Thirty-third Biennial Report

of the

FISH AND GAME DEPARTMENT

of the

STATE OF IDAHO

July 1, 1968 to June 30, 1970

FISHERIES MANAGEMENT

A statewide survey of stream channel alterations was completed on 45 streams which covered a total of 1,138 stream miles. Physical alteration of channels was found on 38 percent of the mileage surveyed. Road construction was involved with 60 percent of the alterations; 19 percent, flood control; 13 percent, mining; 6 percent, railroads. Undisturbed streams channels were found to produce from 1.5 to 112 times more pounds of game fish. On the average, undisturbed sections contained 8 times greater poundage of game fish. Studies in North Carolina and Idaho have shown fish production in altered streams may remain 80 to 90 percent below original levels even after 40 to 86 years recovery.

During the biennium, 7 pollution-caused fish kills were recorded involving 82,260 fish in 12 miles of streams and over 1,000 acres of standing water. Since 1960, over 1½ million fish have been killed by pollution of various forms in Idaho waters.

Chemical treatment to control or eradicate undesirable fish species was done on 9 lakes and reservoirs and 7 streams (127 miles). In addition to rotenone, two new chemicals were employed in Idaho for the first time. Squoxin, developed at the University of Idaho, proved to be a selective toxicant to squawfish and has been used effectively on the North Fork of the Payette and St. Joe Rivers. The other, known as "Fintrol," will kill species formerly resistant to rotenone treatment (carp and suckers) at concentrations as low as 4 to 6 parts per billion.

New fishing waters included cost-sharing on reconstruction of Hornet Creek Dam west of Council, Cove Arm Reservoir (76 acres) built by the fish and game department, and Devils Creek Reservoir (120 acres) in Oneida County. One of the finest lake fisheries in southwestern Idaho was lost during 1969 when the alkalinity and pH of Crane Falls Lake water reached lethal levels for trout.

Transplanting efforts proved successful in establishing kokanee stocks in Anderson Ranch and Salmon Falls Reservoirs. Population size in Anderson Ranch is adequate to support an excellent quality kokanee fishery and egg-take operation. Introductions of grayling in selected alpine lakes continued with one lake in the Selway Wilderness producing 10-inch fish in 1970. In 1965 a program was initiated to increase the upstream range of channel catfish in Snake River above Swan Falls to Minidoka Dam. This has been done primarily with fingerling catfish supplied annually by national fish hatcheries. Fishermen were first reported taking channel catfish in limited numbers in 1970 in the planting areas.

LAKE REHABILITATION

Year	Name	County	Surface Acres	Volume Acre-feet	Undesirable Species	Species Restocked	Toxicant
1968	Kelso Lake	Bonner	61.2	1,532	Bullheads, Perch Pumpkinseeds, Bluegills, Tench	Rainbow	Rotenone
1968	Round Lake (Little Kelso)	Bonner	9.4	472	Bullheads, Perch, Pumpkinseeds, Bluegills, Tench	Rainbow	Rotenone
1968	Granite Lake	Bonner	20.9	627	Bullheads, Perch, Pumpkinseeds, Bluegills, Tench	Cutthroat	Rotenone
1968	Perkins Lake	Boundary	60.0	562	Bullheads, Pumpkinseeds, Bluegills, Suckers Shiners	Brook	Rotenone
1968	Solomon Lake	Boundary	9.0	161	Shiners	Cutthroat	Rotenone
1968	Bass Lake	Boundary	5.2	52	Suckers, Perch, Squawfish, Pumpkinseeds	Brook	Rotenone
1969	Cove Arm Lake	Owyhee	76	2,000	Carp, Suckers, Shiners	Coho, Rainbow	Fintrol
1969	Anderson Ranch Reservoir (shoreline treatment)	Elmore	240		Squawfish	Rainbow, Coho, Kokanee	Rotenone
1969	Pleasantview Reservoir	Oneida	(drained to stream flow)	0	Utah Chub, Suckers	Rainbow	Rotenone

STREAM REHABILITATION

Year	Name	County	Volume	Miles Treated	Undesirable Species	Species Restocked	Toxicant
1968	St. Joe River	Shoshone, Benewah	1300 cfs	22	Squawfish	None --	Squoxin
1969	St. Maries River	Benewah	200 cfs	25	Squawfish	None --	Squoxin
1969	N. Fork Payette R.	Valley	200 cfs	18	Squawfish	None --	Squoxin
1969	Lake Fork	Valley	100 cfs	18	Squawfish	None --	Squoxin
1969	Gold Fork	Valley	50 cfs	4	Squawfish	None --	Squoxin
1969	Camas Creek	Clark	50 cfs	40	Shiner, Dace, Sucker, Chub	Cutthroat, Brown, Rainbow	Rotenone
1969	L. Blackfoot River (Blackfoot Res.)	Caribou	50 cfs	100 yds.	Carp, Suckers	None	Fintrol

FISHERIES RESEARCH

Lake and Reservoir Investigations

Dworshak Fishery Studies

Pre-impoundment studies on the North Fork of the Clearwater River above the proposed reservoir and on the lower Clearwater below Orofino were started June 1, 1969. These studies are financed by the Army Corps of Engineers.

We conducted a trial Squoxin treatment on 18 miles of the North Fork in August, 1969, to assess rate of flow and the upper limits of squawfish. The proposed rough fish eradication in the North Fork is scheduled for the summer of 1971 when Dworshak Dam will be closed.

We conducted a creel census on 48 miles of the North Fork above the proposed reservoir in 1969. The census area is divided into two sections — from Isabella Creek to Bungalow Ranger Station, and from Bungalow Ranger Station to Kelly Creek. The major species found in the creel were juvenile steelhead, whitefish, and cutthroat trout.

Trend samples taken by blasting with prima cord in the pools during August, 1968 and 1969, on eight tributary streams of the North Fork and three tributary streams of the Lochsa River (streams not affected by the dam) showed that juvenile steelhead are the most numerous species in the streams.

A creel census conducted on the main Clearwater River from its mouth to Orofino shows the diversity of the fishery each year. A smallmouth bass fishery from April 15 to September 15 predominates in the summer while the fall steelhead fishery from September 15 to December 31 and the spring steelhead fishery from January 1 to April 15 attract all the attention over the rest of the year.

Bass spawning and growth is monitored through the spring and summer.

We have established seven water quality stations on the main Clearwater River. Thermographs are set in pairs below the North Fork to check water temperatures on each side of the river.

Brownlee Reservoir Study

Early in 1970 we assigned a fishery biologist to Brownlee Reservoir to measure the catch and fishing pressure and to determine if the chemical-thermal conditions have improved since an earlier study ten years ago.

Results to date show that there is a fair fisheries for trout in the spring and that smallmouth bass and channel catfish are available but lightly fished in all sections of the reservoir. Fishing pressure is moderate in the spring and low in mid-summer. The reservoir still has a low oxygen-pollution problem.

Anderson Ranch Reservoir

The Anderson Ranch Reservoir shoreline was treated with rotenone in 1969 and 1970 for the fifth and sixth consecutive years to kill newly hatched squawfish fry. Many fry succumbed to the treatments and the

program appears to be partly successful in reducing squawfish populations. Kokanee emerged as the most important game fish at Anderson Ranch during the biennium. Kokanee from the 1967 year class, which was the first big natural run in the drainage, provided a sport catch of between 7,000 and 8,000 fish averaging 1¼ pounds each and a spawning run of 30,000 fish in 1970. Kokanee are now well established and naturally reproducing.

Cascade Reservoir

Studies to evaluate the fisheries and develop control methods for squawfish were continued during 1969 and 1970 at Cascade Reservoir. Squoxin, a selective squawfish toxin, was used in the North Fork of the Payette River above Cascade Reservoir to kill an estimated 100,000 squawfish in 1969 and 65,000 in 1970. This shows a decline from the 200,000 squawfish spawners killed in 1968. Despite a five-fold increase in angling pressure at Cascade since 1959, catch rates of squawfish have decreased yearly since 1968 indicating a significant decrease in the squawfish population of Cascade Reservoir.

Priest Lake and Upper Priest Lake

Stocking of fingerling cutthroat and eyed eggs continued at Upper Priest and Priest Lake between 1968 and 1970. Approximately 254,000 and 205,000 fin clipped fingerling cutthroat were stocked in 1968 and 1969, respectively. In May 1970 a total of 151,000 unmarked fingerling cutthroat were stocked along with 16,455 fin clipped catchable-size cutthroat. Approximately 2½ million eyed cutthroat eggs were planted in incubation channels tributary to Priest Lake between 1968 and 1970.

Although the Priest Lake studies have not been concluded, indications are that the native cutthroat population is maintaining itself on a small, but apparently stable, basis. The reported decline in the cutthroat population does not appear to be the result of overfishing. At the termination of the 1970 creel census, personnel found that only 3.9 percent of 4,267 interviewed anglers on Priest Lake and 15 percent of 1,282 interviewed anglers on Upper Priest Lake specifically fished for cutthroat trout. These anglers caught 60.5 percent and 46.7 percent, respectively, of the observed cutthroat catch.

Pend Oreille Lake

Creel census estimates on Pend Oreille Lake in 1968 showed that 54,183 anglers spent 241,755 hours to catch 597,895 fish, mostly kokanee. Of these, 832 Kamloops and 394 Dolly Varden were trophy-size fish 17 inches or longer.

Creel census estimates on Pend Oreille Lake in 1969 showed that 42,885 anglers spent 197,620 hours to catch 502,484 fish. Of these, 889 Kamloops and 586 Dolly Varden were trophy-size fish 17 inches or longer.

Mysis Shrimp Introductions

Mysis shrimp have been introduced into Idaho lakes from Waterton and Kootenay Lakes in Canada since 1965. We hope they will produce an important link in the food chain. In 1969 shrimp were recovered from Priest Lake, indicating an established population. The following table shows the number of shrimp released.

Sandpoint Fish Hatchery

Production at Sandpoint Fish Hatchery includes cutthroat trout, brook trout, and Kamloops trout. The cutthroat trout were planted in high mountain lakes, Upper Priest Lake, and Rochat Creek rearing pond.

Twin Falls Fish Hatchery

The water supply trough in the hatchery building was replaced with a 10-inch iron pipe with two 2-inch gate valves for each vat. Cutthroat trout fry were planted in the headwaters of major drainages in the area to supplement natural spawning.

Warm River Fish Hatchery

Cutthroat trout diet tests were continued at Warm River. Three levels of calcium pantothenate were tested: 2.5, 3.75, and 8.75 grams per 100 pounds of feed. The 3.75 gram level gave the best results. The 8.75 gram level inhibited the growth of fish. Cutthroat fingerlings were reared and planted in South Fork and North Fork of Snake River. Catchable-size rainbow trout were redistributed from the Ashton Hatchery.

EGGS RECEIVED BY PURCHASE OR EXCHANGE FROM OTHER AGENCIES

(October 1, 1968 - September 30, 1970)

Species	Year	Number
Rainbow	1969	6,527,533
	1970	5,014,980
Brook	1969	30,528
	1970	311,939
Brown	1969	478,272
	1970	654,476
Coho	1969	5,275,532
	1970	3,193,386
Golden	1969	13,620
	1970	14,391
Grayling	1969	193,754
	1970	252,000
Spring Chinook	1969	990,109
Fall Chinook	1970	500,000
Steelhead	1969	403,614
Kokanee	1970	345,600
Mackinaw	1970	150,000
TOTALS	1969	13,912,962
	1970	10,436,772
BIENNIUM TOTALS		24,349,734

EGGS TAKEN BY STATE

(October 1, 1968 - September 30, 1970)

Station	Year	Species	Number Green Eggs	% Eye Up	Number Eyed Eggs
American Falls	1969	Rainbow	1,979,616	81.2	1,607,449
	1970	Rainbow	2,240,646	81.3	1,821,116
Clark Fork	1969	Kamloops	969,176	84.0	814,930
	1969	Kokanee	801,270	94.1	753,995
	1969	Dolly Varden	890,220	75.0	667,673
	1970	Cutthroat	11,016	18.4	2,024
	1970	Kamloops	742,587	78.9	586,555
	1970	Kokanee	574,206	93.2	534,915
	1970	Dolly Varden	1,123,984	74.5	837,368
Eagle	1969	Kokanee	605,844	85.0	514,967
	1970	Kokanee	1,349,842	89.2	1,204,242
Hayden Creek	1969	Steelhead	40,596	94.0	38,182
	1970	Steelhead	198,683	94.5	187,755
Hayspur	1969	Rainbow	2,893,100	92.8	2,684,879
	1970	Rainbow	3,020,666	91.8	2,771,650
Henrys Lake	1969	Cutthroat	10,207,016	81.4	8,316,875
	1969	Cutthroat and Rainbow	1,466,710	78.5	1,152,380
	1969	Kokanee	5,024,480	99.0	5,007,024
	1970	Cutthroat	8,827,580	77.1	6,809,872
	1970	Cutthroat and Rainbow	238,964	74.7	178,504
	1970	Kokanee	63,360	90.3	57,214
Lemhi Spring	1969	Spring Chinook	76,884	96.8	74,423
	1969	Steelhead	281,185	95.0	267,713
	1970	Spring Chinook	365,916	86.3	315,785
	1970	Steelhead	212,916	94.5	201,206
Mackay	1969	Spring Chinook	581,688	85.7	498,707
Oxbow	1969	Fall Chinook	274,030	97.4	266,871
	1969	Steelhead	2,946,130	84.6	2,495,335
	1970	Fall Chinook	54,990	92.0	50,598
	1970	Steelhead	1,526,054	86.4	1,320,494
Pahsimeroi	1969	Steelhead	1,620,303	90.9	1,467,725
	1969	Spring Chinook	464,150	94.8	440,340
	1970	Spring Chinook	443,772	76.5	339,396
	1970	Steelhead	1,662,000	89.1	1,480,842
Rapid River	1969	Spring Chinook	5,171,697	93.3	4,825,965
	1970	Spring Chinook	13,896,334	93.0	12,923,591
TOTALS	1969		36,294,095	(Av.) 87.8	31,895,433
	1970		36,553,516	86.5	31,623,127
BIENNIUM TOTALS			72,847,611	(Av.) 87.2	63,518,560

HATCHERY PRODUCTION

(October 1, 1968 - September 30, 1970)

Hatchery	Year	Rainbow Nos.	Rainbow Lbs.	Cutthroat Nos.	Cutthroat Lbs.	Brook Nos.	Brook Lbs.	Kamloop Nos.	Kamloop Lbs.	Kokanee Nos.	Kokanee Lbs.	Spring Chinook Nos.	Spring Chinook Lbs.	Fall Chinook Nos.	Fall Chinook Lbs.	Rainbow and Cutthroat Nos.	Rainbow and Cutthroat Lbs.
American Falls	1969	794,706	179,315	883,660	293												
	1970	590,839	147,100	402,000	134												
Ashton	1969	634,576	54,099	175,750	2,285					307,724	99						
	1970	437,739	51,310	140,000	700												
Clark Fork	1969	0	47,532[1]	124,848	275			134,819	5,894	499,152	300						
	1970	0	36,305[1]	248,310	264			224,484	4,536	489,083	175						
Eagle	1969	452,020	31,385							274,400	1,120						
	1970	329,247	19,593							304,518	1,673						
Grace	1969	1,282,020	109,604	942,260	3,190												
	1970	1,130,771	102,704	1,120,805	2,374											308,940	368
Hagerman	1969	1,864,860	438,668					98,615	4,075								
	1970	1,796,058	426,408					87,840	4,800								
Hayden Creek	1969											328,427	3,555				
	1970											208,320	16,025				
Hayspur	1969	1,453,233	137,721														
	1970	1,244,071	141,172							89,577	807						
Henrys Lake	1969			1,571,892	621[2]											476,412	119
	1970			575,412	450											132,852	96
Mackay	1969	992,571	111,967	252,199	596							562,072[3]	115				
	1970	789,361	109,504	64,512	125					147,750	394	401,940	1,386				
McCall	1969	283,020	172	392,812	183												
	1970	237,392	188	364,070	130												
Mullan	1969	250,918	538	388,701	671												
	1970			382,650	374					740,180	250						
Niagara	1969																
	1970																
Oxbow	1969																
	1970													255,536	1,850		
Rapid River	1969													497,298	2,316		
	1970											5,070,901	101,795				
Sandpoint	1969			320,268	2,693	21,050	931	213,261	137			852,000	154,240				
	1970			178,266	5,384	204,536	1,993	188,146	178								
Twin Falls	1969	472,856	33,687	34,313	64												
	1970	315,272	26,994	800	0					348,319	179						
Warm River	1969			907,850	2,212												
	1970			617,806	1,959												
Pahsimeroi	1969											393,840	9,846				
	1970																
Biennium Totals		15,351,530	2,205,966	10,089,184	24,977	225,586	2,924	947,165	19,620	3,200,703	4,997	7,817,500	286,962	752,834	4,166	918,204	583

HATCHERY PRODUCTION
(October 1, 1968 - September 30, 1970)

Hatchery	Year	Steelhead Nos.	Steelhead Lbs.	Coho Nos.	Coho Lbs.	Dolly Varden Nos.	Dolly Varden Lbs.	Brown Nos.	Brown Lbs.	Golden Nos.	Golden Lbs.	Grayling Nos.	Grayling Lbs.	Mackinaw Nos.	Mackinaw Lbs.	Totals Nos.	Totals Lbs.
American Falls	1969			286,774	2,040			287,163	4,530							1,965,140	181,648
	1970			430,598	1,037			61,365	496			31,500	3			1,710,600	152,801
Ashton	1969			242,200	2,600											1,421,615	59,579
	1970			233,000	2,030											842,239	54,043
Clark Fork	1969					320,202	104					40,000	5			1,079,021	54,105
	1970					650,050	898									1,651,927	42,183
Eagle	1969			111,800	710											838,220	33,215
	1970			169,776	308											803,541	21,574
Grace	1969			259,375	1,455									0	2,750	2,792,595	117,367
	1970			190,000	2,375											2,441,576	107,453
Hagerman	1969			126,616	392											2,090,091	443,135
	1970			333,000	370											2,216,898	431,578
Hayden Creek	1969	358,563	5,919													686,990	9,474
	1970	546,434	17,723													754,754	33,748
Hayspur	1969			514,700	4,030											1,967,933	141,751
	1970			425,310	1,229			47,600	155							1,806,558	143,363
Henrys Lake	1969															2,048,304	740
	1970															708,264	546
Mackay	1969	63,365	150	518,400	4,800					12,310	5	6,926	4			2,407,843	117,637
	1970			365,400	2,100					12,200	6	8,400	1	42,000	1,200	1,831,563	114,716
McCall	1969											6,000	2			681,832	357
	1970									1,000	1	24,600	2			627,062	321
Mullan	1969			894,000	1,170											1,533,619	2,379
	1970			685,884	1,366											1,808,714	1,990
Niagara	1969	2,869,327	196,846													2,869,327	196,846
	1970	2,222,313	290,081													2,222,313	290,081
Oxbow	1969															255,536	1,850
	1970															497,298	2,316
Rapid River	1969															5,070,901	101,795
	1970															852,000	154,240
Sandpoint	1969															554,579	3,761
	1970															570,948	7,555
Twin Falls	1969															507,169	33,751
	1970															664,391	27,173
Warm River	1969															907,850	2,212
	1970															617,806	1,959
Pahsimeroi	1969															0	0
	1970															393,840	9,846
Biennium Totals		6,060,002	510,719	5,786,833	28,012	970,252	1,002	396,128	5,181	25,510	12	117,426	17	42,000	3,950	52,700,857	3,099,088

[1]Clark Fork Hatchery weight increase in rainbow trout transferred from Hagerman.

IDAHO FISH PLANTINGS*

By Species, Size — All Agencies

(October 1, 1968 - September 30, 1970)

Species	Year	0-3″	3-6″	6″-Up	Total	Pounds
Rainbow	1969	3,965,975	1,373,459	3,371,939	8,711,373	1,244,775.75
	1970	2,738,979	2,449,728	3,334,550	8,523,257	1,147,921.75
Cutthroat	1969	6,112,401[1]	678,946		6,791,347	21,914.80
	1970	4,513,833[2]	563,937	16,455	5,094,225	28.003.25
Rainbow X Cutthroat	1969	815,452			815,452	587.00
	1970	132,852			132,852	96.00
Brook	1969	960	54,300		55,260	1,066.00
	1970	113,030	17,652		130,682	1,033.50
Coho Salmon	1969	4,832,436[3]	111,800		4,944,236	16,369.00
	1970	2,859,285		8,400	2,867,685	14,428.00
Spring Chinook Salmon	1969	1,659,816[4]	157,427	987,636	2,804,879	47,309.00
	1970	4,765,923[5]	3,597,547		8,363,470	171,115.00
Fall Chinook Salmon	1969	255,536			255,536	1,850.00
	1970	497,298			497,298	2,316.00
Kamloops	1969	346,685	96,746	22,930	466,361	11,516.50
	1970	412,333	71,230	18,012	501,575	8,849.00
Mackinaw	1969			33,150	33,150	3,900.00
Kokanee	1969	806,876	274,400		1,081,276	1,519.00
	1970	2,119,427			2,119,427	3,478.45
Grayling	1969	12,926			12,926	4.70
	1970	104,500			104,500	10.45
Golden	1969	14,300			14,300	6.25
	1970	13,200			13,200	6.75
Steelhead	1969	322,443	109,200	1,645,100	2,076,743	180,965.00
	1970	2,970,800[6]	575,247	2,984,051	6,530,098	505,477.00
Brown	1969	61,365			61,365	496.00
	1970	260,523	74,240		334,763	2,021.00
Bluegill	1969			65	65	13.00
Dolly Varden	1969	319,441			319,441	94.00
	1970	642,179			642,179	398.00
Channel Catfish	1970	20,000			20,000	200.00
Totals	1969	19,526,612	2,856,278	6,060,820	28,443,710	1,532,386.00
	1970	22,164,162	7,349,581	6,361,468	35,875,211	1,885,354.15
BIENNIUM TOTALS		41,690,774	10,205,859	12,422,288	64,318,921	3,417,740.15

*Excludes all salvaged fish — these are reported in another table.

[1]878,400 planted as eyed eggs
[2]528,680 planted as eyed eggs
[3]2,000,000 planted as eyed eggs
[4]1,488,816 planted as eyed eggs
[5]4,744,823 planted as eyed eggs
[6]2,007,500 planted as eyed eggs

The following financial statements reflect the department's position during the Biennium.

TOTAL FUND OPERATIONS – FUND 6

July 1, 1968 - June 30, 1970

	Fish & Game Section 1	Predator Animal Section 2	Wildlife Restoration Section 3	Fish Restoration Section 4	Columbia River Section 5	Special Studies Section 6	Match. Funds Programs Section 7	Percent	Total
Beginning Fund Balance									$ 912,617.92
Revenue									
Licenses	7,927,784.24							79.0	7,927,784.24
Matching Funds	4,100.00		1,004,273.68	263,759.29	209,278.46	335,993.62	16,929.23	18.3	1,834,334.28
Other	257,441.33		10,334.91	498.00			288.26	2.7	268,562.50
Total Revenue	$8,189,325.57		$1,014,608.59	$264,257.29	$209,278.46	$335,993.62	$17,217.49	100.0%	$10,030,681.02
	81.6		10.1	2.6	2.1	3.4	.2	100.0%	
Total Funds Available									10,943,298.94
Disbursements									
Salaries and Wages	3,482,991.51		505,125.39	146,176.77	95,603.58	145,813.07	16,290.56	50.5	4,392,000.88
Travel	156,436.51		15,121.79	6,117.82	8,705.70	4,778.55	168.13	2.2	191,328.50
Other Expenses	1,823,299.21	49,799.98	474,485.14	175,648.74	83,669.32	190,916.80	19,279.33	32.3	2,817,098.52
Capital Outlay	709,643.64		462,111.88	113,163.23	3,336.90	8,212.15	1,002.31	14.9	1,297,470.11
Refunds	3,777.71							.1	3,777.71
Total Expense	$6,176,148.58	$49,799.98	$1,456,844.20	$441,106.56	$191,315.50	$349,720.57	$36,740.33	100.0%	$ 8,701,675.72
	31.0	.6	16.7	5.1	2.2	4.0	.4	100.0%	
State Transfers									
Social Security	188,546.99								188,546.99
Adminis. Charges	47,037.19								47,037.19
Administrative Audit Prior Biennium	5,000.00								5,000.00
Cancelled Warrants	(30.41)								(30.41)
Total Transfers	$ 240,553.77								$ 240,553.77
Total Disbursements	$6,416,702.35	$49,799.98	$1,456,844.20	$441,106.56	$191,315.50	$349,720.57	$36,740.33		$ 8,942,229.49
Ending Fund Balance									2,001,069.45
Outstanding Orders	117,970.61		28,077.56	38,142.84	942.99	1,032.00	1,291.05		187,457.05
Ending Unemcumbered Fund Balance									*$ 1,813,612.40*

SUMMARY OF APPROVED PROJECTS

Classification	Federal	State	Total	Percent of Total
Coordination	8,055.00	2,685.00	10,740.00	2.14%
Development	60,000.00	20,000.00	80,000.00	16.02%
Research	292,867.50	97,622.50	390,490.00	78.16%
Land	13,800.00	4,600.00	18,400.00	3.68%
Totals	$374,722.50	$124,907.50	$499,630.00	100.00%

BUREAU OF COMMERCIAL FISHERIES

During this biennium the Bureau of Commercial Fisheries of the U.S. Fish and Wildlife Service participated in department projects with matching funds as follows:

		Federal	State	Total
BCF-10-04	Construction at Hayden Creek	2,604.34	868.11	3,472.45
BCF-10-05	Construction at Hayden Creek	860.18	286.72	1,146.90
BCF-11-04	Experimental Rearing of Steelhead Chinook at Hayden Creek Ponds	9,675.61	3,225.20	12,900.81
BCF-11-05	Experimental Rearing of Steelhead Chinook at Hayden Creek Ponds	14,560.50	5,457.58	20,018.08
	Totals	$27,700.63	$9,837.61	$37,538.24

IDAHO POWER COMPANY

The Idaho Power Company reimbursed the department 100% for these contracts obligated during the biennium as partial compensation for fish losses.

IPC-11	Oxbow Studies	$ 27,377.78
IPC-13	Rapid River Hatchery	123,011.32
IPC-17	Rapid River Evaluations	6,921.35
1PC-22	Niagara Springs Hatchery	118,622.22
IPC-25	Pahsimeroi Release Ponds	1,855.36
IPC-26	Niagara Springs Evaluations	9,895.86
IPC-28	Pahsimeroi Trap	10,941.91
	Total reimbursable projects	$298,625.80

COLUMBIA RIVER FISHERIES DEVELOPMENT PROGRAM

In 1957 the Fish and Game Department participated for the first time in the Columbia River Fishery Development Program. This was a program designed to restore the fishery resource in the Columbia River and its tributaries. Funds were appropriated by Congress in 100 percent grants in an effort to restore losses caused by dams constructed in the Columbia River. To date, through Fiscal Year 1970, the department has received a total of $2,626,691.42 for fishery development programs, $475,176.75 for special study programs and $503,956.51 for operation and maintenance of projects constructed with development funds.

The grant allotted for the current biennium for operational studies programs was $50,890.43. The following projects were approved from this allotment: