

HENRY

Hydraulic Engineering Repository

Ein Service der Bundesanstalt für Wasserbau

Conference Paper, Published Version

Levasseur, Anne; Girardet, Léa; Bercher, Quentin

Application of MASCARET for modelling manganese dispersion during a dam-break flood

Zur Verfügung gestellt in Kooperation mit/Provided in Cooperation with:
TELEMAC-MASCARET Core Group

Verfügbar unter/Available at: <https://hdl.handle.net/20.500.11970/104284>

Vorgeschlagene Zitierweise/Suggested citation:

Levasseur, Anne; Girardet, Léa; Bercher, Quentin (2014): Application of MASCARET for modelling manganese dispersion during a dam-break flood. In: Bertrand, Olivier; Coulet, Christophe (Hg.): Proceedings of the 21st TELEMAC-MASCARET User Conference 2014, 15th-17th October 2014, Grenoble – France. Echirolles: ARTELIA Eau & Environnement. S. 47-47.

Standardnutzungsbedingungen/Terms of Use:

Die Dokumente in HENRY stehen unter der Creative Commons Lizenz CC BY 4.0, sofern keine abweichenden Nutzungsbedingungen getroffen wurden. Damit ist sowohl die kommerzielle Nutzung als auch das Teilen, die Weiterbearbeitung und Speicherung erlaubt. Das Verwenden und das Bearbeiten stehen unter der Bedingung der Namensnennung. Im Einzelfall kann eine restriktivere Lizenz gelten; dann gelten abweichend von den obigen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Documents in HENRY are made available under the Creative Commons License CC BY 4.0, if no other license is applicable. Under CC BY 4.0 commercial use and sharing, remixing, transforming, and building upon the material of the work is permitted. In some cases a different, more restrictive license may apply; if applicable the terms of the restrictive license will be binding.



Application of MASCARET for modelling manganese dispersion during a dam-break flood

Anne LEVASSEUR^{1,2}, Léa GIRARDET¹, Quentin BERCHER¹

¹ ARTELIA, 6 rue de Lorraine 38042 GRENOBLE

² Anne.LEVASSEUR@arteliagroup.com

Abstract:

A reservoir storing water with high concentration of manganese is located near the river Kwé in the southern province of New Caledonia. A one-dimensional numerical model of the river Kwé has been constructed for the purpose of evaluating the impact of a wave generated by the dam failure. Two cases were investigated: formation of a breach in the dam and overtopping of the dam under extreme hydrologic conditions. The transport of dissolved and adsorbed manganese in the river during the flood event was modelled using the module TRACER included in MASCARET.