

QUALIFICATIONS

BSc, Physics, Univ. of Otago, 1997
 PGDipSci, Photonics, Univ. of Otago, 1998
 MSc, Marine Science, Univ. of Otago, 2002

PROFESSIONAL AFFILIATIONS

NZ Marine Sciences Society
 NZ Association of Impact Assessors

ROLE AT CAWTHRON

Ben is a biophysical systems analyst within the Coastal & Freshwater Group. Ben's primary area of expertise is in the development and application of modelling and remote sensing tools to assist in finding sustainable resource use solutions for biophysical systems.

SPECIAL INTERESTS

- Ecosystem and physical dynamics in coastal and estuarine systems.
- Data mining and analysis to assist understanding of complex systems.
- Development and application of expert systems for risk management and conflict resolution.

SELECTED PUBLICATIONS & REPORTS

Knight BR, Goodwin EO, Jiang WM, Carbines G, 2010. Development of Settlement Model For Marlborough Sounds Blue Cod (*Parapercis Colias*). Prepared for Ministry of Fisheries Cawthron Report No. 1707. 34 p. plus appendices.

Barter P, Beamsley B, Goring D, Johnson D, **Knight BR**, McComb P, Zyngfogel R 2010 East Clive Wastewater Outfall - Hydrodynamic modelling, Prepared for Hastings District Council, 107 p.

Knight BR, Zyngfogel R, Forrest B 2009. PartTracker – a fate analysis tool for marine particles. In Coasts and Ports. Wellington. 8 p.

Knight BR, Jiang WM., 2009 Assessing primary production constraints in New Zealand fisheries. *Fisheries Research*, 100(1): 15-25 .

Heasman K, Keeley N, Roberts B, Batstone C, **Knight BR**, Mussely H 2009. Feasibility of Open Ocean Aquaculture in New Zealand. Prepared for the Foundation for Research, Science & Technology and Offshore Technology Development (OTD) Ltd. Cawthron Report No. 1481. 213 p.

Keeley N, Forrest B, Hopkins G, Gillespie P, Clement D, Webb S, **Knight BR**, Gardner J 2008. Sustainable Aquaculture in New Zealand: Review of the Ecological Effects of Farming Shellfish and Other Non-fish Species. Prepared for the Ministry of Fisheries. Cawthron Report No. 1476. 146 p. plus appendices.



Goodwin EO, Cornelisen C, **Knight BR**, Jiang WM 2008. MTAD Marine Physical Report: Forecasted Effects of Amended Freshwater Discharge on the Low-salinity Layer in Doubtful Sound. Prepared for Meridian Energy Ltd. Cawthron Report No. 1533. 150 p. plus appendices.

Forrest B, Keeley N, Gillespie P, Hopkins G, **Knight BR**, Govier D. 2007. Review of the ecological effects of marine finfish aquaculture: final report. Prepared for Ministry of Fisheries. Cawthron Report No. 1285. 71p.

Tuckey B, Gibbs MT, **Knight BR** and Gillespie P, 2006 Tidal Circulation in Tasman and Golden Bays: Implications for River Plume Behaviour, *NZ Journal of Marine and Freshwater Research*, 40, 305-324B.

Knight BR, Keeley N, Gibbs MT 2006 Characterisation of the hydrodynamics at the Napier Mussels Ltd. site in Hawke Bay, Cawthron Report 957.

Knight BR, 2003 AMP3 Shellfish Water Strategy: Dee Estuary Development Plan for Intermittent Discharges, METOC Report 1171.

Knight BR, 2003 Dunstable Sludge Liquor and River Quality Analysis. METOC Report 1123.

Saunders A, **Knight BR**, 2003 Calibration Report for a Regional Coastal Modelling System for Wales (CMSW). METOC report number 1138.

Knight BR, 2002 A one-dimensional biophysical numerical model applied to Doubtful Sound, a New Zealand fjord. University of Otago Unpublished Masters Thesis.