PUBLICATIONS - J. WILLIAM KAMPHUIJS

Latest update: July 14, 2008

Summary:


More than 130 research publications. The most important areas covered by these are: wave mechanics and long waves, coastal sediment transport and morphology, coastal protection, marinas, hydraulic modelling, numerical modelling, environment, coastal management, water quality and fish habitat.

Over 40 published invited lectures on topics such as coastal sediment transport, shore processes and shore protection, physical and numerical modelling of coastal areas.

Six book chapters on physical modelling of coasts.

Many lecture notes on coastal engineering and management.

More than 150 engineering reports prepared for clients of J.W. Kamphuis Associates Limited. These cover numerical and hydraulic modelling of coasts, coastal systems, shore protection and coastal sediment transport, tidal inlet improvements, design of marinas, design of artificial islands for oil exploration, erosion of cohesive soils, ice forces. Many reports are in connection with litigation. The reports were produced for clients in Canada, and the United States, as well as, for example, in Norway, UK, Netherlands, Israel, Kuwait, Sharjah, Dubai, Australia, New Zealand, Singapore.

Abbreviations:

ACOS  Associate Committee on Shorelines (National Research Council of Canada)
ASCE  American Society of Civil Engineers
BOSS  Conference on Behaviour of Offshore Structures
CANCAM Canadian Congress on Applied Mechanics
CC-SEA Canadian Coastal Science and Engineering Association
COPEDEC International Conf. on Coastal and Port Engineering in Developing Countries
CSCE  Canadian Society for Civil Engineering
ICCE  International Conference on Coastal Engineering
IAHR  International Association for Hydraulic Research
POAC  Conference on Port and Ocean Engineering under Arctic Conditions
EC  Electronic Copy
ET  Electronic (text only)
PPT  PowerPoint
A. PUBLICATIONS IN REFEREED JOURNALS

B. PUBLICATIONS IN CONFERENCE PROCEEDINGS

These are refereed conference proceedings. In the area of Coastal Engineering, such conference publications are often as important as journal publications.

J.W. Kamphuis Publications


C. BOOKS


D. BOOK CHAPTERS

E. INVITED LECTURES

F. CONSULTING ASSIGNMENTS (1985 – Present)

Second opinion on the design and construction of the rubble mound breakwater - Palm Jumeirah.
Netherlands Ministry of Education (2005)
Quality Assessment of Civil Programs at Technical Universities of Delft and Twente, Netherlands.
Member of a 4-member group of technical experts for the International Law of the Sea Tribunal to determine environmental impacts of large Singapore reclamations on Malaysian water.
Member of 4-member advisory group for Singapore to determine potential environmental impacts of large Singapore reclamations on Malaysian water.
Reviewed research projects on stability of armour and provided outside opinion.
Reviewed and provided outside opinion on the technical work leading up to the prescription of new (increased) boundary values for wave action on the Dutch coast.
Queen’s University Faculty of Engineering (2002).
Member of a committee to plan research and lecture space for the faculty of Applied Science.
Advised the Kingston Yacht club on development of their yacht basin.
Member of the Technical Review Committee – Coastal Processes Technical Work Group to evaluate the causes of Great Lakes shore erosion.
Brisset Bishop, Montreal (2001).
Advised legal firm on circumstances involved in the sinking of the vessel Flare off Newfoundland.
Performed audit on environmental conditions surrounding the development of an offshore airport in the North Sea off the coast of the Netherlands (Flyland Project).
Performed a study to define ship-generated erosion in the Cornwall (ON) area.
Rationalisation of European laboratory effort and space requirements.
Member of technical advisory committee to review proposals and funding for a research group consisting of six of technology centers in Delft, Netherlands to develop “sustainable development of delta areas”
Review of the model testing program for reconfiguration of breakwaters.
Han Padron Associates, New York, USA (2000)
Provided advice on the initial design and design procedures for Palm Island (Dubai).
Review of Lake Winnipeg shore erosion and protection”.
Relation between water level regulation and erosion around Lake Temiskaming. Prepared reports and presented evidence in court case.
Review of the environmental and sedimentological aspects for the expansion of the port of Ashdod.
Technical expert on arbitration proceedings concerning artificial shoreline at Dubai – numerous reports and testimony.
Analysis of sedimentation in the harbour of Churchill, Man
Provided advice on the design of a new large-scale coastal hydraulic modelling facility.

Performed hydraulic model studies of scour at inlet structures.

Review and advice regarding the scour design for the storm surge barrier design for Venice.

St Mary’s Cement and Shoreline Engineering, Bowmanville, Ontario (1989 – 1993)
Evaluation of hydraulic and environmental conditions, design of computer programs, and design of perimeter wall for unloading facility.

Member of the technical review committee for Batiquitos Lagoon mitigation project.

Evaluation of the environmental considerations for a breakwater extension.

National Water Research Institute, Burlington, Ontario (1991)
Performed erosion tests on cohesive clay samples.

Feasibility study for a Marina at Bells Point, Wolfe Island.

Gulf Canada Resources (1989)
Analysis of cohesive soil erosion at an arctic artificial island site.

Public Works Canada (1989)
Determination of sediment transport rates at Jordan Harbour, ON.

Analysis of shore erosion on Lake Erie.

Determination of scour potential of cohesive soils at bridge crossings.

Howe International, Ottawa, ON (1987)
Review of marine works projected for elevator Bay, Kingston.

Hastings Corp., Belleville (1987)
Review erosion of gabion wall.

Port of St John, NB (1986)
Evaluation of consulting reports

Singleton, Urquhart (1986)
Evaluation of coastal bluff erosion on Vancouver Island in preparation for litigation

Institute for Marine Dynamics, St John’s Nfld (1985)
Review of wave absorber methodology

Esso Resources, Canada (1981-1987)
Hydraulic model studies for the design of various artificial oil exploration islands in the Arctic
G. REPORTS PREPARED FOR CLIENTS

WL-01, “Effects of Changed Wave Boundary Conditions Along the Dutch Coast”. For Delft Hydraulics Laboratory to be included in their report for the Dutch government agency Rijkswaterstaat, Dec 2002, 8 pp. (EC)
J.W. Kamphuis Publications

CCL-1, "Feasibility of Constructing a Marina at Bells Point, Wolfe Island". For Cumming, Cockburne Limited, Willowdale, Ontario, April 1990, 5 pp. (EC)
JOR-1, "Evaluation of Sediment Transport Rates at Jordan Harbour". For Public Works Canada, Ontario Region, Jul 1989, 8 pp. (EC)
J.W. Kamphuis Publications

ES-9, "Toe Protection for Caisson Retained Island" For Esso Resources Canada, Calgary, Apr 1982, 42 pp.
ES-6, "Implications of Decreasing the Caisson Height for the Esso Caisson Retained Island" For Esso Resources Canada, Calgary, May 1981, 22 pp.
ES-2, "Ice Jamming". For Esso Resources Canada, Calgary, Nov 1979, 18 pp.
AK-6, "Type of Dredge and Environmental Considerations for Al Khiran". For Project Planning Associates, Toronto, Mar 1979, 5 pp.
RCA-3, "Armouring and Overtopping at Wharf, St.Mary's Cement, Bowmanville". For Reid Crowther and Partners, Toronto, Jan 1977, 6 pp.
BU-1, "Ideas on a Marina at Burlington". For Project Planning Associates, Toronto, Apr 1976, 8 pp.
CAT-1, "Improvement to the West Street Boat Ramp". For Cataraqui Region Conservation Authority, Kingston, Sep 1975, 14 pp.
PAA-4, "Preliminary Comments on Kuwait Beaches along the Arabian Gulf Coast". For Project Planning Associates, Toronto, Mar 1975, 5 pp.
TYS-1, "Evaluation of Marine Environment for Ta Yue Shan". For Golder Associates, Hong Kong, Apr 1974, 8 pp.
J.W. Kamphuis Publications

RCA-2, "Environmental Considerations on St. Mary's Pier". For Reid Crowther and Partners, Toronto, Apr 1973, 3 pp.
PNP-3, "Solutions to Erosion at North East Beach". For Canada Dept. of Indian Affairs and Northern Development, Ottawa, Oct 1972, 7 pp.
PAA-2, "Erosion at North East Beach". For Canada Dept. of Indian Affairs and Northern Development, Ottawa, Mar 1972, 9 pp.
WEC-1, "Duclos Point Park". For William E Coates Ltd., Lindsay, Feb 1972, 4 pp.
PAA-1, "Erosion Protection Scheme for West Point Beach, Pelee National Park". For Canada Dept. of Indian Affairs and Northern Development, Ottawa, Nov 1971, 5 pp.
DLS-1, "Outline of Beach Study Programme for Point Pelee Area". For Ont. Dept. of Lands and Forests, Toronto, Apr 1971, 28 pp.
DLFS-4, "Remarks on Study and Protection of Marentette Beach". For Ont. Dept. of Lands and Forests, Toronto, Jan 1971, 7 pp.