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News and Announcements

NEW REPORTS

Reports on two major studies of the effects of urban development on stream quality, which have been carried out by the Regional Science Research Institute, are now available.

Stream Quality Preservation through Planned Urban Development. Robert E. Coughlin, Thomas R. Hammer et al. (EPA-R5-73-019). Available from the Government Printing Office in Washington, D.C., $2.25.

This report presents results of a 3 year research program designed to create a basis for estimating benefits of patterns of urban land use planned to protect environmental values. This set of empirical studies examines relationships between amounts and types of urban land use and stream channel enlargement, flooding, and water quality; effects of landscape characteristics and water quality on perceived attractiveness; effects of environmental characteristics on residential location decisions; net effects on open space of planned patterns as compared with typical development; and effects of aesthetic and other landscape characteristics on land values. Most of the individual studies, as well as the overall research program, involve subjects which have received very little previous study.

Environmental Study of the Wissahickon Watershed within the City of Philadelphia. Robert E. Coughlin and Thomas R. Hammer. Regional Science Research Institute, G.P.O. Box 8776, Philadelphia, Penn., $6.00.

An application of research findings from the first report and from other ongoing research at the Regional Science Research Institute to the planning of a watershed to accommodate additional urbanization. Estimates are made of effects of hypothetical new development on streamflow, channel enlargement, sedimentation and water quality. Aesthetic and ecological impacts are identified. Land coverage limitations are set and site engineering requirements are specified which will make possible certain exceptions to the coverage limitations. This planning study is much more explicit and quantitative than most environmental land use planning studies.

The Regional Science Research Institute announces publication of a major research report entitled:

Effects of Urbanization on Stream Channels and Stream Flow. Thomas R. Hammer. Regional Science Research Institute, G.P.O. Box 8776, Philadelphia, Penn., 272 pp., 42 tables, 31 figures, $6.00.

This report is the product of 4 years' investigation of the hydrologic effects of urban land uses. The major studies described involve cross-sectional analysis of data for large samples of streams, with highly detailed treatment of natural and man-made watershed features. This research design has allowed an unusually thorough consideration of hydrologic impacts associated with specific land alterations.

The following hydrologic effects of urbanization are studied: enlargement of stream channels; change in stream channel behavior; sediment production due to channel enlargement; change in bankfull discharge; and change in other peak discharges, with recurrence intervals from 1 to 50 years. These studies have made possible the development of a general description of stream-channel behavior and a statement of the relationship between stream channels and stream flow.

A classification scheme for urban land uses based on characteristics relevant to hydrologic impact is presented. The implications of the findings for land-use planning are considered, and the use of the relationships obtained for predictive purposes is illustrated for a sample watershed.

MAN—ENVIRONMENT SYSTEMS

Man—environment systems — M-ES — is a forum for communications bearing on the interface between research in the behavioral and social sciences and the design and management of the sociophysical environment.

The award winning design of M-ES allows the reader maximum flexibility in the use of the looseleaf and separately-bound contributions. The total can be scanned easily, and the parts can be integrated into topic files or circulated as reprints.

M-ES is published by the Association for the Study of Man—Environment Relations, Inc. — ASMER — a non-profit membership organization. The aim of ASMER is to contribute to the advancement, dissemination and application of knowledge concerning mental interrelationships between human behavior and the environment. Membership in ASMER, which includes subscription to M-ES, is $20.00 per year for full membership, $12.00 for student membership. Application blank on request.

Another of the Association's projects is the "Focus" series of monographs, initiated in 1972 with "Environmental Design Perspectives". Our goal is to devote this series to international collaboration in man—environment relations. Focus 2 — "The International Directory of Behavior and Design Research — made possible through a grant from the National Endowment for the Arts, is the result of collaboration with REDE (Research & Design Institute) and the American Institute of Architects. Its intent is to list all researchers in man—environment relations and related areas such as architectural psychology, behavior and environment, environmental design methods, etc. Name Indices are provided by geographical area and current project activity.

For membership, subscriptions or additional information, write to: ASMER, Inc., P.O. Box 57, Orangeburg, N.Y. 10962.

OECD INVOLVEMENT IN URBAN ENVIRONMENT

A number of monographs and articles in the area of urban environment have been received from the Organization for Economic Cooperation and Development. Copies may be requested from the Environment Directorate, OECD, 2 rue Andre Pascal, 7577 Paris.

The first of these, "Streets for People" published by OECD in 1974 (125 pp., 115 photographs, 12 maps) gives a comprehensive view of pedestrian zone innovations and experiences. The report reviews measures to curtail traffic ranging from parking restrictions to exclusion of traffic entirely from certain areas. A number of examples from cities throughout Europe and Canada attest to the technical, commercial and political feasibility of vehicle-free zones. Attention is focused on factors that contribute to a successful car-free area and what long-range effects can be expected on land use and character of the area.

Policy instruments for influencing urban growth are examined in a monography by G. Max Neutye entitled, "The Price of Land and Land Use Planning: Policy Instruments in the Urban Land Market" (95 pp.). The report focuses on the question of necessary changes in the present market in urban land needed to ensure the provision of a good urban environment. Neutye reviews policy instruments that have been used, the various objectives of policy instruments and the success of particular instruments in achieving those objectives. The planning experiences of The Netherlands, Sweden and the United Kingdom are reviewed with assessments of the success of each. In conclusion, the author identifies the main objectives of urban land market policies as reducing the price of land, or at least capturing part of its increase for the public sector and reducing the cost burden which high land prices place on governments as servicing authorities. He lists and briefly discusses twelve policy instruments, most of which can be used in this area.

The problem of urban noise is addressed in two papers by Ariel Alexander. In the report, "Motor Vehicle Noise" (Working Document U/ENV/71,9, 104 pp.), Alexander assesses the effects of traffic noise on man and the extent of the problem. The article surveys the sources of noise in motor vehicles and the characteristics of noise related to engine speed and use of the vehicle. The article describes methods of noise reduction, some of which involve radical changes in design, as well as many which do not. The article also describes measures for reducing exposure to traffic noise through town planning and road design; soundproofing and arrangements of living rooms; and traffic restrictions and control.

The second Alexander article is "Actions and Strategies For Noise Abatement; with emphasis on economic incentives" (5 pp.). The article examines achievements by OECD countries in reducing and containing noise nuisances. Included are controls on use, and noise emission limits on vehicles and aircraft; regulation of construction and industrial noise; and land use planning policies to avoid the creation of new noisy situations. Finally, the article assesses noise charges, and product labelling requirements as strategies for noise abatement.

ENVIRONMENTAL SIMULATION EXERCISE

UNESCO, in conjunction with the European Coordination Centre for Research and Documentation in Social Sciences, held a 5-day conference on heuristic simulation (Gaming) as it applies to tourism and environmental problems, in Vienna, Austria, in December 1974. The purpose of the conference was to "heighten the sensitivity of decision makers to environmental issues" . . . . and to "stress methods of analysis that can help them to assess the consequences of technological change". (The purpose of the conference are spelled out in more detail in Document no, 1.)

Contact person: Jose Killagas, Division of Social Sciences, UNESCO, 7 Place de Fontenoy, 75700 Paris, France.

Forthcoming events

INTERNATIONAL CONGRESS OF SCIENTISTS ON THE HUMAN ENVIRONMENT (HESC)

Time: November 16th—26th, 1975
Place: Kyoto, Japan
Info: Yoichi Fukushima, General Secretary of the National Organizing Committee for the HESC, Science Council of Japan, 22—34, Roppongi 7-Chome, Minato-Ku, Tokyo, 106 Japan.

HABITAT: UNITED NATIONS CONFERENCE ON HUMAN SETTLEMENTS

Time: May 31st—June 11th, 1976
Place: Vancouver, Canada
Info: HABITAT Information, 485 Lexington Ave., New York, N.Y. 10007, U.S.A.