Fraser River Model Project
fonds

Compiled by Erwin Wodarczak (1998)
Last revised November 2010

University of British Columbia Archives
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- **Catalogue entry** (UBC Library catalogue)
Fonds Description

1.22 m of textual records.

Administrative History

The Fraser River Model Project, which ran from 1948 to 1961, was designed to help improve navigation on the Fraser River Estuary. The National Research Council of Canada funded the initial construction and operation of the model and the University of British Columbia provided land, office, and laboratory space, materials and engineering and administrative supervision. The University’s support continued after the Federal Department of Public Works took over operational and financial control of the model in 1953. Located on a three-acre site on the western edge of the Point Grey campus, the project was a hydraulic, erodible-bed, tidal river model and one of the largest in the world and the only one of its kind in Canada. The model’s horizontal scale was 1:600, the vertical scale 1:70. E.S. Pretious of the Department of Civil Engineering was director of the project.

Scope and Content

Fonds consists of reports and printed material arising from the Fraser River Model Project (1948-1963) acquired from Dr. Pretious and from the Applied Science Reading Room. The classification system was Dr. Pretious’ own, and the original order in which they were received has been maintained.

Notes

Title based on the contents of the fonds.

Items included in the original accession which are included elsewhere in the Library’s holdings were removed in a 1998 re-appraisal.

Finding aid available. See also Item 025, which is an index to all Fraser River Model publications.
File List

BOX 1


005  The Sediment load of the lower Fraser River, B.C. / E.S. Pretious. Vancouver: University of B.C. Department of Civil Engineering, February 1969.


009  Fraser River System flood flow hydrographs, May and June 1953-67 / University of B.C. Civil Engineering Department. Water Resources Division.

010  Annual report / Dominion-Provincial Board, Fraser River Basin 1949. Large binder, contains numerous maps.

011  Preliminary report on flood control and hydro-electric power in the Fraser River Basin / Fraser River Board. Victoria, June 1958.
Interim report: investigations into measures for flood control in the Fraser River Basin / Fraser River Board. Victoria, June 1956 [includes Appendices a-c].


Computed and observed water levels, Fraser River at Mission / A.L. McNaughton. (Dominion-Provincial Board. Fraser River Basin. Memorandum No. 2). October 10, 1951.

Interim report no. 1: flood storage requirements / A.L. McNaughton. (Dominion-Provincial Board. Fraser River Basin). June 1, 1951.


Brief summary of principal features of model / E.S. Pretious. (Fraser River Model). Vancouver, November 1959.

Quarterly bulletin / National Research Council of Canada. April-June 1951. [feature article: "Fraser River Model Hydraulics Laboratory," by E.S. Turner, p. 1-6].


Publications, Fraser River Model. [index to all publications produced from the project].


Further model studies of the effect on water levels at New Westminster resulting from a structure in Annacis Channel / E.S. Pretious, E.D. Thorne. (Fraser River Model. FRM-210). August 6, 1954 [c. 1-2].


The Design of a pendulum-type velocity meter / Ian D. Smith. (Fraser River Model. Report FRM-217). June 30, 1955 [c.1-3]. FRM-217 Revised: dated December 6, 1960 [The revision is called 035 c.1, the others c.2-3].


Model studies of improvement plans for the navigable channel in the main arm of the Fraser River at New Westminster, British Columbia / G.E. Jarlan. (Fraser River Model. Report FRM-222). December 23, 1955 [c.1, 3 (sic)].


Bed-load movement in the main arm of the Fraser River estuary. Part I: Laboratory flume studies to determine criteria for incipient motion. Part II: Estimated length of time when bed-material is in motion E.S. Pretious. (Fraser River Model. Report FRM-224). March 28, 1956.


041a Plans for reduction of shoaling and for improvement of the Fraser River at
New Westminster, B.C. (Part 2) / E. Vollmer. (Fraser River Model. Report

042 Model studies to reduce dredging at Steveston Cut, Fraser River, B.C. / E.

043 Estimate of quantity rate of bed-load transport in the Fraser River Estuary /

BOX 3

043a Model tests to determine the effects of proposed dredging by Fenco in the
Port Mann-Sapperton areas of the Fraser River / E. Vollmer. (Fraser River

044 Suggested glossary for river-training and harbour development structures /

045 Revision and addendum to "Final report on plans for reduction of shoaling
and for improvement of the Fraser River at New Westminster, B.C." / E.S.
Pretious, J.E. Barlow. (Fraser River Model. Report FRM-232 revision &

045 Final report on plans for reduction of shoaling and for improvement of the
Fraser River at New Westminster, B.C. / E.S. Pretious, E. Vollmer. (Fraser

046 Historical review of river training and its effects in the New Westminster
area, Fraser River, B.C. E.S. Pretious, E. Vollmer. (Fraser River Model. Report

047 Study and proposal for the elimination of dredging at Ladner Slough and the
improvement of Ladner Channel for navigation / E.S. Pretious, E. Vollmer.

048 Fraser River Model studies and prototype confirmations E.S. Pretious, E.
Final report on special observations of bed movement in lower Fraser River at Ladner Reach during 1950 freshet and till June 1951. Including supplementary report no. 1 to memorandum re special observations 1950 freshet [sic]/ E.S. Pretious, T. Blench. Vancouver: National Research Council of Canada; Fraser River Model, July 6, 1951.


Fraser River Model, a joint project between the University of British Columbia and the Department of Public Works, Canada: some facts relating to the project and a summary of studies made / E.S. Pretious. University of B.C., July 1961. [cover title is "Article," but no note of where or if it was published].


Fraser River Model index to map filing system. n.d.

Inventory of Fraser River Model equipment and supplies, March 31, 1953 / National Research Council. Division of Mechanical Engineering. [U.B.C. Department of Civil Engineering Report letterhead].

Inventory of Fraser River Model equipment and supplies, March 31, 1953 (revised to March 31, 1954) / National Research Council. Division of Mechanical Engineering.

Inventory of equipment and supplies revised to March 31, 1955 / University of B.C. Fraser River Model.

Inventory of equipment and supplies on long-term loan from the National Research Council, Canada / University of B.C. Fraser River Model. March 31, 1955.

Inventory of equipment and supplies as at March 31, 1958 / University of B.C. Fraser River Model.
Inventory of equipment and supplies as at March 31, 1959 / University of B.C. Fraser River Model.

Inventory of equipment and supplies as at March 31, 1960 / University of B.C. Fraser River Model.

Inventory of equipment and supplies as at March 31, 1961 / University of B.C. Fraser River Model.


Laboratory flume studies, Deas Island Tunnel / E.S. Pretious, E. Vollmer, A.G. Mercer. (University of B.C. Department of Civil Engineering Report). November 18, 1957.


Principles of river training as an aid to navigation, with occasional reference to the Fraser River, B.C., basic laws of river behaviour / E.S. Pretious. (Fraser River Model Technical Report no. 5). July 22, 1960.


Some recent developments in fisheries engineering research / E.S. Pretious, L.R. Kersey. (University of B.C. Fraser River Hydro & Fisheries Research Project. Memorandum Report). December 1957.