The National Academies of
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TRANSPORTATION RESEARCH BOARD

TRB Snap Search: Hydraulics & Hydrology

TRB’s involvement in research on Hydraulics & Hydrology from 2018-2019

The Transportation Research Board (TRB) provides innovative, research-based solutions to improve how we move. TRB is part of the National Academies of Sciences, Engineering, and Medicine, an independent, non-profit institution that provides objective advice on scientific, engineering, and medical issues.

A resource to the nation and to the transportation community worldwide, TRB provides an extensive portfolio of services:

- Opportunities for information exchange on current transportation research and practice
- Management of cooperative research and other research programs
- Analyses of national transportation policy issues and guidance on federal and other research programs
- Publications and access to research information from around the world

All available Snap Searches can be accessed online here: http://www.trb.org/InformationServices/Snap.aspx

TRB Research

TRID – The world’s largest and most comprehensive bibliographic source on all modes and disciplines of transportation

- Click here to view search results on TRB published research on Hydraulics & Hydrology within the past year.

Subject Webpage

- Hydraulics & Hydrology Research at TRB

Recent Reports & Publications

- National Cooperative Highway Research Program (NCHRP)
  - Report 918 - Approaches for Determining and Complying with TMDL Requirements Related to Roadway Stormwater Runoff
  - Report 870 - Field Performance of Corrugated Pipe Manufactured with Recycled Polyethylene Content
  - Synthesis 519 - The Renewal of Stormwater Systems Using Trenchless Technologies

Current & Upcoming Projects

- Current Projects
  - NCHRP 14-39 - Using Vegetated Compost Blankets to Achieve Highway Runoff Volume and Pollutant Reduction
  - NCHRP 15-61 - Applying Climate Change Information to Hydrologic and Hydraulic Design of Transportation Infrastructure
  - NCHRP 20-44(15) - Consultant Support for implementation of Design Hydrology for Stream Restoration and Channel Stability at Stream Crossings
  - NCHRP 24-47 - Revised Clear-Water and Live-Bed Contraction Scour Analysis
  - NCHRP 24-48 - A Methodology for Determining Scour Depth around Structures in Gravel-bed Rivers
  - NCHRP 25-25/Task 119 - Enhancing the International Stormwater BMP Database to Serve as a Highway Specific BMP Database
  - NCHRP 25-25/Task 120 - Use of the State Department of Transportation Portal to the International Stormwater BMP Database
  - NCHRP 25-60 - Watershed Approach to Mitigating Hydrologic Impacts of Highway Projects
  - NCHRP Synthesis 20-05/Topic 50-02 - Highway Hydraulic Engineering State of Practice
  - NCHRP IDEA 20-30/IDEA 211 - Reducing Stormwater Runoff and Pollutant Loading with Biochar Addition to Highway Greenways

- Upcoming Projects
- NCHRP 24-49 - Guidance on the Selection and Use of Flow Resistance Values in Two-Dimensional (2D) Hydraulic Models

Reports from the National Academies Press on Hydraulics & Hydrology

- Framing the Challenge of Urban Flooding in the United States
- Improving the EPA Multi-Sector General Permit for Industrial Stormwater Discharges
- The Use of Dispersants in Marine Oil Spill Response
- Future Water Priorities for the Nation
- Understanding the Long-Term Evolution of the Coupled Natural-Human Coastal System
- Review of the Edwards Aquifer Habitat Conservation Plan: Report 3

Committees & Panels

Sign-up to be a committee "Friend"

TRB Standing Committees – Search by transportation mode and committee topic

- AFB60 – Hydrology and Hydraulics
- AFB65 – Stormwater
- AFF70 – Culverts and Hydraulic Structures
- APS60 – Subsurface Drainage

Task Forces - Search for task force under committee here

CRP Panels

- Project Panels Related to Hydraulics & Hydrology

Councils

- A0040T – Young Member Council

Recent and Upcoming Events

Upcoming Conferences - Left hand menu "upcoming conferences by topic"

(Conferences cosponsored by TRB are denoted with an asterisk.)

2019 International Conference on Ecology and Transportation*
September 22-26, 2019
Sacramento, California

3rd International Conference on Information Technology in Geo-Engineering (3rd ICITG 2019)*
September 29-October 2, 2019
Guimaraes, Portugal

American Society of Civil Engineers (ASCE) Geo-Congress 2020*
February 25, 2020
Minneapolis, Minnesota

Webinars – View upcoming webinars, suggest a webinar or add registration information

Past Webinars

- Hydraulics and Hydrology

TRB’s Transportation Research Information Services (TRIS)

TRIS includes the TRB Library and the TRIS Databases (listed below) which are available free on TRB’s website.

The TRB Library provides information services to TRB staff, sponsors, TRB Committee members and panels and researchers. Access to the TRB Library is a benefit to TRB sponsors and TRB committee members.

In cooperation with your State DOT Library or Information Service, the TRB Library provides:

- Reference and research assistance
- Literature searches
- Articles for TRB Committee work

The TRB Library provides training on effective and efficient use of the following TRIS resources:

TRID – The world’s largest and most comprehensive bibliographic source on all modes and disciplines of transportation - trid.trb.org
Publications Index (PubsIndex) Database – The papers, articles and reports published by the Transportation Research Board, Highway Research Board, Strategic Highway Research Programs or the Marine Board - pubsindex.trb.org

Research in Progress (RiP) Database – Current or recently completed transportation research projects - rip.trb.org

Research Needs Statements (RNS) – Research needs as identified by TRB Technical Activities standing committees - rns.trb.org

Contact the Library at TRBLibrary@nas.edu or I (202) 334-2989