

ABOUT THE PROGRAM

LOCATION

The Seminar will be held at the Arden Hills Training Center which is located at 1900 West County Road I. Directions: take 35W north to the County Road I exit.

APPLICATION AND FEES

The fee for the seminar is \$45.00 which includes daily luncheons and coffee breaks as well as instructional materials. Applicants may, if they wish, register for one day only, at a fee of \$25.00. Registration is personal and non-transferable. A full refund of the fee will be made if the registration is cancelled in advance of the Seminar, not accepted, or if the Seminar is not held. The University reserves the right to cancel if necessary.

ACCOMMODATIONS AND PARKING

Limited accommodations are available at the Training Center. Registrants should arrange directly with the Training Center if accommodations are desired. Call (612) 633-6360. A list of hotel and motels in the area is available upon request. Parking is available at the Training Center.

The University of Minnesota adheres to the principle that all persons shall have equal opportunity and access to facilities in any phase of University activity without regard to race, creed, color, sex or national origin. Under this principle, educational, cultural, social, housing, extra curricular, and employment opportunities are available to all on an equal basis.

PLANNING COMMITTEE

Alvin G. Anderson, St. Anthony Falls Hydraulic Laboratory, University of Minnesota

Peter Fischer, U.S. Army Corps of Engineers, St. Paul

Emmanuel Jensen, Civil Engineering Consultant, Minnetonka

Leonard Kremer, Professional Engineer, Barr Engineering Company, Minneapolis

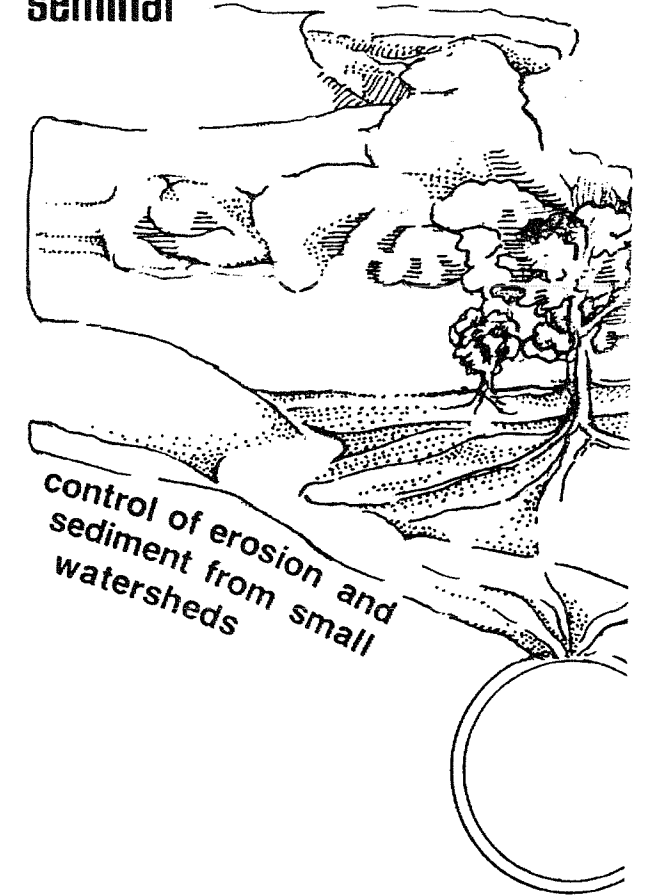
Floyd Laumann, Technical Representative, Hancock Concrete Products, Minneapolis

Tom Richards, Program Director, Department of Conferences, University of Minnesota

John Sandahl, Minnesota Highway Department, St. Paul

Dick Schnaer, City Engineer, St. Paul

water resources seminar



NOVEMBER 19-20 1973
ARDEN HILLS TRAINING CENTER

PRESENTED BY:



Department of Conferences
Continuing Education and Extension
UNIVERSITY OF MINNESOTA

in cooperation with

AMERICAN SOCIETY OF CIVIL ENGINEERING
NORTHWEST SECTION
WATER RESOURCES GROUP

Water Resources Seminar

Control of Erosion and Sediment from Small Watersheds

Until recently the management of storm water runoff consisted primarily of designing a storm sewer and appurtenances to convey the design quantity of runoff from an unwanted area to a suitable outlet. With the stress on "cleaning up the environment", the quality of storm water discharged into public waters is now a major concern.

This seminar is planned to provide information on what is required by the various State and Federal agencies with respect to storm water runoff quality, and methods that can be utilized to meet these requirements. It will consist of two one-day sessions. The first session on November 19 will review the problems related to storm water runoff and the requirements of the State and Federal agencies plus a general discussion on the solutions to the problems. The second day will be a work session with practical problems on prediction and control of sediments and erosion in open channels and during construction, and removal of undesirable physical contaminants.

PROGRAM

November 19, 1973

- 8:00 a.m. Final Registration
- 8:20 Opening Remarks Peter Fischer, presiding
- 8:30 Guidelines For Erosion and Sediment Control in Stormwater Runoff
 - . . .John J. Mulhern, Environmental Protection Agency, Washington, D.C. AND
 - . . .Burton C. Becker, Hittman Associates Inc., Columbia, Maryland
- 9:30 PCA Direction in Erosion and Sediment Control
 - . . .Mike Zager, PCA Division of Water Quality, Minnesota Pollution Control Agency, Division of Water Quality, Minneapolis
- 10:30 Coffee Break

- 10:45 New DNR Regulations with Emphasis For Erosion and Sediment Control
 - . . .Gene Hollenstein, Chief Hydrologist, Minnesota Department of Natural Resources, St. Paul
- 11:45 Metropolitan Council Development Guide for Water Resources
 - . . .Frank Lamb, Metro Square Building, St. Paul
- 12:45 p.m. Lunch
- 1:45 Erosion and Sediment - Problems and Solutions - A Soil Conservation Service Overview
 - . . .Harry M. Majors, State Conservationist, Soil Conservation Service, St. Paul
- 2:45 Urban Runoff
 - . . .Paul Baker, Director of Public Works, City of Mankato, Mankato, Minnesota
- 3:45 Coffee Break
- 4:00 Runoff Control at Construction Sites
 - . . .Jack McCreery, Johnson Bros. Construction, Litchfield, Minnesota

CONCURRENT WORKSHOPS

November 20, 1973

- 8:45 a.m. Opening Remarks
 - Alvin G. Anderson presiding
- Concurrent Workshops
 - Prediction of Sediment Yield From Unprotected Soils
 - . . .L.D. Meyer, Agricultural Engineer, Sedimentation Laboratory, Agricultural Research Service, Oxford, Mississippi

- Erosion Control By Non-Structural Methods
 - . . .Lawrence Foote, Minnesota State Highway Department, St. Paul, Minnesota
- Design of Erosion Resistant Drainage Channels
 - . . .Alvin G. Anderson, St. Anthony Falls Hydraulics Laboratory, University of Minnesota AND
 - . . .Jerome M. Normann, Hydraulic Research Engineer, Federal Highway Administration, Washington, D.C.
- Design of Erosion Control Structures
 - . . .Fred W. Blaisdell, Hydraulic Engineer, Agricultural Research Service, Minneapolis, Minnesota AND
 - . . .Clayton Anderson, Hydraulic Engineer, Agricultural Research Service, Minneapolis, Minnesota
- Erosion Control Measures At Storm Sewer and Culvert Outlets
 - . . .John L. Grace, Jr., Hydraulics Research Engineer, U.S. Army Waterways Experiment Station, Vicksburg, Mississippi

- 9:00-10:00 Workshops
- 10:00-10:30 Coffee
- 10:30-11:30 Workshops
- 11:30-12:30 Workshops
- 12:30- 1:30 Lunch
- 1:30- 2:30 Workshops
- 2:30- 3:00 Coffee
- 3:00- 4:00 Workshops
- Adjourn

WATER RESOURCES SEMINAR
Control of Erosion and Sediment
From Small Watersheds

95-22TR
November 19-20, 1973
Arden Hills Training Center

REGISTRATION FORM
(Duplicate for additional registrations)

Mr.
NAME Ms.

(Please print or type)

PHONE

ADDRESS
(Street and number)

(City)

(State)

(Zip)

AGENCY OR ORGANIZATION

POSITION TITLE

I enclose \$45.00 (check or money order payable in U.S. funds to the University of Minnesota in payment of the Seminar fee.)

I enclose \$25.00 in payment of fee for one day only.

Fees are to be paid by my agency or organization. Enclosed is a letter of authorization to bill and/or a purchase order number (please specify on billing authorization whether registration is for one or two days).

Please send hotel/motel list.

SIGNATURE

DATE