

1989
Summary of
CURRENT SCIENTIFIC INVESTIGATIONS
on the
UPPER MISSISSIPPI RIVER

Upper Mississippi River Conservation Committee
1830 Second Avenue
Rock Island, IL 61201



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INTRODUCTION

This is a summary of a survey conducted by the Upper Mississippi River Conservation Committee in January 1989. The purpose of the survey is to compile information on all ongoing scientific investigation on the Upper Mississippi River. It is to be a tool to facilitate communication regarding the natural and recreational resources of the River.

A blank form for the 1990 survey is included at the back of this report and may be submitted at the investigator's convenience. Any questions should be directed to Gail Carmody, Coordinator, UMRCC, 1830 Second Ave., Rock Island, IL 61201(309/793-5800).

POOL	RIVER MILE(S)	TYPE	PRINCIPAL INVESTIGATOR	ASSOCIATE INVESTIGATORS	TITLE OF WORK	OBJECTIVES	FUNDING SOURCE	PROJECT COMPLETION DATE	REPORT COMPLETION DATE
22	325-301	H	Jeff Anderson Donohue & Associates, Inc. 4738 North 40th Street Sheboygan, WI 53083 414/458-8711	Dave Stanley Leah Rogers	GEOMORPHOLOGICAL Modeling Pool 22	To generate a geomorphic map of Pool 22.	COE - Rock Island District	May 1989	May 1989
19	380-	C	Richard Anderson Western Illinois University Department of Biological Sciences Macomb, IL 61455 309/298-1553	S. Havera R.J. Tebbs	PRESENT Food Habitats of Diving Ducks on Pool 19	To examine waterfowl food habitats in Pool 19 after 20 years of change in habitat.	Western Illinois U.	Dec 1989	Sep 1990
21	330	H	Richard Anderson Western Illinois University Department of Biological Sciences Macomb, IL 61455 309/298-1553	D.C. Detert	BENTHOS and Fish Use of New Wing Dams	To compare use of old and new wing dams as habitat.	Western Illinois U.	Dec 1989	Sep 1990
19	364-380	B	Richard Anderson Western Illinois University Department of Biological Sciences Macomb, IL 61455 309/298-1553	J. Owens J.W. Grubaugh	MUSSEL Activity and Use of Channel Border Habitat	To determine rate and direction of movement in channel border.	Western Illinois U.	Jun 1989	Jan 1990
1	849.5 851.5 760.0 757.3 749.0 745.0 735.0 690.5 644.5	G	Robert Anfang U.S. Army Corps of Engineers 1421 U.S. Post Office & Custom House St. Paul, MN 55101-1479 612/220-0268	Gary Wege	REVEGETATION of Dredged Material Placement Sites in St. Paul District Corps of Engineers	1. To revegetate dredged material placement sites using a variety of methods and species. 2. To evaluate the effectiveness of revegetation measures.	COE - St. Paul District	Ongoing	Interim Report 1990
19	374	H,G	Jeffery Arnold Western Illinois University Department of Biological Sciences Macomb, IL 61455 309/298-1553	R.V. Anderson	EFFECT of Lous Borer on American Lotus Production	To determine life history of borer and effects on lotus production.	Western Illinois U.	Nov 1988	Sep 1989
9-19	Various	E	Bill Aspelmeier Fairport Biology Station RR 3, Box 434 Muscatine, IA 52761 319/263-5062		SEDIMENTATION Study	To Determine Sedimentation rate in differing types of river habitat (i.e. backwaters and side channels).	IA DNR	1989	1990

POOL	RIVER MILES(S)	TYPE	PRINCIPAL INVESTIGATOR	ASSOCIATE INVESTIGATORS	TITLE OF WORK	OBJECTIVES	FUNDING SOURCE	PROJECT COMPLETION DATE	REPORT COMPLETION DATE
1-9	825-664	A- F	Gary Archison Dept. of Animal Ecology 124 Science II Iowa State University Ames, IA 50011 515/294-4787	James Wiener Greg Cope Michelle Schmidt Sheryl Beauvais	BIOLOGICAL Effects of Contaminant Transfer to Biota From Resuspension of Sediments of the Upper Mississippi River	1. To develop a system to test the effects on aquatic organisms exposed to resuspended sediments. 2. To determine the effects of resuspended contaminated sediments from the UMR on fish.	U.S. FWS	Sep 1990	Sep 1991
19, 20, 25 26	Various	A, F	Peter Bayley Illinois Natural History Survey 607 E. Peabody Champaign, IL 61820 217/244-2141	Richard E. Sparks	ILLINOIS and Mississippi Rivers long-term fish data analyses	1. To determine relationships between indices of fish biomass density/ productivity and environmental factors in particular hydrological effects and floodplain development. 2. To determine effects of water and sediment quality changes on fish populations.	INHS	Dec 1989	?
19	365-410	C	Frank Bullose IL Natural History Survey River Research Lab Box 599 Havana, IL 62614 309/543-3950/3105	S.P. Havera R. Crumpton D. Holm	WOOD Duck Nesting at Nauvoo	To monitor population response to nest boxes.	INHS	Annual	Annual
5a		D	Ron Benjamin Buffalo County Courthouse Alma, WI 54610 608/685-3763	Lawrence Conrad Jeff Anderson David Stanley Robert C. Vogel	SURVEY of recreational use in pool 5a	To use Fluorim method to survey recreational use in pool 5a.	WI DNR	Oct 1988	Jul 1989
13, 14	Various	H	David Bern Center for Archeological Research Southwest Missouri State University Springfield, MO 65804 417/836-5363		ARCHAEOLOGY and geomorphology in pools 13 and 14, upper Mississippi River	1. To inventory archeological sites. 2. To model geomorphology of the area as it relates to the potential for buried sites.	COE - Rock Island District	Aug 1989	May 1989

Key For Study Types

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		E	Nani G. Bhowmik Illinois State Water Survey 2204 Griffith Drive Champaign, IL 61820-7495 217/333-0238	J.R. Adams M. Demissie	LONG Term Ecological Research on Large Rivers	1. To determine hydrologic and riverine environment conditions and trends in relation to biological stability and change.	NSF	Aug 1989	June 1989
IR		H	Nani G. Bhowmik Illinois State Water Survey 2204 Griffith Drive Champaign, IL 61820-7495 217/333-0238	William Bogner TaWen Soong J. Rodger Adams	PHYSICAL Impacts of Navigation - Illinois and Mississippi Rivers	1. To develop and test methods to evaluate physical effects of tow passage. 2. To evaluate physical effects of tow passage.	COE/U.S. FWS LTRMP	Ongoing	Annual Reports
19	364-385	C	Lonie R. Boens Western Illinois University Department of Biological Sciences Maconh, IL 61455 (309) 298-1553	S. Havera R. Anderson	EFFECTS of Watercraft on Migrating Waterfowl	To determine if water related activity disturb waterfowl	Western Illinois U.	May 1988	May 1989
9-19		A	Tom Boland John Pilo Bellevue Research Station RR 3, Box 160 Bellevue, IA 52031 319/872-4976	Tom McCarthy Dennis Weiss	COMMERCIAL Fishing Statistics	To record and assimilate commercial fishing statistics for the state of Iowa.	IA DNR	Annual	Feb
11-18 & 20-22	Various	D	Roger D. Bollman Mississippi River Project P.O. Box 34 Pleasant Valley, IA 52767 309/788-6361 X-522	Project Staff	VISITOR Use Surveys	1. To determine visitation, visitor hour use, types of usage, and recreation value of visits to Corps of Engineers managed recreation areas on the UMR.	COE - Rock Island District	Ongoing	None
5	742	A	Hannibal Bolton Fishery Assistance Office 51 E. 4th Street, Rm 101 Winona, MN 55987 507/4524390		WEAVER Bottoms Rehabilitation	1. To evaluate the response of fish population to habitat modification.	U.S. FWS	1992	1994?
13	534	A	Hannibal Bolton (See above)		SPRING Lake Pre-Project Habitat Modification	1. To inventory fisheries of Spring Lake prior to habitat modification.	U.S. FWS	1989	1989?

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14	504-520.5	A	Tim Bowzer LMS Engineers c/o Quad Cities Nuclear Station 22710 - 206th Avenue North Cordova, IL 61242 309/654-2284	Larry La Jeanne	LONG-Term Fishery Monitoring of Pool 14	1. To monitor trends in community composition and abundances of freshwater drain. 2. To evaluate life history and population dynamics of fish	Commonwealth Edison and Low-Illinois Gas & Electric	Ongoing	April 1989
15	492.5-493.3	A	Lexa L. Browning Western Illinois University Department of Biological Sciences Macomb, IL 61455 (309) 298-1553	R. V. Anderson	CHARACTERIZATION of Heron Rookeries	To determine if common characteristics are in widely separate rookery sites.	Western Illinois U.	Dec 1989	May 1990
12-26		B	Dr. Edward Cawley Department of Biology Loras College Dubuque, IA 52004-0178 319/588-7128		A SURVEY of the Unionid Mussel Population of a Known Quality Mussel Bed of the Mississippi River	To collect baseline population data (species composition, density, distribution, reproduction, recruitment and mortality rates).	National Marine Fisheries Service, IL DOC	Mar 1989	Mar 1989
5	485.0-486.0	B	Kathleen Cheep U.S. Fish and Wildlife Service Upper Mississippi River National Wildlife and Fish Refuge 51 E. 4th Street Winona, MN 55987 507/454-7351		WEAVER Bottoms Rehabilitation Project Monitoring	To evaluate the effects of the Weaver Bottoms rehabilitation project.	U.S. FWS	1995	1995
5	742	C, E, G	Kathleen Cheep U.S. Fish and Wildlife Service Upper Mississippi River National Wildlife and Fish Refuge 51 E. 4th Street Winona, MN 55987 507/454-7351	Robert Dirslein	VEGETATION of Weaver Bottoms Dredge Spoil Islands	To compare vegetation (natural and planted) growth on dredge spoil islands and monitor wildlife uses, especially waterfowl.	US FWS	1995	1995
15	485.8-486.3	B	Thomas C. Cheng Medical University of S. Carolina P.O. Box 12559 Charleston, SC 29412 803/795-7490		Determination of Microbial and Parasitic Differences Between Healthy and Moribund Mussels of the Mississippi and Illinois Rivers	To determine cause(s) of mussel die-offs	IL DOC	Nov 1989	Nov 1989
IR	95.5-96.0	B							

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Lab		F, A	Earl Chilton III National Fisheries Research Center P.O. Box 818 La Crosse, WI 54602 608/783-6451	Leslie Holland-Bartels	IMPACT of Suspended Sediments on Growth and Survival of Larval Fishes	To determine effects of sublethal suspended solid concentrations after hatching on selected fish species.	U.S. FWS	Sep 1989	Sep 1989
TRIB		A	Phil Choctran Division of Natural Sciences St. Norbert College DePere, WI 54115	John Lyons	SILVER Lampry/Paddlefish Interactions in the Lower Wisconsin River	1. To assess preference by silver lampry for Paddlefish versus other species. 2. To estimate population sizes for silver lampry and paddlefish. 3. To estimate lampry attack rates, mortality rates, and growth rates. 4. To assess site selectivity by silver lampry on paddlefish.			
1-9	825-664	A	Greg Cope Iowa State University Department of Animal Ecology 124 Science II Ames, IA 50011	Gary Atchison James Wiener	CADMIUM and Metallothionein Concentrations in Juvenile Bluegill (<i>Lepomis macrochirus</i>) exposed to Upper Mississippi River Sediment	To assess the bioavailability of cadmium in non-suspended and suspended bottom sediments to juvenile bluegill using a biochemical indicator.	U.S. FWS	Aug 1990	Dec 1990
TRIB		A	Fred Copes Biology Department University of Wisconsin Stevens Point, WI 54481 715/346-3078		FISH Population Dynamics	To estimate fish population, growth, mortality, movement patterns, diet, exploitation rates of the Wisconsin River - L. Dubay to Wisconsin Rapids.	None	Ongoing	?
Above 1-12	Various	H	David B. Czamecki Department of Biology Loras College Dubuque, IA 52004-0178 319/588-7231	John Ross	LORAS College Freshwater Algal Culture Collection	To add to collection of dominant algal taxa from Mississippi River, Lake Itasca to Dubuque, IA.	None	Continuous	
20 22 24 25 26 B27	351 317 280 268 206 160, 68, 40	A,F	Jim Czamecki MO Dept. of Conservation 1110 south College Avenue Columbia, MO 65201 314/449-3761	Gordon Farabee	FISH Tissue Contaminant Network	1. To monitor selected contaminant levels in fish so that levels can be compared to health guidelines. 2. To monitor selected contaminant levels in fish so that trend information can be obtained on these contaminants.	MO DOC	?	Aug 1989 Annual Report

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11, 13		C	Robert B. Dahlgren U.S. Fish and Wildlife Service P.O. Box 2484 La Crosse, WI 54602 608/784-5440	John F. Wetzel	MALLARD Island Nesting Study	<ol style="list-style-type: none"> To determine densities and success on islands of various sizes. To relate density and success to island size, predation, and cover. 	US FWS	1993	1994
All		C	Robert B. Dahlgren U.S. Fish and Wildlife Service P.O. Box 2484 La Crosse, WI 54602 608/784-5440	Carl E. Korschgen	HUMAN Disturbances to Waterfowl: An Annotated Bibliography	To assemble literature citations to provide waterfowl managers with information on human disturbances.	US FWS	Nov 1988	Jul 1989
5		All	Robert B. Dahlgren U.S. Fish and Wildlife Service P.O. Box 2484 La Crosse, WI 54602 608/784-5440	COE, St. Paul District Minn. DNR Wisc. DNR	WEAVER Bottoms Resource Analysis Program	To study environmental changes resulting from Weaver Bottoms rehabilitation project	COE, St. Paul District, Minn. DNR, Wisc. DNR	1995	1996
5	752	F	Mike Davis MN DNR - Mississippi Team Rt. 2, Box 230 Lake City, MN 55041 612/345-3331	Lake City Fisheries	ENGINEER Lakes HREP Preproject Monitoring	To establish baseline D.O./Temp conditions in project area.	MIN DNR	Sep 1989	?
2	844-847.5	B	Mike Davis MN DNR - Mississippi Team Rt. 2, Box 230 Lake City, MN 55041	Mark Cleveland	MUSSEL Community Data	To establish baseline mussel community data.	MIN DNR	Jul 1989	?
7	707	A	Michael R. Dewey National Fisheries Research Center P.O. Box 813 La Crosse, WI 54602-0818 608/783-6451	Leslie Holland-Bartels	SPATIAL, Temporal and Microhabitat Preferences and Distribution of Juvenile Fish in Main Channel Border Habitats	<ol style="list-style-type: none"> To describe spatial, temporal, microhabitat preferences in a dredge spoil island complex. To evaluate the use of buoyant pop nets in shallow water-vegetated and non-vegetated habitats. To evaluate seine and backpack electroshocker gear efficiencies. To evaluate the spatial variability of nearshore fish population and possible effects of vessel passage. 	U.S. FWS	Sep 1989	Sep 1989

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TRIB		A	Jack Enblom Ecological Services Section MN DNR 500 Lafayette Road St. Paul, MN 55155-4625 612/296-0785	Steve Hanson Paul Renard Gary Montz	STREAM Reconnaissance and Fisheries Survey of the St. Croix River	To repeat a 1959 fisheries survey conducted by teh MN and WI Conservation Deps. from Danbury to Stillwater MN.	MN DNR Federal Aid	Sep 1989	Jun 1990
5,6		C	Ray Faber St. Mary's College Winona, MN 55987 507/457-1540	Barry Drazkowski	BLACK TRAN Nesting Behavior on Upper Mississippi River	1. To identify cause of reduced black tern nesting success. 2. To evaluate mapping capabilities for black tern nesting habitat using LTRMP CRIC.	?	Fall 1989	Jan 1990
24		D	Gordon Farabee Missouri Dept. of Conservation 323 South Main Palmyra, MO 63461 314/769-3528		RECREATIONAL Use Survey Pool 24 of the Upper Mississippi River	1. To document recreational use of Pool 24. 2. To determine economic value derived from pool use.	MO DOC	Completed Aug 1988	1989
26	235-236.7	A	Gordon Farabee Missouri Dept. of Conservation 323 South Main Palmyra, MO 63461 314/769-3528	Norm Stucky	EVALUATION of Cedar Trees as Fish Habitat Along UMR Main Channel Border	1. To assess fish population status. 2. To identify and improve fish population through application of fisheries management techniques.	MO DOC federal aid	Fall 1989	1990
24		A	Gordon Farabee Missouri Dept. of Conservation 323 South Main Palmyra, MO 63461 314/769-3528		LAKE Sturgeon Stocking Pool 24 UMR	To establish lake sturgeon within Pool 24	MO DOC federal aid	?	?

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20	353L,347.8	A	Gordon Farabee Missouri Dept. of Conservation		JUVENILE Fish Growth Rates	1. To determine fish species composition of fish inhabiting main channel border habitats within Pools 20 through 26 of the Upper Mississippi River. 2. To determine juvenile fish growth rates.	MO DOC Federal Aid	Winter 1988	1989
21	325R		323 South Main Palmyra, MO 63461						
22	322.8R, 320.5L, 318.8L, 276-277L, 248R, 207.8R		314/769-3528						
24									
25									
26									
22	323	G	Tim Fearal District Office Corps of Engineers P.O. Box 34 Pleasant Valley, IA 52767 309/788-6361, ext. 489	Project Staff Coordinating Agency Staff	REGENERATION SURVEYS	To determine success of natural regeneration of tree species following harvest operations.	COE - Rock Island District	Spring 1992	1993
13	552	C	Tim Fearal District Office Corps of Engineers P.O. Box 34 Pleasant Valley, IA 52767 309/788-6361, ext. 489	Pete Peterson Project Staff	AVIAN Surveys	To determine impacts on avian populations following timber harvest on the UMR.	COE - Rock Island District	1992	1993
18	423								
22	323								
16		D	Janet Fritschken USAE Waterways Experiment Station Attn: CEWTS-ERR P.O. Box 631 Vicksburg, MS 39180-0631		CAMPGROUND Receipt Study	To collect descriptive data on visitors to Corps campgrounds for use in determining trends and providing information for planning and management purposes.	COE - Office of the Chief of Engineers	Indefinite	Annual
12 to Ohio R.	0-581	A	A.W. Fair IL Department of Conservation 140 Lake Vista Drive Carlyle, IL 62231		COLLECTION and Summarization of Commercial Fisheries Harvest Statistics	To document annual commercial fisheries harvest.	IL DOC	Annually	July of following year
19		H	R.W. Gordon IL Natural History Survey 607 E. Peabody Drive		BACTERIAL Populations of Water Column, Sediments and Vegetation in Vallisneria Beds.	To determine numbers of bacteria on plants as they grow and decay during the growing season.	INHS	Fall 1988	Spring 1989

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15-26	203-493	C	Stephen Havera IL Natural History Survey River Research Lab Box 599 Havana, IL 62614 309/543-3950/3105	Robert Cropton	AERIAL Censuses of Waterfowl and Bald Eagles	To census waterfowl and eagles September-April	IL DOC - Federal Aid	Annual	Annual
19	365-410	C	Stephen Havera IL Natural History survey River Research Lab Box 599 Havana, IL 62614 309/543-3950/3105	Lonnie Boen	DISTURBANCE of Diving Ducks	To monitor human disturbance of diving ducks on Pool 19.	INHS, IL DOC	Jun 1989	Sep 1989
19	365-410	C	Stephen Havera IL Natural History Survey River Research Lab Box 599 Havana, IL 62614 309/543-3950/3105	Richard Tebbs	FOOD Habits of Diving Ducks	To monitor food habits of diving ducks on Pool 19.	INHS	Oct 1990	Oct 1990
TRIB		B	Marian E. Havlik Malacological Consultants 1603 Mississippi Street La Crosse, WI 54601 608/782-7958	INHS	EFFECTS of Low Dam Replacement on Naiad Mollusk Population	To remove endangered mussels from river cofferdam site, Milan, IL.	INHS IL DOT	1988	1989
IR	Peoria	B	Marian E. Havlik Malacological Consultants 1603 Mississippi Street La Crosse, WI 54601 608/782-7958	INHS	NAIAD Mollusk Population at Franklin St. Bridge, Peoria, IL	To move non-endangered mussels prior to bridge construction.	IL DOT	1988	1989
10	632-637	B	Marian E. Havlik Malacological Consultants 1603 Mississippi Street La Crosse, WI 54601 608/782-7958		AGE/LENGTH Frequency of <u>Lampsilis</u> <u>Higginsii</u>	To determine same of fresh-dead endangered mussels.	ASAL, Self	1989	1989
3	804.6	B	Marian E. Havlik Malacological Consultants 1603 Mississippi Street La Crosse, WI 54601 608/782-7958		NAIAD Mollusk Population Between Smiths Landing and Big River, WI	To assess of possible endangered and threatened mussel population.	Private Contract	1988	1989

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Various	Various	B	Marian E. Hawk Malacological Consultants 1603 Mississippi Street La Crosse, WI 54601 608/782-7958		BIOGEOGRAPHY and Distribution of Rare Unionids in UMR System	To identify zoogeography of rare mussels in UMR System.	Self	1988	1989
Various	Various	B	Marian E. Hawk Malacological Consultants 1603 Mississippi Street La Crosse, WI 54601 608/782-7958		BIOTIC Index For Naid Mollusks in the Upper Mississippi River System	To determine a biotic index for UMRs naid Mollusks.	Self	1989	1989
5	744	F	A.S. (Ilex) Hawkins U.S. Fish and Wildlife Service Upper Mississippi River National Wildlife and Fish Refuge 51 E. 4th Street Winona, MN 55987 507/452-4232		WHITEWATER Conservation Project	<ol style="list-style-type: none"> To accelerate Farm Conservation Planning and Watershed best management practices for implementation through cooperative approaches. To monitor high flow sediment on middle and north branches of Whitewater River. 	US FWS	Oct 1989	Jan 1990
14, 15,	479, 503	A, C, D, F	Michael R. Headrick Nemadocus Associates, Inc. 25 Nashua Road Bedford, NH 03103 603/668-9447	Mary Gagnon	LaCLAIRE Hydro	To determine impacts of proposed hydro project on inter pool fish movement, survival and size of fish populations, physical, chemical and biological character of L&D 14 tailwater, and impacts of other projects.	City of LaClaire	3 years after operation	Each July
9, 10, 6		B	David J. Heath WDNR Bureau of Endangered Resources CHEF II ER/4 Madison, WI 53707 608/267-5262	William Smith Ron Nicoara	DISTRIBUTION and Population Dynamics of Rare and Endangered Mussels	<ol style="list-style-type: none"> To sample population parameters of some rare and endangered mussels in essential habitat areas. To locate new sites for L. hughesi. 	WI DNR Federal Aid	Sep 1989	Dec 1989

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St. Croix River	0-80	B	David J. Heath WDNR Bureau of Endangered Resources GEF II ER/4 Madison, WI 53707 608/267-5262	William Smith Ron Nicotera	REPRODUCTIVE Periods, Growth and Transplant Survival Rates of Marked and Relocated Mussels	<ol style="list-style-type: none"> To recover some rare mussel species that were tagged in 1988 to determine annual growth and survival. To determine reproductive period of these. 	WI DNR Federal Aid	Sep 1989	Dec 1989
1-4	760-930	F	Dan Helwig MN Pollution Control Agency 520 Lafayette Road St. Paul, MN 55155 612/296-7250		PCBs in Suspended Solids	<ol style="list-style-type: none"> To measure PCBs in suspended solids collected in sediment traps in 8 locations from Sartell to Wabasha. To assess PCB loadings to the River from suspended solids. To help determine and locate sources of PCBs. 	MPCA U.S. EPA	Mar 1989	Jun 1989
Headwater Stream		F,H	Randall Hicks University of MN Itasca Biological station Lake Itasca, MN 56460 218/266-3345		INFLUENCE of Lakes on River Margins on Microbial Productivity	<ol style="list-style-type: none"> To Measure bacterial productivity. To investigate influence of lake bacterial abundance in the Mississippi River. To determine production of microbial extracellular polymers. 	University of MN	Oct 1989	
B27	183.6-168.5	F	Robert L. Hite IL Environmental Protection Agency 2309 W. Main Street Marion, IL 62959 618/997-4371	Robert L. Schleuger	LOW Flow Water Quality Characteristics of the Mississippi River in the Vicinity of St. Louis, July 1988	To document water quality conditions during period of extreme low river discharge.	IEPA	Jul 1988	Jan 1989
5-26	Various	A	Leslie Holland-Bartels National Fisheries Research Center P.O. Box 818 La Crosse, WI 54602 608/783-6451		COMPARATIVE Examination of Age, Growth and Health of Fish Larvae in the Main Channel vs. Backwater	<ol style="list-style-type: none"> To examine the comparative health of the drifting component. To use histological criteria as an indicator of the viability of main channel individuals. 	U.S. FWS	Sep 1989	Sep 1989

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7	705-706	F, A	Leslie Holland-Barnds National Fisheries Research Center P.O. Box 818 La Crosse, WI 54602 608/783-6451	Michael R. Dewey	IMPACTS of Contaminants in Micro-Habitats on Fish Recruitment.	1. To identify the yoy of a sport species whose movement patterns are restrictive enough to insure that their identified contaminant levels are reflective of a specific back water habitat. 2. To quantify the contaminant load and variability for the yoy indicator.	U.S. FWS	Sep 1989	Sep 1989
13 18 22	552 423 323	G	Jim Hong Mississippi River Project - Corps of Engineers Pleasant Valley, IA 52767 309/738-6361, ext. 489	Pete Paersen Tim Kavel Project Staff	AVIAN Surveys	To determine impacts to avian populations following timber harvesting on the UMR.	COE -Rock Island District	1992	1993
Above 1		A	A.J. Hopwood Department of Biological Sciences St. Cloud State University St. Cloud, MN 56301 612/255-2036	Steven F. Williams	ICHTHYOPLANKTON in the Mississippi River Above the St. Cloud Dam	1. To determine composition of the drift. 2. To describe vertical and horizontal patterns in a crosssection of the river. 3. To evaluate seasonal variation. 4. To evaluate diurnal variation. 5. To estimate the total number of eggs and larvae of each species drifting in one season.	Wazyru Engineering, Inc.	Jul 1988	Jun 1989
2-5	738-847	F	Marvin Hora MN Pollution Control Agency 520 Lafayette Road St. Paul, MN 55155-3898 612/296-7215		PCHs in the Mississippi River Penfish	To determine if bluegills and crappies should be on MN consumption advisory.	State	Dec 1989	Jun 1990
1-4	752-930	F	Marvin Hora MN Pollution Control Agency 520 Lafayette Road St. Paul, MN 55155-3898 612/296-7215		PCHs in Suspended and Bottom Sediments	To determine PCB hotspots and PCB transport in Mississippi River.	State	Sep 1990	Jul 1991

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2-5	738-847	C	Marvin Hora MN Pollution Control Agency 520 Lafayette Road St. Paul, MN 55155-3898		CONTAMINANTS in MN Wildlife	To survey waterfowl, eagles, and mink for contaminants.	State	Sep 1990	Jul 1991
2	825	E, B	Dan Hornbach McAlester College 1600 Grand Avenue St. Paul, MN 55105 612/696-6101	Barry Payne Andrew Miller	INVERTEBRATE Ecology and Sedimentation Rates in a Backwater Lake	1. To assess production of mayfly nymphs. 2. To monitor sedimentation rates. 3. To investigate physiology of mussels.	COE - Waterways Experiment Station	1994	Jan 1989
16		D	Scott Jackson U.S. Army Corps of Engineers P.O. Box 631 Vicksburg, MS 39180 601/634-2105		CAMPGROUND Receipt Study	To measure camper characteristics and use patterns.	COE	Ongoing	Annual Reports
1-3, TRIBS	Various	F	Kent Johnson Metropolitan Waste Control Comm. Quality Control Department 230 E. 5th Street St. Paul, MN 55101 612/222-8423		ANNUAL Water Quality Monitoring of the Mississippi, Minnesota, and St. Croix Rivers, in the 7 County Minneapolis, St. Paul Vicinity	1. To monitor wastewater treatment effluents in Minnesota waters. 2. To determine potential impacts on receiving water.	MWCC	Annual	Nov of following year
9-11		C	Gerald Kaufmann Department of Biology Loras College Dubuque, IA 52001 319/588-7231		COOT Use of Pools 9-11 during Migration	To evaluate the importance of submerged vegetation.	None	1990	1991
11		C	Gerald Kaufmann Loras College Dubuque, IA 52001 319/588-7231		MORPHOLOGY of Coot (<i>Fulica Americana</i>) Wing Muscles and Digestive Tract	To monitor fat accumulation of migrating coot and bacteria and protozoa of coot caeca.	None	1989	1989
B27	0-195		Tom Keevin U.S. Army Corps of Engineers 210 Tucker Boulevard North St. Louis, MO 63101-1986 314/263-5711, 273-5711	IL DOC, MO DOC, US FWS	MUSSEL Survey of the Middle Mississippi River	To determine mussel species composition and abundance.	COE - St. Louis District	Mar 1989	Jun 1989

POOL	RIVER MILE(S)	TYPE	PRINCIPAL INVESTIGATOR	ASSOCIATE INVESTIGATORS	TITLE OF WORK	OBJECTIVES	FUNDING SOURCE	PROJECT COMPLETION DATE	REPORT COMPLETION DATE
14	502-506	B	Jack Killgore USAE Waterway Experiment Station Attn: CEWES-HR-A P.O. Box 631 Vicksburg, MS 39180-0631 601/634-3397	Andrew Miller	HSI Model Development for the UMRS Environmental Management Program (Aquatic and Terrestrial Species)	1. To construct guilds based on target cover types, habitat classes and life requisites. 2. To develop HSI models for each guild block.	COE - Rock Island District	1989	Winter 1989
14	502-506	B	Michael J. Knott Stanley Consultants Stanley Building Muscatine, IA 52761 319/264-6293		MUSSEL and Substrate Survey - Pool 14 Mississippi River	1. Determine locations, extent, and quality of any mussel concentrations found. 2. Examine, qualify and map general substrate zones.	COE - RI District	Jul 1988	Sep 1988
20-26		B	Leroy Koch Missouri Department of Conservation 323 S. Main Pulmona, MO 63461 314/769-3528		QUANTITATIVE Mussel Survey	To obtain baseline data on mussel communities.	MO DOC	?	?
20-26		B	Leroy Koch Missouri Department of Conservation		QUALITATIVE Mussel Survey	To obtain baseline data on mussel communities.	MO DOC	?	?
20-26		B	Leroy Koch Missouri Department of Conservation 323 S. Main Pulmona, MO 63461	Al Buchanan	FAT Pocketbook Transplant to UMR	To establish viable population of Fat Pocketbook in UMR.	MO DOC	?	?
22-24		A/B	Leroy Koch Missouri Department of Conservation		CONSUMPTION of Juvenile Mussels by	To determine what species of fish prey upon juvenile mussels.	MO DOC	?	?
14	503-521.3	A	William Lewis and David Bergerhouse Southern Illinois University c/o Quad Cities Nuclear Station 22710 - 200th Avenue North Cordova, IL 61242 309/654-2748	Larry Lalone	CULTURE of Walleye and Hybrid Striped Bass in the Cooling Canal of Quad Cities Nuclear Station	1. To develop facilities at Quad Cities Station for the production of large numbers of fingerling game fish. 2. To determine whether stocking of Pool 14 with fingerling walleye and hybrid striped bass can enhance existing fisheries or develop new sport fisheries.	Commonwealth Edison and Iowa-Illinois Gas & Electric	Ongoing	April each

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TRIB		A	John Lyons WI Department of Natural Resources 3911 Fish Hatchery Road Fitchburg, WI 53711 608/275-3223	Don Fago Gene Van Dyck Kurt Weiske	VARIATION in Year-Class Strengths and Growth Rates Among Gametfish of the Lower Wisconsin River	<ol style="list-style-type: none"> To quantify relationships among year-class strengths, growth rates and selected environmental variables for walleye, sauger, and smallmouth bass. To compare values and relationships from the Lower Wisconsin River with other parts of the Wisconsin River and the Mississippi River. (Concurrent projects are examining walleye movement and characteristics of the fishery.) 	WI DNR Federal Aid	1995	1996
9-11	Various	C, D	McGregor District Manager U.S. Fish and Wildlife Service P.O. Box 460 McGregor, IA 52157 319/873-3423		UNTITLED	<ol style="list-style-type: none"> To census - waterfowl, eagles, herons, egrets, cormorants, frogs. To estimate public use - fishermen hunters, trappers, campers, picnickers, etc. 	U.S. FWS	Ongoing	Annual Counts
10	635	B	Andrew C. Miller WESER-A Waterways Exp. Stu. Vicksburg, MS 39180-0631 601/634-2141	Barry Payne Carl Way Dan Hornbach	POPULATION and Community studies of Freshwater Mussels in the UMR	To make quantitative total substrate samples to assess recruitment, density and mortality of dominant freshwater mussels.	COE	?	Jan 1989
18 17	430 443	A	Jim Milligan U.S. Fish and Wildlife Service Route 1 Genoa, WI 54632 608/689-2605	Kenneth Russell Bernard Schonhoff	FISH Population Surveys	To collect baseline fishery data on the Keithsburg and Big Timber Units of the Mark Twain NWR to be used in developing a fishery management plan.	U.S. FWS	Annual	
10		B, F	Lawrence G. Mitchell Department of Animal Ecology Iowa State University Ames, IA 50011 515/294-4680	Teresa J. Naimo Becky A. Lasec Leslie Holland-Bartels Diane Waller	BIOLOGICAL: Effects of Suspended Sediments and Associated Contaminant on Various Life Stages of Freshwater Mussels of the Upper Mississippi River	<ol style="list-style-type: none"> To develop a laboratory system to test the effects on larval, juvenile and adult mussels exposed to uniform and evaluated navigation-related pulsed levels of resuspended sediments. To develop a lab system to test the effects of sediment-bound and water borne heavy metal contaminants on glochidial development and juvenile and adult life history characteristics such as growth, feeding rate, reproduction and general physiology. 	U.S. FWS	Sep 1990	Sep 1990

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11-B27	510+0	F	Mary Mahaffy Melanie Young U.S. Fish and Wildlife Service 1830 Second Avenue Rock Island, IL 61201 309/793-5800		QUANTIFICATION and Toxicity Determination of Xenobiotic Chemical and Inorganic Contaminants in Effluents, Sediments and Biota From the Mississippi River and Tributaries.	To identify and quantify contaminants in sediments, effluents and biota on the Mississippi River System that could impact waterfowl, waterfowl foods, waterfowl habitat or refuge land.	US FWS	Ongoing	Progress Report Spring 1990
Headwater Stream		H	Margot Monson University of MN Hasea Biological Station Lake Hasea, MN 56460 218/266-3345		ASSESSMENT of the Endangerment Status of MN Trichoptera	To survey catchsites of Kaseca area.	?	Feb 1990	
12-27	0-581	F	Laurie Moyer IL Environmental Protection Agency 2200 Churchill Road Springfield, IL 62706 217/82-3362	Robert Setzki William Tucker	ROUTINE Ambient Water Quality Monitoring Network (AWQMN)	To document ambient water quality conditions.	IL EPA	Ongoing	Start
3 and 4 TRHS	785-802	H	Northern States Power Company Prairie Island Environmental Lab RR 2 Welch, MN 55089 612/388-1121 ext. 4349	Glen M. Kuhl Kenneth N. Mueller Dan J. Orr	ENVIRONMENTAL Monitoring and Ecological Studies	To perform monitoring and studies as related to river water intake and discharge at power plant sites.	Private Utility	Ongoing	Annual
3 and 4	787.5-802	A	Northern States Power Company Prairie Island Environmental Lab RR 2 Welch, MN 55089 612/388-1121 ext. 4349	Glen M. Kuhl Kenneth N. Mueller	FISH Population Study	To monitor and assess the status of the fisheries in the Prairie Island Nuclear Generating Plant vicinity.	Private	Ongoing	Annual
3	798.5	A	Northern States Power Company Prairie Island Environmental Lab RR 2 Welch, MN 55089 612/388-1121 ext. 4349	Glen M. Kuhl Kenneth N. Mueller	FINE Mesh Vertical Traveling Screens Impingement Survival Study, and Sampling Mortality Assessment	To assess the effectiveness of 0.5 mm mesh screens in reducing entrainment impacts on fish in the Prairie Island Nuclear Generating Plant vicinity.	Private	Ongoing	Annual

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17	451	C	R.W. Nyboer IL Department of Conservation Dearborn Hall, 205 E. Seminary St. Mt. Carroll, IL 61053	V. Kleen L. Wargowsky E. DeVries	HERON Rookery Monitoring	To monitor expansion/declines of heron rookeries.	IL DOC	Jun 1989	Oct 1989
16	476								
13	556								
12	574								
12	575-76								
13		C	R.W. Nyboer IL Department of Conservation Dearborn Hall, 205 E. Seminary St. Mt. Carroll, IL 61053 815/244-3655	V. Kleen E. DeVries	DOUBLE-CRESTED Cormorant Colony Monitoring	To monitor expansion/decline, movement of cormorant colonies.	IL DOC	Jul 1989	Oct 1989
13	524, 534	H	R.W. Nyboer IL Department of Conservation Dearborn Hall, 205 E. Seminary St. Mt. Carroll, IL 61053 815/244-3655		POPULATION Dynamics of Ornate Boxturtle	To determine population size, use and management needs of Ornate Boxturtle at Ayers, T.F.N.P.	IL DOC	Oct 1990	Feb 1991
		H	Jean O'Neil USAE Waterways Experiment Station Attn: CEWES-ER-W P.O. Box 631 Vicksburg, MS 39180-0631 601/634-3641	Andrew Miller	HSI Model Development for the UMRS Environmental Management Program (Aquatic and Terrestrial Species)	1. To construct guilds based on target cover types, habitat classes, and life requisites. 2. Develop HSI models for each guild lock.	COE - Rock Island District	1988	Winter 1989
13		A	John Pilo Bellevue Research Station RR 3, Box 160 Bellevue, IA 52031 319/872-4976		NO TITLE	To collect sauger milt to be used in our saugeye project at Rathbun Hatchery.	DNR	Ongoing	
9	671-674	A	John Pilo Bellevue Research Station RR 3, Box 160 Bellevue, IA 52301 319/872-4976	Maurice Anderson Dennis Weiss	AN Evaluation of Largemouth Bass Populations in the Upper Mississippi River	1. To estimate the abundance, standing stocks, age, growth and total mortality of largemouth bass in (see below). 2. To determine largemouth bass habitat requirements, response to low oxygen conditions, spawning nest depth, and response to water level fluctuations (Pool 12, see below). 3. To determine harvest and estimate exploitation of largemouth bass.	IA DNR Federal Aid	1991	1992
10	626-628								
12	563-564.5								
13	541.5-545								

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9, 11, 16, 18	Various	A	John Pido Bellevue Research Station RR 3, Box 160 Bellevue, LA 52301 319/872-4976	Maurice Anderson Dennis Weiss	AN Evaluation of the Effect of a Change in Commercial Harvest Regulations on the Channel Catfish Populations Inhabiting the Upper Mississippi River	Overall objective: To provide an assessment of the effects of increasing the minimum legal length from 13 to 15 inches for commercially harvested catfish. 1. To determine length-weight relationships, length-frequency distributions, harvest rates, and relative abundance of channel catfish. 2. To determine the abundance of young of the year channel catfish.	IA DNR Federal Aid	1991	1992
13	555	A	John S. Ramsey & Dennis L. Seamruch LA Coop. Fish & Wildlife Research Dept. of Animal Ecology - ISU Ames, IA 50011 515/294-3057	Gary L. Curtis Clark Moen	SPAWNING and Early Life History of Paddlefish and Spottnose Sturgeon in the Upper Mississippi River	1. To detail stimuli and limitation of spawning. 2. To locate spawning grounds. 3. To locate nursery grounds. 4. To follow growth and movements.	IA DNR	Mar 1991	Jun 1991
IR	120-327	F	Philippe Ross, Richard E. Sparks IL Natural History Survey River Research Laboratory, Box 599 Havana, IL 62644 309/543-3950/3105	Anthony Paparo K. Douglas Blodgett Frank S. Dillon	IDENTIFICATION of Toxic Substances in the Upper Illinois River	1. To identify the toxicant(s) in the sediments of the Illinois River. 2. Identify the primary source of this toxicity.	IL DOC	Jan 1991	1991
IR		F	Richard Ruelle U.S. Fish and Wildlife Service 1830 Second Avenue Rock Island, IL 61201 309/793-5800		QUANTIFICATION and Toxicity Determination of Xenobiotic Chemical and Inorganic Contaminants in Ethnics, Sediments and Biota from the Illinois River and Tributaries.	To identify and quantify contaminants in sediments, effluents and biota on the Illinois River System that could impact waterfowl, waterfowl foods, waterfowl habitat or refuge lands.	US FWS	Ongoing	Spring 1990
14		F	Richard Ruelle U.S. Fish and Wildlife Service 1830 Second Ave. Rock Island, IL 61201 309/793-5800		CONTAMINANT EVALUATION of Sediments	To determine composition and distribution of contaminated sediments.	U.S. FWS	Sep 1988	?

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12,13,14	Various	C, D	Savanna District Manager U.S. Fish and Wildlife Service Savanna District Staff Post Office Building Savanna, IL 61704 815/273-2732		ANNUAL Heron and Cormorant Rookery Counts	1. To tag trees in rookery. 2. To identify tree species used. 3. To map rookeries and count nests annually.	U.S. FWS	Ongoing	Annual Counts
12,13,14	Various	C, H	Savanna District Manager U.S. Fish and Wildlife Service Post Office Building Savanna, IL 61074 815/273-2732		UNTITLED	To census waterfowl, bald eagles and beaver to determine peak populations and annual fluctuations.	US FWS	Ongoing	Annual Counts
IR	153.0-292.0	F	Robert A. Schacht, William J. Tucker IL Environmental Protection Agency 1701 First Avenue Maywood, IL 60153 312/545-9780	Howard Essig William Eitinger	ILLINOIS River Intensive Survey - Lockport to Pekin	To document present water quality conditions based on water chemistry and macroinvertebrates.	IL EPA	1989	1990
Head Waters Stream		A	Irene Schlosser University of MN Itasca Biological Station/interactions. Lake Itasca, MN 56460 218/266-3345		LOTIC Fish Ecology	To determine effects of flow regime on stream ecology species.	National Science Foundation	Sep 1990	
10, 12, 13, 14, 16, 17	Various	B	Bernard Schonhoff Fairport River Biology Station RR 3 Box 434 Muscatine, IA 52761 319/263-5062	Ed Kocal	MISSISSIPPI River Commercial Mussel Survey	1. To determine the size of mussel being harvested. 2. To estimate the percent of dead shell in the harvest. 3. To determine the size and number of sub-harvestable shells in the population.	IA DNR	Ongoing	Annually in March
17	444	A	Bernard Schonhoff IA Department of Natural Resources Fairport Biology Station RR 3, Box 434 Muscatine, IA 52761 319/263-5062	Ed Kocal	BIG Timber Creel	To determine angler use and catch rate.	IA DNR	Mar 1989	Feb 1990
8, 13, 26	Various	A E F G	Joe Scott U.S. Fish and Wildlife Service LTRMP/EMTC La Crosse, WI 54601 608/783-7550	Jerry Rasmussen John Wezel Russ Gent Rick Anderson	LONG Term Resource Monitoring - Water and Sediment, Fish, Vegetation	To produce population and habitat data that will allow appropriate management of the UMRS	COE FWS CTRMP, State	1997	Interim Feb 1989

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All	All	A,B, C,D E,F, G,H	Joe Scott U.S. Fish and Wildlife Service LIRMP/EM/TC La Crosse, WI 54601 608/783-7550	Joseph Wlosinski	COMPUTER Resource Information Center writing of Riverine Fishes	To provide technical assistance through computer resource information center.		1997	Interim 1989
14	510-513	A	Robert J. Stuedgen Fisheries Research Lab Southern Illinois University Carbondale, IL 62901-6511 618/536-7761	Dale Logsdon Paul S. Wills	WINTER Habitat Requirements and Overwintering of Riverine Fishes	To determine tolerance of river fish to low temperatures and low at low temperatures.	IL DOC Federal Aid	Aug 1990	Aug 1990
13	545	C	Bob Shoers IA Department of Natural Resources Counthouse - Maquoketa, IA 52060 319/652-3132	Forrest Fromm	WOOD Duck nesting Dynamics at Green Island	To determine nest success, competition, predation, use, site selection, best nest box construction.	IA DNR	Ongoing	Annually
		H	Alison Smith University of MN Inasa Biological Station Lake Itasca, MN 56460 218/266-3345		FRESHWATER Ostracodes of Minnesota	To quantify Ostracods distribution with water chemistry on MN and Eastern ND & SD.	?	?	?
5	751, 754	F	Stan Smith U.S. FWS, St. Paul Field Office 50 Park Square Court, St. Paul, MN 55101 612/290-3131		AN Assessment of Potential Contaminant Impacts Associated with Construction of Habitat Rehabilitation and Enhancement Program (HREP) Projects	To determine the concentrations of trace metals, organochlorine pesticides, total PCBs and polynuclear aromatic hydrocarbons in sediments and carp at two completed backwater dredging project sites.	U.S. FWS	1989?	?
Lab, 14, 15 19, IR		A,B	Richard E. Sparks IL Natural History Survey River Research Laboratory, Box 599 Havana, IL 62644 309/543-3950/3105	Philip B. Moy Paul Ralibey K. Douglas Blodgett	VALUE of Mussel Beds To Sport Fisheries	To determine whether sport fish display a preference for mussel beds as a substrate, using laboratory experiments.	IL DOC Federal Aid	Mar 1990	May 1990

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19, 20, 26 26 & IR	Various	H	Richard E. Sparks IL Natural History Survey River Research Laboratory, Box 599 Havana, IL 62644 309/543-3950/3105	Rodger Adams Nani Bhowmik Misgawaw Demissie Richard Anderson Richard Cahill Peter Bayley Robert Gordon Lewis Osborne Pamela Tazik	LONG-TERM Ecological Research on the Illinois and Mississippi Rivers	1. To complete analysis of data and publish results from this 7-year project. 2. To determine patterns and basis of biological productivity in large floodplain rivers.	NSF	Dec 1989	Dec 1989
IR	100-134	A	Richard E. Sparks IL Natural History Survey River Research Laboratory, Box 599 Havana, IL 62644 309/543-3950/3105	Brian L. Todd Frank S. Dillon	EFFECTS of Barge Traffic on Channel Catfish	1. To document the effects of barges on the behaviour of adult channel catfish. 2. To document habitat use by channel catfish. 3. To document movement patterns of To determine effect of hydraulic structures at L&D No. 2 on dissolved oxygen.	IL DOC Federal Aid	Jun 1989	Jul 1989
2	815	F	H. Stefan St. Anthony Falls Hydraulic Lab, University of MN 3rd Avenue, SE & MS River Minneapolis, MN 55414	J. Thorne I. Daniil	DISSOLVED Oxygen Study At Dam No.2		City of Hastings	Feb 1989	Feb 1989
8, 9		F	John Sullivan WI DNR 3550 Mormon Coulee Road La Crosse, WI 54601 608/785-9000		AMBIENT Water Quality Monitoring Stations	1. To collect monthly monitoring at Wisconsin's stored stations. 2. To collect suspended sediment for contaminant analysis evaluation. 3. To provide data for trend analysis and problem identification.	U.S. EPA WI DNR	Ongoing	Oct
5a, 11		F	John Sullivan WI DNR 3550 Mormon Coulee Road La Crosse, WI 54601 608/785-9000		SEDIMENTATION Rates in Selected Backwater Areas of the Mississippi River	1. To collect detailed water depths at designated transects to establish baseline conditions for future evaluations. 2. To help evaluate non point source control efforts in selected priority watershed projects bordering the Wisconsin slot of the Mississippi River.	WI DNR	Mar 1989	Jun 1989
IR		A	Charles Surprenant U.S. FWS - Fisheries Assistance Box J Carterville, IL 62918 618/997-6869		SWAN Lake Baseline Fishery Survey	To document the fish community of Swan Lake of the Illinois River sufficient to evaluate the effects of a proposed HREP Project.	U.S. FWS	FY 1990-91	FY 1991

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8	698	F	Kathy Swanda		ROUTINE Water Quality Monitoring Program	To collect ambient water quality information to measure long term trends and to determine compliance with water quality standards.	State and Federal Aid	Ongoing	Data published every 3 yrs next report will be done in 1991
6	714		MN Pollution Control Agency						
5	738		Division of Water Quality						
2	815, 826, 840		Program Development Section						
Above 1	859, 895, 990, 982, 1172, 1292, 1365		520 Lafayette Road St. Paul, MN 55155 612/296-8856						
19	364-67	G	Pamela Tark Illinois Natural History Survey 607 E. Peabody Drive Champaign, IL 61820 217/244-5514	Richard Anderson	PRODUCTION of <u>Yalissnena Americana</u> in Pool 19, Upper Mississippi River	To determine rates and patterns of production for <u>Yalissnena</u> in Pool 19.		Nov 1988	
	Various	A	Pam Thiel WI DNR 3550 Mammern Coatee Road La Crosse, WI 54601 608/785-9900	Ron Benjamin Kurt Welke Jim Helzer	PRE-HIREP Project Fishery Surveys	To determine fish populations at proposed HIREP sites.	WI DNR	Ongoing	Ongoing
3-10	Various	G	Randall R. Ulrich St. Paul District, Corps of Engineers Mississippi River Project Office 33 So. Walnut, #11 La Crosse, MN 55947-1338 507/895-6341		FOREST Inventory	To obtain baseline data to begin a forest management plan for Corps lands on the Mississippi River 9-foot channel project in the St. Paul District.	COE - St. Paul District	1992	
10	633.4	H	U.S. Geological Survey		DATA Collection Analysis	To monitor river discharge and sediment load.	USGS COE - St. Paul District COE - Rock Island District Union Electric	Ongoing	
14	511.8		P.O. Box 1230						
19-20	364.2		Iowa City, IA 52244-1230 319/377-4191						

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		B	Diane Waller National Fisheries Research Center P.O. Box 818 La Crosse, WI 54602 608/783-6451	Leslie Holland-Bartels	OPERATIONAL Culture of Freshwater Unionid Mussels	To develop a culture method for freshwater endangered mussels which incorporates identification of feed system development, and large scale production emphasizing field operational productions of mussels to transplantable size.	U.S. FWS	Sep 1990	Sep 1990
TRIB		C	A.R. Weisbrod St. Croix National Riverway P.O. Box 708 St. Croix Falls, WI 54024	D.W. Warner	USE OF Fragmented Habitats by Migrating Birds	To determine habitats important to migrating birds.	Private National Park Service	1988	1992
4A-12		H	A.R. Weisbrod St. Croix National Riverway P.O. Box 708 St. Croix Falls, WI 54024	R.C. Johnson	VERTERATE Reservoir of Lyme Disease in the St. Croix River Valley	To determine vertebrate reservoirs and vector dispersal.	National Institute of Health & National Park Service	1990	1993
10		B	Kurt Welke, Fish Manager Department of Natural Resources 3550 Mormon Coulee Road La Crosse, WI 54601		ASSESSMENT of 1989 Commercial Harvest of Mussels	To determine the harvest by pounds, pool, month, of commercial mussels in WI waters of pools 4A-12 in 1989.	WI DNR	Dec 1989	Feb 1990
10		A	Kurt Welke, Fish Manager Department of Natural Resources 3550 Mormon Coulee Road La Crosse, WI 54601		INDEX of Walleye and Sauger Yoy Strength, Pool 10	To index walleye yoy and sauger yoy year class strength below L&D 9.	WI DNR	Oct/Nov 1989	Dec 1989
7, 8		B	Kurt Welke, Fish Manager Department of Natural Resources 3550 Mormon Coulee Road La Crosse, WI 54601		MUSSEL Population Trends and Mortality Events	Collect mussel density, recruitment and age distribution data to project population trends and determine effects of commercial harvest.	WI DNR	Dec 1990	Mar 1991
7, 8		C	John F. Wetzel WI DNR 3550 Mormon Coulee Road La Crosse, WI 54601 608/785-9000	John Nelson Bob Dahlgren Ron Nicklans	DUCK Nesting Studies - Pools 7 and 8	1. To determine nest densities and success rates on different size islands. 2. To determine factors affecting densities and rates - (island size, height, vegetation, location distance from shore, proximity to other island etc) 3. To develop predictive models and test their value on selected islands in the upper reaches of the river. 4. To incorporate results into the planning, construction management of EMP nesting islands.	WI DNR U.S. FWS	1992-1994	1992-1994

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1-27	Various	F, A	James G. Wiener U.S. Fish and Wildlife Service National Fisheries Contaminant Research Center P.O. Box 936 La Crosse, WI 54602-0936 608/783-6451	Jeff Bernhardt Mark Steingraber Greg Cape	EFFECTS of Sediment Associated Contaminants on Aquatic Biota of the Upper Mississippi River	<ol style="list-style-type: none"> To evaluate the toxicity of contaminants from resuspended sediments to larval fish. To evaluate the uptake by fish of contaminants from resuspended riverine sediments. To assess the bioavailability of contaminants in the bottom sediments of the Upper Mississippi River. 	U.S. FWS	Jan 1990	Sep 1990
1-10	618-857	F	Dan Wilcox Environmental Resources Branch St. Paul District U.S. Army Corps of Engineers 1428 U.S. Post Office & Custom House St. Paul, MN 55101 612/220-0276		SEDIMENT Reconnaissance of Historic Dredge Cuts	To determine the physical and chemical composition of sediment in historic dredge cuts.	COE St. Paul District	Aug 1989	Oct 1989
7	709	H	Dan Wilcox Environmental Resources Branch St. Paul District U.S. Army Corps of Engineers 1428 U.S. Post Office and Custom House St. Paul, MN 55101 612/220-0276		MONITOR Wetland Landing Wing Dams	To determine habitat change in vicinity of Wetland Landing wing dams since construction.	COE St. Paul District	Aug 1989	Oct 1989
Above 1		H	Dan Wilcox Environmental Resources Branch St. Paul District U.S. Army Corps of Engineers 1428 U.S. Post Office and Custom House St. Paul, MN 55101 612/220-0276		INSTREAM Flow Needs Analysis	To determine the relationship between riffle habitat available and river discharge during low flow periods.	COE - St. Paul District	May 1989	Jan 1989

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POOL	RIVER MILE(S)	TYPE	PRINCIPAL INVESTIGATOR	ASSOCIATE INVESTIGATORS	TITLE OF WORK	OBJECTIVES	FUNDING SOURCE	PROJECT COMPLETION DATE	REPORT COMPLETION DATE
9-20		D	Linda Wiley Iowa DNR S.E. District Brighton, IA 52540 319/694-2430		MISSISSIPPI River Access Inventory	To develop boating access guide for Pools 9-20.	IA DNR	Jul 1989	Jul 1989
Above 1		A	M.C. Whiteside University of MN Itasca Biological Station Lake Itasca, MN 56460 218/266-3345	J.T. Hatch	INTERACTION Between Larval Fish and Zooplankton	To determine impact of fish on zooplankton.	NSF	Sep 1988	
24,25,26	180-301	H	C. Gary Wolff Simons, Li & Associates, Inc. 3555 Stanford road Fort Collins, CO 80525 303/223-4100	Yung-Hai Chen Robert A. Mussetter	DEVELOPMENT of Optimization Model to Evaluate Methods of Reducing Stage-Sag at St. Louis During Low Flows	To develop an optimization algorithm in conjunction with a flood-routing model to determine operation pool policies that will minimize sag in flow and stage.	COE - St. Louis District	Nov 1988	Nov 1988

INDEX BY STUDY TYPE

A-Fisheries

Atchison	Enblom	Ramsey &
Bayley	Farabee	Scarnecchia
Benjamin	Fritz	Schlosser
Boland	Headrick	Scott
Bolton	Holland-Bartels	Sheehan
Chilton	Hopwood	Surprenant
Chochran	Lewis &	Thiel
Cope	Bergerhouse	Welke
Copes	Lyons	Wiener
Czarnezki	Milligan	Whiteside
Dahlgren	NSPC	
Dewey	Pitlo	

B-Mussels

Anderson	Havlik	Mitchell
Atchison	Heath	Schonhoff
Cawley	Hornbach	Waller
Cheng	Knott	Welke
Dahlgren	Koch	
Davis	Miller	

C-Waterfowl & Other Birds

Anderson	Faber	Nyber
Atchison	Feavel	Scott
Bellrose	Havera	Sheets
Boens	Headrick	U.S. FWS
Cheap	Hora	Weisbrod
Dahlgren	Kaufman	Wetzel

D-Recreation

Atchison	Farabee	Scott
Benjamin	Fritschen	U.S. FWS
Bollman	Headrick	Wiley
Dahlgren	Jackson	

INDEX BY STUDY TYPE - CONTINUED

E-Sedimentation

Aspelmeier
Atchison
Bhowmik

Cheap
Dahlgren
Hornbach

Scott

F-Water Quality/Sediment Quality

Atchison
Bayley
Chilton
Czarnecki
Dahlgren
Davis
Essig
Hawkins
Headrick

Hicks
Hite
Holland-Bartels
Hora
Johnson
Mahaffy
Mitchell
Moyer
Ross & Sparks

Ruelle
Schacht
Scott
Sullivan
Svanda
Tucker
Wiener
Wilcox

G-Vegetation

Anfang
Arnold
Cheap

Dahlgren
Feavel
Hong

Scott
Tazik
Urich

H-Other

Anderson
Arnold
Benn
Bhomik
Browning
Czarnecki

Dahlgren
Gordon
Hicks
Killgore
Monson
NSPC
Nyber

O'Neil
Scott
Smith
USGS
Weisbrod
Wolff

INDEX BY POOL

POOL 1

Anfang
 Atchison
 Cope
 Czarnecki
 Dahlgren
 Johnson
 Helwig
 Hora
 Scott
 Wiener
 Wilcox

POOL 2

Atchison
 Cope
 Czarnecki
 Dahlgren
 Davis
 Helwig
 Hora
 Hornbach
 Johnson
 Scott
 Svanda
 Wiener
 Wilcox

POOL 3

Atchison
 Cope
 Czarnecki
 Dahlgren
 Havlik
 Helwig
 Hora
 Johnson
 NSPC
 Scott
 Urich
 Wiener
 Wilcox

POOL 4

Anfang
 Benjamin
 Fernholz
 Helwig
 NSPC
 Urich
 Wiener

POOL 5a

Anfang
 Benjamin
 Sullivan
 Wiener

POOL 5

Bolton
 Cheap
 Fernholz
 Holland-Bartels
 Smith
 Wiener

POOL 6

Fernholz
 Havlik
 Holland-Bartels
 Sullivan
 Urich
 Wiener

POOL 7

Benjamin
 Dewey
 Fernholz
 Havlik
 Holland-Bartels
 Holzer
 Steinbach
 Sullivan
 Urich
 Wetzel
 Wiener

POOL 8

Atchison
 Benjamin
 Cope
 Czarnecki
 Dahlgren
 Holland-Bartels
 Scott
 Sullivan
 Svanda
 Welke
 Wetzel
 Wiener
 Wilcox

POOL 9

Aspelmeier
 Atchison
 Boland
 Cope
 Czarnecki
 Dahlgren
 Heath
 Holland-Bartels
 Kaufmann
 Pitlo
 Scott
 Urich
 U.S. FWS
 Welke
 Wiener
 Wilcox
 Wiley

INDEX BY POOL - CONTINUED

POOL 10

Anfang
Aspelmeier
Boland
Czarnecki
Dahlgren
Havlik
Heath
Holland-Bartels
Kaufmann
Miller
Mitchell
Pitlo
Schonhoff
Scott
Urich
U.S. FWS
USGS
Welke
Wiener
Wilcox
Wiley

POOL 11

Aspelmeier
Boland
Bollman
Fernholz
Holland-Bartels
Kaufman
Sullivan
U.S. FWS
Wiener

POOL 12

Aspelmeier
Boland
Bollman
Browning
Czarnecki
Dahlgren
Fritz
Holland-Bartels
Moyer
Nýber
Pitlo
Schonhoff
Scott
U.S. FWS
Welke
Wiener
Wiley

POOL 13

Aspelmeier
Benn
Boland
Bollman
Bolton
Browning
Dahlgren
Feavel
Holland-Bartels
Hong
Moyer
Nýber
Pitlo
Ramsey
& Scarnecchia
Scott
Sheets
Schonhoff
U.S. FWS
Wiener
Wiley

POOL 14

Aspelmeier
Benn
Boland
Bollman
Bowzer
Browning
Dahlgren
Headrick
Holland-Bartels
Knott
Lewis &
Bergethouse
Moyer
Ruelle
Schonhoff
Scott
Sheehan
U.S. FWS
USGS
Wiener
Wiley

POOL 15

Aspelmeier
Boland
Bollman
Bowzer
Browning
Cawley
Cheng
Dahlgren
Havera
Headrick
Holland-Bartels
Moyer
Scott
Wiener

POOL 16

Aspelmeier
Boland
Bollman
Browning
Dahlgren
Fritschen
Havera
Holland-Bartels
Jackson
Moyer
Nýber
Pitlo
Schonhoff
Scott
Wiener
Wiley

POOL 17

Aspelmeier
Boland
Bollman
Browning
Dahlgren
Havera
Holland-Bartels
Milligan
Moyer
Nýber
Schonhoff
Scott
Wiener
Wiley

INDEX BY POOL - CONTINUED

POOL 18

Aspelmeier
Boland
Bollman
Browning
Dahlgren
Feavel
Havera
Holland-Bartels
Hong
Milligan
Moyer
Pitlo
Scott
Wiener
Wiley

POOL 19

Anderson
Arnold
Aspelmeier
Bayley
Bellose
Boens
Boland
Browning
Dahlgren
Gordon
Havera
Holland-Bartels
Moyer
Scott
Tazik
USGS
Wiener
Wiley

POOL 20

Bayley
Bollman
Browning
Czarnezki
Dahlgren
Farabee
Havera
Holland-Bartels
Kock
Moyer
Scott
USGS
Wiener
Wiley

POOL 21

Anderson
Bollman
Browning
Dahlgren
Farabee
Havera
Holland-Bartels
Koch
Moyer
Scott
Wiener

POOL 22

Anderson
Bollman
Browning
Czarnezki
Dahlgren
Farabee
Feavel
Havera
Holland-Bartels
Hong
Koch
Moyer
Scott
Wiener

POOL 24

Browning
Czarnezki
Dahlgren
Farabee
Havera
Holland-Bartels
Koch
Moyer
Scott
Wiener
Wolff

POOL 25

Bayley
Browning
Czarnezki
Dahlgren
Farabee
Havera
Holland-
Bartels
Koch
Moyer
Scott
Wiener
Wolff

POOL 26

Bayley
Browning
Czarnezki
Dahlgren
Farabee
Havera
Holland-
Bartels
Koch
Moyer
Scott
Wiener
Wolff

INDEX BY POOL - CONTINUED

POOL 27

Dahlgren
Moyer
Scott
Wiener

**Below Lock and Dam
27**

Hite
Keevin
Mahaffy & Young

Illinois River

Bhowmik
Cheng
Havlik
Ruelle
Schacht, Tucker
& Essig
Surprenant
Ross & Sparks

Headwater Stream

Hicks
Monson
Schlosser
Mahaffy & Young

Lab

Chilton

Other Tributaries

Chochran
Copes
Enblom
Havlik
Johnson
Lyons
NSPC
Weisbrod

St. Croix River

Heath

GLOSSARY

ASAL - Academy of Arts & Letters

B27 - Below Lock and Dam 27, Upper Mississippi River Miles 0-190.3

COE - U.S. Army Corps of Engineers

CRIC - Computer Resource Information Center

IA DNR - Iowa Department of Natural Resources

IL DOC - Illinois Department of Conservation

IL DOT - Illinois Department of Transportation

INHS - Illinois Natural History Survey

IR - Illinois River

LTRMP - Long Term Resource Monitoring Program

MN DNR - Minnesota Department of Natural Resources

MPCA - Minnesota Pollution Control Agency

MO DOC - Missouri Department of Conservation

MWCC - Metropolitan Waste Control Commission

NMFS - National Marine Fisheries Service

NPS - National Park Service

NSF - National Science Foundation

TRIBS - Tributary rivers and streams to the Upper Mississippi River

US EPA - U.S. Environmental Protection Agency

US FWS - U.S. Fish and Wildlife Service

USGS - U.S. Geological Survey

WI DNR - Wisconsin Department of Natural Resources

1990 SURVEY FORM - DUE FEBRUARY 1, 1990

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