

Volume II

PROCEEDINGS
of the
Symposium and Specialty Conference
on

INSTREAM FLOW NEEDS

Presented by the
Western Division of the
AMERICAN FISHERIES SOCIETY
and the
Power Division of the
AMERICAN SOCIETY OF CIVIL ENGINEERS

*Solutions to technical, legal, and
social problems caused by increasing
competition for limited streamflow.*

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FOREWORD

The original intent of this conference, as it was conceived in the early 1970's, was to provide a forum and a proceedings to serve as a focal point and a primary reference for persons working on water resource allocation problems. This intent has not changed, though the emphasis on program and proceedings content shifted. Originally the conference was to serve the technical needs of disciplines dealing with methodologies. These needs were thoroughly assessed by a cooperative study, workshop and report prepared by the U.S. Fish and Wildlife Service, Utah State University, and numerous reviewers. Recognizing this accomplishment, the Steering Committee for the Instream Flow Needs Conference revised the original program to emphasize the interdisciplinary aspects of current problems, namely communication and the awareness of legal, social, and technical aspects of preserving instream values and diversionary necessities in emerging areas of conflict.

The success of any conference is, of course, the result of the combined efforts of many people. But the expertise and motivation of the individual contributors is the essence of the endeavor, and their contributions are sincerely appreciated. Also recognized are the cooperation and financial assistance of the following: U.S. Fish and Wildlife Service; U.S. Forest Service; Water Resources Council; Federal Energy Administration; Sport Fishing Institute; Trout Unlimited; State of Washington Water Research Center; and the Albrook Hydraulics Laboratory, Washington State University, where the proceedings was edited. The broad sponsorship reflects the multidisciplinary character of the program and the proceedings.

Papers are arranged in the chronological order of presentation at the conference. Each author prepared his paper camera ready for printing. The papers were reviewed by the editors who assisted with minor corrections or adjustments, but the language of the authors was retained.

We hope that the users of these proceedings will find them to be a valuable reference for instream flow problems.

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VOLUME II
TABLE OF CONTENTS

Page

General Session 4

Legal Foundations for Instream Flow Laws and Their Administration

Moderator: Jack C. Fraser

THE LEGAL BASES FOR INSTREAM FLOWS by Frank J. Trelease	1
ADMINISTRATION OF STATE INSTREAM FLOW LAWS by Kris G. Kauffman.	22

Session IV-A. 7-Courts Case--Eagle County, Colorado

Moderator: Charles G. Prewitt

7-COURTS CASE--EAGLE COUNTY, COLORADO (SUMMARY) by Michael D. (Sandy) White.	30
SUMMARY DISCUSSION by Charles G. Prewitt	32

Session IV-B. Dams and Minimum Flow Predictions

Moderator: Robert P. Hayden

THE RESERVATION OF INSTREAM FLOW FOR FISH IN CALIFORNIA--A CASE STUDY by Charles R. Hazel.	33
A STATUS REPORT OF THE ASSESSMENT OF EFFECTS OF ALTERED STREAMFLOW CHARACTERISTICS ON FISH AND WILDLIFE: A CASE STUDY APPROACH IN NINE WESTERN STATES by Gerald C. Horak	56
SUMMARY DISCUSSION by Robert P. Hayden	65

Session IV-C. The West Coast Experience

Moderator: Jerry Louthain

ADMINISTERING INSTREAM FLOW LAWS IN CALIFORNIA by Charles K. Fisher	68
THE OREGON EXPERIENCE WITH A MINIMUM STREAMFLOW LAW by R. F. Rousseau.	77
WASHINGTON STATE'S INSTREAM FLOW PROGRAM ACTION by Kris G. Kauffman.	84
SUMMARY DISCUSSION by Jerry Louthain	96

Session IV-D. The Trinity River Studies

Moderator: J. Bruce Kimsey

WATER DEVELOPMENT IMPACT ON FISH RESOURCES AND ASSOCIATED VALUES OF THE TRINITY RIVER, CALIFORNIA by Felix E. Smith.	98
IS THE TRINITY RIVER DYING? by Audrey Bush	112

THE FOREST SERVICE ROLE IN THE TRINITY RIVER BASIN FISH AND WILDLIFE RESTORATION PROGRAM: FUNCTIONING OF A PUBLIC LAND MANAGER IN AN INTERAGENCY FRAMEWORK by A. E. Hall, Jr.	123
WATER RESOURCES DEVELOPMENT AND MANAGEMENT--TRINITY RIVER, CALIFORNIA by Ernest N. Sasaki.	129
SUMMARY DISCUSSION by J. Bruce Kimsey.	139

Session IV-E. Operation of Projects for IFN Benefits

Moderator: Noel Larson

WATER MANAGEMENT AND FISH PRODUCTION IN MISSOURI RIVER MAIN STEM RESERVOIRS by Norman G. Benson.	141
CONFLICTS AND COMPATIBILITIES ASSOCIATED WITH REGULATING THE MISSOURI RIVER MAIN STEM RESERVOIR SYSTEM TO ENHANCE THE FISHERY RESOURCE by Elmo W. McClendon	148
THE INFLUENCE OF MAINSTEM NAVIGATION DAMS ON WATER QUALITY AND FISHERIES IN THE UPPER OHIO RIVER BASIN by Michael Koryak.	158
SUMMARY DISCUSSION by Noel Larson.	174

Session IV-F. Permit Systems for Water Management

Moderator: Race D. Davies

PERMIT SYSTEMS FOR MANAGING WATER QUALITY: AN INFLUENT CONTROL PROPOSAL FOR AGRICULTURAL RETURN FLOWS by George E. Radosevich.	175
LEGAL RECOGNITION OF INSTREAM WATER RIGHTS by Wick Dufford, Gonzaga Univ., Spokane, WA.	*
USING INTERSTATE COMPARISON TO IMPROVE A PERMIT SYSTEM by Race D. Davies.	180
SUMMARY DISCUSSION by Race D. Davies	183

Session IV-G. Quantification of IFN by Law in Colorado

Moderator: Harvey R. Doerksen

QUANTIFICATION OF INSTREAM FLOW NEEDS BY LAW IN COLORADO by David W. Robbins.	184
--	-----

Session IV-H. Instream Flow Problems of the Boise River

Moderator: David H. Fortier

INTRODUCTION by David H. Fortier	204
RECREATIONAL VALUES AND INSTREAM FLOW NEEDS OF THE LOWER BOISE RIVER, IDAHO (ABSTRACT) by James F. Keating.	206

*Paper not available.

	Page
HYDROLOGY OF LOWER BOISE RIVER by Lawrence V. Armacost	207
ADMINISTRATION OF THE BOISE RIVER by Murland R. Packer	216
BOISE RIVER DAM OPERATIONS by Robert Brown, U.S.B.R., Boise, ID	*
SUMMARY DISCUSSION by David H. Fortier	222

Session V-A. Quantifying Impacts on Aquatic Habitat

Moderator: Clair B. Stalnaker

DEVELOPMENT AND APPLICATION OF A TROUT COVER RATING SYSTEM FOR IFN DETERMINATIONS by Thomas A. Wesche	224
EFFECTS OF FLOW PATTERNS BELOW LARGE DAMS ON STREAM BENTHOS: A REVIEW by James V. Ward	235
A METHODOLOGY FOR EVALUATING THE EFFECTS OF DIFFERENT STREAMFLOWS ON SALMONID HABITAT by Brian F. Waters	254
VALIDITY OF METHODOLOGIES TO DOCUMENT STREAM ENVIRONMENTS FOR EVALUATING FISHERY CONDITIONS by William S. Platts	267

Session V-B. Forest Service Regional IFN Methodologies

Moderator: Donald K. Dunham

A HABITAT-DISCHARGE METHOD OF DETERMINING INSTREAM FLOWS FOR AQUATIC HABITAT by Don K. Bartschi	285
HISTORY OF FOREST SERVICE INVOLVEMENT IN INSTREAM FLOW NEEDS by G. Wesley Carlson	295
UNITED STATES FOREST SERVICE STREAM SURVEY PROCEDURE--NORTHERN REGION by James L. Cooper	300
DETERMINING INSTREAM FLOWS USING THE SAG TAPE METHOD AND R2CROSS X COMPUTER PROGRAM by J. Allen Isaacson	314
ESTHETIC CONSIDERATIONS FOR INSTREAM FLOW DETERMINATION by Hubertus J. Mittmann	322
INSTREAM FLOW METHODOLOGY FOR THE FOREST SERVICE IN THE PACIFIC NORTHWEST REGION by Gerald W. Swank and Robert W. Phillips	334

Session V-C. Recreational IFN Methodology

Moderator: Gerard A. Verstraete

INTRODUCTION by Gerard A. Verstraete	344
INSTREAM FLOWS--LEGAL OBSTACLES by Nathan W. Higer	346

*Paper not available.

INSTREAM FLOW EVALUATION FOR OUTDOOR RECREATION by James A. Morris	352
INSTREAM FLOW REGIMENS FOR FISH, WILDLIFE, RECREATION AND RELATED ENVIRONMENTAL RESOURCES by Donald L. Tennant	359
SUMMARY DISCUSSION by Gerard A. Verstraete	374

Session V-D. Large River Methodologies

Moderator: Keith Bayha

A METHODOLOGY FOR RECOMMENDING STREAM RESOURCE MAINTENANCE FLOWS FOR LARGE RIVERS by Robert G. White	376
INSTREAM FLOW TECHNIQUES FOR LARGE RIVERS by Tim Cochnauer	387
NEGOTIATIONS FOR FISHERY FLOWS IN COLUMBIA RIVER by Terry Holubetz.	400
SUMMARY DISCUSSION by Keith Bayha.	404

Session V-E. Effects of Project Operations on IFN

Moderator: Robert W. Wiley

FACTORS AFFECTING UPPER COLORADO RIVER RESERVOIR TAILWATER TROUT FISHERIES by James W. Mullan <i>et al</i>	405
REGULATION OF INSTREAM FLOW NEEDS AT LICENSED PROJECTS by Forrest R. Hauck.	429
EFFECT OF DAMS AND RIVER REGULATION ON RUNS OF ANADROMOUS FISH TO THE MID-COLUMBIA AND SNAKE RIVERS by Howard L. Raymond	444
OPERATION OF RESERVOIR SYSTEMS FOR INSTREAM FLOW NEEDS RESEARCH by Robert W. Scott	466
SUMMARY DISCUSSION by Robert W. Wiley.	474

Session V-F. WSP Program for Determining IFN

Moderator: Liter E. Spence

WSP--WILL IT DO THE JOB IN MONTANA by Liter E. Spence	475
APPLICATION OF THE U.S. BUREAU OF RECLAMATION WATER SURFACE PROFILE PROGRAM (WSP) by John M. Dooley.	478
USE AND RELIABILITY OF WATER SURFACE PROFILE PROGRAM DATA ON A MONTANA PRAIRIE STREAM by Allen A. Elser.	496
USE OF THE WATER SURFACE PROFILE PROGRAM IN DETERMINING INSTREAM FLOW NEEDS IN SIXTEENMILE CREEK, MONTANA by Dennis L. Workman	505

SUMMARY DISCUSSION by Liter E. Spence. 514

Session V-G. Mathematical Modeling

Moderator: Brian Mar

MATHEMATICAL MODELING OF SEDIMENT TRANSPORT AS A METHODOLOGY FOR DETERMINING INSTREAM FLOW REQUIREMENTS
by W. J. Grenney and D. B. Porcella. 515

STREAM TEMPERATURE MODELING
by Larry E. Comer *et al.*. 527

MODEL OF INSTREAM FLOWS
by Darrel W. Clapp 540

RELATING FISH PRODUCTION TO STREAMFLOW LEVELS USING FISH AND WATER MANAGEMENT MODELS
by James W. Miller 545

SUMMARY DISCUSSION by Brian Mar. 562

Session V-H. Water Data Retrieval Systems

Moderator: Charles G. Prewitt

DEVELOPMENT OF COLORADO WATER DATA BANK AND ITS USE FOR PLANNING AND ADMINISTERING THE STATE'S WATER RESOURCES (see p. 408, Vol. I)
by Robert A. Longenbaugh *

REVIEW OF THE CURRENT STATUS OF AGENCY ACTIVITIES IN MONITORING OF WATER QUALITY IN THE FORT UNION COAL REGION
by Edmond R. Bates 564

Session V-I. Fisheries IFN Methodologies

Moderator: Ken Thompson

LAHONTAN CUTTHROAT TROUT AND CUI-UI INSTREAM FLOW METHODOLOGY
by Randy E. Bailey and Robert D. Ringo 577

DEVELOPMENT OF METHODOLOGIES FOR EVALUATING INSTREAM FLOW NEEDS FOR SALMONID REARING
by Thomas Nickelson. 588

RELATIONSHIP OF TROUT ABUNDANCE TO STREAM FLOW IN MIDWESTERN STREAMS
by Ray J. White *et al.*. 597

SUMMARY DISCUSSION by Ken Thompson 616

General Session 5

NATURAL RESOURCES PERSPECTIVES
by Lynn A. Greenwalt 617

General Session 6

POLICIES OF THE FOREST SERVICE IN DETERMINING INSTREAM FLOW NEEDS
by Rexford A. Resler 626

A WRC NATIONAL PERSPECTIVE ON INSTREAM FLOW PROBLEMS
by Warren D. Fairchild 631

*Paper not available.

	Page
THE PLACE OF THE AQUATIC SPECIALIST IN THE INTERDISCIPLINARY APPROACH TO SOLVING STREAMFLOW PROBLEMS by William S. Platts	636
THE SPORTSMAN'S VIEWPOINT AND SOME SUGGESTIONS by R. P. Van Gytenbeek	648
CONCLUDING REMARKS by Fred Eiserman.	656