(23): 4505-4518.
- Buchanan, W.F., Hall, S.L., Henderson, J., Olivier, A., Pettigrew, J.M., Parkington, J.E., Robertshaw, P.T. (1978). Coastal shell middens in the Paternoster area, south-western Cape. *South African Archaeological Bulletin* 33: 89-93.
- Burman, J. & Levin, S. 1974. *The Saldanha Bay story*. Cape Town: Human & Rosseau.
- Bustamante, P. and P. Miramand (2005). Subcellular and body distributions of 17 trace elements in the variegated scallop *Chlamys varia* from the French coast of the Bay of Biscay. *Sci. Tot. Environ.*, 337: 59-73.
- Bustamante, R.H. and G.M. Branch (1996a). The dependence of intertidal consumers on kelp-derived organic matter on the west coast of South Africa. *J. Exp. Mar. Biol. Ecol.*, 196: 1-28.
- Bustamante, R.H. and G.M. Branch (1996b). Large scale patterns and trophic structure of southern African rocky shores: the roles of geographic variation and wave exposure. *Journal of Biogeography*, 23: 339-351.
- Bustamante, R.H., Branch, G.M. and S. Eekhout (1995b). Maintenance of exceptional intertidal grazer biomass in South Africa: Subsidy by subtidal kelps. *Ecology* 76(7): 2314-2329.
- Bustamante, R.H., Branch, G.M., Eekhout, S., Robertson, B., Zoutendyk, P., Schleyer, M., Dye, A., Hanekom, N., Keats, D., Jurd, M. and C. McQuaid (1995). Gradients of intertidal primary productivity around the coast of South Africa and their relationships with consumer biomass. *Oecologia*, 102: 189-201.
- Cabelli, V.J., Dufour, A.P., McCabe, L.J. and M.A. Levin (1982). Swimming-associated gastroenteritis and water quality. *Am J Epidemiol.*, 115: 606-616.
- Calabrese, A., MacInnes, J.R., Nelson, D.A. and J.E. Miller (1977). Survival and growth of bivalve larvae under heavy metal stress. *Mar. Biol.* 44: 179-184.
- Canli, M. and R.W. Furness (1993). Toxicity of heavy metals dissolved in seawater and influences of sex and size on metal accumulation and tissue distribution in the Norway lobster *Nephrops norvegicus*. *Mar. Environ. Res.* 36: 217-236.
- Canterford, G.S. and D.R. Canterford (1980). Toxicity of heavy metals to the marine diatom *Ditylum brightwellii* (West) Grunow: correlation between toxicity and metal speciation. *J. Mar. Biol. Ass. U.K.*, 60: 227-242.
- Cardell, M.J., Sarda, R. and J. Romero (1999). Spatial changes in sublittoral soft-bottom polychaete assemblages due to river inputs and sewage discharges. *Acta Oecologica*. 20: 343 – 351.
- Carter, R.A. and R.C. van Ballegooyen (1998). Preliminary Kudu Power Plant environmental assessment: the discharge of hot water effluent into the marine environment, CSIR Report ENV/S-C 98017, 43pp.
- Casado-Martinez, C. (2013). Ecotoxicity of Rare Earth Elements: Info Sheet. Swiss Centre for Applied Ecotoxicity Eawag. 2pp. www.eawag.ch/medien/publ/fb/doc/fs_rareearth_elements_e.pdf

- Chapman, M.G., Underwood, A.J. and G.A Skilleter (1995). Variability at different spatial scales between a subtidal assemblage exposed to the discharge of sewage and two control assemblages. *Journal of Experimental Marine Biology and Ecology*, 189: 103 – 122.
- Chapman, P. and L.V. Shannon (1985). The Benguela Ecosystem. Part II. Chemistry and related processes. *Oceanogr. Mar. Biol. Ann. Rev.*, 23: 183-251.
- Chase, B.M., Thomas, D.S.G. (2007). Multiphase late Quaternary aeolian sediment accumulation in western South Africa: timing and relationship to palaeoclimatic changes inferred from the marine record. *Quaternary International* 166: 29–41.
- Cheggour, M., Langston, W.J., Chafik, A., Texier, H., Idrissi H. and A. Boumezzough (1999). Phosphate industry discharges and their impact on metal contamination and intertidal macrobenthos: Jorf Lasfar and Safi coastlines (morocco), *Toxicological and Environmental Chemistry*, 70(1): 159 – 179.
- Chen, J., and W. Chen (2000). Salinity tolerance of *Haliotis diversicolor supertexta* at different salinity and temperature levels. *Aquaculture*, 181: 191-203.
- Chen, J.C., Lin, M.N., Lin, J.L., and Y.Y. Ting (1992). Effect of salinity on growth of *Penaeus chinensis* juveniles. *Comp. Biochem. Physiol.*, 1024(2): 343-346.
- Chen, Y., Cao, X.D., Lu, Y. and X.R. Wang (2000). Effects of rare earth metal ions and their EDTA complexes on antioxidant enzymes of fish liver. *Bulletin of Environmental Contamination and Toxicology*, 65(3): 357–365.
- Chenelot, H., Jewett, S. and M. Hoberg (2008). Invertebrate Communities Associated with Various Substrates in the Nearshore Eastern Aleutian Islands, with Emphasis on Thick Crustose Coralline Algae. In: Brueggeman, P. and N.W. Pollock (eds.) *Diving for Science. Proceedings of the American Academy of Underwater Sciences 27th Symposium*. Dauphin Island, Alaska, AAUS, pp13-36.
- Cheng, W., and J.-C. Chen (2000). Effects of pH, temperature and salinity on immune parameters of the freshwater prawn *Allacrobachium rosenbergii*. *Fish and Shellfish Immunology*, 10:- 387-391.
- Cheng, W., Juang, F.-M., J.-C. Chen (2004). The immune response of Taiwan abalone *Haliotis diversicolor supertexta* and its susceptibility to *Vibrio parahaemolyticus* at different salinity levels. *Fish and Shellfish Immunology*, 16: 295-306.
- Christie, N.D. (1974). Distribution patterns of the benthic fauna along a transect across the continental shelf off Lamberts Bay, South Africa. Ph.D. Thesis, University of Cape Town, 110 pp & Appendices.
- Christie, N.D. (1976). A numerical analysis of the distribution of a shallow sublittoral sand macrofauna along a transect at Lambert's Bay, South Africa. *Trans. Roy. Soc. S. Afr.*, 42, 149-172.
- Cid, A., Herrero, C., Torres, E. and J. Abalde (1995). Copper toxicity on the marine microalga *Phaeodactylum tricorutum*: effects on photosynthesis and related parameters. *Aquat. Toxicol.* 31: 165-174.
- Clark, B.M. (1997a). Variation in surf-zone fish community structure across a wave-exposure gradient. *Estuarine, Coastal and Shelf Science*, 44: 659-674.
- Clark, B.M. (1997b). Dynamics and Utilisation of Surf Zone Habitats by Fish in the South-Western Cape, South Africa. Unpublished PhD Thesis, University of Cape Town
- Clark, B.M., Bennett, B.A. & S.J. Lamberth (1994). A comparison of the ichthyofauna of two estuaries and their adjacent surf-zones, with an assessment of the effects of beach-seining on the nursery function of estuaries for fish. *South African Journal of Marine Science*, 14: 121-131.
- Clark, B.M., Orr, K., Angel, A., Hutchings, K., Steffani, N. and J. Turpie (2010). State of the Bay 2009: Saldanha Bay and Langebaan Lagoon, Prepared by Anchor Environmental Consultant, Prepared for Saldanha

Bay Water Quality Trust

- Clark, B.M., Orr, K.K., Hutchings, K., Steffani, N., Angel, A., and J. Turpie (2009). State of the Bay 2008: Saldanha Bay and Langebaan Lagoon, Prepared by Anchor Environmental Consultants and Steffani Marine Environmental Consultant, Prepared for Saldanha Bay Water Quality Trust
- Clark, B.M., Smith, C.E. and W.F. Meyer (1998). Ecological effects of fine tailings disposal and marine diamond pumping operations on surf zone fish assemblages near Lüderitz, Namibia. Report to Namdeb Diamond Corporation (Pty) Ltd., Oranjemund, Namibia. 46pp.
- Clark, B.M., Tunley, K., Angel, A., Hutchings, K., Steffani, N., and J. Turpie (2011). State of the Bay 2010: Saldanha Bay and Langebaan Lagoon, Prepared by Anchor Environmental Consultants, Prepared for Saldanha Bay Water Quality Trust
- Clark, J.V. (1992). Physiological responses of adult *Penaeus semisulcatus* (de Haan) to changes in salinity. *Comp. Biochem. Physiol. A.*, 101(1): 117-119.
- Clemente, J.S. and P.M. Fedorak, (2005). A review of the occurrence, analyses, toxicity, and biodegradation of naphthenic acids. *Chemosphere*, 60 (5): 585–600.
- Cockcroft, A. and A.J. Mackenzie (1997). The recreational fishery for west coast rock lobster *Jasus lalandii* in South Africa. *South African Journal of Marine Science*, 18: 75-84.
- Cockcroft, A.C., Schoeman, D.S., Pitcher, G.C., Bailey, G.W. and D.L. van Zyl (2000). A mass stranding, or 'walk out' of west coast rock lobster, *Jasus lalandii*, in Elands Bay, South Africa: Causes, results and implications. In: Von Vaupel Klein, J.C. and F.C. Schram (Eds), *The Biodiversity Crisis and Crustacea: Proceedings of the Fourth International Crustacean Congress*, Published by CRC press.
- Conard, N. J., T. J. Prindiville and A. W. Kandel. (1999). The 1998 fieldwork on the Stone Age archaeology and palaeoecology of the Geelbek Dunes, West Coast National Park, South Africa. *Southern African Field Archaeology* 8:35-45.
- Conard, N.J. & Kandel, A.W. (2006). The economics and settlement dynamics of the later Holocene inhabitants of near coastal environments in the West Coast National Park (South Africa). In Wotzka, H-P (ed) *Grundlegungen. Beiträge zur europäischen und afrikanischen Archäologie für Manfred K. H. Eggert*. Tübingen: Francke:329- 355.
- Connell, S.D. (2001). Urban structures as marine habitats: an experimental comparison of the composition and abundance of subtidal epibiota among pilings, pontoons and rocky reefs. *Marine Environmental Research*, 52: 115-125.
- Connell, S.D., and R.O. Slayter (1977). Mechanisms of succession in natural communities and their role on community stability and organisation. *American Naturalist*, 111: 1119-1144.
- Connell, S.D., and T.M. Glasby (1999). Do urban structures influence local abundance and diversity of subtidal epibiota? A case study from Sydney Harbour. *Marine Environmental Research*, 47: 373-387.
- Cook, P.A. (1978). A prediction of some possible effects of thermal pollution on marine organisms on the west coast of South Africa, with particular reference to the rock lobster, *Jasus lalandii*. *Trans. Roy. Soc. S. Afr.*, 43(2): 107-118.
- Cooper, J. (1995). Specialist study on the impact of underwater blasting on marine invertebrates, especially African Penguins, in Saldanha Bay. CSIR Report EMAS-C 94095D. 33pp.
- Costanzo, S.D., O'Donohue, M.J., Dennison, W.C., Loneragan, N.R. and M. Thomas (2001). A new approach for detecting and mapping sewage impacts. *Marine Pollution Bulletin*, 42: 149–156.

- Cranford, P.J., Gordon, Jr., D.C., Lee, K., Armsworthy, S.L. and G.H. Tremblay (1999). Chronic toxicity and physical disturbance effects of water- and oil-based drilling fluids and some major constituents on adult sea scallops (*Placopecten magellanicus*). *Mar. Environ. Res.*, 48: 225-256.
- Cranford, P.J., Querbach, K., Maillet, G., Lee, K., Grant, J. and C. Taggart (1998). Sensitivity of larvae to drilling wastes (Part A): Effects of water-based drilling mud on early life stages of haddock, lobster, and sea scallop. Report to the Georges Bank Review Panel, Halifax NS, Canada. 22 pp.
- Crawford, R.J.M., Shannon, L.V. and D.E. Pollock (1987). The Benguela ecosystem. 4. The major fish and invertebrate resources. *Oceanogr. Mar. Biol. Ann. Rev.*, 25: 353 – 505.
- Cui, J., Zhang, Z., Bai, W., Zhang, L., He, X., Ma, Y., Lui, Y. and Z. Chai (2012). Effects of rare earth elements La and Yb on the morphological and functional development of zebrafish embryos, *Journal of Environmental Sciences*, 24(2): 209-213.
- Currie, D.R., Sorokin, S J. and T.M. Ward (2009). Infaunal macroinvertebrate assemblages of the eastern Great Australian Bight: effectiveness of a marine protected area in representing the region's benthic biodiversity. *Marine and Freshwater Research* 60:459-474.
- Das, T., Sharma, A. and G. Talukder (1988). Effects of lanthanum in cellular systems. A review. *Biol. Trace Elem. Res.*, 18: 201-228.
- David, J.H.M. (1989). Seals. In: *Oceans of Life off Southern Africa*, Eds. Payne, A.I.L. and Crawford, R.J.M. Vlaeberg Publishers. Halfway House, South Africa.
- Day, J.H. (1959). The biology of Langebaan Lagoon: a study of the effect of shelter from wave action. *Trans R Soc S Afr.*, 35, 475-547.
- Day, J.H., Field, J.G. and M. Montgomery (1971). The use of numerical methods to determine the distribution of the benthic fauna across the continental shelf of North Carolina. *Journal of Animal Ecology* 40:93-126.
- De Decker, A.H. (1970). Notes on an oxygen-depleted subsurface current off the west coast of South Africa. *Invest. Rep. Div. Sea Fish. South Africa*, 84, 24 pp.
- De Greef, K., Griffiths, C.L. and Z. Zeeman (2013). Deja vu? A second mytilid mussel, *Semimytilus algosus*, invades South Africa's west coast. *African Journal of Marine Science*, 35(3): 307-313.
- De Villiers, C., Driver, A., Brownlie, S., Day, E., Euston-Brown, D., Helme, N., Holmes, P., Job, N., and A. Rebelo. (2005). *Fynbos Forum Ecosystem Guidelines for Environmental Assessment in the Western Cape*. Fynbos Forum, c/o Botanical Society of South Africa, Conservation Unit, Kirstenbosch, Cape Town.
- DEA. (2011). *Threatened Terrestrial Ecosystems in South Africa*. Government Gazette Vol. 1002: No. 34809. National Printer, Pretoria.
- Del Pilar Ruso, Y., De la Ossa Carretero, J.A., Giménez Casaldueiro, F. and J.L. Sánchez Lizaso (2007). Spatial and temporal changes in infaunal communities inhabiting soft-bottoms affected by brine discharge. *Marine Environmental Research*, 64: 492-503.
- Del Pilar Ruso, Y., De la Ossa Carretero, J.A., Giménez Casaldueiro, F., and J.L. Sánchez Lizaso (2008). Effects of a brine discharge over soft bottom Polychaeta assemblage. *Environmental Pollution*, 156: 240-250.
- Del Pilar Ruso, Y., De la Ossa Carretero, J.A., Loya-Fernández, A., Ferrero-Vicente, L.M., Giménez-Casaldueiro, F., and J.L. Sánchez-Lizaso (2009). Assessment of soft-bottom Polychaeta assemblage affected by a spatial confluence of impacts: Sewage and brine discharges. *Marine Pollution Bulletin*, 58: 765-786.
- Demacon. (2009). *Saldanha Development Zone Pre-Feasibility Analysis*. Report to WESGRO (on behalf of the Department of Economic Development and Tourism). Demacon, Stand.

- Department of Environmental Affairs and Development Planning: Western Cape Government (DEA&DP). 2013. Growth Potential of Towns in the Western Cape - Revised Draft. DEA&DP, Cape Town.
- Department of Minerals and Energy, (2010). *Amendment to the Broad-Based Socio-Economic Empowerment Charter for the South African Mining Industry*
- Department of Trade and Industry (2012). The Industrial Policy Action Plan. Fourth Edition.
- Department of Water Affairs and Forestry (DWAF) (1995). South African water quality guidelines for coastal marine waters. Volume 1. Natural Environment. Volume 2. Recreation. Volume 3. Industrial use. Volume 4. Mariculture. Pretoria.
- Department of Water Affairs and Forestry (DWAF) (2000). Water use authorisation process for individual applications. Edition 1: Final Draft for implementation and use. Revision 3, December 2000, Pretoria. ISBN 0-620-26602-3 (<http://www-dwaf.pwv.gov.za/Documents/>)
- Department of Water Affairs and Forestry (DWAF) (2002). National Water Quality Management Framework. Water Quality Management Sub-series No. MS 7, Draft 2. Pretoria.
- Department of Water Affairs and Forestry (DWAF) (2003a). Aide Mémoire for the preparation of a water quality management report to support the application for licences for sewage treatment works in terms of the requirements of the National Water Act, 1998 (Act 36 of 1998). Management Series. Operational Guideline No. U2.1. First Edition, February 2003. Pretoria.
- Department of Water Affairs and Forestry (DWAF) (2003b). Towards a strategy for a waste discharge charge system. Water Quality Management Series. Sub-series No. MS 11, First Edition, 30 September 2003. Pretoria (www-dwaf.pwv.gov.za/Documents/).
- Department of Water Affairs and Forestry (DWAF) (2004a). Operational policy for the disposal of land-derived water containing waste to the marine environment of South Africa, Water Quality Management Series Sub-Series No. MS 13.2, Edition 1. Pretoria
- Department of Water Affairs and Forestry (DWAF) (2004b). Operational Policy for the disposal of land-derived water containing waste to the marine environment of South Africa: Guidance on Implementation, Water Quality Management Series Sub-Series No. MS 13.3, Edition 1. Pretoria
- Department of Water Affairs and Forestry (DWAF) (2004c). Operational policy for the disposal of land-derived water containing waste to the marine environment of South Africa: Appendices. Water Quality Management Series Sub-Series No. MS 13.4, Edition 1. Pretoria.
- Department of Water Affairs and Forestry (DWAF) (2007). Guidelines for the Evaluation of possible Environmental Impacts during the Development of Seawater Desalination Processes. August 2007, Project No. 337/2006, Pretoria
- Department of Water Affairs and Forestry (DWAF) (2014). National Guideline for the Discharge of Effluent from Land-based Sources into the Coastal Environment. Pretoria, South Africa. RP101/2014.
- Dewar, G. (2010). Late Holocene burial cluster at Diaz Street Midden, Saldanha Bay, Western Cape, South Africa. South African Archaeological Bulletin 65: 26-34.
- Diab, A.M. (2002). Bacteriological studies on the potability, efficacy and EIA of desalination operations at Sharm El-Sheikh region, Egypt. Journal of Biological Sciences, 2: 411-414.
- Diaz, R.L. and R. Rosenberg (1995). Marine benthic hypoxia: a review of its ecological effects and the behavioural responses of benthic macrofauna. Oceanogr. Mar. Biol. Ann. Rev., 33: 245-303.

- Diener, D.R., Fuller, S.C., Lissner, A., Haydock, C.I., Maurer, D., Robertson, G. and R. Gerlinger, (1995). Spatial and temporal patterns of the infaunal community near a major ocean outfall in Southern California. *Marine Pollution Bulletin*, 30: 861 – 878.
- Dietl, H., Kandel, A.W. & Conard, N.J. (2005). Middle Stone Age settlement and land use at the open-air sites of Geelbek and Anyskop, South Africa. *Journal of African Archaeology* 3: 233-244.
- Dingle, R.V., Lord, A.R. and Hendey, Q.B. (1979). New sections in the Varswater Formation (Neogene) of Langebaan Road, south-western Cape, South Africa. *Annals of the South African Museum* 78: 81-92.
- Dingle, R.V., Siesser, W.G. and Newton, A.R. (1983). *Mesozoic and Tertiary Geology of Southern Africa*. Rotterdam: A.A. Balkema. 375 pp.
- Dorfman, D. (1977). Tolerance of *Fundulus heteroclitus* to different metals in salt waters. *Bulletin of the New Jersey Academy of Sciences*, 22(2): 21–23.
- Du Toit, A.L. (1917). Report on the phosphates of Saldanha Bay. *Memoir of the Geological Survey of the Union of South Africa* 10: 38 pp.
- Dugan J.E., Hubbard, D.M., McCrary, M.D. and M.O. Pierson (2003). The response of macrofauna communities and shorebirds to macrophyte wrack subsidies on exposed sandy beaches of southern California. *Estuarine, Coastal and Shelf Science*, 58S: 133-148.
- Duronslet, M.J., Caillouet, C.W., Manzella, S., Indelicato, K.W., Fontaine, C.T., Revera, D.B., Williams, T., and D. Boss (1986). The effects of an underwater explosion on the sea turtles *Lepidochelys kempi* and *Caretta caretta* with observations of effects on other marine organisms. Unpublished report submitted to National Marine Fisheries Service Biological Laboratory, Galveston, Texas.
- Einav, R., Harussi, K. and D. Perry (2002). The footprint of the desalination processes on the environment. *Desalination*, 152: 141-154.
- Eisler, R. (1988a). Arsenic hazards to fish, wildlife, and invertebrates: A synoptic review. U.S. Fish and Wildlife Service, Biological Report 85, 92pp.
- Eisler, R. (1988b). Lead hazards to fish, wildlife, and invertebrates: A synoptic review. U.S. Fish and Wildlife Service, Biological Report 85, 134 pp.
- Eisler, R. and R.J. Hennekey (1977). Acute toxicities of Cd²⁺, Cr⁶⁺, Hg²⁺, Ni²⁺ and Zn²⁺ to estuarine macrofauna. *Arch. Environ. Contam. Toxicol.*, 6: 315-323.
- Ellingsen, K.E. (2002). Soft-sediment benthic biodiversity on the continental shelf in relation to environmental variability. *Mar Ecol Prog Ser.*, 232, 15-27.
- Ellis Island. n.d. <http://www.ellisland.org/shipping/Formatship.asp?shipid=3206>. Website visited 30 March 2012.
- Ellis, D.V. (2003). The concept of 'sustainable ecological succession'; and its value in assessing the recovery of sediment seabed biodiversity from environmental impact. *Marine Pollution Bulletin*, 46: 39-41
- El-Nady, F.E. and M.M. Atta (1996). Toxicity and bioaccumulation of heavy metals to some marine biota from the Egyptian Coastal Waters. *J. Environ. Sci. Health.*, A31 (7): 1529-1545.
- Elwen, S.H. (2008). The distribution, movements and abundance of Heaviside's dolphin in the nearshore waters of the Western Cape, South Africa. PhD Thesis, University of Pretoria.
- Elwen, S.H., Thornton, M., Reeb, D. and P.B. Best (2010). Near-shore distribution of Heaviside's (*Cephalorhynchus heavisidii*) and dusky dolphins (*Lagenorhynchus obscurus*) at the southern limit of their range in South Africa. *African Journal of Zoology*, 45: 78-91.

- Emanuel, B.P., Bustamante, R.H., Branch, G.M., Eekhout, S., and F.J. Odendaal (1992). A zoogeographic and functional approach to the selection of marine reserves on the west coast of South Africa. *South African Journal of marine Science*, 12, 341-354.
- Engledow, H.R. and J.I. Bolton (1992). Environmental tolerances in culture and agar content of *Gracilaria verrucosa* (Hudson) Papenfus (Rhodophyta, Gigartinales) from Saldanha Bay. *S. Afr. J. Bot.*, 58(4): 263-267.
- EPA (1993). Deformities and associated sublethal effects in fish exposed to sewage-borne contaminants: literature review (Report 93/72, EPA). Sydney: Environment Protection Authority.
- Eppley, R.W., Renger E.H. and P.M. Williams (1976). Chlorine reactions with seawater constituents and inhibition of photosynthesis of natural marine phytoplankton. *Estuarine and Coastal Marine Science*, 7: 291-301.
- Escaravage, V., Herman, P.M.J., Merckx, B., Włodarska-Kowalczyk, M., Amouroux, J.M., Degraer, S., Grémare, A., Heip, C.H.R., Hummel, H., Karakassis, I., Labruno, C. and W. Willems (2009). Distribution patterns of macrofaunal species diversity in subtidal soft sediments: biodiversity-productivity relationships from the MacroBen database. *Marine Ecology Progress Series* 382:253-264.
- Estacio, F.J., Garcia-Adiego, E.M., Fa, D.A., Garcia-Gomez, J.C., Daza, J.L., Hortas, F. and J.L. Gomez-Ariza (1997). Ecological analysis in a polluted area of Algeciras Bay (Southern Spain): external "versus" internal outfalls and environmental implications. *Marine Pollution Bulletin*, 34: 780 – 793.
- European Union Risk Assessment Report (2004). Edetic Acid (EDTA). CAS No: 60-00-4. EINECS No: 200-449-4. Risk Assessment Vol. 49. Final Report, 2004. http://ecb.jrc.it/documents/Existing-Chemicals/RISK_ASSESSMENT/REPORT/edtareport061.pdf
- Fagundez, S.B., and G. Robaina (1992). Effects of temperature, salinity and photoperiod on the embryonic development of the squid *Sepioteuthis sepioidea* (Blainville, 1823). *Memorias de la Sociedad de Ciencias Naturales, "La Salle"*, 52: 93-103.
- Fairweather, P.G. (1988). Sewage and the biota on seashores; assessment of impact in relation to natural variability. *Environmental Monitoring and Assessment*, 14: 197 - 210.
- Fairweather, P.G. (1990). Sewage and the biota on seashores: assessment of impact in relation to natural variability. *Environmental Monitoring and Assessment* 14: 197 - 210.
- Fauvelle-Aymar, F.-X., Sadr, K., Bon, F. & Gronenborn, D. (2006). The visibility and invisibility of herders' kraals in southern Africa, with reference to a possible early contact period Khoekhoe kraal at KFS5, Western Cape. *Journal of African Archaeology* 4:253-271.
- Fegley, S.R., Macdonald, B.A. and T.R. Jacobsen (1992). Short-term variation in the quantity and quality of seston available to benthic suspension feeders. *Estuar. Coast. Shelf Sci.*, 34: 393–412.
- Felix-Henningsen, P., Kandel, A.W., Conard, N.J., 2003. The significance of calcretes and paleosols on ancient dunes of the Western Cape, South Africa, as stratigraphic markers and paleoenvironmental indicators. *British Archaeological Reports International Series* 1163: 45-52.
- Field, J.G. and C.L. Griffiths (1991). Littoral and sublittoral ecosystems of southern Africa. In: A.C. Mathieson and P.H. Nienhuis (eds). *Ecosystems of the World 24. Intertidal and Littoral Ecosystems*, Elsevier Science Publishers, Amsterdam.
- Field, J.G., Griffiths, C.L., Griffiths, R.J., Jarman, N., Zoutendyk, P., Velimirov, B. and A. Bowes (1980). Variation in structure and biomass of kelp communities along the south-west cape coast. *Trans. Roy. Soc. S. Afr.*, 44: 145-203.

- Findlay K.P., Best P.B., Ross G.J.B. and V.C. Cockroft (1992). The distribution of small odontocete cetaceans off the coasts of South Africa and Namibia. *S. Afr. J. Mar. Sci.*, 12: 237-270.
- Findlay, K.P. (1996). The impact of diamond mining noise on marine mammal fauna off southern Namibia. In: Environmental Evaluation Unit Report, Impacts of deep sea diamond mining, in the Atlantic 1 mining licence area in Namibia, on the natural systems of the marine environment. EEU Unpublished Report No. 11/96/158.
- Fitch, J.E., and P.H. Young (1948). Use and effect of explosives in California waters. *California Fish and Game*, 34, 53-70.
- Flach, E. and L. Thomsen (1998). Do physical and chemical factors structure the macrobenthic community at a continental slope in the NE Atlantic? *Hydrobiologia*, 375/376, 265-285.
- Fossing, H., Ferdelman, T.G. and P. Berg (2000). Sulphate reduction and methane oxidation in continental margin sediments influenced by irrigation (South-East Atlantic off Namibia). *Geochim. Cosmochim. Acta*. 64(5): 897–910.
- Fransen, H. (2004). *The old buildings of the Cape*. Johannesburg & Cape Town: Jonathan Ball.
- Galvin, R.M. (1996). Occurrence of metals in waters: An overview. *Water SA* 22: 7-18.
- GESAMP (2001). *Protecting the Oceans from Land-based Activities - Land-based Sources and Activities Affecting the Quality and Uses of the Marine, Coastal and Associated Freshwater Environment*, GESAMP Reports and Studies 71
- Ghosh, D. and A.K. Ray (1993a). 17 β -Hydroxysteroid dehydrogenase activity of ovary and hepatopancreas of freshwater prawn, *Macrobrachium rosenbergii*, in relation to ovarian condition and estrogen treatment. *General and Comparative Endocrinology*, 89: 248 – 254.
- Ghosh, D. and A.K. Ray (1993b). Subcellular action of estradiol-17 β in a freshwater prawn, *Macrobrachium rosenbergii*. *General and Comparative Endocrinology*, 90: 273 – 281.
- Gibson, R.N. (1982). Recent studies on the biology of intertidal fishes. *Oceanogr. and Mar. Biol.: Ann. Rev.*, 20: 363-414.
- Gitschlag, G.R., (1990). Sea turtle monitoring at offshore oil and gas platforms. In: Richardson, T.H., Richardson, J.I. & M. Donnelly (Eds). *Proceedings of the 10th Annual Workshop on Sea Turtle Biology and Conservation*. NOAA Technical Memorandum NMFS-SEFC-278. pp. 223-246.
- Gitschlag, G.R., and B.A. Herozeg (1994). Sea turtle observations at explosive removals of energy structures. *Marine Fisheries Review*, 56, 1-8.
- Gitschlag, G.R., and M. Renaud (1989). Sea turtles and the explosive removal of offshore oil and gas structures. In: Eckert, S.A., Eckert, K.L. & T.H. Richardson (Eds). *Proceedings of the 9th Annual Workshop on Sea Turtle Conservation and Biology*, NOAA Technical Memorandum NMFS-SEFC-232, pp. 67-68.
- Glassom, D., K. Prochazka and G.M. Branch (1997). Short-term effects of an oil spill on the west coast of the Cape peninsula, South Africa. *J. Coastal Cons.*, 3: 155-168.
- Glenny, W (2003). An archaeological survey and surface recording of the Holbaai area, Vredenburg Peninsula, Western Cape. Unpublished Honours project, University of Cape Town.
- Glenny, W 2003. An archaeological survey and surface recording of the Holbaai area, Vredenburg Peninsula, Western Cape. Unpublished Honours project, University of Cape Town.
- Goertner, J.F., Wiley, M.L., Young, G.A., and W.W. McDonald (1994). Effects of underwater explosions on fish

- without swimbladders. Technical Report NSWC TR 88-114. Naval Surface Warfare Center, Dahlgren Division, White Oak Detachment Silver Spring, MD.
- Goitom, E. (2011). Bioaccumulation of lanthanum in marbled crayfish (*Procambarus* sp.). Unpublished MSc Thesis, University of Wageningen, 61pp.
- Gray, C.A. (1996). Intrusions of surface sewage plumes into continental shelf waters: interactions with larval and presettlement juvenile fishes. *Marine Ecology Progress Series*, 139: 31 – 45.
- Gray, C.A., Otway, N.M. and A.G. Miskiewicz (1996). Numerical responses of larval fishes to deepwater sewage disposal: a field assessment. *Marine Pollution Bulletin*, 33: 190 – 200.
- Gray, J.S. (1989). Effects of environmental stress on species rich assemblages. *Biological Journal of the Linnean Society*, 37: 19 - 32.
- Gribble, J. (2009). Saldanha coasters and wreck of the Nagel. In: Athiros, G., Athiros, L. & Athiros, N. (eds) *A West Coast odyssey: a journey into the fascinating history of the Cape's West Coast peninsula*: 81-82. Tokai: Historical Media cc.
- Griffiths, C.L., Hockey, P.A.R., Van Erkom Schurink, C. and P.J. Le Roux (1992). Marine invasive aliens on South African shores: implications for community structure and trophic functioning. *S. Afr. J. Mar. Sci.*, 12: 713–722.
- Griffiths, C.L. and J.L. Seiderer (1980). Rock-lobsters and mussels - limitations and preferences in a predator-prey interaction. *J. Exp. Mar. Biol. Ecol.*, 44(1): 95-109.
- Grigg, R.W. (1994). Effects of sewage discharge, fishing pressure and habitat complexity on coral ecosystems and reef fishes in Hawaii. *Marine Ecology Progress Series*, 103: 25–34.
- Guidetti, P., Fanelli, G., Frascchetti, S., Terlizzi, A. and F. Boero (2002). Coastal fish indicate human-induced changes in the Mediterranean littoral. *Marine Environmental Research*, 53: 77 – 94.
- Guidetti, P., Terlizzi, A., Frascchetti, S. and F. Boero (2003). Changes in Mediterranean rocky-reef fish assemblages exposed to sewage pollution. *Marine Ecology Progress Series*, 253: 269 – 278.
- Guo, H.Y., Chen, L., Wang, X.R. and W.H. Xu (2001). The effects of ytterbium on the enzymes activities of Crucian (*Carassius auratus*) liver. *Journal of Nanjing University (Natural Science)*, 37(6): 665–670.
- Gutiérrez-Galindo E.A. (1981). Effect de l'EDTA sur l'accumulation et l'élimination du Mercure par la moule *Mytilus edulis*. *Chemosphere*, 10: 971-976.
- Halkett, D. & Hart, T. (1999). West coast report on pilot excavations at 'E' Quarry, Langebaanweg Fossil Park, Langebaanweg. Unpublished report prepared for Earth Sciences Division, South African Museum. Archaeology Contracts Office, University of Cape Town.
- Hall, J.A., Frid, C.L.J. and M.E. Gill (1997). The response of estuarine fish and benthos to an increasing discharge of sewage effluent. *Marine Pollution Bulletin*, 34: 537 – 535.
- Hardy, F.G., Evans, S.M. and M.A. Tremayne (1993). Long-term changes in the marine macroalgae of three polluted estuaries in north-east England. *Journal of Experimental Marine Biology and Ecology*, 172: 81 - 92.
- Harries, J.E., Sheahan, D.A., Jobling, S., Matthiessen, P., Neall, P., Sumpter, J.P., Tylor, T. and N. Zaman (1997). Estrogenic activity in five United Kingdom rivers detected by measurement of vitellogenins in caged male trout. *Environmental Toxicology and Chemistry*, 16: 534 – 542.
- Harris, L.R (2012). An ecosystem-based spatial conservation plan for the South African sandy beaches. PhD Thesis, Nelson Mandela Metropolitan University, Port Elizabeth.

- Hart, T. & Pether, J. (2008). Phase 2 expansion of the Sishen - Saldanha Iron Ore Export Corridor, Saldanha Bay, Western Cape: heritage impact assessment (part 1), palaeontological impact assessment (part 2). Unpublished report prepared for Transnet. University of Cape Town: Archaeology Contracts Office.
- Hart, T. (2001). Phase 2 mitigatory archaeological excavations at Leentjiesklip 3 Club Mykonos, Langebaan. Unpublished report prepared for Club Mykonos, Langebaan. University of Cape Town, Archaeology Contracts Office.
- Hart, T. (2003). Heritage impact assessment of a portion of the farm Pienaars Poort owned by National Port Authority (NPA), Saldanha Bay. Unpublished report prepared for Philip Rosenthal, Environmental Engineer. Archaeology Contracts Office, University of Cape Town.
- Hart, T. (2010). Heritage impact assessment of Portion 7 OF Jacobs Baai farm 108 and Portion 3 of Portion 1 of the farm Trekoskraal No 104 Vredenberg District (Jacobs Bay Tortoise Reserve) Unpublished report prepared for Jacobs Bay Tortoise Reserve Pty Ltd. University of Cape Town, Archaeology Contracts Office.
- Hart, T.J. G and Gribble J. (1998). Phase 2 archaeological sampling of Late Stone Age middens, Leentjiesklip 2, Langebaan. Unpublished report prepared for Langebaan Waterfront Pty Ltd. ACO. UCT.
- Hart, T.J.G. & Jerardino, A.M. (1998). Phase 2 archaeological sampling of Late Stone Age archaeological sites at Paradise Beach, Club Mykonos. Unpublished report prepared for CML Developers. ACO. UCT.
- Hashim, A. and M. Hajjaj (2005). Impact of desalination plants fluid effluents on the integrity of seawater, with the Arabian Gulf in perspective. *Desalination*, 182: 373-393.
- Hathaway, R.R. and R.E. Black (1969). Interconversions of estrogens and related developmental effects in sand dollar eggs. *General and Comparative Endocrinology*, 12: 1 – 11..
- Haughton, S.H. 1932a. The Late Tertiary and Recent deposits of the west coast of South Africa. *Transactions of the Geological Society of South Africa* **34**: 19-58.
- Haughton, S.H. 1932b. On the phosphate deposits near Langebaan Road. *Transactions of the Geological Society of South Africa* **35**: 119-124.
- Hawkins, S.J. and R.G. Hartnoll (1983). Grazing of intertidal algae by marine invertebrates. *Oceanography & Marine Biology: An Annual Review*, 21: 195-282.
- Helme, N. 2014. Botanical Impact Assessment of the Proposed Frontier Rare Earths Saldanha Regional Marine Outfall Pipelin, Western Cape. Report to CSIR, Stellenbosch.
- Helme, N. (2006). Botanical assessment of Farm 133, Ptn 2 of Farm 132, Farm 131, and Portion 4 of Farm 127, Vredenburg. Unpublished report for Creative Profile. Nick Helme Botanical Surveys, Scarborough.
- Helme, N. (2006a). Botanical assessment of Portion 4 of the farm Yzervarkensrug 127, Vredenburg. Unpublished report for Sillito Environmental Consultants. Nick Helme Botanical Surveys, Scarborough.
- Helme, N. (2011). Botanical inputs for the proposed Saldanha IDZ planning. In: Morris Environmental & Groundwater Alliances. (Cape Town, 2011). Saldanha Bay IDZ Feasibility Study: Strategic Environmental Review. Nick Helme Botanical Surveys, Scarborough.
- Helme, N. (2011a). Botanical fatal flaw study for proposed smelter development on Uyekraal 189/0, Saldanha. Unpublished study for AGES Gauteng (Pty) Ltd. Nick Helme Botanical Surveys, Scarborough.
- Helme, N. (2012). Botanical scoping study for proposed Saldanha desalination project. Unpublished study for CSIR, Stellenbosch. Nick Helme Botanical Surveys, Scarborough.

- Helme, N. and Koopman, R. (2007). Vegetation report for CAPE Finescale Vegetation Mapping Project: Saldanha Peninsula. Report for CapeNature, as part of the CAPE program.
- Helme, N.A., Mucina, L., Raimondo, D. & Victor, J.E. (2005). *Limonium acuminatum* L.Bolus. National Assessment: Red List of South African Plants version 2011.1. Accessed on 2012/04/27.
- Helme, N.A., Raimondo, D. & von Staden, L. (2010). *Daubenya zeyheri* (Kunth) J.C.Manning & A.M.van der Merwe. National Assessment: Red List of South African Plants version 2011.1. Accessed on 2012/04/27.
- Hendey, Q.B. (1978). The age of the fossils from Baard's Quarry, Langebaanweg, South Africa. *Annals of the South African Museum* 75: 1-24.
- Hendey, Q.B. (1981a). Palaeoecology of the Late Tertiary fossil occurrences in "E" Quarry, Langebaanweg, South Africa, and a re-interpretation of their context. *Annals of the South African Museum* 84: 1-104.
- Hendey, Q.B. (1981b). Geological succession at Langebaanweg, Cape Province, and global events of the Late Tertiary. *South African Journal of Science* 77: 33-38.
- Hendey, Q.B. (1983a). Cenozoic geology and palaeogeography of the Fynbos region. In: Deacon, H.J., Hendey, Q.B. and Lambrechts, J.J.N. (eds), *Fynbos palaeoecology: a preliminary synthesis*. South African National Scientific Programmes Report No. 75: 35-60.
- Hendey, Q.B. (1983b). Palaeontology and palaeoecology of the Fynbos region: an introduction. In: Deacon, H.J., Hendey, Q.B. and Lambrechts, J.J.N. (eds.), *Fynbos palaeoecology: a preliminary synthesis*. South African National Scientific Programmes Report No. 75: 87-99.
- Hendey, Q.B. (1983c). Palaeoenvironmental implications of the Late Tertiary vertebrate fauna of the Fynbos region. In: Deacon, H.J., Hendey, Q.B. and Lambrechts, J.J.N. (eds.), *Fynbos palaeoecology: a preliminary synthesis*. South African National Scientific Programmes Report No. 75: 100-115.
- Hendey, Q.B. & Cooke, H.B.S. (1985). *Kolpochoerus paiceae* (Mammalia, Suidae) from Skurwerug, near Saldanha, South Africa, and its palaeoenvironmental implications. *Annals of the South African Museum* 97: 9-56.
- Hendey, Q.B. (1969). Quaternary vertebrate fossil sites in the south-western Cape Province. *South African Archaeological Bulletin* 24:96-105.
- Hendey, Q.B. and Dingle, R.V. (1990). Onshore sedimentary phosphate deposits in south-western Africa. In: Burnett, W. C. and Riggs, S.R. (eds.), *Phosphate Deposits of the World*, Vol. 2: 200-206. Cambridge: Cambridge University Press.
- HERA (2003). Human & Environmental Risk Assessment on ingredients of European household cleaning products. Sodium Tripolyphosphate (STPP) CAS: 7758-29-4. Draft June 2003. (<http://www.heraproject.com>).
- Heritage Western Cape. 2012. A short guide to and policy statement on grading.
- Heugens, E.H.W., Hendriks, A.J, Dekker, T., Van Straalen N.M and W. Admiraal (2001). A review of the effects of multiple stressors on aquatic organisms and analysis of uncertainty factors for use in risk assessment. *Crit. Rev. Toxicol.*, 31(3): 247-284.
- Hill, S.H., (1978). A guide to the effects of underwater shock waves on Arctic marine mammals and fish. *Pacific Marine Science Report* 78-26. Institute of Ocean Sciences, Patricia Bay, Sidney, B.C. 50 p.

- Hine, P.J. (2004). Archaeological excavations at Holbaai, Vredenburg Peninsula, Western Cape: variability and subsistence among Later Stone Age groups. Unpublished Honours project, University of Cape Town.
- Hockey, P.A.R. and C. van Erkom Schurink (1992). The invasive biology of the mussel *Mytilus galloprovincialis* on the southern African coast. *Transactions of the Royal Society of South Africa*, 48: 123-139.
- Holland, H. (2012). Visual Impacts. Unpublished report prepared for CSIR. Henry Holland.
- Holland, H. (2014). Visual Specialist Study on the Proposed Construction, Operation and Decommissioning of the Marine Outfall Pipeline and Associated Infrastructure for Frontier Saldanha Utilities (Pty) Ltd in the Saldanha Bay Region, Western Cape. Report to the CSIR. Mapthis, Cape Town.
- Hueckel, G.J., Buckley, R.M., and B.L. Benson (1989). Mitigating rocky habitat loss using artificial reefs. *Bulletin of Marine Science*, 44: 913-922.
- Hull, R., Whitfield, M., Marshall, L., Moore, C. and K. Rankin (2012). Ecotoxicity and Accumulation of Rare Earth Elements. *Intrinsic*, pp1.
- Hunt, J.W., Anderson, B.S., Phillips, B.M., Tjeerdema, R.S., Puckett, H.M., Stephenson, M., Tucker, D.W. and D. Watson (2002). Acute and chronic toxicity of nickel to marine organisms: Implications for water quality criteria. *Environ. Toxicol. Chem.* 21: 2423-2430.
- Hutchings L., Nelson G., Horstmann D.A. and R. Tarr (1983). Interactions between coastal plankton and sand mussels along the Cape coast, South Africa. In: McLachlan, A. and T.E. Erasmus (eds). *Sandy Beaches as Ecosystems*. Junk, The Hague. pp 481-500.
- Hutchings, K. and S.J. Lamberth (2002). Bycatch in the gillnet and beach-seine fisheries in the Western Cape, South Africa, with implications for management. *South African Journal of Marine Science*, Thiyagarajan, 227-241.
- Hutchings, L., Verheye, H.M., Huggett, J.A., Demarcq, H., Cloete, R., Barlow, R.G., Louw, D. and A. da Silva (2006). Variability of plankton with reference to fish variability in the Benguela current large marine ecosystem-An overview. *Large Marine Ecosystems*, 14: 91-124.
- Hutchinson, T.H., Williams, T.D. and G.J. Eales (1994). Toxicity of cadmium, hexavalent chromium and copper to marine fish larvae (*Cyprinodon variegatus*) and copepods (*Tsibe battagliai*). *Mar. Environ. Res.* 38: 275-290.
- Ichihashi, H., Kohno, H., Kannan, K., Tsumura, A. and S.-I. Yamasaki (2001). Multielemental analysis of purpleback flying squid using high resolution inductively coupled plasma-mass spectrometry (HR ICP-MS). *Environ. Sci. Technol.*, 35: 3103-3108.
- Iglesias, J.I.P., Urrutia, M.B., Navarro, E., Alvarez-Jorna, P., Larretxea, X., Bougrier, S., and M. Heral (1996). Variability of feeding processes in the cockle *Cerastoderma edule* (L.) in response to changes in seston concentration and composition. *Journal of Experimental Marine Biology & Ecology*, 197: 121-143.
- Irwin, R.J., Van Mouwerik, M., Stevens, L., Seesa, M.D. and W. Basham (1997). Environmental contaminants encyclopedia. National Park Service, Water Resources Division, Fort Collins, Colorado. Available on the internet at www.aqd.nps.gov/toxic/*.pdf.
- Jaramillo, E., McLachlan A. and J. Dugan (1995). Total sample area and estimates of species richness in exposed sandy beaches. *Mar. Ecol. Prog. Ser.*, 119: 311-314.
- Jarman N.G. and R.A. Carter (1981). The primary producers of the inshore regions of the Benguela. *Trans. Roy. Soc. S. Afr.*, 44(3): 321-325.
- Jiang, Z.Y, Jia, Z.H., Li, Z.M., Guo, Y.S., Zhou, F.W. and H.T. Liu (2008). Distribution and accumulation of rare earth elements in common carp (*Cyprinus carpio*). *Journal of Jilin Agricultural University*, 30(1): 52-55.

- Jop, K.M. (1989). Acute and chronic toxicity of hexavalent chromium to five marine species. In Aquatic Toxicology and Health Assessment (Vol. 12), Eds. Cowgill UM, Williams LR. American Society for the testing of materials, Philadelphia, USA. pp. 251-260.
- Jop, K.M., Rodgers, J.H., Dorn, P.B. and K.L. Dickson (1986). Use of hexavalent chromium to five marine species. In Aquatic Toxicology and Hazard Assessment (Vol 9), Eds. Poston TM, Purdy R. American Society for the Testing of Materials, Philadelphia, USA. pp. 390-403.
- Kandel, A.W. & Conard, N.J. (2005). Production sequences of ostrich eggshell beads and settlement dynamics in the Geelbek Dunes of the Western Cape, South Africa. *Journal of Archaeological Science* 32:1711-1721.
- Kandel, A.W. & Conard, N.J. n.d. The archaeology of the Anyskop blowout of the West Coast Fossil Park. Unpublished report sourced accessed online at: <http://www.fossilpark.org.za/pdfs/academic-info-anyskop.pdf>. Accessed 01 November 2010.
- Kandel, A.W., Felix-Henningsen, P. & Conard, N.J. (2003). An overview of the spatial archaeology of the Geelbek Dunes, Western Cape, South Africa. *British Archaeological Reports International Series* 1163: 37-44.
- Kensley, B. 1974. The status of the Plio-Pleistocene *Panopea* in southern Africa (Mollusca, Bivalvia, Hiatellidae). *Annals of the South African Museum* 65: 199-215.
- Kaplan, J. 2011. Archaeological impact assessment proposed construction of a sick bay facility on Farm 284/2 Saldanha Bay. Unpublished report prepared for Footprint Environmental Services. Riebeeck West: Agency for Cultural Resource Management.
- Katzenellenbogen, J.A. (). The structural pervasiveness of estrogen activity. *Environmental Health Perspective*, 103(suppl 7): 99 – 101.
- Keevin, T.M., and G.L. Hempen (1997). The environmental effects of underwater explosions with methods to mitigate impacts. U.S. Army Corps of Engineers St. Louis District 1222 Spruce Street St. Louis, Missouri 63103-2833.
- Kenny, A.J., and H.L. Rees (1994). The effects of marine gravel extraction on the macrobenthos: Early post-dredging recolonisation. *Marine Pollution Bulletin*, 28: 442-447.
- Kenny, A.J., and H.L. Rees (1996). The effects of marine gravel extraction on the macrobenthos: Results 2 years post-dredging. *Marine Pollution Bulletin*, 32: 615-622.
- Kensley, B. (1985a). The faunal deposits of a Late Pleistocene raised beach at Milnerton, Cape Province, South Africa. *Annals of the South African Museum* 95: 183-226.
- Kensley, B. (1985b). Cementing bivalves of the genus *Chlamys* ('*Hinnites*') in Southern Africa. *South African Journal of Science* 81 (10): 629-631.
- Kensley, B.F. (1972). Pliocene marine invertebrates from Langebaanweg, Cape Province. *Annals of the South African Museum* 60: 173-190.
- Kensley, B.F. (1977). A second assemblage of Pliocene invertebrates from Langebaanweg, Cape. *Annals of the South African Museum* 72: 189-210.
- Kilburn, R.N. and Tankard, A.J. (1975). Pleistocene molluscs from the West and South coasts of the Cape Province, South Africa. *Annals of the South African Museum* 67: 111-122.
- Kim, J.H., Gibb, H.J., Howe, P.D and WHO (2006). Concise International Chemical Assessment Document 69: Cobalt and Inorganic Cobalt Compounds. January 2006. WHO Geneva

- Kindig, A.C. and M.M. Littler (1980). Growth and primary productivity of marine macrophytes exposed to domestic sewage effluents. *Marine Environmental Research*, 3: 81 - 100.
- King, M.G. (1977). Cultivation of the Pacific oyster, *Crassostrea gigas*, in a non-tidal hypersaline pond. *Aquaculture*, 11: 123-136.
- Kingsford, M.J. and C.A. Gray (1996). Influence of pollutants and oceanography on abundance and deformity of wild fish larvae. In: Schmitt, R.J. & C.W. Osenberg (eds) *Detecting ecological impacts*. Academic Press, London, p 235 – 255.
- Kingsford, M.J., Suthers, I.M. and C.A. Gray (1996). Exposure to sewage plumes and the incidence of deformities in larval fishes. *Marine Pollution Bulletin*, 33: 201 – 212.
- Kinoshita, I. and S. Fujita (1988). Larvae and juveniles of blue drum, *Nibea mitsukurii*, occurring in the surf zone of Tosa Bay, Japan. *Japanese Journal of Ichthyology*, 35: 25-30.
- Kirst, G.O. (1989). Salinity tolerance of eukaryotic marine algae, *Annual Review of Plant Physiology and Plant Molecular Biology*, 40: 21-53.
- Kissa E, Moraitou-Apostolopoulou M, Kiortsis V (1984) Effects of four heavy metals on survival and hatching rate of *Artemia salina* (L.). *Archiv für Hydrobiologie*, 102(2):255–264.
- Klaine, S. J., Cobb, G. P., Dickerson, R. L., Dixon, K. R., Kendall, R. J., Smith, E. E., and Solomon, K. (1996). An ecological risk assessment for the use of the biocide, Dibromonitripropionamide (DBNPA), in industrial cooling systems. *Environmental Toxicology and Chemistry*, 15: 21-30.
- Klein, R.G., (1988). The archaeological significance of animal bones from Acheulean sites in southern Africa. *African Archaeological Review* 6: 3-25.
- Klein, R.G., Avery, G., Cruz-Urbe, C. & Steele, T. (2007). The mammalian fauna associated with an archaic hominin skullcap and later Acheulean artefacts at Elandsfontein, Western Cape Province, South Africa. *Journal of Human Evolution* 52:164-186.
- Klima, E.F., Gitschlag, G.R., and M.L. Renaud (1988). Impacts of the explosive removal of offshore petroleum platforms on sea turtles and dolphins. *Marine Fisheries Review*, 50: 33-42.
- Koop, K. and P. Hutchings (1996). Disposal of sewage to the ocean – a sustainable solution? *Marine Pollution Bulletin*, 33: 121 – 123.
- Kostyuchenko, L.P., (1973). Effects of elastic waves generated in marine seismic prospecting on fish eggs in the Black Sea. *Hydrobiological Journal* 9: 45-48.
- Kungvankij, P. *et al.* (1986a). Shrimp hatchery design, operation and management. NACA Training Manual Series No 1. Network of Aquaculture Centres in Asia, Regional Lead Centre in the Philippines. 88 pp.
- Laird, M. and C. Griffiths (2008). Present distribution and abundance of the introduced barnacle *Balanus glandula* Darwin in South Africa. *African Journal of Marine Science*, 30: 93-100.
- Lane, S.B. and R. Carter (1999). Generic environmental management programme for marine diamond mining off the west coast of South Africa. Marine Diamond Mines Association, Cape Town, South Africa. 6 volumes.
- Lasiak, T.A. (1981). Nursery grounds of juvenile teleosts: evidence from surf zone of King's beach, Port Elizabeth. *South African Journal of Science*, 77: 388-390.
- Latorre, M., (2005). Environmental impact of brine disposal on *Posidonia* seagrasses. *Desalination* 182: 517-524.
- Lattemann, S. and T. Höpner (2002). Chemical impacts from seawater desalination plants - a case study of the

- northern Red Sea. Desalination, 152: 133-140.
- Lattemann, S. and T. Höpner (2003). Seawater desalination: Impacts of brine and chemical discharge on the marine environment, Vol. Balaban Desalination Publications, Italy
- Lazaris, D., Liasko, R., Leonardos, I., Evangelou, A. and V. Kalfakakou, (2012). Toxic effects of Europium chloride on developing zebrafish (*Danio rerio*) embryos, *Journal of Biological Research*, 18: 291.
- Levitt, G.J., Anderson, R.J., Boothroyd, C.J.T. and F.A. Kemp (2002). The effects of kelp harvesting on its regrowth and the understorey benthic community at Danger Point, South Africa, and a new method of harvesting kelp fronds. *South African Journal of Marine Science*, 24: 71-85.
- Lewis, J.A. (1996). Effects of underwater explosions on life in the sea. Ship Structures and Materials Division, Aeronautical and Maritime Research Laboratory. Document # DSTO-GD-0080. 38pp.
- Littler, M.M. & S.M. Murray (1975). Impact of sewage on the distribution, abundance and community structure of rocky intertidal macro-organisms. *Marine Biology*, 30: 277 - 291.
- Littler, M.M. and S.M. Murray (1978). Influence of domestic waste on energetic pathways in rocky intertidal communities. *Journal of Applied Ecology*, 15: 583 - 595.
- Littler, M.M., Martz, D.R. and D.S. Littler (1983). Effects of recurrent sand deposition on rocky intertidal organisms: importance of substrate heterogeneity in a fluctuating environment. *Marine Ecology Progress Series*, 11: 129-139.
- Lobel, P.B., Longerich, H.P., Jackson, S.E. and S.P. Belkhorde (1991). A major factor contributing to the high degree of unexplained variability of some elements concentrations in biological tissue: 27 elements in 5 organs of the mussel *Mytilus* as a model. *Arch. Environ. Contam. Toxicol.*, 21: 118-125.
- Lombard, A.T., Strauss, T., Harris, J., Sink, K., Attwood, C. and L. Hutchings (2004). South African National Spatial Biodiversity Assessment 2004: Technical Report. Volume 4: Marine Component. Pretoria: South African National Biodiversity Institute. (www.sanbi.org).
- Lopez Gappa, J.J., Tablado, A. and N.H. Magaldi (1990). Influence of sewage pollution on a rocky intertidal community dominated by the mytilid *Brachidontes rodriguezii*. *Marine Ecology Progress Series*, 63: 163 - 175.
- Lorenzo, J.I., Nieto, O. and R. Beiras (2002). Effects of humic acids on speciation and toxicity of copper to *Paracentrotus lividus* larvae in seawater. *Aquat. Toxicol.* 58: 27-41.
- Luger, S., R.C. van Ballegooyen and R. Carter (1997). Possible use of seawater cooling by Saldanha Steel: Three dimensional modelling of the thermal plume and assessment of ecological impacts. CSIR Report ENV/S-C97058, 66p + figures.
- Luksiene, D., Sandstrom, O., Lounasheimo, L. and J. Andersson (2000). The effects of thermal effluent exposure on the gametogenesis of female fish. *J. Fish Biology*, 56(1): 37-50.
- Lussier, S.M., Gentile, J.H. and J. Walker (1985). Acute and chronic effects of heavy metals and cyanide on *Mysidopsis bahia* (Crustacea: Mysidacea). *Aquat. Toxicol.*, 7: 25-35.
- Lutjeharms, J.R.E. and J.M. Meeuwis (1987). The extent and variability of South East upwelling in the Benguela and Comparable Ecosystems. *South African Journal of Marine Science*, 5: 51-62.
- Mabrook, B. (1994). Environmental impact of waste brine disposal of desalination plants, Red Sea, Egypt. *Desalination*, 97: 453-465.
- Macdonald, J.M., Shields, J.D. and R.K. Zimmer-Faust (1988). Acute toxicities of eleven metals to early life-history stages of the yellow crab *Cancer anthonyi*. *Mar. Biol.*, 98: 201-207.

- MacLatchy, D., Peters, L., Nickle, J. and G. Van Der Kraak (1997). Exposure to β -sitosterol alters the endocrine status of goldfish differently than 17β -estradiol. *Environmental Toxicology and Chemistry*, 16: 1895 – 1904.
- MacPherson, E. and A. Gordo (1992). Trends in the demersal fish community off Namibia from 1983 to 1990. *S. Afr. J. mar. Sci.*, 12: 635-649.
- Majiedt, P., Holness, S., Sink, K., Oosthuizen, A. and P. Chadwick (2013). *Systematic Marine Biodiversity Plan for the West Coast of South Africa*. South African National Biodiversity Institute, Cape Town. Pp 46.
- Mance, G. (1987). *Pollution Threat of Heavy Metals in Aquatic Environments*. Elsevier Applied Science, London and New York. pp 372.
- Maree, K. and D. Vromans. (2010). *The Biodiversity Sector Plan for the Saldanha Bay, Bergrivier, Cederberg and Matzikama Municipalities. Supporting land-use planning and decision-making in Critical Biodiversity Areas and Ecological Support Areas*. Produced by CapeNature as part of the C.A.P.E. Fine-scale Biodiversity Planning Project. SANBI, Kirstenbosch.
- Marine Casualty Database Southern African Coast. n.d. <http://www.reocities.com/Heartland/ridge/2216/text/MARITIME.TXT>.
- Marshall, D.J. and C.D. McQuaid (1993). Differential physiological and behavioural responses of the intertidal mussels, *Choromytilus meridionalis* (Kr.) and *Perna perna* L., to exposure to hypoxia and air: a basis for spatial separation. *Journal of Experimental Marine Biology & Ecology*, 171: 225-237.
- Martin, M., Osborn, K.E., Billig, P. and N. Glickstein (1981). Toxicities of ten metals to *Crassostrea gigas* and *Mytilus edulis* embryos and *Cancer magister* larvae. *Mar. Poll. Bull.* 12: 305-308.
- Martin, M., Stephenson, M. and J. Martin (1977). Copper toxicity experiments in relation to abalone deaths observed in a power plant's cooling waters. *Calif. Fish Game* 63: 95-100.
- Matozzo, V., Monari, M., Foschi, J., Serrazanetti, G.P., Catan, O. and M.G. Marin (2007). Effects of salinity on the clam *Chamelea gallina*. Part 1: alterations in immune responses. *Marine Biology*, 151: 1051-1058.
- Matthews, S.G. and G.C. Pitcher (1996). Worst recorded marine mortality on the South African coast. In: Yasumoto T, Oshima Y, Fukuyo Y (Eds), *Harmful and Toxic Algal Blooms*. Intergovernmental Oceanographic Commission of UNESCO, pp 89-92.
- Matthiessen, P. and R.J. Law (2002). Contaminants and their effects on estuarine and coastal organisms in the United Kingdom in the late twentieth century. *Environmental Pollution*, 120(3): 739-757.
- May, V. (1985). Observation on algal floras close to two sewage outfalls. *Cunninghamia*, 1: 385 - 394.
- Mayfield, S. (1998). *Assessment of predation by the West Coast rock lobster (Jasus lalandii): relationships among growth rate, diet and benthic community composition, with implications for the survival of juvenile abalone (Haliotis midae)* Unpublished PhD Thesis, University of Cape Town
- Mayfield, S., Branch, G.M., and A.C. Cockcroft (2000). Relationships among diet, growth rate and food availability for the South African rock lobster, *Jasus lalandii*. *Crustaceana*, 73(7): 815–834.
- McClurg, T.P. (1974). Studies on some environmental requirements of *Penaeus indicus* M. EDW. Twenty-ninth Steering Committee Meeting on Marine Disposal of Effluents. CSIR, NIWR, 79pp.
- McLachlan, A. (1980). The definition of sandy beaches in relation to exposure: a simple rating system. *South African Journal of Science*, 76: 137-139.
- McLachlan, A. (1988). Behavioural adaptations of sandy beach organisms: an ecological perspective. In: Chelazzi, G. and M. Vannini (eds.), *Behavioural adaptation to intertidal life*, pp. 449-475. Plenum Press, New York.

- McLachlan, A., Jaramillo, E., Donn T.E. and F. Wessels (1993). Sandy beach macrofauna communities and their control by the physical environment: a geographical comparison. *J. coastal Res. Spec. Issue 15*: 27-38.
- McLeese, D.W. (1974). Toxicity of copper at two temperatures and three salinities to the American lobster (*Homarus americanus*). *J. Fish. Res. Bd. Can.* 31: 1949-1952.
- McLusky, D. S. (1981). The estuarine ecosystem. Blackie & Son, Glasgow, 150pp.
- McQuaid, C.D. and G.M. Branch (1985). Trophic structure of rocky intertidal communities: response to wave action and implications for energy flow. *Mar Ecol Prog Ser*, 22: 153-161.
- McQuaid, C.D. and K.M. Dower (1990). Enhancement of habitat heterogeneity and species richness on rocky shores inundated by sand. *Oecologia*, 84: 142-144.
- Melville-Smith, R. and L. Van Sittert (2005). Historical commercial West Coast rock lobster *Jasus lalandii* landings in South African waters. *African Journal of Marine Science*, 27(1): 33-44.
- Meyer-Reil, L.-A. and M. Köster (2000). Eutrophication of marine waters: effects on benthic microbial communities. *Marine Pollution Bulletin*, 41(1-6): 255 – 263.
- Middaugh, D.P. and J.M. Dean (1977). Comparative sensitivity of eggs, larvae and adults of the estuarine teleosts, *Fundulus heteroclitus* and *Menidia menidia* to cadmium. *Bull. Environ. Contam. Toxicol.* 17: 645-652.
- Miller, D.C. and R.W. Sternberg (1988). Field measurements of the fluid and sediment dynamic environment of a benthic deposit feeder. *J. Mar. Res.*, 46: 771-796.
- Miri, R. and A. Chouikhi (2005). Ecotoxicological marine impacts from seawater desalination plants. *Desalination*, 182: 403-410.
- Mitchell, P. (1998). The impact of aerated sewage lagoon effluent on water quality in Field Lake. Alberta Environmental protection. Pub. No. T/820. www3.gov.ab.ca/env/info/infocentre/publist.cfm.
- Mitchell-Innes, B.A. and D.R. Walker (1991). Short-term variability during an Anchor Station study in the southern Benguela upwelling system. Phytoplankton production and biomass in relation to species changes. *Prog. Oceanogr.*, 28: 65-89.
- Modde, T. (1980). Growth and residency of juvenile fishes within a surf zone habitat in the Gulf of Mexico. *Gulf Research Reports*, 6: 377-385
- Morris, A.G. (1992). A master catalogue: Holocene human skeletons from South Africa. Johannesburg: Witwatersrand University Press.
- Mortimer, M.R. and G.J. Miller (1994). Susceptibility of larval and juvenile instars of the sand crab, *Portunus pelagicus* (L.), to sea water contaminated by chromium, nickel or copper. *Aus. J. Mar. Freshwater Res.* 45: 1107-1121.
- Moullac, G.L., Soyeux, C., Saulnier, D., Ansquer, D., Avarre, J.C. and P. Levy (1998). Effect of hypoxic stress on the immune response and the resistance to vibriosis of the shrimp *Penaeus stylirostris*. *Fish and Shellfish Immunology* 8: 621-629.
- Mucina, L. and M. Rutherford. Eds. 2006. Vegetation map of South Africa, Lesotho, and Swaziland. *Strelitzia* 19. South African National Biodiversity Institute, Pretoria.
- Municipal Demarcation Board. 2003. Municipal Profiles. Available at <http://www.demarcation.org.za/municprofiles2003/index.html>.
- Muschenheim, D.K. and T.G. Milligan (1996). Flocculation and accumulation of fine drilling waste particulates on the Scotian Shelf (Canada). *Marine Pollution Bulletin* 32 (10): 740-745.

- Neff, J.M. (2005). Composition, Environmental Fates, and Biological Effects of Water Based Drilling Muds and Cuttings Discharged to the Marine Environment: A Synthesis and Annotated Bibliography. Prepared for Petroleum Environmental Research Forum (PERF) and American Petroleum Institute. 83pp.
- Nel, P. (2001). Physical and biological factors structuring sandy beach macrofauna communities. PhD Thesis, University of Cape Town, Cape Town, South Africa: pp 202.
- Nel, P. (2002). Physical and biological factors structuring sandy beach macrofauna communities. PhD thesis. University of Cape Town, South Africa.
- Nel, P., Pulfrich, A. and A.J. Penney (2003). Impacts of beach mining operations on sandy beach macrofaunal communities on the beaches of Geelwal Karoo, Report by Pisces Environmental Services (Pty) Ltd prepared for Trans Hex Operations (Pty) Ltd, Cape Town.
- Nelson, G. (1989). Poleward motion in the Benguela area. In: Neshyba et al. (Eds), Poleward Flows along Eastern Ocean Boundaries. 34: Coastal and Estuarine Studies New York; Springer, pp110-130.
- Nelson, G. and L. Hutchings (1983). The Benguela upwelling area. Prog Oceanogr 12: 333-356.
- Nergis, Y., Sharif, M., Choudhry, A.F., Hussain, A. and J.A. Butt (2012). Impact of industrial and sewage effluents on Karachi coastal water and sediment quality. Middle-East Journal of Scientific Research, 11(10): 1443 – 1454.
- Newell, R.C., Seiderer, L.J. and D.R. Hitchcock (1998). The impact of dredging works in coastal waters: a review of the sensitivity to disturbance and subsequent recovery of biological resources on the seabed. Oceanography and Marine Biology: an Annual Review, 36: 127-178.
- Newman, G.G. and D.E Pollock (1971). Biology and migration of rock lobster *Jasus lalandii* and their effect on availability at Elands Bay, South Africa. Investl. Rep. Div. Sea Fish. S. Afr. 94: 1-24.
- Nimmo, D.W.R., D.V. Lightner and L.H. Bahner (1977). Effects of cadmium on the shrimps, *Penaeus duorarum*, *Palaemonetes pugio* and *Palaemonetes vulgaris*. In: Physiological Responses of Marine Biota to Pollutants, Academic Press, New York. pp. 131-183.
- O’Keeffe, D.J., and G.A. Young (1984). Handbook on the environmental effects of underwater explosions (Technical Report NSW TR 83-240). Silver Spring, MD: Naval Surface Weapons Centre.
- O’Sullivan, A.J. (1971). Ecological effects of sewage discharge in the marine environment. Proceedings of the Royal Society, London. B. 177: 331 – 351.
- OECD (Organisation for Economic Co-operation and Development) (1997). Screening Information Data Set: (SIDS) Initial Assessment Profile: Sodium Dodecyl Sulphate. <http://www.chem.unep.ch/irptc/sids/OECD/SIDS/151213.htm>
- Olivier, D.W. (2011). The sustainability and employment creation potential of bivalve mariculture: A case study of mussel and oyster farms in Saldanha Bay. Thesis presented in fulfilment of the requirements for the degree of Masters in Sociology at the University of Stellenbosch.
- Olsgard, F. and J.S. Gray (1995). A comprehensive analysis of the effects of offshore oil and gas exploration and production on the benthic communities of the Norwegian continental shelf. Marine Ecology Progress Series, 122: 277–306.
- Oosthuizen W.H. (1991). General movements of South African (Cape) fur seals *Arctocephalus pusillus pusillus* from analysis of recoveries of tagged animals. S. Afr. J. Mar. Sci., 11: 21-30.
- Oral, R., Bustamante, P., Warnau, M., D’Ambra, A. and G. Pagano (2010). Cytogenetic and developmental toxicity of cerium and lanthanum to sea urchin embryos. Chemosphere, 81: 194-198.

- Orton, J. (2007). Archaeological and palaeontological assessment of two portions of a road alignment near Langebaan and Saldanha Bay, Vredenburg and Hopefield Magisterial Districts. Unpublished report prepared for The Environmental Partnership. University of Cape Town: Archaeology Contracts Office.
- Orton, J. (2009). Rescue excavation at Diaz Street Midden, Saldanha Bay, South Africa. *Azania: Archaeological Research in Africa* 44: 107-120.
- Orton, J. (2011). Heritage impact assessment for the proposed Uyekraal Wind Energy Facility, Hopefield Magisterial District, Western Cape. Unpublished report prepared for Savannah Environmental. University of Cape Town, Archaeology Contracts Office.
- Orton, J. (2011). Heritage impact assessment for the proposed Uyekraal Wind Energy Facility, Hopefield Magisterial District, Western Cape. Unpublished report prepared for Savannah Environmental. University of Cape Town, Archaeology Contracts Office.
- Orton, J. (2012). Heritage Impact Assessment for the proposed West Coast District Municipality Desalination Plant, Vredenburg Magisterial District, Western Cape. Unpublished report prepared for CSIR. University of Cape Town: Archaeology Contracts Office.
- Otway, N.M. (1995a). Assessing impacts of deepwater sewage disposal: a case study from New South Wales, Australia. *Marine Pollution Bulletin*, 31: 347 – 354.
- Otway, N.M., Gray, C.A, Craig, J.R., McVea, T.A. and J.E. Ling (1996). Assessing the impacts of deepwater sewage outfalls on the spatially and temporally variable marine communities. *Marine Environmental Research*, 41: 45 - 71.
- Palmer, A.S., Snape, I., Stark, J.S., Johnstone, G.J. and A.T. Townsend (2006). Baseline metal concentrations in *Paramoera walkeri* from East Antarctica. *Mar. Pollut. Bull.*, 52: 1441–1449.
- Pastorok, R.A. and G.R. Bilyard (1985). Effects of sewage pollution on coral reef communities. *Marine Ecology Progress Series*, 21: 175 – 189.
- Paulson, C. and G. Amy (1993). Regulating metal toxicity in stormwater. *Water Environ. Technol.* July 44-49.
- Pearson, T.H. & R. Rosenberg, (1978). Macrobenthic succession in relation to organic enrichment and pollution of the marine environment, *Oceanography and Marine Biology: An Annual Review*, 16: 229–311.
- Pecquerie, L., Drapeau, L., Freon, P., Coetzee, J.C., Leslie, R.W. and M.H. Griffiths (2004). Distribution patterns of key fish species of the southern Benguela ecosystem: an approach combining fishery-dependent and fishery-independent data. *African Journal of Marine Science*, 26(1): 115-139.
- Pence, G. (2008). Fine Scale Conservation Plan for the Saldanha Municipality. Report for CapeNature, as part of the C.A.P.E. programme.
- Pernice, M., Boucher, J., Boucher-Rodoni, R., Joannot, P. and P. Bustamante (2009). Comparative bioaccumulation of trace elements between *Nautilus pompilius* and *Nautilus macromphalus* (Cephalopoda: Nautiloidea) from Vanuatu and New Caledonia. *Ecotoxicol. Environ. Saf.*, 72: 365-371.
- Peters, E.C., Gassman, N.J., Firman, J.C., Richmond, R.H. and E.A. Power, (1997). Ecotoxicology of tropical marine ecosystems. *Environmental Toxicology and Chemistry*, 16(1): 12 – 40.
- Pether, J, Roberts, D.L. and Ward, J.D. (2000). Deposits of the West Coast (Chapter 3). In: Partridge, T.C. and Maud, R.R. (eds.), *The Cenozoic of Southern Africa. Oxford Monographs on Geology and Geophysics, Oxford University Press, New York.* No. 40: 33-55.
- Pether, J. (2012). Palaeontological impact assessment (Desktop Study) as part of the Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) for a sea water reverse osmosis

- desalination plant in the Saldanha Bay region, Western Cape, South Africa. Unpublished report prepared for CSIR. Kommetjie: John Pether.
- Pether, J. (2014). Palaeontological Impact Assessment (Desktop Study). Proposed construction of a marine outfall pipeline and associated infrastructure in Danger Bay in the Saldanha Bay region, Western Cape, South Africa. The Saldanha Regional Marine Outfall Project. Unpublished report prepared for CSIR. Kommetjie: John Pether.
- Petrich, S.M. and D.J. Reisch (1979). Effects of aluminium and nickel on survival and reproduction in polychaetous annelids. *Bull. Environ. Contam. Toxicol.* 23: 698-702.
- Phillips, D.J.H. (1977). The use of biological indicator organisms to monitor trace metal pollution in marine and estuarine environments - a review. *Environmental Pollution*, 13: 281 - 317.
- Phillips, D.J.H. (1978). The use of biological indicator organisms to quantitate organochlorine pollutants in aquatic environments - A review. *Environmental Pollution*, 16: 167 - 229.
- Pillar, S.C. (1986). Temporal and spatial variations in copepod and euphausiid biomass off the southern and south-western coasts of South Africa in 1977/78. *S. Afr. J. mar. Sci.*, 4: 219-229.
- Pillar, S.C., Barange, M. and L. Hutchings (1991). Influence of the frontal system on the cross-shelf distribution of *Euphausia lucens* and *Euphausia recurva* (Euphausiacea) in the Southern Benguela System. *S. Afr. J. mar. Sci.*, 11: 475-481.
- Piscus Environmental Services. 2014. Marine Ecology Specialist Study on the Proposed Construction, Operation and Decommissioning of the Marine Outfall Pipeline and Associated Infrastructure for Frontier Saldanha Utilities (Pty) Ltd in the Saldanha Bay Region, Western Cape. Report to the CSIR. PISCES, Cape Town.
- Pitcher, G.C. (1998). Harmful algal blooms of the Benguela Current. IOC, World Bank and Sea Fisheries Research Institute Publication. 20pp.
- Pitcher, G.C. and D. Calder (2000). Harmful algal blooms of the southern Benguela Current: a review and appraisal of monitoring from 1989 to 1997. *S. Afr. J. Mar. Sci.*, 22: 255-284.
- Post, A. L., Wassenberg, T.J. and V. Passlow (2006). Physical surrogates for macrofaunal distributions and abundance in a tropical gulf. *Marine and Freshwater Research* 57:469-483.
- Potter, I.C., Beckley, L.E., Whitfield, A.K. and R.C.J. Lenanton (1990). Comparisons between the roles played by estuaries in the life cycles of fishes in temperate Western Australia and southern Africa. *Environmental Biology of Fishes*, 28: 143-178.
- Presidential Infrastructure Coordinating Commission (PICC). 2012. A Summary of the National Infrastructure Development Plan. PICC, Pretoria.
- Prochazka, K. (1994). Habitat partitioning in shallow-water cryptic ichthyofaunal communities in the western and southwestern Cape, South Africa. Unpublished PhD Thesis, University of Cape Town, South Africa.
- Provincial Government of the Western Cape (PGWC). (2006). Western Cape Provincial Growth and Development Strategy. WCPG, Cape Town.
- Provincial Government of the Western Cape (PGWC). (2010). Regional Development Profile: West Coast District. PGWC Provincial Treasury, Cape Town.
- Pulfrich, A. (2013). Intertidal Rocky-Shore Communities of the Sperrgebiet Coastline: Consolidated Rocky-shores Monitoring Report – 2013. Report to NAMDEB Diamond Corporation (Pty) Ltd., Oranjemund, Namibia. 126pp.

- Pulfrich, A., Nel, P. and A.J Penney (2004). Impacts of Beach Mining Operations on Sandy Beach Macrofaunal Communities on the Beaches of Geelwal Karoo: 2004 Beach Survey. Pisces Environmental Services (Pty) Ltd. Report to Trans Hex Operations (Pty) Ltd. October 2004, 42pp.
- Pulfrich, A., Parkins, C.A., and G.M. Branch (2003a). The effects of shore-based diamond-diving on intertidal and subtidal biological communities and rock lobsters in southern Namibia. *Aquatic Conservation: Marine & Freshwater Ecosystems*, 13: 257-278.
- Pulfrich, A., Parkins, C.A., Branch, G.M., Bustamante, R.H., and C.R. Velásquez (2003b). The effects of sediment deposits from Namibian diamond mines on intertidal and subtidal reefs and rock-lobster populations. *Aquatic Conservation: Marine & Freshwater Ecosystems*, 13: 233-255.
- Qiang, T., Wang, X. and L.D. Tian (1994). Bioaccumulation of the rare earth elements Lanthanum, Gadolinium and Yttrium in carp (*Cyprinus carpio*). *Environmental pollution*, 85: 345-350.
- Raimondi, P.T. and D.C. Reed (1996). Determining the spatial extent of ecological impacts caused by local anthropogenic disturbances in coastal marine habitats. In: Schmitt, R.J. & C.W. Osenberg (eds) *Detecting ecological impacts*. Academic Press, London, p 179–198
- Raimondo, D., Von Staden, L., Foden, W., Victor, J.E., Helme, N.A., Turner, R.C., Kamundi, D.A., and Manyama, P.A. (eds.) (2009). *Red List of South African Plants 2009. Strelitzia 25*. South African National Biodiversity Institute, Pretoria.
- Rainbow, P.S. (1995). Biomonitoring of heavy metal availability in the marine environment. *Mar. Pol. Bull.* 31: 183-192.
- Rainbow, P.S. and W.H. Black (2002). Effects of changes in salinity and osmolality on the rate of uptake of zinc by three crabs of different ecologies. *Marine Ecology Progress Series*, 244: 205-217.
- Rand, A.M. (2006). Using Geographic Information Systems and Remote Sensing to improve the management of kelp resources in South Africa. MSc Thesis, University of Cape Town
- Raventos, N., Macpherson, E. and A. Garcia-Rubies (2006). Effect of brine discharge from a desalination plant on macrobenthic communities in the NW Mediterranean. *Marine Environmental Research*, 62: 1-14.
- Reish DJ (1984). Marine ecotoxicological tests with polychaetous annelids. In: *Ecotoxicological Testing for the Marine Environment. Volume 1*. Eds: Persoone G, Jaspers E, Claus C. State University of Ghent and Institute of Marine Scientific Research, Bredene, Belgium. Pp 427-454.
- Relini, G., Zamboni, N., Tixi, F., and G. Torchia (1994). Patterns of sessile macrobenthos community development on an artificial reef in the Gulf of Genoa (northwestern Mediterranean). *Bulletin of Marine Science*, 55: 745-771.
- Richmond, R.H. (1993). Coral reefs: present problems and future concerns resulting from anthropogenic disturbance. *American Zoologist*, 33: 524 – 536.
- Roach, A.C., Banwell, K.A., Dasey, M.W., Gum, W.L. and G.W. Henry (1995). Effects of Sewage Outfalls on Marine Organisms at Port Kembla and Bellambi, Illawarra Region, NSW. Environment Protection Authority, Sydney, 73 pp.
- Roast, S.D., Rainbow, P.S., Smith, B.D., Nimmo, M. and M.B. Jones (2002). Trace metal uptake by the Chinese mitten crab *Eriocheirsinensis*: the role of osmoregulation. *Marine Environmental Research*, 53: 453-464.
- Roberts, D. & Berger, L.R. (1997). Last interglacial (c. 117 kyr) human footprints from South Africa. *South African Journal of Science* 93: 349-350.

- Roberts, D. (2009). A walk with Eve. In: Athiros, G., Athiros, L. & Athiros, N. (eds) A West Coast odyssey: a journey into the fascinating history of the Cape's West Coast peninsula: 14-15. Tokai: Historical Media cc.
- Roberts, D.E. (1996). Effects of the North Head deep-water sewage outfall on nearshore coastal reef macrobenthic assemblages. *Marine Pollution Bulletin*, 33: 303 – 308.
- Roberts, D.E., Smith, A., Ajani, P. and A.R. Davis (1998). Rapid changes in encrusting marine assemblages exposed to anthropogenic point-source pollution: a 'Beyond BACI' approach. *Marine Ecology Progress Series*, 163: 213 – 224.
- Roberts, D.L. & Berger, L. (1997). Last interglacial (c. 117 kyr) human footprints from South Africa. *South African Journal of Science* 93: 349-350.
- Roberts, D.L. and Brink, J. (2002). Dating and correlation of Neogene coastal deposits in the Western Cape (South Africa): implications for neotectonism. *S. Afr. J. Geol.*, **105**, 337–352.
- Roberts, D.L., Bateman, M.D., Murray-Wallace, C.V., Carr, A.S., Holmes, P.J. (2009). West Coast dune plumes: climate driven contrasts in dunefield morphogenesis along the western and southern South African coasts. *Palaeogeogr. Palaeoclimatol. Palaeoecol.* **271**: 24–38.
- Roberts, D.L., Botha, G.A., Maud, R.R. and Pether, J. (2006). Coastal Cenozoic Deposits. In: Johnson, M. R., Anhaeusser, C. R. and Thomas, R. J. (eds.), *The Geology of South Africa*. Geological Society of South Africa, Johannesburg/Council for Geoscience, Pretoria. 605-628.
- Roberts, D.L., Matthews, T., Herries, A.I.R., Boulter, C., Scott, L., Dondoa, C., Mtembia, P., Browning, C., Smith, R.M.H., Haarhoff, P and Bateman, M.D. (2011). Regional and global context of the Late Cenozoic Langebaanweg (LBW) palaeontological site: West Coast of South Africa. *Earth-Science Reviews* **106**: 191-214.
- Robertshaw, P.T. (1977). Excavations at Paternoster, south-western Cape. *South African Archaeological Bulletin* 32: 63–73.
- Robertshaw, P.T. (1979). Excavations at Duiker Eiland, Vredenburg District, Cape Province. *Annals of the Cape Provincial Museums (Human Sciences)* 1 (1): 1–26.
- Robinson, C.D., Brown, E., Craft, J.A., Davies, I. M., Moffat, C.F., Pirie, D., Robertson, F., Stagg, R.M. and S. Struthers (2003). Effects of sewage effluent and ethynyl oestradiol upon molecular markers of oestrogenic exposure, maturation and reproductive success in the sand goby (*Pomatoschistus minutus*, Pallas). *Aquatic Toxicology*, 62: 119 – 134.
- Robinson, T., Griffiths, C., McQuaid, C. and M. Rius (2005). Marine alien species of South Africa - status and impacts. *African Journal of Marine Science*, 27: 297-306.
- Rogers, J. (1980). First report on the Cenozoic sediments between Cape Town and Elands, Bay. *Geological Survey of South Africa Open File Report*. 136 pp.
- Rogers, J. (1982). Lithostratigraphy of Cenozoic sediments between Cape Town and Eland's Bay. *Palaeoecology of Africa* **15**: 121-137.
- Rogers, J. (1983). Lithostratigraphy of Cenozoic sediments on the coastal plain between Cape Town and Saldanha Bay. *Technical Report of the Joint Geological Survey/University of Cape Town Marine Geoscience Unit* **14**: 87-103.
- Rogers, J. and J.M. Bremner (1991). The Benguela Ecosystem. Part VII. Marine-geological aspects. *Oceanogr. Mar. Biol. Ann. Rev.*, 29: 1-85.

- Rosko, J.J. and J.W. Rachlin (1975). The effect of copper, zinc, cobalt and manganese on the growth of the marine diatom *Nitzschia closterium*. *Bulletin of the Torrey Botanical Club*, 102(3): 100-106.
- Rothman, M.D., Anderson, R.J. and A.J. Smith (2006). The effects of harvesting of the South African kelp (*Ecklonia maxima*) on kelp population structure, growth rate and recruitment. *J of Applied Phycology*, 18: 1-7.
- Rouget, M., Reyers, B., Jonas, Z., Desmet, P., Driver, A., Maze, K., Egoh, B. & Cowling, R.M. (2004). South African National Spatial Biodiversity Assessment 2004: Technical Report. Volume 1: Terrestrial Component. Pretoria: South African National Biodiversity Institute.
- Routledge, E.J., Sheahan, D., Desbrow, C., Brighty, G.C., Waldock, M. and J.P. Sumpter (1998). Identification of estrogenic chemicals in STW effluent. 2. In vivo responses in trout and roach. *Environmental Science and Technology*, 32: 1559 – 1565.
- Ruso, Y.D .P., la Ossa Carretero, J.A.D., Casalduero, F.G., and J.L.S. Lizaso (2007). Spatial and temporal changes in infaunal communities inhabiting soft-bottoms affected by brine discharge . *Marine Environmental Research*, 64: 492-503.
- Russo, A.R. (1982). Temporal changes in fish community structure near a sewage ocean outfall, Mokapu, Oahu, Hawaii. *Marine Environmental Research* 6: 83 – 98.
- Russo, A.R. (1989). Fish community structure on a deep ocean outfall, Barber's Point, Oahu, Hawaii. *Int Rev Ges Hydrobiol.*, 74: 499 – 506.
- Sadr, K. & Gribble, J. (2010). The stone artefacts from the Vredenburg Peninsula archaeological survey, west coast of South Africa. *Southern African Humanities* 22: 19-88.
- Sadr, K. (2009). Marine shell dates and surface lithic assemblages on the west coast of South Africa. *Journal of Archaeological Science* 36: 2713–2729.
- Sadr, K., Smith, A., Plug, I., Orton, J. & Mutti, B. (2003). Herders and foragers on Kasteelberg: interim report on excavations 1999-2002. *South African Archaeological Bulletin* 58: 27 – 32.
- Saldanha Bay Municipality (SBM). (2006). Integrated Development Plan 2006 – 2011. Saldanha Bay Municipality, Saldanha.
- Saldanha Bay Municipality (SBM). (2008). Integrated Development Plan Review 2008 – 2009. Saldanha Bay Municipality, Saldanha.
- Saldanha Bay Municipality (SBM). (2011). Saldanha Bay Spatial Development Framework. Saldanha Bay Municipality, Saldanha.
- Saldanha Bay Municipality (SBM). (2011a). Water Services Development Plan: Saldanha Bay Municipality. Saldanha Bay Municipality, Saldanha.
- Saldanha Bay Municipality (SBM). (2014). Integrated Development Plan 2012 – 2017: 2014 Review. Saldanha Bay Municipality, Saldanha.
- Sandstrom, O., Abrahamsson, I., Andersson, J. and M. Vetemaa (1997). Temperature effects on spawning and egg development in Eurasian perch. *J. of Fish Biology*, 51(5): 1015-1024.
- Santos, C. (1993). A multivariate study of biotic and abiotic relationships in a subtidal algal stand. *Marine Ecology Progress Series*, 94: 181-190.
- Saridou, M., Verriopoulos, G., Siokou-Frangou, I. and A. Giannakourou (2009). Microbial food web in the Saronikos Gulr marine area affected by the Psittalia sewage outfalls. 9th Hell. Symp. Ocean. Fish., Book of abstracts.

- Sauer, W.H.H., Penney, A.J., Erasmus, C., Mann, B.Q., Brouwer, S.L., Lamberth, S.J. and T.J. Stewart (1997). An evaluation of attitudes and responses to monitoring and management measures for the South African boat-based linefishery. *S. Afr. J. Mar. Sci.*, 18: 147-164.
- Sauvé, S., Brousseau, P., Pellerin, J., Morin, Y., Senécal, L., Goudreau, P. and M. Fournier (2002). Phagocytic activity of marine and freshwater bivalves: in vitro exposure of haemocytes to metals (Ag, Cd, Hg and Zn). *Aquat. Toxicol.*, 58: 189-200.
- Savage, C., Elmgren, R. and U. Larsson (2002). Effect of sewage-derived nutrients on an estuarine macrobenthic community. *Mar. Ecol. Prog. Ser.*, 243: 67–82.
- Schiel, D.R., and M.S. Foster (1986). The structure of subtidal algal stands in temperate waters. *Oceanography & Marine Biology: An Annual Review*, 24: 265-307.
- Schrire, C., Deetz, J., Lubinsky, D. & Poggenpoel, C. (1990). The chronology of OPudepost 1, Cape, as inferred from an analysis of clay pipes. *Journal of Archaeological Science* 17: 269-300.
- Schrire, C., Deetz, J., Lubinsky, D. & Poggenpoel, C. 1990. The chronology of Oudepost 1, Cape, as inferred from an analysis of clay pipes. *Journal of Archaeological Science* 17: 269-300.
- Seapy, R.R., and M.M. Littler (1982). Population and species diversity fluctuations in a rocky intertidal community relative to severe aerial exposure and sediment burial. *Mar. Biol.*, 71: 87-96.
- Senut, B. and Pickford, M. 1995. Fossil eggs and Cenozoic continental biostratigraphy of Namibia. *Palaeontologia Africana* 32: 33-37.
- Shams El Din, A.M., Aziz, S. and B. Makkawi (1994). Electricity and water production in the Emirate of Abu Dhabi and its impact on the environment, *Desalination*, 97: 373-388.
- Shannon L.V., and S. Pillar (1985). The Benguela Ecosystem III. Plankton. *Oceanography & Marine Biology: An Annual Review*, 24, 65-170.
- Shannon, L. V., Boyd, A. J., Brundrit, G. B. and Taunton-Clark, J., (1986). On the existence of an *El Niño*-type phenomenon in the Benguela System. *Journal of Marine Research* 44: 495-520.
- Shannon, L.J., Moloney, C.L., Jarre, A. and J.G. Field (2003). Trophic flows in the southern Benguela during the 1980s and 1990s. *Journal of Marine Systems*, 39: 83 - 116.
- Shannon, L.V. and G. Nelson (1996). The Benguela: Large scale features and processes and system variability. In: Wefer, G., Berger, W.H., Siedler, G. and D.J. Wells (eds.). *The South Atlantic: Present and Past Circulation*. Berlin; Springer: 163-210
- Shannon, L.V. and J.G. Field (1985). Are fish stocks food-limited in the southern Benguela pelagic ecosystem? *Mar. Ecol. Prog. Ser.*, 22(1): 7-19.
- Shannon, L.V. and M.J. O'Toole (1998). Integrated overview of the oceanography and environmental variability of the Benguela Current region. *Synthesis and Assessment of Information on the BCLME: Thematic Report 2. UNDP/GEF (RAF/96/G43)*, 58pp
- Sharp, J.R. and J.M. Neff (1982). The toxicity of mercuric chloride and methylmercuric chloride to *Fudulus heteroclitus* embryos in relation to exposure conditions. *Environ. Biol. Fish.* 7: 277-284.
- Shaughnessy, P.D. (1979). Cape (South African) fur seal. In: *Mammals in the Seas. F.A.O. Fish. Ser.*, 5, 2: 37-40.
- Sheller, F.E.C., Kalf, D.F., Weltje, L and A.P. van Wezel, (2000). Maximum Permissible Concentrations and Negligible Concentrations for Rare Earth Elements (REEs). RIVM Report No. 601501011, 66pp.
- Shillington, F., (2003). Oceanography. In: Molloy F, Reinikainen T (eds) *Namibia's Marine Environment*. Directorate of Environmental Affairs of the Ministry of Environment and Tourism, Namibia:7-18

- Shillington, F.A., Peterson, W.T., Hutchings, L., Probyn, T.A., Waldron, H.N. and J.J. Agenbag (1990). A cool upwelling filament off Namibia, South West Africa: Preliminary measurements of physical and biological properties. *Deep-Sea Res* 37(11A): 1753-1772.
- Shoenmakers, H.J.N., Bohemen, C.G.V. and S.J. Dieleman (1981). Effects of oestradiol-17 β on the ovaries of the starfish *Asterias rubens*. *Developmental Growth and Differentiation*, 23(2): 125 – 135.
- Shurin, J.B. and S.I. Dodson (1997). Sublethal toxic effects of cyanobacteria and nonylphenol on environmental sex determination and development in *Daphnia*. *Environmental Toxicology and Chemistry*, 16: 1259 – 1267.
- Siddall, M., Chappell, J. and Potter, E.-K. (2007). Eustatic sea level during past interglacials. *The Climate of Past Interglacials: Developments in Quaternary Science* 7: 75-92.
- Siesser, W.G. (1970). Carbonate components and mineralogy of the South African coastal limestones and limestones of the Agulhas Bank. *Transactions of the Geological Society of South Africa* 73: 49-63.
- Siesser, W.G. (1972). Petrology of the Cainozoic coastal limestones of the Cape Province, South Africa. *Transactions of the Geological Society of South Africa* 75: 177-185.
- Simon-Blecher, N., Granevitze, Z., and Y. Achituv (2008). *Balanus glandula*: from North-West America to the west coast of South Africa. *African Journal of Marine Science*, 30: 85-92.
- Singer, R. & Wymer, J. (1968). Archaeological investigations at the Saldanha skull site in South Africa. *South African Archaeological Bulletin* 23:63-74.
- Singer, R. (1954). The Saldanha skull from Hopefield, South Africa. *American Journal of Physical Anthropology* n.s. 12:345-362.
- Singer, R. (1954). The Saldanha skull from Hopefield, South Africa. *American Journal of Physical Anthropology* n.s. 12:345-362.
- Singer, R. (1961). The new fossil sites at Langebaanweg, South Africa. *Current Anthropology* 2:385-387.
- Sink, K., Holness, S., Harris, L., Majiedt, P., Atkinson, L., Robinson, T., Kirkman, S., Hutchings, L., Leslie, R., Lamberth, S., Kerwath, S., von der Heyden, S., Lombard, A., Attwood, C., Branch, G., Fairweather, T., Taljaard, S., Weerts, S., Cowley, P., Awad, A., Halpern, B., Grantham, H. and T. Wolf (2012). National Biodiversity Assessment 2011: Technical Report. Volume 4: Marine and Coastal Component. South African National Biodiversity Institute, Pretoria.
- Siokou-Frangou, I., Krasakopoulou, E., Asimakopoulou, G., Giannakourou, A., Kontoyiannis, H., Pagou, K., Panayotidis, P., Pavlidou, A., Simboursa, N., Zenetos, A., Zeri C. and S. Zervoudaki (2009). Impact of Athens metropolitan area sewage outfalls on the Saronikos Gulf ecosystem. Symposium of Impact of large coastal Mediterranean cities on marine ecosystems – Alexandria, Egypt 10-12 February 2009.
- Smith, A.B. (2006). Excavations at Kasteelberg and the origins of the Khoekhoen in the Western Cape, South Africa. Oxford: BAR International Series 1537.
- Smith, A.B. (2011). Archaeological report: proposed new warehouse shed for the Exxaro Namakwa Sands Smelter, on Portion 3 Yzervarkensrug. Unpublished report prepared for SRK Consulting (South Africa) (Pty) Ltd. Rondebosch: University of Cape Town.
- Smith, A.B., Sadr, K., Gribble, J. & Yates, R. (1991). Excavations in the South-Western Cape, South Africa, and the archaeological identity of prehistoric hunter-gatherers within the last 2000 years. *South African Archaeological Bulletin* 46: 71-91.

- Smith, A.K., Ajani, P.A. and D.E. Roberts (1999). Spatial and temporal variations in fish assemblages exposed to sewage and implications for management. *Marine Environmental Research*, 47: 241 – 260.
- Smith, G.G. and G.P. Mocke (2002). Interaction between breaking/broken waves and infragravity-scale phenomena to control sediment suspension and transport in the surf zone. *Marine Geology*, 187: 320-345.
- Smith, M., (1996). Effects of underwater explosions on aquatic vegetation, submerged and emergent. Report Submitted to the U.S. Army Corps of Engineers, Project #DACW43-96-P1584. Southern Illinois University, Edwardsville, IL.
- Smith, S.D.A. (1996). The effects of domestic sewage effluent on marine communities at Coffs Harbour, New South Wales, Australia. *Marine Pollution Bulletin*. 33: 309 - 316.
- Smith, S.D.A. and R.D. Simpson (1992). Monitoring the shallow sublittoral using the fauna of kelp (*Ecklonia radiata*) holdfasts. *Marine Pollution Bulletin*. 24: 46-52.
- Smith, S.D.A. and R.D. Simpson (1993). The effects of pollution on the holdfast macrofauna of the kelp *Ecklonia radiata*: discrimination at different taxonomic levels. *Marine Ecology Progress Series*, 96: 199-208.
- Snelgrove, P.V.R. and C.A. Butman (1994). Animal-sediment relationships revisited: cause versus effect. *Oceanogr Mar Biol Annu Rev.*, 32: 111-177.
- Soares, A.G. (2003). Sandy beach morphodynamics and macrobenthic communities in temperate, subtropical and tropical regions - a macroecological approach. PhD Thesis, University of Port Elizabeth. 72 pp.
- Soares, A.G., McLachlan, A. and T.A. Schlacher (1996). Disturbance effects of stranded kelp on populations of the sandy beach bivalve *Donax serra* (Röding). *Journal of Experimental Marine Biology and Ecology*, 205: 165-186.
- Soares, A.G., Schlacher, T.A. and A. McLachlan (1997). Carbon and nitrogen exchange between sandy beach clams. *Marine Biology*, 127: 657-664.
- Soltan, D., Verlaque, M., Boudouresque, C.F. and P. Francour (2001). Changes in macroalgal communities in the vicinity of a Mediterranean sewage outfall after setting up of a treatment plant. *Marine Pollution Bulletin*, 42: 59 – 70.
- Sorvari, J. and M. Sillanpää (1996). Influence of metal complex formation on heavy metal and free EDTA and DTPA acute toxicity determined by *Daphnia magna*. *Chemosphere*, 33(6): 119-127.
- Sotero-Santos, B., Rocha, O. and J. Povinelli (2007). Toxicity of ferric chloride sludge to aquatic organisms. *Chemosphere*, 68(4): 628-636.
- Starczak, V.R., Fuller, C.M. and C.A. Butman (1992). Effects of barite on aspects of ecology of the polychaete *Mediomastus ambiseta*. *Marine Ecology Progress Series*, 85: 269-282.
- Statistics South Africa (StatsSA). (2002). Census 2001. StatsSA, Pretoria
- Statistics South Africa (StatsSA). (2008). Community Survey 2007. StatsSA, Pretoria
- Statistics South Africa (StatsSA). (2012). Census 2011. StatsSA, Pretoria
- Steffani, C.N. (2009). Assessment of Mining Impacts on Macrofaunal Benthic Communities in the Northern Inshore Area of the De Beers ML3 Mining Licence Area - 18 Months Post-mining. Prepared for De Beers Marine (South Africa), 47pp.

- Steffani, C.N. (2010). Assessment of mining impacts on macrofaunal benthic communities in the northern inshore area of the De Beers Mining Licence Area 3 – 2010 . Prepared for De Beers Marine (South Africa). pp 30 + Appendices.
- Steffani, C.N. (2012). Assessment of Mining Impacts on Macrofaunal Benthic Communities in the Northern Inshore Area of the ML3 Mining Licence Area - 2011. Prepared for De Beers Marine (South Africa), July 2012, 54pp.
- Steffani, C.N. and A. Pulfrich (2004a). Environmental Baseline Survey of the Macrofaunal Benthic Communities in the De Beers ML3/2003 Mining Licence Area. Prepared for De Beers Marine South Africa, April 2004., 34pp.
- Steffani, C.N. and A. Pulfrich (2007). Biological Survey of the Macrofaunal Communities in the Atlantic 1 Mining Licence Area and the Inshore Area between Kerbehuk and Lüderitz 2001 – 2004 Surveys. Prepared for De Beers Marine Namibia, March 2007, 288pp.
- Steffani, C.N. and G.M. Branch (2003a). Spatial comparisons of populations of an indigenous limpet *Scutellastra argenvillei* and an alien mussel *Mytilus galloprovincialis* along a gradient of wave energy. *African Journal of Marine Science*, 25: 195-212.
- Steffani, C.N. and G.M. Branch (2003b). Temporal changes in an interaction between an indigenous limpet *Scutellastra argenvillei* and an alien mussel *Mytilus galloprovincialis*: effects of wave exposure. *African Journal of Marine Science*, 25: 213-229.
- Steffani, C.N. and G.M. Branch (2005) Mechanisms and consequences of competition between an alien mussel, *Mytilus galloprovincialis*, and an indigenous limpet, *Scutellastra argenvillei*. *Journal of Experimental Marine Biology and Ecology*, 317: 127-142.
- Steffani, N. (2007a). Biological Baseline Survey of the Benthic Macrofaunal Communities in the Atlantic 1 Mining Licence Area and the Inshore Area off Pomona for the Marine Dredging Project. Prepared for De Beers Marine Namibia (Pty) Ltd. pp. 42 + Appendices.
- Steffani, N. and A. Pulfrich (2004b). The potential impacts of marine dredging operations on benthic communities in unconsolidated sediments. Specialist Study 2. Specialist Study for the Environmental Impact Report for the Pre-feasibility Phase of the Marine Dredging Project in Namdeb's Atlantic 1 Mining Licence Area and in the nearshore areas off Chameis. Prepared for PISCES Environmental Services (Pty) Ltd, September 2004.
- Stegenga, H., Bolton, J.J. and Anderson, R.J. (1997). Seaweeds of the South African west coast. pp. [2] + 1-655. Cape Town: Bolus Herbarium, University of Cape Town.
- Stynder, D.D., Moggi-Cecchi, J., Berger, L.R. & Parkington, J.E. Human mandibular incisors from the late Middle Pleistocene locality of Hoedjiespunt 1, South Africa. *Journal of Human Evolution* 41: 369-383.
- Sumpter, J.P. and S. Jobling (1995). Vitellogenesis as a biomarker for estrogenic contamination of the aquatic environment. *Environmental Health Perspective*, 103(suppl 7): 173 – 178.
- Sun, H., Wang, X.-R. and L.-S. Wang (1997). Bioconcentration of rare earth elements Lanthanum, Gadolinium and Yttrium in algae *Chlorella vulgaris Beijerinck*: influence of chemical species. *Chemosphere*, 34: 1753–1760.
- Tagatz, M.E. and M. Tobia (1978). Effect of barite (BaSO₄) on development of estuarine communities. *Estuarine and Coastal Marine Science*, 7: 401-407.
- Taljaard, S. (2006). The development of a common set of water and sediment quality guidelines for the coastal zone of the BCLME (Project BEHP/ℓ BMP/03/04) Report submitted to UNOPS as part of the Benguela

- Current Large Marine Ecosystem Programme. CSIR Report CSIR/NRE/ECO/ER/2006/0011/C. Stellenbosch, South Africa (www.bclme.org).
- Taljaard, S. and P.M.S. Monteiro (2002). Saldanha Bay marine water quality management plan. Phase I: Situation Assessment. Report to the Saldanha Bay Water Quality Forum Trust. CSIR Report ENV-S-C 2002-115/1. Stellenbosch.
- Taljaard, S., Monteiro, P.M.S. and W.A.M. Botes (2006). A structured ecosystem-scale approach to marine water quality management. *Water SA*, 32: 535-542.
- Tankard, A.J. (1974a). Petrology and origin of the phosphorite and aluminium phosphate rock of the Langebaanweg-Saldanha area, south-western Cape Province. *Annals of the South African Museum* 65: 217-249.
- Tankard, A.J. (1974b). Varswater Formation of the Langebaanweg-Saldanha area, Cape Province. *Transactions of the Geological Society of South Africa* 77: 263-283.
- Tankard, A.J. (1975c). The marine Neogene Saldanha Formation. *Transactions of the Geological Society of South Africa* 7: 257-264.
- Tankard, A.J. (1976). Pleistocene history and coastal morphology of the Ysterfontein-Elands Bay area, Cape Province. *Annals of the South African Museum* 69: 73-119.
- Taylor, D.T., Maddock, B.G. and G. Mance (1985). The acute toxicity of nine "grey list" metals (arsenic, boron, chromium, copper, lead, tin, vanadium and zinc) to two marine fish species: dab (*Limanda limanda*) and grey mullet (*Chelon labrosus*). *Aquat. Toxicol.*, 7: 135-144.
- Terlizzi, A., Frascchetti, S., Guidetti, P. and F. Boero (2002). The effects of sewage discharge on shallow hard substrate sessile assemblages. *Marine Pollution Bulletin*, 44: 544 – 550.
- Trevor, D., Caston, M. and S. Zwelabo (2010). An assessment of the effect of industrial and sewage effluent on aquatic invertebrates: a case study of a southern Urban stream, Zimbabwe. *Journal of Sustainable Development*, 3(2): 210 – 214.
- Truter, C. n.d. West Coast Towns: Saldanha Bay. <http://www.route27sa.com/saldanha.html>. Website consulted 29th March 2012.
- Tunley, K.L., Clark, B.M. and A. Biccard (2011). St Helena State of the Bay 2012. Prepared by Anchor Environmental Consultants, Prepared for St Helena Bay Water Quality Trust. 58pp.
- Turner, M. (2009). The wreck of the Merestein at Jutten Island. In: Athiros, G., Athiros, L., Athiros, N. & Turner, M. (eds) *A West Coast Odyssey: a journey into the colourful and fascinating history of the Cape's West Coast peninsula*: 60-63. Tokai: Historical Media cc.
- Underwood, A.J., Chapman M.G. and L. Howitt (1992). Intertidal and subtidal macrobenthos at Plantation Point, Jervis Bay. Report to Public Works Department, Sydney.
- Underwood, A.J., Chapman M.G. and M.H. Atkinson (1990). Intertidal and subtidal macrobenthos at Plantation Point, Jervis Bay. Report to NSW Public Works, Sydney.
- UNEP (2008). Desalination Resource and Guidance Manual for Environmental Impact Assessments, United Nations Environment Programme, Regional Office for West Asia, Manama, and World Health Organization, Regional Office for the Eastern Mediterranean, Cairo
- Urban-Econ. (2014). Saldanha Rare Earth Elements Separation Plant: Economic Impact Assessment. Report to AGES, Urban-Econ, Pretoria.
- US EPA (1994) Reregistration Eligibility Decision (RED) - 2,2-dibromo-3-nitrilopropionamide (DBNPA) – List C

- (Case 3056), EPA 738-R-94-026, Office of Pesticide PProgrammes, Washington DC, 179pp.
- US EPA (1994). Reregistration Eligibility Decision (RED) - 2,2-dibromo-3-nitrilopropionamide (DBNPA) – List C (Case 3056), EPA 738-R-94-026, Office of Pesticide PProgrammes, Washington DC, 179pp.
- Van Ballegooyen, R.C. and S.A. Luger (1999). Assessment of a potential thermal discharge in a coastal embayment using a three dimensional hydrodynamic model. In: Fifth International Conference on Coastal and Port Engineering in Developing Countries: Proceedings of the COPEDEC V, Cape Town, April 1999, (ed. G.P. Mocke), Volume 3: 2018-2027.
- Van Ballegooyen, R.C., Pulfrich, A., Penney, A. and N. Steffani (2005). Kudu Power Plant Environmental Impact Assessment: Assessment of a proposed cooling water discharge into the marine environment at a location near Uubvley. CSIR Report ENV-S-C 2005-054, 141pp.
- Van Ballegooyen, R.C., Steffani, C.N. and P.D. Morant (2004). Kudu Power Plant Environmental Impact Assessment: Assessment of a proposed cooling water discharge into the marine environment. CSIR Report ENV-S-C 2004-086, 62pp+ 22 pp. Appendix.
- Van der Lingen, C.D. (1994). Aspects of the early life history of Galjoen *Dichistiuscapensis*. S. Afr. J. mar. Sci., 14: 37-45.
- Van Der Merwe, I.J., Davids, A.J., Ferreira, S., Swart, G.P. & Zietsman, H.L. (2005). Growth Potential of Towns in the Western Cape (2004). Report to the Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.
- Van Zyl, H., Barbour, T. & Hamann, R. (2008). Assessment of socio-economic impacts of Sea Harvest's operations on Saldanha Bay and the West Coast District. Unpublished report prepared for Sea Harvest Corporation Ltd by the Environmental Evaluation Unit, University of Cape Town.
- Van Zyl, H.W., de Wit, M.P. & Leiman, A. (2005). Guideline for involving economists in EIA processes: Edition 1. CSIR Report No ENV-S-C 2005 053 G. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.
- Velimirov, B., Field, J.G., Griffiths, C.L. and P. Zoutendyk (1977). The ecology of kelp bed communities in the Benguela upwelling system. *Helgoländer Wiss Meeresunters*, 30, 495-518.
- Velimirov, B., Field, J.G., Griffiths, C.L. and P. Zoutendyk (1977). The ecology of kelp bed communities in the Benguela upwelling system. *Helgoländer Wiss Meeresunters*, 30: 495-518.
- Vergheze, B., Radhakrishnan, E.V. and A. Padhi (2007). Effect of environmental parameters on immune response of the Indian spiny lobster, *Panulirus homarus* (Linnaeus, 1758). *Fish and Shellfish Immunology*, 23: 928-936.
- Verheye, H.M. and A.J. Richardson (1998). Long-term increase in crustacean zooplankton abundance in the southern Benguela upwelling region (1951-1996): bottom-up or top-down control? *ICES Journal of Marine Science*, 55: 803-807.
- Viant, M.R., Walton, J.H., TenBrook, P.L. and R.S. Tjeerdema (2002). Sublethal actions of copper in abalone (*Haliotis rufescens*) as characterized by *in vivo* ³P NMR. *Aquat. Toxicol.*, 57: 139-151.
- Viarengo, A., Marro, A., Marchi, B. and B. Burlando (2000). Single and combined effects of heavy metals and hormones on lysosomes of haemolymph cells from the mussel *Mytilus galloprovincialis*. *Marine Biology*, 137: 907 – 912.
- Villacastin-Herrero, C.A., Crawford, R.J.M, and J.G. Field (1992). Statistical correlations between purse-seine catches of chub-mackerel off South Africa and select environmental parameters. S. Afr. J. mar. Sci., 12: 157-165.

- Visser, G.A. (1969). Analysis of Atlantic waters off the coast of southern Africa. Investigational Report Division of Sea Fisheries, South Africa, 75: 26 pp.
- Visser, G.E. & Monama, F.L. (2008). Black workers, typhoid fever and the construction of the Berg River – Saldanha military water pipeline, 1942 – 1943. *The Journal for Transdisciplinary Research in Southern Africa* 4: 181-208.
- Visser, H.N. & Schoch, A.E. (1972). Map Sheet 255: 3217D & 3218C (St Helenabaai), 3317B & 3318A (Saldanhabaai). *Geological Survey of South Africa*.
- Visser, H.N. & Schoch, A.E. (1973). The geology and mineral resources of the Saldanha Bay area. *Memoir Geological Survey of South Africa* 63: 156 pp.
- Visser, H.N. & Toerien, D.K. (1971). Die geologie van die gebied tussen Vredendal en Elandsbaai. Explanation of Sheet 254: 3118C (Doring Bay) and 3218A (Lambert's Bay). *Geological Survey of South Africa*. 63 pp.
- Vries, M.B., Delvigne, G.A.L. and R.A.H Thabet (1997). Relocation of desalination plant 's outfall in the U.A.E in order to minimise environmental damage. Madrid: I.D.A.World Congress on Desalination and Water Reuse.
- Waalkes, M.P., Coogan, T.P. and R.A. Barter (1992). Toxicological principles of metal carcinogenesis with special emphasis on cadmium. *Critical Reviews in Toxicology* 22: 175-201.
- Walker, D.R and W.T. Peterson (1991). Relationships between hydrography, phytoplankton production, biomass, cell size and species composition, and copepod production in the southern Benguela upwelling system in April 1988. *S. Afr. J. mar. Sci.*, 11: 289-306
- Wambach, D.A., Traxler, M.A., and K.W. Eakin (2001). Montana Department of Transportation - a fine feathered friend. In: Irwin, C.L., Garrett, P. & K.P. McDermott (Eds). *Proceedings of the 2001 International Conference on Ecology and Transportation*, Center for Transportation and the Environment, North Carolina State University, Raleigh, NC: pp. 546-548. (Abstract).
- Wang, X.Y., Tu, Q., Tian, L.Q. and L.M. Dai (1991). Bioconcentration of rare earth elements in carp. *Environmental Chemistry*, 10(4): 37-43.
- Wang, Y., Zhang, M. and X. Wang (2000). Population growth responses of *Tetrahymena shanghaiensis* in exposure to rare earth elements. *Biol. Trace Elem. Res.*, 75: 265-275.
- Wang, Z.-L. and M. Yamada (2007). Geochemistry of dissolved rare earth elements in the Equatorial Pacific Ocean. *Environ. Geol.*, 52: 779-787.
- Watling, H.R. (1985). Comparative study of the effects of zinc, cadmium and copper on the larval growth of three oyster species. *Bull. Environ. Contam. Toxicol.*, 28: 195-201.
- Watling, H.R. and R.J. Watling (1982). Comparative effects of metals on the filtering rate of the brown mussel (*Perna perna*). *Bulletin of Environmental Contamination and Toxicology*, 29: 651-657.
- Webley, L., Orton, J. & Hart, T. (2010). Heritage impact assessment: proposed West Coast One Wind Energy Facility, Vredenburg District, Western Cape. Unpublished report prepared for Savannah Environmental. St James: ACO Associates.
- Webley, L., Orton, J. & Hart, T. (2010). Heritage impact assessment: proposed West Coast One Wind Energy Facility, Vredenburg District, Western Cape. Unpublished report prepared for Savannah Environmental. St James: ACO Associates.
- Weltje, L. (2003). Bioavailability of Lanthanides to freshwater organisms. PhD Thesis, University Delft. 192pp.

- Weltje, L., Verhoof, L.R., Verweij, W. and T. Hamers (2004). Lutetium speciation and toxicity in a microbial bioassay: testing the free-ion model for lanthanides. *Environ Sci Technol.*, 38(24): 6597-6604.
- West Coast District Municipality (WCDM). 2012. WCDM Draft Integrated Development Plan 2012 – 2016. WCDM, Malmesbury.
- Western Cape Provincial Department of Environmental Affairs & Development Planning EIA Guideline Information Document Series: (DEA&DP, March 2013).Part 1-Part8.
- Wide Blue. n.d. <http://www.wideblue.co.za/saldanha.html>. Website consulted on 29th March 2012.
- Wiens, M., Seack, J., Koziol, C., Hassanein, H.M.A., Steffen, R., Korzhev, M., Schroder, H.C. and W.E.G. Muller (1999). 17 β -Estradiol-dependent regulation of chaperone expression and telomerase activity in the marine sponge *Geodia cydonium*. *Marine Biology*, 133: 1 – 10.
- Winter, S. & Baumann, N. (2005). Guideline for involving heritage specialists in EIA processes: Edition 1. CSIR Report No ENV-S-C 2005 053 E. Republic of South Africa, Provincial Government of the Western Cape, Department of Environmental Affairs & Development Planning, Cape Town.
- Wong, C.K., K.H. Chu, K.W. Tang, T.W. Tam and L.J. Wong (1993). Effects of chromium, copper and nickel on survival and feeding behaviour of *Metaenaeus ensis* larvae and postlarvae (Decapoda: Penaeidae). *Mar. Environ. Res.*, 36: 63-78.
- Wreck Site. (2012). <http://www.wrecksite.eu/wreck.aspx?139056>. Website consulted on 30th March 2012.
- Wu, R.S.S. (2002). Hypoxia: from molecular responses to ecosystem responses. *Marine Pollution Bulletin*, 45: 35-45.
- Wybergh, W. (1919). The coastal limestones of the Cape Province. *Transactions of the Geological Society of South Africa* 22: 46-67.
- Wybergh, W. (1920). The Limestone Resources of the Union. *Memoir of the Geological Survey of South Africa* 11: Vol. 2.
- Xu, Z. and J.P. Jiang (2004). Effects of cerium on embryonic development of large yellow croaker, *Pseudosciaena crocea* (Richardson). *Fisheries Science*, 23(12): 24–25.
- Yelverton, J.T., Richmond, D.R., Hicks, W., Sanders, K., and E.R. Fletcher (1975). The relationship between fish size and their response to underwater blast. Topical Report DNA 3677T. Defense Nuclear Agency, Department of Defense, Washington, D.C.
- Yonkos, L.T., Fisher, D.J., Burton, D.T., Whitekettle, W.K. and J.C. Petrille (2001). Effectiveness of the sulphur(IV) compound, sodium bisulfite, in reducing chlorine, chlorine dioxide, and chlorite toxicity to *Daphnia magna* in well water and pond water. *Environmental Toxicology and Chemistry*, 20(3): 530-536.
- Young, G. A., (1991). Concise methods for predicting the effects of underwater explosions on marine life. NAVSWC NO 91-220. Naval Surface Warfare Center. Silver Spring, Maryland.
- Zanders, I.P. and W.E. Rojas (1992). Cadmium accumulation, LC₅₀ and oxygen consumption in the tropical marine amphipod *Elasmopus rapax*. *Mar. Biol.*, 113: 409-413.
- Zeri, C., Kontoyiannis, H. and A. Giannakourou (2009). Distribution, fluxes and bacterial consumption of total organic carbon in a populated Mediterranean Gulf. *Cont.Shelf Res.*, 29: 886–895.

- Zettler, M.L., Bochert, R. and F. Pollehne (2009). Macrozoobenthos diversity in an oxygen minimum zone off northern Namibia. *Marine Biology* 156:1949-1961.
- Zhang, G.S. (2008). Effects of lanthanum on antioxidant activity and esterase isozymes in kidney and gill of *Cyprinus carpio* Linnaeus. *Chinese Journal of Ecology*, 17(8): 1337–1342.
- Zoutendyk, P. (1989). Oxygen consumption by the Cape rock lobster, *Jasus lalandii*. *S.Afr. J. mar. Sci.*, 8: 219-230.
- Zoutendyk, P. (1992). Turbid water in the Elizabeth Bay region: A review of the relevant literature. CSIR Report EMAS-I 92004.
- Zoutendyk, P. (1995). Turbid water literature review: a supplement to the 1992 Elizabeth Bay Study. CSIR Report EMAS-I 95008.
- Zoutendyk, P., and I.R. Duvenage (1989). Composition and biological implications of a nepheloid layer over the inner Agulhas Bank near Mossel Bay, South Africa. *Transactions of the Royal Society of South Africa*, 47: 187-197.

Technical Reports

- AGES (2013). Scoping Report as part of the Environmental Impact Assessment Process for the proposed Separation Plant on Portion 6 of the Farm Langeberg 188, Saldanha Bay Local Municipality.
- AGES (2014). Environmental Impact Assessment Report and Environmental Management Programme for the proposed Separation Plant on portion 6 of the farm Langeberg 188, Saldanha Bay Local Municipality.
- ANZECC (2000). Australian and New Zealand guidelines for fresh and marine water quality. Volume 2, Aquatic ecosystems. National water quality management strategy; no.4. Australian and New Zealand Environment and Conservation Council, Agriculture and Resource Management Council of Australia and New Zealand, Canberra, Australia. ISBN 0 642 19562 5 (www.deh.gov.au/water/quality/nwqms/introduction/).
- Aurecon (2013), Final EIA for the proposed construction of the Afrisam Cement Plant, Limestone and Clay Quarries and associated infrastructure in the Saldanha Bay Region, Western Cape
- CSIR (1997). Saldanha Bay general cargo quay dredging: Effects of underwater blasting on benthic invertebrates and fish. CSIR Report ENV/C 97055. 6pp.
- CSIR, (2012). Draft Scoping Report for the proposed construction, operation and decommissioning of a Seawater Reverse Osmosis Plant and associated infrastructure in the Saldanha Bay region, Western Cape, CSIR Report No: GWDS Stel General 1159. Prepared for the West Coast District Municipality.
- CSIR, (2013). Draft Environmental Impact Assessment Report for the proposed construction, operation and decommissioning of a Seawater Reverse Osmosis Plant and associated infrastructure in the Saldanha Bay region, Western Cape, CSIR Report No: GWDS Stel General 1159. Prepared for the West Coast District Municipality.
- CSIR. (2014). Environmental Impact Assessment for the Proposed Saldanha Marine Regional Outfall Project of Frontier Saldanha Utilities Pty (Ltd) at Danger Bay in the Saldanha Bay region: Final Scoping Report. CSIR, Stellenbosch.
- EMBECOM, (2004). Dredging-related re-suspension of sediments: Impacts and guidelines for the marine dredging. Specialist study for the environmental impact report for the pre-feasibility phase of the

- marine dredging project in Nambdeb's Atlantic 1 Mining Licence Area and in near shore areas off Chameis. 72pp
- Process Projects, (August, 2013). Desktop Trade Off Study: Saldanha Separation Plant: Effluent Brine Disposal Options Study. Process Projects Document No: PC5155. Prepared for Frontier Rare Earths Limited.
- Royal HaskoningDHV (Pty) Ltd, (August 2013). Saldanha Regional Marine Outfall Technical Report. Environmental Authorization Submission. Prepared for Frontier Saldanha Utilities (Pty) Ltd.
- WESGRO. 2011. Saldanha Industrial Development Zone Feasibility Study: Revision 1. WESGRO, Cape Town.
- World Bank (1998). Pollution Prevention and Abatement Handbook. Thermal Power: Guidelines for New Plants. WORLD BANK GROUP, p413-426.
- WorleyParsons RSA & CSIR (2012). Desalination Plant Project. Marine Modelling Studies in support of EIA. Draft report July 2012. Report No. 257830 – 257830-00-CS-REP-0001
- WorleyParsons RSA (2014). Saldanha Regional Marine Outfall Project: Marine Modelling Studies in support of EIA. Combined Effluent Dispersion Modelling. January 2014. Report No. 277760 – 00-CS-REP-0003. pp92 plus appendices.