



STATEWIDE TECHNICAL ASSISTANCE

JOB PERFORMANCE REPORT PROJECT FW-7-T-3

Subproject I, Job 1: Fisheries Program Coordination and Supervision
Subproject I, Job 2: Statewide Water Quality
Subproject I, Job No. 3: Water Quantity Investigation
Subproject I, Job No. 4: Statewide Technical Assistance
Subproject H, Job No. 1: Panhandle Region Technical Assistance
Subproject II, Job No. 2: Clearwater Region Technical Assistance
Subproject II, Job No. 3: Southwest Region Technical Assistance
Subproject H, Job No. 4: Magic Valley Technical Assistance
Subproject H, Job No. 5: Southeast Region Technical Assistance
Subproject H, Job No. 6: Upper Snake Region Technical Assistance

PERIOD COVERED: July 1, 1996 to June 30, 1997

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JOB PERFORMANCE REPORT

State of: Idaho

Name: STATEWIDE TECHNICAL
ASSISTANCE

Project No.: FW-7-R-3

Title: Statewide Supervision
and Coordination

Subproject No.: 1.

Job No.: 1

Period Covered: July 1, 1996 to June 30, 1997

ABSTRACT

During the contract period we continued consultation with Idaho Power Company (IPC) relicensing. Activities include design of protection, mitigation, and enhancement for Upper Salmon Falls, Lower Salmon Falls, and Bliss and study design for the three-dam Hells Canyon complex.

The State of Idaho has designed and implemented a bull trout conservation plan in response to a potential Endangered Species Act listing by the U.S. Fish and Wildlife Service. The plan uses a citizen involvement process which requires extensive coordination between agencies.

Author:

Will Reid
Fishery Program Coordinator

OBJECTIVES

To supervise and coordinate Idaho Department of Fish and Game (IDFG) policy regarding water quality, water quantity, aquatic habitat alterations, hydropower licensing, and conservation of aquatic habitats.

To appraise and provide technical assistance to the executive and legislative branches of state government in matters relating to aquatic environments.

METHODS

IDFG personnel review proposals to construct, modify, or relicense hydroelectric facilities throughout the State of Idaho. Based on the best scientific information available, we recommend to the Federal Energy Regulatory Commission (FERC) measures which will protect fish and wildlife habitat. Existing research and/or management reports provide the basis for most comments provided to the FERC. When data is lacking or outdated, we cooperate with the applicant to design studies which will assist the FERC in decision-making.

IDFG has the primary authority to manage all fish and wildlife in Idaho. Idaho Code specifically charged the IDFG to protect, preserve, and perpetuate those resources. As such, we serve as a consulting agency to other state agencies and review federal actions that may impact fish and wildlife habitat. We also assist private landowners in the design of land use practices where they may impact habitats.

As the statewide coordinator for habitat protection, I assist regional personnel to ensure compliance and consistency with IDFG policy regarding habitat protection and mitigation.

RESULTS

Federal Energy Regulatory Commission

IPC owns and operates eleven hydroelectric projects on the Snake River which inundate roughly 490 miles of the Snake River. Each of the IPC-owned projects require a license to operate from the FERC. Individual licenses will expire between 1997 and 2010. As part of the relicensing process, IPC must consult with the IDFG and others to design studies for the purpose of describing base-line conditions and to assist the FERC in the identification of protection, mitigation, and enhancement measures for fish and wildlife resources impacted by

the projects. The FERC must also identify cumulative impact issues associated with the projects and implement measures to mitigate.

Historically the Snake River, downstream of Shoshone Falls, supported anadromous chinook salmon, steelhead, and lamprey. Resident species included redband trout, white sturgeon (which may have exhibited anadromy), and a number of "non-game" species. European settlement along the Snake River has substantially altered the Snake River ecosystem, resulting in the decline of native species of fish. Anadromous salmon and steelhead have become extinct upstream of Hells Canyon Dam and white sturgeon populations exhibit declining numbers. Factors contributing to the decline of Snake River aquatic resources include dam construction for hydroelectricity and irrigation, depleted flows, alteration of the hydrograph for flood control and irrigation storage, and poor water quality. Through relicensing, the IDFG seeks to mitigate the loss of aquatic resources resulting from hydroelectric development, and initiate recovery of remaining native species.

The Shoshone Falls Project was constructed on a natural migration barrier on the Snake River at river mile 615. Twin Falls, another natural migration barrier, lies immediately upstream of Shoshone Falls. Due to its location between two natural barriers, few if any impacts have occurred to aquatic resources.

Upper Salmon Falls Dam lies 35 miles downstream of Shoshone Falls at river mile 580. At river mile 573, Lower Salmon Falls Dam backs water up to the Upper Salmon Falls Dam. Bliss Dam sits on the Snake River at river mile 560 with about seven miles of river between Lower Salmon Falls Dam and Bliss Reservoir. Within the area of impact of the three projects, the Snake Plain Aquifer discharges in excess of 5,000 cfs of water into the Snake River. The Snake Plain Aquifer essentially renews the flow of the Snake River during the summer irrigation period after depletion by upstream U.S. Bureau of Reclamation irrigation reservoirs.

IPC has submitted license applications for the Shoshone Falls, Upper Salmon Falls, Lower Salmon Falls, and Bliss projects. The State of Idaho, in collaboration with other interests, have started negotiations with IPC in an effort to reach a settlement on a mitigation package.

At the C.J. Strike project IPC has completed resource studies. Mitigation and land use discussions between IPC and resource agencies have started. Through a collaborative team process, IPC and all interested parties have completed a study design for relicensing of the Hells Canyon Complex.

Conservation Planning

Efforts have continued to provide assistance to "Basin Area Groups" and "Watershed Advisory Groups" as established under Idaho Water Quality regulations. The "Idaho

approach" utilized local citizen groups to design management practices to alleviate water quality problems. IDFG staff participate as technical advisory team members.

The Idaho Conservation Plan for Bull Trout follows a format similar to water quality. The bull trout plan calls for the formation of watershed advisory groups that will focus on bull trout recovery.

Water Quality

During the contract period, I continued coordination with the Idaho Division of Environmental Quality (DEQ) to implement the State of Idaho water quality protection measures. The IDFG assists the DEQ by providing habitat needs of the fish and wildlife resources dependent on water quality.

JOB PERFORMANCE REPORT

State of: Idaho

Name: STATEWIDE TECHNICAL
ASSISTANCE

Project No.: FW-7-T-3

Title: Statewide Water Quality

Subproject No.: 1

Job No.: 2

Period Covered: July 1, 1996 to June 30, 1997

ABSTRACT

During the project year I was involved with a number of different agencies in an effort to maintain habitat for aquatic resources. This involved two major hydropower relicensing efforts in the State of Idaho, as well as making comments on numerous other hydropower proposals. I was also involved in a number of work groups relating to water quality activities.

Author:

John T. Heimer
Fishery Staff Biologist

OBJECTIVES

To provide technical assistance to agencies in matters relating to fish and wildlife habitat and water quality. The majority of my time was taken up in providing information regarding the effects of specific hydropower projects on fish and wildlife resources.

METHODS

I worked on two major hydropower relicensing efforts in Idaho this past year. One was by PacifiCorp on the Bear River in southeastern Idaho and the other by Washington Water Power on the Clark Fork River in northern Idaho and western Montana. More specifics about each are as follows:

RESULTS

Bear River Relicensing by PacifiCorp

PacifiCorp operates four hydroelectric facilities on the Bear River having licenses which will expire in the year 2001. These facilities are Soda, Grace, Cove, and Oneida. Studies to evaluate flows downstream from these projects in regards to hydropower production, irrigation demands, boating, fish populations, and angling activity are being conducted.

After much discussion and studies, it appears that a flow of 150 cubic feet per second (cfs) of water downstream from Soda Reservoir will be agreed to. Flows in the Black Canyon will depend on the completion of fish movement and boating studies. Flows between the Grace Dam and Cove Plant may be augmented by adjacent springs. Downstream from Oneida Dam weekend angling flows, minimum flows for fish, acceptable boating flows, ramping rates, and streambank erosion losses are being evaluated.

PacifiCorp is using a conventional approach to relicensing. Through their consultants they have set up a Delphi Process to arrive at a consensus on various items as information regarding these items becomes available. This Delphi Process uses a Delphi Team, made up of individuals representing different groups, to discuss issues and hopefully arrive at a consensus regarding them.

Clark Fork River Relicensing by The Washington Water Power Company

The Washington Water Power Company (WWPC) operates Noxon and Cabinet Gorge dams on the Clark Fork River in western Montana and Idaho, respectively. These dams will require a new license for their operation by the year 2001. A number of studies from the standpoint of relicensing have been conducted, others are ongoing and more is proposed. Issues faced regarding this relicensing process and studies being conducted regarding them relate to the loss of islands in the Clark Fork Delta, fish connectivity at Cabinet Gorge Dam, and power peaking (load following) in the Clark Fork River downstream from Cabinet Gorge Dam.

The WWPC is using an applicant-prepared environmental assessment process. This process allows the Federal Energy Regulatory Commission (FERC) to be involved from the beginning and to keep in step with project developments. Small work groups, made up of individuals with interest in that specific matter, review ongoing studies, propose new ones, and develop project mitigation and enhancement measures. The main work group (Relicensing Team) reviews these measures and determines how to proceed.

Other FERC Coordination

We made comments on 51 hydroelectric projects requiring a FERC status change in Idaho during 1996. These comments are often the results of a request to change the operating procedures specified in the FERC license.

Other Activities

During the year I served on other committees and provided input on fish and wildlife issues. These included the Mining Advisory Committee coordinated by the Idaho Department of Lands, the Slide Recovery Task Force coordinated by the Bureau of Disaster Services, the Water Quality Committee of the Natural Resource Conservation Service, and the Education Subcommittee of the Water Quality Committee.

OBJECTIVES

To prepare recommendations for minimum stream flows for selected streams statewide; to coordinate the IDFG participation in the SRBA; and to solicit and prepare IDFG comments on water quantity issues that may impact fish, wildlife, and aquatic habitat.

RESULTS

Instream Flow Program

Northern Idaho Rivers

In 1996, at the request of their director, the IDWR postponed several scheduled public hearings for the St. Joe, St. Maries, Pend Oreille, and Clark Fork rivers instream flow applications. He had questions regarding the validity of the Tennant Method to establish instream flow regimes. I provided an estimate of costs and time to conduct Instream Flow Incremental Methodology (IFIM) studies on the four rivers for the director's and Idaho Water Resource Board (Board) consideration. After considering the expense and time needed to conduct site specific studies, IDWR decided to proceed with the applications as they were. The hearings for the rivers was reset for July 1997. I provided testimony in support of the requested flows at those hearings. Minimum stream flows have been approved by IDWR for the St. Joe, St. Maries, and Pend Oreille rivers. These permits will be submitted for legislative review and approval in January 1998. Action was postponed on the Clark Fork River application because of pending negotiations over the relicensing of the Cabinet Gorge Dam hydropower project.

Upper Boise River Basin

Hearings to approve instream flow recommendations for the Middle Fork Boise, Crooked, and Yuba rivers were held in October 1996. I presented flow and fisheries data in support of the recommendations at the hearing. IDWR approved the permits in November, and the permits received final legislative approval in March 1997. Water right licenses for the minimum flows have been issued.

North Fork Payette River

The Big Payette Lake Water Quality Council (Council) identified the North Fork Payette River between Big Payette and Upper Payette lakes as an important waterway providing rearing and spawning habitat for rainbow trout and kokanee salmon. The quality and quantity of habitat is affected by flows in the river (Big Payette Lake Management Plan and Implementation Program, unpublished draft, 1997). The Lake Reservoir Company holds storage rights to 3000 acre-feet in Upper Payette Lake, and this water is used for irrigation downstream near the towns of Emmett and Payette. Releases of storage water affect the flow of the river between the two lakes.

Regional personnel and I undertook an IFIM study in 1996 to determine the necessary flow in the river to support adequate spawning, rearing, and passage habitat for trout and kokanee. A more detailed technical report, describing the techniques, results, and recommendations will be available in October 1997. The report recommends that a flow of 60 cfs at the USGS gauging station, located near the mouth of Fisher Creek, be provided to maintain the fisheries resources in the river above Big Payette Lake. In order to maintain a flow of 60 cfs at the gauge, a release of 35 cfs from Upper Payette Lake is needed. The Council recommended the Lake Reservoir Company consider the release as part of their ongoing water management. The Council understands that availability of water to meet the minimum flow is subject to annual water supply, irrigation demands, and potential impacts on downstream water users.

Instream Flow Workshops

I participated in the National Instream Flow Program Assessment conference in Denver, Colorado in March 1996. The conference brought together all the states' instream flow program coordinators to discuss their respective state programs, successes, and problems in securing instream flow water rights. The conference attendees also spent considerable time discussing the Public Trust Doctrine and its application to instream flow issues. Case histories were presented by several speakers detailing how the doctrine has been used to protect instream values. The conference allowed the program coordinators to network with their counterparts in neighboring states and discuss common issues and problem resolutions.

I also was invited to present an overview of Idaho's instream flow program at the Western Water Conference in Gunnison, Colorado in August 1996. I was one of several states' representatives to discuss the status of instream flow programs throughout the west and midwest. Conference attendees included lawmakers, water right attorneys, conservationists, state and federal agency personnel, and water users from many western and midwestern states.

Buck Creek Investigations

Buck Creek is a fourth-order tributary to Canyon Creek in the Little North Fork Clearwater River drainage. In 1990, IDFG acquired fee-simple title to approximately 4,800 hectares of land in the Canyon Creek and Spotted Louis Creek drainages from Plum Creek Timber Corporation. IDFG acquired timber rights on all the land except for Section 11, which encompasses most of the headwaters of Buck Creek. The DAW Forest Products Company purchased the timber rights from Plum Creek and entered into a timber management agreement with IDFG in the spring of 1991. Logging began in the summer of 1991.

Beginning in 1990 and continuing through 1997, IDFG has collected data to determine baseline status and post-logging impacts on fish populations and habitat conditions. The objectives of the study, descriptions of the reaches, techniques used, and initial findings have been previously reported (Reid et al. 1992 and 1996). Snorkel counts were not made in 1992, 1994, and 1995 either because of work schedule conflicts or weather and/or fire conditions.

Westslope cutthroat trout (*Oncorhynchus clarki*) has been the only game fish observed in the stream and average transect densities (fish per 100 square meters) has ranged from 0.2 in 1991 to 60.7 in 1990 (Table 1). More YOY (young-of-the-year) fish were observed in 1996 and particularly in 1997 than in previous years. Snorkeling was conducted in early August in 1997, while previous counts generally had been made in mid to late July. Average densities of cutthroat by reach were lower in 1997 than in previous years except for 1991 (Table 2). Counts in 1991 were conducted in early July, while in 1993, 1996, and 1997 data were collected in late July or early August. Densities of cutthroat were highest in 1990 when counts were made in late August. Differences in densities may be related to downstream movement of fish during late summer, as documented in other northern Idaho streams (Johnson and Bjornn, 1975; Thurow and Bjornn, 1975). Additionally, the lower densities observed in 1997 may be due to observed habitat changes in Buck Creek. I believe these changes may be the result of a large, early winter flood event. While no habitat measurements were made, we observed that in places the channel appeared to be full of sand, gravel, and debris, causing excessive channel braiding and pool filling. Prior to 1997, it did not appear that significant changes in instream and riparian habitat had occurred. Additional habitat measurements should be made in future years to compare to those made in 1991 to determine the extent of the observed changes. The differences in numbers of fish observed could also have been due in part to inclement weather (overcast skies and rain), making observations difficult, and an inexperienced snorkeling crew.

Densities of cutthroat in Buck Creek compare favorably with other streams in the Little North Fork Clearwater River drainage (Table 3) and based on the five years of data collected, it appears that the logging in the upper drainage has not had a significant adverse effect on cutthroat populations.

Table 1. Westslope cutthroat trout densities (fish/100m²) by size class, reach, and transect observed in Buck Creek from 1990-1997.

Fish Size Class (mm)						
Year	Reach	Transect	0-50	51-100	101-150	150+
1990	1	1	--	1.9	13.6	11.6
		2	--	1.9	11.5	12.4
	2	3	--	1.6	6.4	8.0
		4	--	2.2	5.6	3.3
		5	--	7.3	14.6	38.8
	3	6	--	4.3	12.9	25.9
		7	--	3.3	9.8	21.2
		8	--	4.1	3.3	2.5
		9	--	--	--	13.5
		10	--	--	6.9	6.9
		11	--	4.2	--	8.5
		12	--	--	--	3.8
1991	1	1	--	--	--	3.0
		2	--	14.3	--	9.5
		3	--	2.1	4.6	8.3
		4	--	--	--	0.2
		5	--	--	1.3	0.7
		6	--	--	13.3	20.0
	2	7	--	--	1.1	1.1
		8	--	--	--	14.6
		9	--	--	--	3.5
		10	--	--	1.0	4.2
		11	--	1.1	2.2	6.6

Year	Reach	Transect	0-50	51-100	101-150	150+
1991	3	12	--	--	1.7	18.3
		13	--	--	0.7	2.7
		14	2.3	--	2.3	7.1
	4	15	--	--	5.0	15.0
		16	--	--	--	2.7
		17	--	--	--	27.1
		18	--	--	17.0	67.0
19	--	--	5.0	37.1		
1993	1	1	--	--	3.1	--
		2	--	9.1	11.4	13.6
		3	--	3.5	4.8	1.2
		4	--	--	1.2	--
		5	--	0.8	--	--
		6	--	12.6	23.2	8.4
		7	--	1.3	--	--
		8	--	13.0	19.5	--
		9	--	8.7	8.7	4.9
		10	--	3.3	5.0	3.3
		11	--	4.4	3.0	4.4
		12	--	3.7	3.7	4.4
		13	--	7.8	--	10.4
	2	14	--	0.5	--	--
		15	--	4.1	6.1	8.1
		16	--	7.8	3.9	--
		17	--	11.6	14.5	--
		18	--	9.8	9.8	5.9

Year	Reach	Transect	0-50	51-100	101-150	150+
1993	2	19	--	10.4	17.3	8.7
		20	--	21.1	17.6	10.6
	3	21	--	7.1	7.1	--
		22	--	1.5	2.2	2.2
		23	--	7.9	7.9	2.6
1996	1	1	2.4	0.8	3.2	12.11
		2	0.5	--	--	--
		3	3.2	3.2	--	--
		4	--	0.8	3.8	3.8
		5	6.5	--	1.6	9.8
		6	--	2.3	4.5	12.5
		7	--	--	--	26.8
	2	8	0.9	4.2	1.4	5.1
		9	1.1	0.1	1.1	6.5
		10	--	6.4	4.3	6.4
		11	--	--	7.3	17.5
		12	--	2.8	8.5	2.8
		13	--	--	--	12.4
		14	--	--	17.4	26.1
	3	15	--	--	1.8	5.3
		16	--	--	2.8	14.0
		17	--	--	5.2	17.2
		18	--	--	3.4	20.5
		19	--	--	2.7	13.5
1997	1	1	--	--	--	--
		2	3.7	1.7	--	--

Year	Reach	Transect	0-50	51-100	101-150	150+
1997	1	3	--	3.5	8.1	--
		4	3.1	--	9.2	--
		5	3.5	5.3	--	--
	2	6	2.3	3.8	0.8	--
		7	0.6	5.0	4.4	0.6
		8	7.0	--	12.8	5.8
		9	3.0	6.0	4.5	--
		10	5.6	1.1	--	--
		11	3.8	3.8	--	--
	3	12	2.6	3.9	7.8	1.3
		13	--	14.6	10.9	--
		14	--	2.6	6.5	1.3
		15	1.6	1.6	4.6	1.6
		16	11.3	8.5	8.5	2.8
		17	1.7	3.4	6.9	--
		18	1.3	1.3	1.3	--

Table 2. Average westslope cutthroat trout densities (fish/100m²) in Buck Creek by reach and year.

Reach No.	Year				
	1990	1991	1993	1996	1997
1	26.6	6.9	14.4	14.0	6.6
2	23.4	5.4	13.7	15.2	10.3
3	17.5	8.7	14.9	16.6	13.0
4	--	18.5*	--	--	--

*The only year that reach 4 was snorkeled was 1991.

Table 3. Comparison of densities estimates (fish/100 m²) for westslope cutthroat trout in Buck Creek and other tributaries in the Little North Fork Clearwater River drainage, 1990-1997.

Stream	Year	Density
Buck Creek	1990	22.5
	1991	7.3
	1993	14.3
	1996	15.3
	1997	10.0
Adair Creek	1991	4.0
Rutledge Creek	1991	8.0
Twin Creek	1991	11.0
Spotted Louis Creek	1991	21.0
Montana Creek	1991	17.0

Snake River Basin Adjudication

Several pending issues in the Snake River Basin Adjudication (SRBA) were addressed during 1996 and 1997. IDFG resolved disputes over two water rights on the Hagerman Wildlife Management Area. One dispute involved our claimed use of water for fish/wildlife ponds that was originally denied by IDWR. A field tour of the area resolved the concerns that IDWR had, and they subsequently recommended the right as it was originally claimed. A second dispute regarding water use among IDFG, the Brailsford Ditch Users Association, and the U.S. Fish and Wildlife Service was also resolved. A settlement agreement detailing period of use and amount of use was signed by the parties and accepted by IDWR and the SRBA Court in late 1996.

Other issues before the SRBA Court included how to recommend enlarged water rights under the 1994 statutes and whether a right could be partially forfeited or abandoned. For enlarged rights, IDWR proposes to split water rights into two parts--the original portion and an enlarged portion. The original portion will retain the original priority date, while the enlarged portion will have a new priority date, i.e., the date the enlargement of water use actually occurred. Further, the enlarged portion will be subordinate to other rights from the same source that were issued prior to April 1994 that may be injured by allowing the enlargement, and for which no previous claim has been filed. IDFG has several rights that have been recommended as enlarged water rights that will be subject to this subordination clause. In all cases examined so far, the impact of the decision makes no practical difference in amount of water delivered to those rights.

The SRBA Court ruled in April 1996 that partial forfeiture of a water right for non-use was not allowed under Idaho statutes. The SRBA Court construed the forfeiture statute (I.C. 42-222) to mean that forfeiture of a water right applied to total sum of the water right, not just a portion. The ruling was appealed to the Idaho Supreme Court in August 1996. The Supreme Court recently overturned the lower court ruling. They said that while the code did not explicitly address partial forfeiture, case law and past Supreme Court rulings implied the concept was a recognized practice, and in fact, was integral to the goal of securing maximum use and benefit of the state's water resources, and is necessary to the economical use of water in the state.

Throughout 1996 and early 1997, I continued to participate as a member of a state technical team in negotiations with federal agencies and Indian tribes regarding their claims in the SRBA. Discussions among technical team members focused on methods of determining instream flow needs for fish habitat and channel maintenance. Issues not related to the technical team caused the formal negotiations to break down in April 1997, and the parties are now pursuing litigation.

Department Water Right, Protests, and Water Planning

I worked with regional staff on eight water right protests during 1996. Six of the protests have been resolved while two are awaiting action by IDWR. Regional personnel are working hard to meet with water right applicants to resolve our concerns before protests are filed; generally, they are successful.

I also reviewed and coordinated IDFG comments with regional staff on the updated State Water Plan, the South Fork Snake River Basin Plan, and the Eastern Snake Plain Aquifer Plan. We worked closely with IDWR staff to incorporate fish and wildlife concerns into the various plans and identify streams within the respective basins for instream flow studies. I provided a draft write-up for the State Water Plan to IDWR staff discussing impacts of water allocation on fish and wildlife habitat. It was not included in the final document.

LITERATURE CITED

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- Reid, W., J.T. Heimer, and C. Robertson. 1992. Statewide Technical Assistance. Federal Aid to Fish and Wildlife Restoration, Job Performance Report, Project F-82-T-1&2.
- Reid, W., J.T. Heimer, C. Robertson, M. Beucler, C.E. Corsi, S.A. Grunder, D.E. Parrish, J. Lukens, and B. Martin. 1996. Statewide Technical Assistance. Federal Aid to Fish and Wildlife Restoration, Job Performance Report, Project FW-7-T-2, Subproject I, Job No. 3: Water Quantity Investigations, IDFG.
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JOB PERFORMANCE REPORT

State of: Idaho

Name: STATEWIDE TECHNICAL
ASSISTANCE

Project No.: FW-7-R-3

Title: Statewide Responsive
Management

Subproject No.: I

Job No.: 4

Period Covered: July 1, 1995 to June 30, 1997

ABSTRACT

Responsive Management staff was involved in collecting and disseminating information, processing information requests, and providing technical services to both Idaho Department of Fish and Game (IDFG) and non-IDFG folks. A regular contribution, called "Keeping Track," to the *Idaho Wildlife* magazine began in the spring 1997 issue. Questionnaires were developed for the IDFG Natural Resources Information Team, our Southeast region, and The Wildlife Society's Native Peoples' Wildlife Management Working Group. The Socio-economics Committee concluded that the primary barrier to better use of socio-economic data is the lack of a dedicated program and staff rather than the lack of information. Currently, only one full-time equivalent is dedicated to human dimensions.

According to the 1996 and 1997 Idaho Public Policy Surveys, one-third of Idahoans have hunted in the past two years, three-fourths support IDFG acquiring lands for habitat protection and access, and three-fifths support the Teaming With Wildlife concept. In general, hunters and non-hunters shared similar opinions regarding motorized off-road vehicle use on closed roads during hunting seasons. Only one in five Idahoans would oppose the mandatory use of hunter orange.

Author:

Michele Beucler
Wildlife Mitigation Specialist

OBJECTIVES

To monitor the state's demographics, economic trends, and public opinions regarding fish and wildlife so that the human element can be integrated into IDFG regulations, policies, and "way of doing business."

To provide information and technical assistance to staff members regarding surveys, public involvement strategies, and other human dimensions projects.

METHODS

New information on human dimensions was collected through personal contacts, information requests, attending meetings and conferences, and reviewing literature. I also subscribe to a peer-reviewed journal and three list serves relating to the human dimensions of fish and wildlife management.

Information was disseminated by responding to verbal and written requests, circulating pertinent information to appropriate people, providing factoids for the *Idaho Wildlife* magazine, and giving presentations to various teams.

Technical services, such as developing questionnaires, were provided upon request and/or when needed.

I coordinated our agency's involvement with the 1996 and 1997 Boise State University Public Policy Survey. In 1996, the Wildlife Bureau sponsored questions regarding Teaming With Wildlife, the black bear hunting initiative, and public support for department-owned lands. In 1997, the Wildlife Bureau sponsored several questions regarding off-road vehicle use during hunting seasons, and the Information and Education Bureau sponsored a question regarding mandatory use of hunter orange.

I participated in the Socio-economics Committee that was formed by the Idaho Department of Fish and Game Commission (Commission) to evaluate six specific recommendations from the *1994 Study of the Idaho Department of Fish and Game*.

RESULTS

I developed a questionnaire for the IDFG Natural Resources Information Team needs assessment, and I developed follow-up questions for our Southeast region to evaluate the effectiveness of advertising a radio auction. I also developed a questionnaire for a survey of The Wildlife Society's Native Peoples' Wildlife Management Working Group members and summarized the results for the executive board.

Approximately 60 percent of Idahoans would support Teaming With Wildlife, and 74 percent support allowing IDFG to continue to purchase property for wildlife habitat and access (Willmorth et al. 1996). Approximately one-third of Idahoans hunted in the last two years (Scudder 1997). Only one in five Idahoans would oppose the mandatory use of hunter orange. Most Idahoans, hunters and non-hunters alike, would support access by non-motorized vehicles, pack stock, and foot traffic during road closures. Likewise, more than two-thirds would oppose access by off-road vehicles during road closures. Over two-thirds of Idahoans would support restrictions of off-road motorized vehicles in certain game management units, by type of vehicle used, by the number of vehicles, and hours of use, but not by restricting firearm transport. About 60 percent of Idahoans appear to support trading off easy access by motorized vehicles for more mature animals and longer hunting seasons.

The Socio-economics Committee submitted a report to the Commission with three consistent themes: 1) The primary barrier to better use of socio-economic data is a dedicated program and staff rather than lack of information; 2) The Commission should establish clear policy and objectives for dealing with outdoor recreation; and 3) The IDFG should do a much better job of documenting and communicating the social and economic impacts of fish and wildlife management decisions (IDFG 1997).

I responded, usually in a timely manner, to miscellaneous tasks such as processing information requests, completing the Wildlife Management Institute's questionnaire regarding animal rights activities, and compiling economic information to be presented at the Western Association of Fish and Wildlife Agencies (WAFWA). I presented a summary of Idahoans' opinions and attitudes towards fish and wildlife issues to upper-level managers who were evaluating the structure and function of the IDFG. I worked with our magazine editor to develop a regular contribution, called "Keeping Track," to the *Idaho Wildlife* magazine beginning with the spring 1997 issue (Beucler 1997).

I attended the Organization of Wildlife Planners 1996 annual meeting in Bloomington, Indiana. Topics included "the end of bureaucracy and the rise of the intelligent organization," performance measures and cost-accounting methods, conflict resolution, management effectiveness, and issue management. Topics at the 1997 annual conference in Charleston, South Carolina, included marketing in a fish and wildlife agency, the Cultural Audit Process (agency culture). Conference materials were routed to IDFG bureau chiefs, regional

supervisors, and other personnel who had an interest. Currently, I am the program chair of the planning committee for the 1998 annual conference in Idaho.

RECOMMENDATIONS

With additional staff time and program dedication, a "Human Dimensions" team could be established to enhance the collection, dissemination, and application of human dimensions information.

A reference/cataloging system could be developed that would greatly improve the accessibility of human dimensions information.

LITERATURE CITED

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Scudder, D. F. 1997. Idaho public policy survey, number eight. Social Science Research Center, Boise State University, Boise, Idaho. 54pp.

U.S. Fish and Wildlife Service. 1995. 1994 study of the Idaho Department of Fish and Game. U.S. Fish and Wildlife Service, Division of Federal Aid, Management Assistance Team. Fort Collins, CO.

Willmorth, M.J., P. Davis Hyle, and D. F. Scudder. 1996. Idaho public policy survey, number seven. Social Science Research Center, Boise State University, Boise, Idaho. 50pp.

JOB PERFORMANCE REPORT

State of: Idaho Name: STATEWIDE TECHNICAL ASSISTANCE

Project No: FW-7-T-3 Title: Panhandle Region Technical Assistance

Subproject No: II Job No: 1

Period Covered: January 1, 1996 to December 31, 1997

ABSTRACT

During the project year, I provided comments on 310 issues, developments, or proposals which would potentially affect fish and wildlife habitat in the Panhandle Region. In addition, I attended 205 meetings or site visits. Forest management, stream and lakeshore alterations, and land development issues required the greatest amount of time and effort. Major emphasis was placed on addressing flood-related problems, participation in Washington Water Power relicensing activities, and on Idaho Department of Lands and U. S. Forest Service timber sale programs. I also worked cooperatively with fish management staff on fish data collection efforts in order to improve the knowledge base on which to base comments.

The estimated number of juvenile bull trout in Trapper Creek declined again in 1996--probably a reflection of the weak year class I observed in 1995 when numbers of YOY (young-of-the-year) were low. Numbers of YOY bull trout were low again in 1996.

Author:

Chip Corsi
Environmental Staff Biologist

OBJECTIVES

1. Influence land use decisions in the Panhandle Region to protect or improve fish and wildlife habitat.
2. Provide other agencies, organizations, or individuals with technical guidance, assistance, advice, or comments on projects, and activities or developments which might affect or are associated with fish and wildlife habitat in the region.
3. Comment on NEPA documents, Federal Energy Regulatory Commission (FERC) documents, stream channel and lakeshore alteration proposals, land use planning, and other environmental impacts.
4. Coordinate with other Idaho Department of Fish and Game (IDFG) personnel and volunteers to meet workload demands. Continue to seek opportunities to improve monitoring and baseline data collection abilities, and conduct field reconnaissance of project sites to improve the quality of responses.
5. Continue to work closely with other agencies, the public, and industry representatives to prevent or reduce impacts to fish and wildlife.

METHODS

I used personal contacts, project and document review, and field inspections as a basis for providing technical guidance on projects, activities, or proposals which could affect fish and wildlife resources in the Panhandle Region. I used electrofishing and direct observation to obtain data on fish populations.

RESULTS

During the project year, I provided written comments on 310 habitat-related issues. In addition, I attended 205 meetings or site visits to review problems or examine proposals and projects (Table 1). As in previous years, the greatest number of contacts were with Idaho Department of Lands (IDL), Idaho Department of Water Resources (IDWR), the U. S. Forest Service (USFS) and on city or county planning and zoning issues. The overall number of

Table 1. Summary of technical assistance contacts by Panhandle Region Environmental Staff Biologist during the period January 1996 through December 1996.

Agency /Group	Written	Meetings/Site Visits	Total
US Forest Service	59	16	75
Idaho Department of Lands			
-Timber	17	5	32
-Navigable Waters	35	3	38
-Mining	2	1	3
Idaho Department of Water Resources	64	17	81
US Army Corps of Engineers	11	10	21
City/County Planning and Zoning	27	9	36
Bureau of Land Management	9	1	10
Division of Env. Quality	3	7	10
Coeur d'Alene Basin Groups	3	8	11
FEMA	1	0	0
Idaho Transportation Department	2	3	5
US Armed Services	2	1	3
Fed. Highway Admin.	1	0	1
US Fish and Wildlife Service	1	2	3
Clean Lakes	2	2	4
Utilities/FERC	8	19	27
Panhandle Area Council	4	0	4
Nat. Res. Cons. Service	3	6	9
Media	0	6	6
School/Conservation/Sportsmen Groups	6	17	23

Agency /Group	Written	Meetings/Site Visits	Total
Individuals	6	14	20
County Road and Bridge Depts.	5	3	8
Other States/Provinces	1	2	3
In House	16	28	44
Developers	3	3	6
University	0	1	1
Chamber of Commerce	0	1	1
Totals	310	205	515

contacts dropped from previous years despite an increase in the number of IDL and USFS timber sales reviewed from 1994 to 1995. Due to severe flooding during the winter of 1995-1996, stream channel alterations, both legal and illegal, required a significant amount of time to document and/or provide technical assistance on. The relicensing process for Washington Water Power's (WWP) lower Clark Fork River projects was initiated in 1995, and in 1996 took off in earnest. I am currently participating in the Fisheries and Water Quality working groups, and help out on the Loss Statement and Plenary groups.

IDL foresters continue to be receptive to IDFG comments on habitat issues. I work closely with the IDL fisheries biologist on identifying migration barriers, defining Class I streams, and other issues.

Timber harvest planning on USFS-managed lands began to increase in late 1996 in response to the Rescissions Act. Considerable salvage activity occurred but was confined primarily to activities along existing roads, and some road obliteration or decommissioning will occur at the close of sales. The net result will be a reduction in road mileage. Flooding in early December 1995, and subsequently in February and April of 1996 resulted in serious damage to several road systems and watersheds around the Forest, and much of the damage cannot be fully assessed at this time. A considerable amount of my 1996 workload was focused on flood damage repair both on and off of the Forest.

Reconstruction of Forest Highway 9 from Murray to Thompson Pass began in 1995 and continued through 1996. Mitigation includes conversion of old tailings piles to wetlands and a fish pond. Fish pond development is a high priority in the Coeur d'Alene River corridor as it will allow for a publicly acceptable way to eliminate stocking of the river and allow focus on

management for wild trout and their habitat. An initial effort at developing the fish pond was damaged by winter flooding, but the pond is being rebuilt and should be ready in 1997.

Major issues identified by the IDFG for the relicensing of the WWP projects include fish passage, flow management below the Cabinet Gorge Dam, water temperature, sediment transport, and the effect of the dams and flows on island formation and erosion in the Clark Fork Delta. WWP has taken a collaborative approach to relicensing, with Idaho and Montana state agencies, federal agencies, Indian tribes, and non-governmental organizations participating. During 1996, several study needs were identified by the work groups, and studies commenced in 1996 and continue into 1997. High levels of nitrogen gas saturation were documented as a result of the high runoff in the Clark Fork during 1996, and their potential impact on the fishery will be evaluated in 1997.

The IDFG continues to provide technical input on restoration activities associated with the clean-up of mine waste in the Coeur d'Alene basin.

Monitoring in Trapper Creek (Upper Priest Lake tributary) showed bull trout continuing to persist although numbers of YOY were low again in 1996, and densities were the lowest yet recorded (Tables 2 and 3). Estimated cutthroat trout numbers were similar to those found in 1995 at all three sampling sites (Table 2). Five bull trout redds were counted in 1995, compared with four in both 1993 and 1994 and two in 1995. The low and apparently volatile numbers of bull trout in Trapper Creek are likely indicative of a population at risk (Rieman and McIntyre 1993).

Table 2. Estimated densities of bull trout and westslope cutthroat trout (fish/ 100m²) from Trapper Creek sampling sites.

Species	Location	Year					
		1991	1992	1993	1994	1995	1996
Cutthroat	Below E. Fork	4.3	3.8	1.3	4.5	3.8	4.8
	Above Lower Bridge	5.1	3.0	4.5	8.3	3.7	2.9
	East Fork	*	14.6	13.2	20.5	21.4	13.6
Bull Trout	Below E. Fork	5.1	3.0	4.5	8.3	8.7	2.9

Table 3. Population estimates by size class for various size classes (in mm) of bull trout collected from the lower Trapper Creek site, Upper Priest Lake drainage, Idaho.

Year	Population Estimate (95% CI)		
	30-79	80-139	> 139
1992	12 (0≤N≤19)	24 (9≤N≤33)	1 (N/A)
1993	36 (29≤N≤44)	15 (8≤N≤22)	1 (N/A)
1994	63 (22N103)	37 (22sNs53)	0
1995	5 (3≤N≤7)	38 (29≤n≤47)	1 (N/A)
1996	10 (±0)	24 (24≤N≤25)	1 (N/A)

LITERATURE CITED

Rieman, B. E., and J. D. McIntyre. 1993. Demographic and habitat requirements for conservation of bull trout. U.S. Forest Service, General Technical Report INT-302.

JOB PERFORMANCE REPORT

State of: Idaho

Name: STATEWIDE TECHNICAL ASSISTANCE

Project No: FW-7-T-3

Title: Clearwater Region Technical Assistance

Subproject No: II

Job No: 2

Period Covered: July 1, 1996 to June 30, 1997

ABSTRACT

During the 1996 project year, comments and technical input were provided on proposals, issues, and developments that might affect fish and wildlife resources in the Clearwater Region. The primary issues were US Forest Service (USFS) and Idaho Department of Lands (IDL) project proposals and timber sales, input and site visits to stream alteration proposals, and projects in the lower Clearwater River system, developing habitat maps and protection in Latah County, working on the outfitter allocation team, internal coordination and information gathering, working on Idaho Department of Transportation road improvement projects, commenting on community development projects, updating the wildlife surveys protocol manual, and continuing work on USFS-Idaho Department of Fish and Game (IDFG) draft elk guidelines.

Authors:

Gregg Servheen
Natural Resource Staff Biologist

Wildlife Biologists
Jay Crenshaw, Steven Nadeau, Frances Cassirer, George Pauley, and Jim White

Fisheries Biologists
Jody Brostrom, Ed Schriever, Tim Cochnauer

OBJECTIVES

1. Provide fish and wildlife technical assistance and information to state, federal, and local government agencies.
2. Coordinate IDFG input on proposed developments, mitigation, and impacts to fish and wildlife resources.
3. Provide written responses and documentation on IDFG positions and policy related to local fish and wildlife issues.
4. Provide internal input and comment on how IDFG policies, rules, regulations, and positions will affect other natural resource management agencies and private elements.
5. Support IDFG fish and wildlife management efforts by participating in fish and wildlife surveys and interdisciplinary teams.

METHODS

Letter and document review; meetings, personal, e-mail, and phone contacts; written responses; and field inspections were used to provide fish and wildlife input and internal coordination.

RESULTS

Fish and wildlife biologists of the Clearwater Region of the IDFG provide technical comment and consultation for fish and wildlife conservation on IDL timber sales; USFS trail, landscape, and access projects; Idaho Department of Water Resources (IDWR) stream protection advisory group, stream alteration permits, and water rights; city and county road and municipal improvement projects; U.S. Army Corps of Engineers (COE) stream protection permits and dredging projects; county planning; and private industry.

PROJECTS OF NOTE

Interagency Leadership Team

Continued participation and promotion of the Interagency Leadership Team. This team, initiated under the Venture 20 project, consists of the Forest and Regional Supervisors of the Clearwater National Forest, the Nez Perce National Forest, the IDFG, and the Bureau of Land Management (BLM). The team coordinates the actions of their respective agencies and provides a forum for resolving technical and policy differences between the agencies. In its most recent form, it has developed into a Level 1 consultation team providing fish and wildlife impact assessment, adjustment, and mitigation to all USFS and BLM projects. Although it is difficult to maintain a consistent schedule, this coordination effort has provided a "no surprises" approach between the agencies.

County Planning

The IDFG began working in Latah County to protect riparian areas, watershed values, nongame species, forested and shrubfield areas, and native prairie habitats as they revised county planning and zoning. The IDFG worked with Anne Black, a graduate student at the University of Idaho's Landscape Dynamics Lab, to devise a way to define and map important fish and wildlife habitats in Latah County using Geographic Information Systems (GIS) information provided through the Idaho GAP analysis project, Idaho Conservation Data Center, and the University of Montana's Wildlife Spatial Analysis Lab.

The GIS information and capability has provided a way to define and map wildlife conservation areas and priorities within the context of county planning. The mapping and language are currently still in development. This cooperative effort needs to be expanded to provide the IDFG a comprehensive approach to natural resource protection at the county level and a management application of the conservation models provided by the GAP analysis project, Idaho Conservation Data Center. The project now depends on the volunteer work of students at the University of Idaho. Funding is needed to develop habitat model definitions, ground truthing, and habitat conservation priorities as part of this effort.

Outfitters

A significant portion of time was spent on developing an outfitter allocation for elk tags. The intent is to develop a fair method that ties an outfitter allocation of elk tags to management adjustments in elk seasons. The allocation developed is based on the past five years of an outfitters hunting use (historic use) in their licensed area. The interagency allocation proposal also developed an alternative to incorporate allocated tags into existing controlled hunts and passed legislation and received Idaho Fish and Game Commission approval to implement the allocation proposal when existing general hunts become limited.

Water Resources Advisory Group

In response to flooding in early 1996, the Governor requested the IDWR to form an advisory team to better serve stream protection during and after emergencies in north Idaho. The team met four times and formulated a list of stream protection BMPs, a revised emergency permit for stream alteration, and recommendations for programmatic changes to effect better coordination and responsiveness among the agencies responsible for stream protection. However, IDWR has not followed through with a report to the Governor about the team's recommendations. Despite IDFG urging in written and verbal form, improvements have only been implemented as individuals have desired. This was an important opportunity to improve stream protection that appears to have failed.

Data Gathering

Significant time was spent on obligations and responsibilities to assist monitoring. These included black bear scent station transects, hunter check station surveys, snorkel surveys, raptor surveys, hunter and fishermen license checks, and harlequin duck surveys.

Lochsa Face Access Plan

The IDFG participated in a collaborative group to develop an access management strategy for the North Lochsa Face Landscape area. This 128,000-acre area has both heavily roaded and roadless areas and motorized and non-motorized trails. An eleven-member group selected by the USFS met five times to develop a trail access management and monitoring plan. The

group included motorized and non-motorized users, the Idaho Conservation League, back-country horsemen, elk hunters, IDFG, and USFS personnel. The group developed a plan that includes a monitoring plan to determine a sustainable level of trail use and prescriptions for all trails within the study area which have been included in the North Lochsa Face Landscape and Watershed Assessment. The draft of this assessment has been released and there will be a USFS decision on the access strategy in 1997 or early 1998.

Wetland Restoration Program

The Wetland Restoration Program in the 1996 Farm Bill provides for wetland and riparian restoration by the Natural Resources Conservation Service (NRCS) on lands that are signed to either 30- or 15-year conservation easements or ten-year set-aside agreements. In cooperation with the NRCS and U.S. Fish and Wildlife Service (USFWS), IDFG sponsored a mailing to all platted landowners in the lower Potlatch River floodplain. This area was severely impacted by 1996 flooding, and the intent was to sign interested landowners to protect floodplain and restore wetland and riparian habitats. However, after a mailing of about 120, we received only 12 responses and paid 5 site visits. Most landowners felt there was inadequate compensation to put their land in a conservation easement, and the parcels were limited enough in size that they could not compete with other statewide sign-ups.

Watershed Assessment

The IDFG now participates in the TES consultation meetings between the USFS, BLM, USFWS, and National Marine Fisheries Service. Initial efforts of this group were to develop projects and timber sales that do not affect decisions from the federal regulatory agencies. However, the group has now expanded to develop programmatic consultation on such activities as prescribed fire, noxious weed and gopher control, road obliteration, trail maintenance, suction dredging, dispersed recreation, instream monitoring, and timber harvest. This will enhance efficiency of project development and implementation for these programs while insuring no adverse effects on listed or proposed species. Additionally, the team is developing a watershed assessment and characterization model for forest planning and revision. These watershed assessments and characterizations are based on 6th code HUCs and include: presence/absence of listed species, population utilization, key watershed by species, habitat capability, condition and sensitivity, recovery potential, restoration focus, restoration priority, and restoration activities. The team will work on these through 1997 for the entire Clearwater Basin.

Table 1. Summary of Technical Consultation

Agency or Group	Type of Contact		
	Written	Meetings/Site Visits	Total
US Forest Service	109	63	122
ID Dept of Lands	34	4	38
ID Dept of Water Resources	122	16	138
US Bureau of Land Management	5	0	5
Municipal	12	2	14
Army Corps of Engineers	8	1	9
ID Dept of Transportation	15	5	20
Power Companies	2	2	4
Bonneville Power Administration	2	1	3
Clearwater Econ. Devop. Assoc.	3	1	4
Farm Services Administration	1	0	1
Professional	2	0	2
Idaho Parks & Recreation	1	1	2
National Resource Conservation Service	0	5	5
Public Advisory Groups	0	5	5
Fed. Energ. Mgt. Authority	1	0	1
Fed. Energy Reg. Comm.	1	0	1
University of Idaho	1	6	7

Agency or Group	Type of Contact		Total
	Written	Meetings/Site Visits	
Idaho Outfitters and Guides Board	4	5	9
Idaho Dept. of Environ. Quality	2	11	13
Nez Perce Tribe	0	1	1
Timber Industry	0	2	3
In House	30	66	96
Counties	5	4	9
<u>Public/Individual</u>	<u>5</u>	<u>7</u>	<u>12</u>
Total	365	158	523

Table 2. Summary of technical assistance provided by Clearwater Region, 1982-1995'

Agency	Report Year										
	1982	1985	1980-85	1986	1987	1988	1989	1990	1992	1993	1995
US Bureau of Land Management	3	4	7	4	1	2	4	---	---	---	---
US Army Corps of Engineers	2	1	5	3	2	----	1	----	----	1	---
US Forest Service	21	10	8	12	12	39	12	2	10	11	10
Idaho Department of Lands	3	2	5	3		2	2	1	1	2	-----
ID Department of Transportation	3	3	4	2	---	---	---	---	---	---	---
Potlatch Corporation	4	2	7	3	3	2	3	2	2	4	---
Bonneville Power Administration	---	---	3	1	---	---	---	---	---	---	---
University of Idaho	---	----	4	1	----	1	---	---	---	---	---
Municipal	---	----	2	2	2	----	----	----	----	----	----
Port of Lewiston	---	---	---	1	---	---	---	---	---	---	---
Counties	1	----	3	2	---	---	---	---	2	---	---
US Bureau of Reclamation	1	----	2	---	---	---	---	---	---	---	---
Nez Perce Tribe	---	---	1	1	1	---	---	---	---	---	---
Private	---	----	1	----		---	---	---	---	---	---
SCS/ASCS	---	----	1	2	2	1	1	----	----	2	---
Small Hydro Project	----	----	3	---	---	---	---	---	---	---	---
US Fish & Wildlife Service	---	----	3	---	---	---	----	----	2	---	---
Idaho Outfitters and Guides Licensing Board	---	----	----	2	2	1	1	1	1	1	---
Forest Industry	---	---	---	1	---	----	----	----	----	---	---
Wallowa-Whitman Nat. For.	----	---	---	---	2	---	---	---	---	---	---
Idaho County Light and Power	---	---	---	---	1	---	---	---	---	---	---
WWP	---	---	---	---	1	---	---	---	---	---	---
Timber Industry	---	----	----	----	----	1	1	1	----	---	---
Columbia River Intertribal Fish.	----	---	---	---	---	1	---	---	---	---	---
Hells Canyon National Rifle Association	---	---	---	---	---	---	1	1	----	2	---
Rocky Mountain Elk Foundation	---	---	---	---	---	---	---	---	1	---	---
Public Schools	----	----	----	---	----	----	---	---	---	---	---
Idaho Parks & Recreation	---	---	---	---	---	---	---	---	---	2	---
Idaho Conservation League	----	---	---	---	---	---	---	---	---	1	---
Region 2 Wildlife Council	---	---	---	---	---	---	---	---	---	1	---
Other	---	---	---	---	---	---	---	1	1	---	---
Total	35	22	59	40	29	50	26	9	20	30	10

Technical assistance was derived from previous report.

JOB PERFORMANCE REPORT

State of: **Idaho** Name: **STATEWIDE TECHNICAL ASSISTANCE**

Project: **FW-7-T-3** Title: **Southwest Region Technical Assistance**

Subproject No.: **II** Job No.: **3**

Period Covered: **January 1, 1996 to December 31, 1996**

ABSTRACT

During the 1996 calendar year, the Southwest Region environmental staff biologist provided technical comments or review on 507 documented occasions. Additionally, this biologist attended 134 meetings or site visits for a total of 641 technical guidance contacts. The majority of contacts were with state and federal agencies dealing with a variety of land and water management issues having potential effects on fish and wildlife habitats. In 1996, important issues were urban planning and development, stream channel alterations, forest and range management, bull trout conservation, mining, and water quality. There were also a number of interagency committees and work groups assigned to this position which required considerable time and effort.

Author:

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Environmental Staff Biologist

OBJECTIVES

To provide technical support and assistance to city, county, private, state, and federal entities in matters relating to fish and wildlife resources within the administrative boundaries of the Southwest Region of the Idaho Department of Fish and Game (IDFG).

METHODS

In order to provide technical guidance on projects, activities, or proposals that could affect fish and wildlife resources in the Southwest Region, I used personal contacts, document reviews, and field inspections. Technical reviews were generally coordinated with other IDFG staff in the region and state office. Comments were typically provided in formal written or verbal fashion. Many inter- and intra-agency meetings were attended to discuss and resolve fish and wildlife habitat issues and angler and hunter-based recreation matters.

In summer 1996, I assisted staff from the Idaho Division of Environmental Quality (DEQ) in classifying fish communities in a number of water quality limited/impaired stream segments using backpack electrofishing gear. Since this was reconnaissance level sampling, a single upstream pass was made to collect as many fish as possible. All fish collected were identified and a representative number of each species were weighed and measured and then returned unharmed to the water. A minimal number (< 6) of voucher specimens were taken of each species.

RESULTS

During the 1996 calendar year, I provided technical assistance, support, and review on approximately 507 occasions. Additionally, about 134 field reviews and meetings were attended (Table 1). As in years past, most of my efforts were directed towards the Idaho Department of Water Resources (IDWR) stream channel protection program, planning and zoning issues of city and county governments, forest and range management programs of the U.S. Forest Service, as well as dealing with numerous land developers and environmental consultants.

Table 1. Summary of technical guidance contacts of the Idaho Department of Fish and Game environmental staff biologist for the Southwest Region during the period January to December 1996.

Agency/Group	Written	Meetings/Site Visits	Total
US Forest Service	53	10	63
US Bureau of Land Management	11	7	18
US Army Corps of Engineers	33	2	35
US Environmental Protection Agency	1	1	2
US Bureau of Reclamation	8	5	13
US Fish and Wildlife Service	7	0	7
Federal Energy Regulatory Commission	1	1	2
Federal Highway Administration	1	0	1
US Department of Agriculture	6	1	7
US Armed Services	0	2	2
Northwest Power Planning Council	0	1	1
National Marine Fisheries Service	2	0	2
General Accounting Office	0	1	1
Idaho Department of Water Resources	190	13	203
Idaho Department of Parks & Recreation	3	0	3
Idaho Department of Lands	16	5	21
Idaho Division of Environmental Quality	9	10	19
Idaho Department of Transportation	3	0	3

Agency/Group	Written	Meetings/Site Visits	Total
Idaho Public Utilities Commission	1	0	1
Office of the Attorney General	1	0	1
City/County Governments	64	10	74
Public/Conservation/Media Consultants/Developers	70	18	88
Basin & Watershed Advisory Groups	4	12	16
HAZMAT Responses	0	1	1
Idaho Power Company Relicensing Efforts	2	16	18
Intradepartment	21	18	39
TOTALS	507	134	641

Beneficial Use Reconnaissance Program Assistance

During the summer of 1996, I assisted the DEQ with fish population assessments as part of their Beneficial Use Reconnaissance Program (BURP). Within the Southwest Region, we sampled 32 streams to document the presence/absence of cold water biota (salmonids, sculpin) and salmonid spawning. Wild rainbow trout (redband variety) were found at most locations. Spawning by wild rainbow trout occurs in most if not all these streams. A summary of this assessment is found in Table 2.

Planning and Zoning

Regional staff and I actively participated in a number of forums regarding residential and commercial developments in the Southwest Region of IDFG. As in previous years, Ada, Canyon, Boise, and Valley counties have shown the most recent activity spanning back to about 1990. Comments from IDFG were supplied to planning and zoning staff and commissions, and elected officials at the city and county levels of government. The IDFG's goal is to educate elected officials as to the consequences of their actions and offer technical

Table 2. Summary of streams and locations sampled in summer 1996 by the IDFG and DEQ as part of the Beneficial Use Reconnaissance Project. Fish species collected are noted.

Stream	Date	Latitude	Longitude	*Fish Species
Sinker (M)	6-25	43091602	116270502	LSS/BLS, SPD
Pickett (L)	6-25	43024804	116234102	None
Browns (U)	6-25	42572387	116294595	None
McBride (U)	7-01	43144800	116555105	None
Soda (U)	7-01	43025197	116553678	None
Soda(L)	7-01	43043532	116566115	RSS
Williams (U)	7-01	42461904	116553207	WRB
Meadow	7-01	42493707	116373808	LSS/BLS, SPD,RSS
Castle (U)	7-02	42271117	116453896	SPD
Corral (L)	7-02	42372548	116535970	WRB, LSS/BLS, SPD, RSS
Noon (L)	7-02	42374376	116504016	WRB
Pleasant Valley	7-02	42308510	116520685	SPD
Macks (U)	7-17	43465401	116042804	None
Macks (L)	7-17	43462406	115583507	*RBT, LSS/BLS, SCUL, LND
Clear #1	7-17	43450205	115585904	WRB, SCUL
Robie (L)	7-17	43384392	116010860	WRB
Clear #3 (L)	7-18	43591303	115485704	WRB, BKT, SCUL
Clear #3 (U)	7-18	43592608	115454906	WRB, BKT
Granite	7-18	43475904	115444609	WRB
Bannock (L)	7-18	43490902	115480403	WRB, SCUL
Bannock (U)	7-18	43481309	115461804	WRB, SPD, SCUL

Stream	Date	Latitude	Longitude	*Fish Species
Harris (U)	7-22	43528707	116041308	WRB
Harris (L)	7-22	43521203	116093004	WRB
Shafer (M)	7-22	43520108	116095702	WRB, LSS/BLS, SPD
Shafer (L)	7-22	43525201	116103103	WRB, LSS/BLS, SPD
Smith (U)	7-23	43521409	115323704	WRB, BKT
Upper Browns	7-24	43464468	115291217	WRB
Logger	8-05	NA	NA	SPD, RSS, SCUL
Lost	8-07	43513600	115313100	WRB
Big Owl	8-07	43530507	115308303	WRB, SCUL
Little Owl (L)	8-07	43533204	115300504	WRB
Hayfork	8-15	43543001	115415402	WRB, BKT, SCUL
Little Goose (U)	8-20	44573182	116092127	BKT
Little Goose (L)	8-20	44573860	116101328	WRB, BKT
Trail (U)	8-20	45103639	115580697	BKT
Thorn (U)	8-20	44595133	116094728	None
Trail (L)	8-21	45104665	115595879	*RBT, BKT
Clear (L)	8-21	44242208	115565279	WRB, SCUL
Clear (U)	8-21	44285778	115511228	WRB, SCUL
Anderson (L)	8-21	44061605	115554705	WRB, SCUL

*Species Legend: WRB-wild rainbow/redband trout; *RBT-wild/hatchery rainbow trout mix; BKT-brook trout; LSS/BLS-largescale/bridgelip sucker; SPD-speckled dace; LND-longnose dace; SCUL-sculpin spp.; RSS-redside shiner

recommendations as to how to avoid or mitigate for development effects on fish and wildlife habitats. Our emphasis has been to protect important or critical wildlife habitats such as big game winter ranges in Ada and Boise counties, the riparian forests of the Snake and Boise River corridors, and habitats identified as important for diverse wildlife communities such as the shrub-steppe environments of the Boise Foothills. While this effort is significant, I believe it is essential. To date, most post-1990 planning and zoning documents and resulting ordinances in the region contain policy goals and objectives which may limit or prohibit development in sensitive wildlife habitats. Examples would be the Boise City Foothills Plan, Ada County Comprehensive Plan, and the Boise River System Ordinance.

Ada Planning Association Ad-Hoc Mitigation Committee

I served as a non-voting member on a committee designed to assess transportation impacts in the Treasure Valley and to develop mitigation standards and identify potential funding sources. My role was to recommend mitigation items for fish and wildlife habitat effects from transportation system development. The intent was to develop a mitigation policy for the Ada County Highway District and the Idaho Transportation Department. Most of the IDFG's recommendations were from the IDFG's 1990-2005 Policy Plan. These recommendations were included verbatim in the final draft and will be reviewed and voted upon early in 1997 by the Ada Planning Association Board.

Southwest Basin Advisory Group - Watershed Advisory Group

In 1996, I attended a number of monthly meetings of the Southwest Basin Advisory Group (BAG) and as requested by the established Watershed Advisory Groups (WAG). To date there are four WAGs formally established and recognized in the Southwest Basin. They include the Lower Boise River WAG, Lower Payette River WAG, Cascade Reservoir WAG, and the Big Payette Lake WAG. I am active in the Lower Boise River and Lower Payette River WAGs while the latter two are attended by staff from IDFG's McCall Office. I am a formal member of the Technical Advisory Committee of the Lower Boise River WAG. My role is technical advisor in fish and wildlife matters.

My active participation in the Southwest BAG and WAGs is extremely time consuming but necessary. The role of the Southwest BAG is to address water quality-related issues concerning Idaho's 303(d) listed streams in this part of the state which totals 187 streams. Across Idaho, there are 962 listed water bodies.

My role is to serve in the capacity of technical advisor in fish and wildlife matters. I have answered specific questions from BAG members regarding fish and wildlife habitat

requirements, status of fish and wildlife communities (in particular water bodies), and to solicit our assistance in monitoring fish and wildlife populations in various water bodies.

Additionally, a more significant role for the IDFG is to provide technical review of the status of designated beneficial uses for water bodies which are undergoing the formation of a Total Maximum Daily Load (TMDL) allocation. Our assistance in monitoring is sought or we are asked to provide careful analysis of proposed changes to use designations.

Another significant outgrowth of the BAG is the formation of a Native Fish WAG, the primary purpose of which is to implement the State of Idaho's Bull Trout Conservation Plan. While the DEQ is the lead agency in this process, my dual role is to co-facilitate meetings of this WAG and serve as a technical expert in development of individual watershed conservation strategies. This process will begin in early 1997 and may last for up to five years.

Coordination with U.S. Forest Service

In 1996, I coordinated with the Boise National Forest on a number of issues having potential ramifications for fish and wildlife management. Of special significance, interdisciplinary teams from the Emmett and Lowman ranger districts have been developing large-scale landscape analyses and watershed analyses for particular management areas including the Deadwood River, North Fork Payette River, and Silver Creek drainages. This ecosystem analysis approach to planning has significant merit for both the U.S. Forest Service (USFS) and the IDFG because of the vast amounts of data that are generated, data sharing, and education and cooperation that is a result of these efforts. I have participated in a number of field reviews, aerial flights, and interagency meetings to discuss IDFG issues and concerns. We have provided written and verbal comments on USFS-generated documents regarding these ongoing analyses.

As expected, one eventual output of ecosystem management projects is potential salvage and green timber sales. Our primary issues regarding timber sales in these largely unroaded landscapes are new road construction/reconstruction, effects on big game vulnerability to harvest, sediment generation and effects on aquatic communities, the integrity of old growth forests and associated wildlife species, and potential cumulative effects on natural resources. We believe the USFS can maintain a viable timber program and adequately safeguard fish and wildlife habitats. Some significant issues the USFS will need to address from our standpoint are protection of bull trout habitat considering the State's conservation plan, the integrity of inventoried roadless areas and backcountry recreation experiences, motorized use of roads, water quality, and the difficult problem of cumulative effects.

Along with regional fish management staff, I have worked with USFS personnel on dredge mining issues in the Middle Fork Boise River drainage. Beginning in late 1995, we started

collecting information on fish population status and physical habitat in the mainstem and tributaries in reaches that are currently dredged versus undredged. Dredge mining is permitted on mining claims above the confluence with Roaring River upstream to the boundary of the Sawtooth National Recreation Area while it is closed downstream of Roaring River. We will use these data to provide sound technical information to land management agencies and elected officials as the need arises. Additionally, both agencies have improved consultation and cooperation with miners who seek to work claims in the drainage.

JOB PERFORMANCE REPORT

State of: Idaho **Name:** STATEWIDE TECHNICAL ASSISTANCE

Project: FW-7-R-3 **Title:** Magic Valley Technical

Subproject No.: II **Job No.:** 4

Period Covered: July 1, 1996 - June 30, 1997

ABSTRACT

During the period July 1, 1996 through June 30, 1997, the Magic Valley Region environmental staff biologist provided comments, technical review, and support on approximately 329 occasions to other federal, state, local governments, individuals, and private organizations. Assistance provided by the environmental staff biologist addressed anticipated impacts to fish and wildlife populations or their associated habitats and recommendations for mitigation. Stream channel alterations, coordination of hydropower-related reviews, stream channel protection act violations, state and federal land management activities (grazing, mining, timber harvest, and national defense), water quality working groups (including associated monitoring), and technical assistance pertaining to urban development constituted the majority of my workload. All activities were coordinated and reviewed with the appropriate regional staff and state office personnel for accuracy, thoroughness, and adherence to Idaho Department of Fish and Game (IDFG) policy.

Author:

David E. Parrish
Environmental Staff Biologist

OBJECTIVES

To provide technical assistance and comments to other government agencies (state, federal, and local), organizations, or private individuals regarding projects or activities which potentially affect fish or wildlife populations or habitat in the Magic Valley Region. Also, to fulfill IDFG's responsibility to coordinate with Division of Environmental Quality (DEQ) in the collection of fish population status data to fulfill the requirements of Idaho Code 39-3601 as it pertains to the protection of state water quality.

METHODS

The Magic Valley Region Environmental Staff Biologist used regional staff, field inspections, literature searches, and professional expertise to form comments and furnish recommendations on a variety of land and water management proposals which could affect fish and wildlife populations or their associated habitat.

RESULTS

The following is a breakdown of entities which were provided technical guidance or project review by the Magic Valley Region Environmental Staff Biologist. Each contact represents a meeting or document response:

U.S. Forest Service (USFS)	46
Bureau of Land Management (BLM)	21
National Parks Service (NPS)	1
U.S. Fish and Wildlife Service (USFWS)	1
U.S. Army Corps of Engineers (COE)	16
Federal Energy Regulatory Commission (FERC)	5
United States Air Force (USAF)	4
Bureau of Reclamation (BOR)	6
Environmental Protection Agency (EPA)	7
Federal Highway Administration (FHA)	2
Natural Resource Conservation Service (NRCS)	7
Idaho Dept. of Water Resources (IDWR)	75
Idaho Dept. of Health and Welfare	
Division of Environmental Quality (DEQ)	25
Idaho Dept. of Lands (IDL)	13
Idaho Dept. of Transportation (IDT)	9

County/City Government	39
Private Development	31
Idaho Power Company (IPC)	9
<u>Miscellaneous</u>	
TOTAL	429

MAJOR PROJECTS OF INTEREST

Water Quality Working Groups

Technical assistance and logistical support was provided to Watershed Advisory Groups (WAGs) dealing with the Wood River, Middle Snake River, Lake Walcott, and Boise Basin Native Fishery . Dissemination of fish and wildlife habitat requirements and population data, explanation of management goals, strategies, and IDFG policies pertaining to conservation of fish and wildlife resources was provided with supporting documentation. This information will be used to formulate citizen recommended best management practices (BMPs) and total daily maximum loads (TMDLs) for nutrients, sediments, and other non-point pollutants within the watersheds.

To assess attainment of beneficial uses, DEQ implemented fish sampling on bodies of water with designated beneficial uses of supporting "coldwater biota" or supporting "salmonid spawning." Assistance included training of DEQ fish sampling personnel, permitting for collection of specimens, and on-the-ground assistance in population sampling and habitat assessment. Streams were only sampled for fish presence or absence and documentation of multiple year classes. Consequently, no population data can be extrapolated. A summary of all fish and habitat data collected cooperatively with DEQ can be found in the July 1, 1996 to June 30, 1997 Magic Valley Region Federal Fisheries Aide Report to be published.

As part of the Middle Snake River TMDL, technical assistance was provided to DEQ and the Environmental Protection Agency in the development of a wasteload allocation plan for conservation-based aquaculture. Data provided included: 1) annual fish production weight and numbers; 2) discharge nutrient monitoring information; 3) facility waste management plans; and 4) information on seasonal fluctuations in nutrient discharge from the four conservation facilities located within the Middle Snake River reach.

The Boise Basin Native Fish WAG focuses on the restoration of native fish throughout the Boise Basin with an emphasis on implementation of Governor Batt's Bull Trout Conservation Plan, adopted July 1, 1996. Education of WAG members regarding habitat needs, impacts of land management activities, and data assembly/interpretation have been the primary focus to-

date. Finalization of problem assessments and development of BMPs should take place in the fall of 1997.

Stream Alterations.

A total of 65 stream alteration permit applications were reviewed for impacts to fish and wildlife resources. The majority of applications were, once again, located in Water Basin 37 and were intended to address bank stabilization and flood damage repair along the Big Wood River. Technical assistance was provided to Idaho Department of Water Resources (IDWR), U.S. Army Corps of Engineers (COE), Blaine County, and private landowners in reviewing these applications.

Hydropower

Technical guidance regarding the impact of hydropower developments to fish and wildlife resources required a significant amount of time during the year. Coordination of fish and wildlife staff review and comment regarding Idaho Power Company's (IPC) relicensing of projects at Upper Salmon, Lower Salmon, Bliss, Shoshone Falls, and Malad projects required significant resource commitments for document review, public meetings, coordination of staff input, disseminating IDFG position and issues to local interest groups, and field tours of the impacted area. All final correspondence is routed through the IDFG Hydropower Relicensing Coordinator located in the Natural Resource Policy Bureau.

Additionally, field reviews were conducted with IPC biologists to assess fish and wildlife habitat mitigation and monitoring at Twin Falls and Milner hydroprojects on the Snake River.

Document review, agency meetings, on-site reviews, inspections, and drafting follow-up comments were conducted for the following projects:

NAME (Federal Energy Regulatory Commission Number)

Upper Salmon Falls (2777)	Lower Salmon Falls (2061)
Bliss (1975)	Shoshone (2778)
Twin Falls (18)	Sahko (11060)
Auger Falls (4797)	Shorock (9967)
Cedar Draw (8278)	Little Mac (6443)
Koyle Ranch (4052)	Ravenscroft (4055)
Milner (2899)	Malad (2726)
Conyear Ditch (4563)	Crossroads (11468)

Hydrology Modifications

Participation and technical guidance was furnished to several groups concerned with water quality and water management in the Magic Valley Region. Specifically, the environmental staff biologist represented IDFG on the Technical and Executive Committees of the Middle Snake River Irrigators Group, and the Jerome, Lincoln, Twin Falls, Cassia, and Gooding counties Middle Snake River Water Resource Commission. Final drafts of the Middle Snake River Nutrient Management Plan and the Middle Snake River Water Resource Commission Water Management Plan were reviewed and comments issued.

IDWR implemented mandatory water measuring and reporting on all non-domestic diversions in Basin 36. Technical assistance was provided to regional staff regarding adequacy of measuring devices, monitoring frequencies, and reporting requirements. Eleven reports were filed with IDWR covering all IDFG water rights in Basin 36.

A total of three new water rights or transfers were protested in the Magic Valley Region during the calendar year. All dealt with surface allocation of water for both consumptive and non-consumptive uses. Reasons for the protests included reducing instream flows, degrading water quality, or appropriating water which would reduce flow of an existing IDFG water right. Other reasons for protests were because the point of diversion was moved upstream in critical stream segments, or additional information was needed to make an accurate assessment of impacts to fish and wildlife resources.

During the year, the Bureau of Reclamation (BOR) began review of water and dam operations management as it relates to fish and wildlife throughout Idaho. The process, known as the Snake River Resources Review or SR 3, will hopefully improve flow timing, quantity, and water quality as it relates to fish and wildlife throughout the Snake River drainage. Information on the status of resident fish and wildlife populations, present habitat conditions, desired future habitat conditions, and interpretation of IDFG management goals, objectives, and plans were all provided to BOR for incorporation into the process.

Land Management Activities

A total of eleven timber sale/commercial thinning/forest health proposals were reviewed and responded to during the year. The majority of proposals were located on the Burley District of the Sawtooth National Forest (Marsh Creek, Fuller's Pasture, Cassia Four-Year Timber Plan) and the Mountain Home District (Pine, Robert's Gulch, Paradise) of the Boise National Forest. Comments and field reviews were used to identify impacts to fish and wildlife and their associated habitat, hunting opportunities, and suggestions on ways to minimize or mitigate impacts.

Changes in federal regulations during the past year required the Bureau of Land Management to notify agencies, such as IDFG, of changes in grazing management. We reviewed 267 grazing management actions for impacts to fish and wildlife or their habitat. These changes included renewals, transfers, and conversions of livestock grazing privileges. Additionally, we reviewed requests for 57 temporary changes in season of use, amount of use, or miscellaneous grazing permit modifications outside "normal" recognized operating parameters.

Residential Developments

During the year, 19 residential or commercial developments were reviewed and comments provided regarding impacts to fish and wildlife resources in Twin Falls, Jerome, Gooding, Blaine, and Camas counties. Sixteen responses to Blaine County Planning and Zoning Commission on issues such as public stream access, protection of wildlife migration corridors, riparian protection and enhancement measures, measures to reduce big game depredation potential, and guidelines regarding methods to reduce conflicts and impacts from the construction of residential homes on traditional wildlife wintering areas were common topics addressed. Heavy snow during the winter in the Wood River Valley exacerbated elk depredations in residential areas and heightened the need for education of the general public and local governments in the necessity to plan for human/wildlife interactions on developed big game winter range.

A total of six environmental reviews to assist local communities to apply for block grants were completed during the year.

Miscellaneous

A total of eight material source reclamation plans were reviewed and comments provided to Idaho Department of Lands. Re-contouring and establishment of vegetation to once again provide wildlife habitat were the focus of technical assistance.

During August 1996, a Union Pacific freight train derailed near the town of Glens Ferry, spilling three railcars containing commercially processed lye into the Snake River. We provided technical assistance, equipment, and conducted water quality and fisheries assessments for the biological investigation of impacts to the Snake River aquatic community. Agency coordination between Union Pacific, IDFG, DEQ, EPA, and Emergency Services was handled by the environmental staff biologist.

In an attempt to streamline consultation between the U.S. Forest Service and U.S. Fish and Wildlife Service, Level 1 teams were formed to review forest actions for compliance with the Endangered Species Act. The environmental staff biologist participated in Level 1 monthly meetings to review all forest projects for impacts on listed or forest sensitive species. Site specific technical information was provided on fish and wildlife populations and available habitats for each project.

OBJECTIVES

To provide technical assistance to city, county, private, state, and federal entities in matters relating to fish and wildlife habitat.

METHODS

Technical assistance was provided through reviews of permit applications, project plans, National Environmental Policy Act documents, site inspections, and meeting attendance.

RESULTS

The major categories for technical assistance in the Southeast Region during this report period were mining, timber sales, grazing, and water-related projects. Most of the technical assistance was provided to the Caribou National Forest, followed by the IDWR, and the Senate Bill (SB) 1284 process (Table 1). Much of the technical assistance was listed in the "other" category which included private consultants, cities, counties, and responses to concerned citizens regarding various projects.

Committee Participation

The Southeast Region ESB participated on and cooperated with the following committees:

Portneuf River Watershed Management Group
Bear River Basin Water Quality Task Force
Blackfoot River Watershed Management Group
Palisades Interagency Work Group

Senate Bill 1284 Implementation

Implementation of SB 1284 established Basin Advisory Groups (BAGs) for the Bear and Upper Snake rivers. Blackfoot and Portneuf watershed groups have both successfully petitioned the Upper Snake River BAG for Watershed Advisory Group (WAG) status. The ESB regularly attended the WAG meetings and provided technical assistance.

Table 1. Summary of technical assistance provided by the Southeast Region ESB and other personnel, 1988-1996.

Agency	Report Year									
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
FSA/NRCS/ RC&D's ^a	0	0	0	0	0	7	24	13	12	7
USACE ^b	1	0	2	1	0	2	6	13	18	17
BLM ^c		5	11	7	13	13	21	8	24	25 14
CNF ^d	18	13	18	26	22	32	53	46	55	55
USFWS ^e	0	2	1	2	1	3	0	0	1	2
IDL ^f	5	5	8	4	2	8	3	8	15	5
ITD ^g	2	3	5	0	0	2	2	6	4	11
IDWR ^h							19	27	39	48
FERC ⁱ /Hydro			3	2	1	0	6	14	16	22
P&Z ^j			0	0	2	6	6	15	9	18
SB 1284 ^k									8	23
Others 19	18	26	26	19	24	38	33	55	38	
Total	50	52	70	74	60	105	165	199	257	260

^aFarm Services Administration/Natural Resource Conservation Service/Resource Conservation & Development

^bUnited States Army Corps of Engineers

^cBureau of Land Management

^dCaribou National Forest

^eUnited States Fish and Wildlife Service

^fIdaho Department of Lands

^gIdaho Transportation Department

^hIdaho Department of Water Resources

ⁱFederal Energy Regulatory Commission

^jPlanning and Zoning

^kSenate Bill 1284 (1995 Idaho Water Quality Legislation)

The Portneuf River Watershed Management Group selected the Mink Creek drainage for potential water quality/habitat improvement projects. The West, South, and East forks, upper main Mink, and Kinney creeks were surveyed by watershed members for general stream and riparian health. The lower main Mink Creek will also be surveyed. Division of Environmental Quality (DEQ) representatives also conducted quarterly water quality sampling.

The Blackfoot Watershed Management Council conducted a Proper Functioning Condition assessment and habitat surveys on Wolverine, Rawlins, Poison, Corral and Horse creeks.

Bear River Hydro Relicensing

PacifiCorp operates four Bear River hydros that initiated the Federal Energy Regulatory Commission relicensing process in 1995. The projects include Oneida, Soda Point, and Grace/Cove (two projects that operate under one license). Current project licenses will expire on October 1, 2001. During the report year, PacifiCorp initiated Phase II of the relicensing process in which environmental studies are conducted to determine the impacts of project operations. PacifiCorp, with assistance from the consulting firm Duke Engineering and Services, Inc., also established a Delphi Team to evaluate data and determine minimum flows needed for each impacted reach of the Bear River. The Delphi Team is comprised of representatives from the Bureau of Land Management, U.S. Fish and Wildlife Service, DEQ, PacifiCorp, Bear River Water Users Association, Idaho Department of Parks and Recreation, Shoshone-Bannock Tribe, and our IDFG (ESB and Natural Resources Policy Bureau personnel).

Phosphate Mining

The ESB conducted site inspections, reviewed plans, drafted comments, and attended meetings regarding the following phosphate mining proposals:

- Dry Valley Mine Expansion, wetland mitigation - FMC
- South Rasmussen Ridge Mine Operating & Reclamation Plan - Monsanto
- Panel E, Smoky Canyon Mine & Reclamation Plan - J.R. Simplot
- Central Rasmussen Ridge Mine and Reclamation Plan - Rhone Poulenc

Planning and Zoning

The ESB assisted Bannock County with development of a revised Comprehensive Plan, Subdivision Ordinances, and Zoning Ordinances. Ordinances were developed that protect important wildlife habitat (open space ordinances) and riparian/wetland habitats (development setbacks).

JOB PERFORMANCE REPORT

State of: Idaho Name: STATEWIDE TECHNICAL ASSISTANCE,

Project No.: FW-7-T-3 Title: Upper Snake Region Technical Assistance

Subproject No.: II Job No.: 6

Period Covered: January 1, 1996 to December 31, 1996

ABSTRACT

During calendar year 1996, the Upper Snake Region environmental staff biologist provided technical review and comments on more than 435 occasions. The majority of interaction was with federal and state agencies on a variety of land and water management issues having potential impact on fish and wildlife habitats. Major duties included forest management, hydropower project operations and compliance, stream alterations, wetland fills, and South Fork basin issues. Activities were coordinated with Idaho Department of Fish and Game (IDFG) staff.

Author:

Robert C. Martin
Environmental Staff Biologist

OBJECTIVES

To provide technical assistance to city, county, private, state, and federal entities in matters relating to fish and wildlife habitats.

METHODS

Document review, literature research, field inspection, and consultation with appropriate policy and management personnel were used to provide comments and recommendations on actions proposed by private entities, local governments, and state and federal agencies.

RESULTS

Contacts

The Upper Snake Region environmental staff biologist provided reviews and comments for the following entities on the listed number of occasions:

U.S. Forest Service (USFS)	76
Bureau of Land Management (BLM)	15
Corps of Engineers (COE)	30
Bureau of Reclamation (BOR)	12
Fish and Wildlife Service (FWS)	24
Federal Energy Regulatory Commission/Utilities	35
Environmental Protection Agency (EPA)	2
Natural Resources Conservation Service (NRCS)	2
Northwest Power Planning Council/Bonneville Power	8
Shoshone-Bannock Indian Tribes	4
Idaho Dept. of Water Resources (IDWR)	75
Idaho Dept. of Lands (IDL)	8
Idaho Division of Environmental Quality (IDEO)	15
Idaho Transportation Department (ITD)	8
Idaho Dept. of Parks and Recreation (IDPR)	2
City/County Governments, Planning and Zoning	25
Private - developers, conservation groups, land trusts	40
Media	4
Intradepartment	30
TOTAL	435

SUMMARY OF SELECTED PROJECTS

Targhee National Forest (TNF)

After five years of planning, the TNF draft Forest Plan Revision and draft EIS were available for comment. I attended public meetings to answer questions on the draft proposals, and I completed the IDFG's review and comments on the drafts. This is the first National Forest in the Pacific Northwest to revise their Forest Plan.

The TNF forest-wide Oil and Gas Leasing EIS was also completed this year. I reviewed and commented on the plan, which included protection of some critical areas on the TNF, and opening other areas to exploration with stipulations to protect fish and wildlife resources.

Additional technical assistance was provided to the TNF on numerous timber salvage sales, land exchanges, private road easements, grazing allotments, trail construction projects, mining proposals, prescribed burns, watershed rehabilitation plans, and cutthroat trout recovery strategies.

U.S. Bureau of Reclamation (BOR)

I provided flow recommendations for the major projects in eastern Idaho. Recommendations for Island Park flow releases were primarily affected by the needs for trumpeter swan recovery, aquatic vegetation protection, and young-of-year rainbow trout survival. The new spillway collar modification was used to regulate the temperature of Island Park releases to benefit trout spawning and growth.

Palisades flow recommendations were primarily affected by the needs for juvenile cutthroat trout survival. Several ramping plans were provided for the BOR during the year.

Technical assistance for the Snake River Resources Review began this year. I participated on the fish, wildlife, and vegetation teams.

I gave a presentation to 100 water users on the benefits of late spring floods to fish, wildlife, and riparian ecosystems.

U.S. Army Corps of Engineers (COE)

I provided technical assistance on numerous wetland fill permit applications and restoration orders for violations. A final mitigation plan was ordered and agreed upon to resolve the ten-year-old Grover violation in Teton County. Blaine Larsen Farms began implementing the Camas Creek mitigation project, incorporating our wildlife recommendations.

U.S. Bureau of Land Management (BLM)

I provided technical assistance on proposals for fencing, grazing allotments, land exchanges, cottonwood/riparian flows research, and an area of critical environmental concern designation. I reviewed and provided comments on the Challis Resource Area draft Management Plan and EIS.

Bonneville Power Administration (BPA)

I began supervision of a mitigation specialist this year. The mitigation program goals are to protect and enhance riparian habitat on the South Fork and lower Henrys Fork of the Snake River, by purchasing land and implementing habitat enhancement projects on acquired land and existing public land. Several projects are being pursued.

Idaho Division of Environmental Quality (IDEQ)

I assisted IDEQ throughout the year by providing fisheries information and assisting with plans to improve habitat on Clean Water Act listed water bodies. Several strategy sessions were conducted for basins in the Upper Snake.

HYDROPOWER PROJECTS

Fall River

I reviewed and assisted with the revegetation plan and under-release avoidance plan. The project continues to have under-releases during winter, although they are smaller and less

frequent. The Federal Energy Regulatory Commission continues to conclude the under-releases are beyond the control of the licensee.

Island Park

Operation of the spillway modification began this year. I attended several meetings conducted to reach agreement on the goals for fish, monitoring, and water temperature management. There are now three locations for water releases through the dam. Instream temperature loggers are installed at numerous locations in the primary spawning area below the dam, in the Buffalo River, and below the Buffalo. Extensive data on water temperature and mixing will enable us to achieve the temperature goals selected for locations in the river.

Buffalo Hydro

Progress was made toward achieving consensus for installing a fish passage facility. Modeling indicated that fish passage would contribute about 4,400 rainbow trout 16 inches or longer to the Henrys Fork fishery each year. A draft agreement for operation and monitoring was prepared.

IDAHO DEPARTMENT OF WATER RESOURCES BASIN PLANNING

I attended numerous technical work sessions, advisory group meetings, and field trips for the South Fork Snake River Basin Plan. Fish, wildlife, and recreation information was provided to assist the evaluation of outstanding resources and associated recommendations for protection of stream reaches. The draft plan proposes protection of about 450 miles of stream to maintain fisheries and riparian habitat quality. I testified at the Idaho Water Resource Board (Board) public meeting, advocating protection of fisheries and riparian resources and associated recreation. I encouraged the Board to make recommendations that would provide the BOR the ability to release high flows sufficient to maintain riparian habitat and stream channel diversity.

Submitted by:

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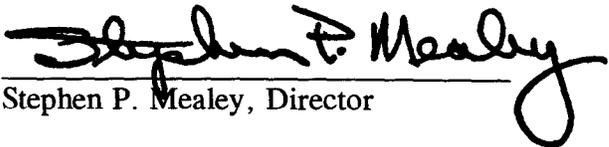
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