



Ertl - Langergraber - Telegdy: Modelling in Sanitary Engineering

Urban Drainage Part 4: Summary

14/15 November 2011

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Models

Overland Flow

- **Time-Area-Method**
- **Reservoir**
- **Unit Hydrograph**
- **Kinematic Wave**

Pipe Flow

- **No Pipe Flow**
- **Wave Translation**
- **Kalinin-Miljukov**
- **Hydrodynamics**

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Model synopsis (1)

- **Rational method**
- **Hydrodynamic model**
- **Continuous hydrological model**

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Model synopsis (2)

Spatial resolution

Processes

Structures

4

Model synopsis (3)

Design and/or analysis

Result? Result verification

Data investment

Computational speed

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Free models in the www

SWMM 5

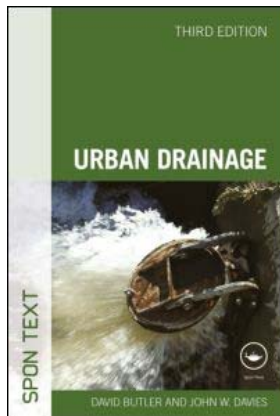
www.epa.gov/ednnrml/models/swmm

KAREN 1.2 (Demo version)

www.hydro-it.com/produkte/karen1.2

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Recommended reading



David Butler, John Davies: Urban Drainage, Spon Press, 2010



Willi Gujer: Siedlungswasserwirtschaft, Springer, 2007