

Hatchery Bureau Hatchery System Analysis  
1/23/95

The hatchery bureau contributes to Montana quality of life and fishery resources in a variety of ways. Primarily these contributions are in the arena of biological management of the states fishery resources, recreation and economy.

BIOLOGICAL

Montana has a wide variety of habitat types which is managed by the fisheries division. These range from high mountain lakes in wilderness areas to wild trout populations in rivers and streams to lakes, reservoirs and small farm ponds. Each of these types require different management initiatives.

Both the Westslope and Yellowstone cutthroat are on the Montana list of species of special concern. Montana maintains a wild based broodstock of each of these subspecies for use in management efforts to maintain existing populations and their reintroduction into suitable habitat. In one drainage (Jewel Lakes) the use of hatchery produced westslope cutthroat was used to reclaim this historically westslope cutthroat basin from rainbow. Yellowstone cutthroat is utilized in the Yellowstone drainage to maintain some existing fisheries and reintroduction of these fish in lakes and streams which are in their historical range.

The Hatchery system assists biologist with the recovery efforts for pallid sturgeon in the lower Missouri and Yellowstone Rivers. the shovelnose sturgeon is utilized as a surrogate species to develop cultural and management techniques which can then be applied to the pallid sturgeon. The hatchery at Miles City serves as a staging area when collections of shovelnose sturgeon are made. These fish are then transferred to other hatcheries for further investigative work.

The hatchery system is heavily involved in high mountain lake management. Many of these lakes have none or limited reproductive potential. Stocking of high mountain lakes is accomplished by aircraft with a few stocked by pack horses, where aircraft operations are restricted. FWP stocks over 200 high mountain lakes of which approximately 125 are stocked each year. Many high mountain lakes are stocked on a periodic schedule ranging from annual stocking to eight years rotation. Frequency is determined on recruitment if any, fishing pressure and longevity expected in these waters. The regional fishery management staff determines the species to be stocked, frequency and numbers.

The hatchery system plays a small but vital role in river and stream management. This role is limited to obtaining eggs from a specific population, incubating and hatching the eggs and stocking fish back into to the same or other similar habitats. Examples of

this are brown trout on the Missouri and Boulder Rivers and rainbow from the Madison used in the Marias River.

### RECREATION

Pursuit of sport fish for recreation and/or food has been part of the Montana "lifestyle" before it was settled by pioneers. This has provided both pleasure and sustenance for residents and visitors alike. The onset of settlers and the subsequent developments have changed the aquatic habitat and altered the species assortment and proportion of animals which inhabit the streams and lakes of the state. Agricultural and urban development consumes and alters large quantities of water. Also dams were built to moderate the effects of floods and droughts. These structures often eliminated essential spawning habitats but provided significantly more water volume for rearing and maintenance of fish populations. Water behind dams have created recreational opportunities for thousands of boaters, anglers and other water based activities.

Fishing pressure from the angling public often exceeds the ability of many lakes and reservoirs to maintain suitable levels of sport fish to accommodate sports men and women who utilize them. Stocking of fish is necessary to maintain fish populations at an adequate level to support angler use at it's current level. As a result of stocking appropriate species and strains of fish in lakes and reservoirs, anglers enjoy the recreational opportunities on approximately 900 lakes and reservoirs each year. Lakes such as Canyon Ferry, Holter, Hauser, Fort Peck, Cooney, Clark Canyon, and over 150 high mountain lakes and numerous farm ponds in eastern Montana are available to the public for recreational pursuit of sport fish due primarily to hatchery supplied fish. As a result of hatchery assistance to the management of Montana's fishery resources, no one has to travel very far to enjoy the recreational benefits of our renowned fishing opportunities.

One aspect of lake and reservoir management with the use of cultured fish is the level of fishing pressure these waters sustain. Using Bluewater Springs Trout Hatchery as an example, this hatchery stocks approximately 33 lakes and reservoirs each year with several strains of rainbow trout. We have angler use estimates on 16 of these waters. Bluewater contributes in a significant way toward maintaining and supporting over 175,000 angler days on waters where estimates are available.

Fishing pressure data estimates that over 2.5 million angler days occurred in 1994. Approximately 50% of these are on lakes and reservoirs and hatchery produced fish support wholly or in part approximately 50% of the angling days for lakes and reservoirs. Therefore the hatchery system contributes to approximately 625,000 angler days statewide on bodies of water for which we have information. Many other waters the hatchery system serves are not included in this pressure estimate.

Many recreationist pursue fishing on Montana's blue ribbon trout streams which are managed as wild fisheries. If the level of fishing pressure sustained by the hatchery system in lakes and reservoirs were not available, much of this angler use would transfer to streams and rivers placing further pressure on these systems both socially and biologically.

#### ECONOMICAL

Using the pressure estimates from 1994 and economic value of an angler day from 1993, the most recent data available for lakes and reservoirs, show significant economical benefits from hatchery maintained fish populations. Actual expenditures by anglers for a day of fishing on a lake or reservoir in Montana was \$50.90 per day in 1993 dollars.

Hatcheries sustain wholly or in part 625,000 angler days. By the 1993 economic data this provides economical activity of over \$31 million to the state each year. Bluewater hatchery alone assist with the maintenance of fisheries valued at over \$8 million. As an example of the value of a single body of water is Cooney Reservoir. The fishery in this reservoir is sustained almost entirely by hatchery fish from Bluewater and Miles City. Cooney Reservoir provided 34,595 angler days in 1994 and is valued at \$1.7 million per year to the local and state economy. Another lake Bluewater stocks is Clark Canyon Reservoir. Clark Canyon provided 50,734 angler days in 1994 and contributed over \$2.5 to the local and state economy. Over 90% of the fishery in Clark Canyon is dependent on hatchery produced fish (Oswald). Therefore Bluewater is responsible for the economic value of over \$2.25 million from this reservoir alone. The annual budget for Bluewater in FY 1995 is \$153,959 and the annual Hatchery Bureau budget is approximately \$1.5 million for all nine state operated hatcheries.

stocking\benefits.leg

## Montana Fish Hatcheries

The propagation and stocking of fish has been a vital part of Fish, Wildlife & Parks (FWP) activities since early in this century. The first Montana hatchery began operation in 1908 at what is now Washoe Park Trout Hatchery at Anaconda. Since then a number of hatcheries have come into and left the inventory of facilities which were involved in the production or distribution of fish.

Currently, nine hatcheries are operated by FWP and are located at Anaconda, Arlee, Big Timber, Bridger, Great Falls, Lewistown, Somers, Miles City and Eureka. Eight are state owned and one, Murray Springs at Eureka, is owned by COE and operated under contract by FWP. This is a mitigation hatchery to partially offset the loss of fishing opportunities due to construction of Libby Dam and impounding Lake Koocanusa.

Historical hatcheries no longer in operation were located at Emigrant, Hamilton, Libby, McNeil Pike Hatchery at Fresno Lake, Ovando and Polson. During the thirties, two satellite stations were operated to stock out fish which were reared at other hatcheries. These were located at Red Lodge and Beaver Creek near Havre, and only operated for a few months during the summer. Red Lodge served the Big Timber and Emigrant hatcheries. Fish were hauled to the site and Forest Service horse and mule pack trains distributed the fish in surrounding mountains. At Beaver Creek fish were trucked in from Great Falls and then distributed into local waters.

Over the years the hatchery operations have changed dramatically. From the first hatchery activities until the early fifties, stocking of fish was the primary fishery management activity of FWP. Fish were stocked into every part of the state and often with species which affected resident fish with the resident usually losing out to the new introduction. In later years, the hatchery system has become a tool of management. Today stocked fish are compatible with resident populations and in numerous cases used to restore native fish into their historical habitat.

The hatchery system today is a highly sophisticated operation with scientifically managed broodstocks, computerized growth and feed usage projections and distribution vehicles to assure the fish are provided complete life support during transportation and stocking. In addition, the horse and mule pack train of years ago have given way to air plants by helicopter and fixed wing aircraft.

Historically the department records show 61,639 fish stockings have taken place through 1991. These records also show that 1,315,762,102 fish have been stocked since the hatchery system began operation.

Below is a brief description of each state operated hatchery.

Washoe Park Trout Hatchery - Anaconda - This is the first fish hatchery operated by FWP and is located within the city of Anaconda adjacent to Washoe Park. It began operations in 1908 and has been in continuous operation since then. Large numbers of eggs collected from Georgetown Lake and Harrison Reservoir were processed through this station. Eggs were shipped to other hatcheries for hatching, rearing and stocking.

Today this hatchery is home of the new wild based westslope cutthroat broodstock. In addition, eggs taken from Desmet rainbow at Willow Creek, a tributary to Harrison Reservoir, are incubated to the eyed stage and then shipped to production hatcheries for rearing and stocking.

Jocko River Trout Hatchery - Arlee - Jocko Hatchery is located 1/4 mile north of Arlee and has been a broodstock station since the early fifties, and produces over six million eggs annually. The rainbow trout is used extensively in FWP management of lakes and reservoirs. In addition, the USFWS maintains a brood of Arlee rainbow and ships eggs to their hatcheries throughout the country.

Yellowstone River Trout Hatchery - Big Timber - The Big Timber hatchery is located adjacent to the town of Big Timber sharing its northern boundary and is responsible for the management of the McBride strain yellowstone cutthroat broodstock. This fish is used successfully in a variety of habitats from high mountain lakes to low lying lakes and reservoirs. The broodstock is wild based with periodic crossing of wild gametes from McBride Lake with the hatchery brood.

Bluewater Springs Trout Hatchery - Bridger - Bluewater Springs Hatchery is located seven miles east of Bridger at the foot of the Pryor Mountains and is named after its water supply, a spring with a distinctive blue color. This hatchery produces over 1.5 million fish, including several strains of rainbow, cutthroat and, on occasion, chinook salmon for use in management programs. Fish from this station are stocked in south, central and eastern Montana.

Giant Springs Trout Hatchery - Great Falls - Giant Springs is located adjacent to Heritage Park near Great Falls. Water supply is from one of the "Giant Springs" arising in the area and is the headwaters of the world's shortest river, the Roe River. Giant Springs produces approximately 2.2 million trout and kokanee salmon annually.

Big Springs Trout Hatchery - Lewistown - Big Springs Hatchery is located seven miles east of Lewistown and is the largest coldwater production hatchery in the state's inventory. It produces over 2.5 million fish of a variety of strains of rainbow, cutthroat, brown trout and kokanee salmon. This hatchery is actually two separate units. One is located at the head of Big Springs Creek (upper unit) and is the location of the hatchery building and eight outside raceways.

The second (lower unit) is located 3/4 miles west and its water supply is the overflow from a covered spring which is the city of Lewistown's water supply. A majority of production rearing of the Lewistown hatchery occurs at the lower unit.

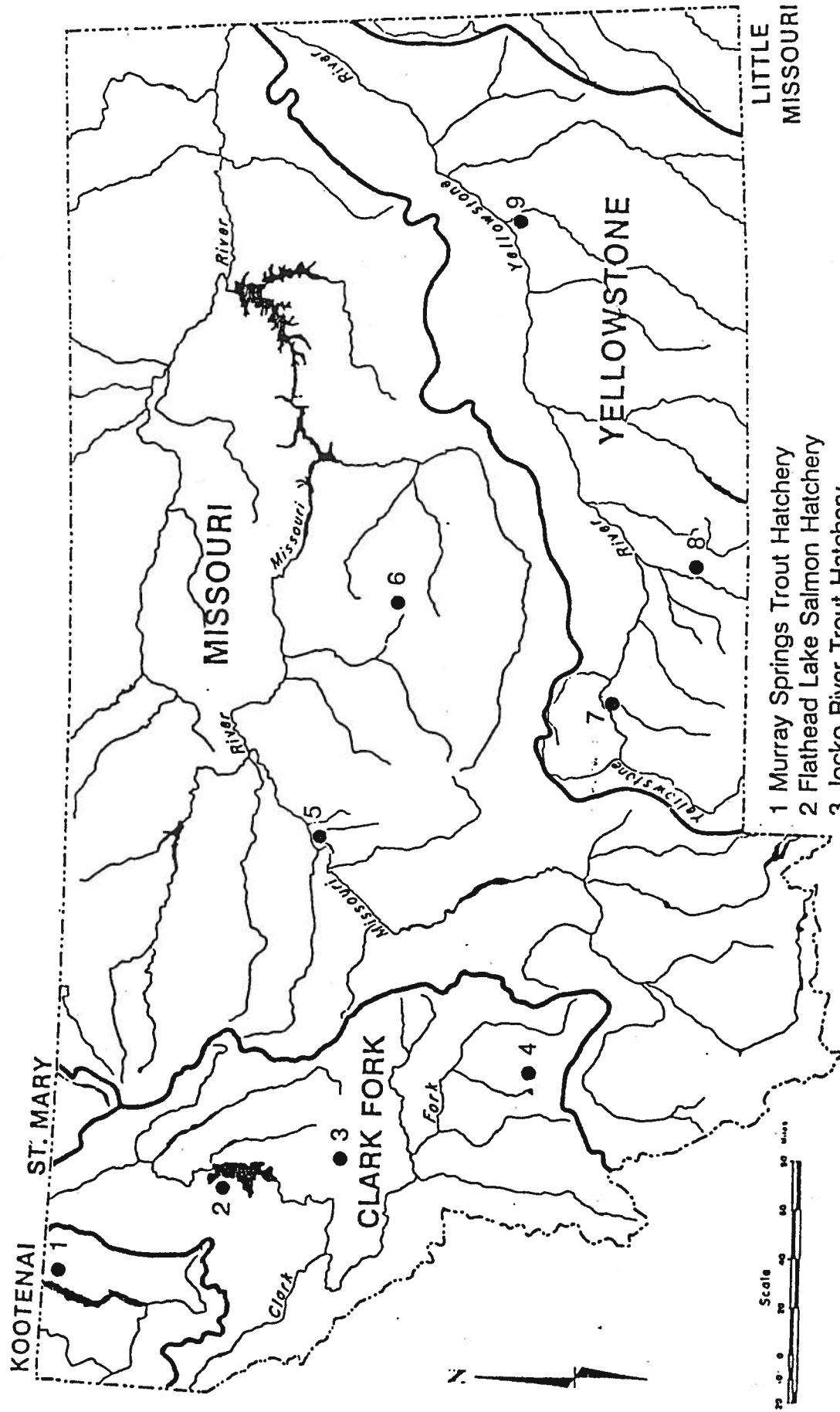
Flathead Lake Salmon Hatchery - Somers - Somers hatchery is located on the northwest shores of Flathead Lake and is at the center of the kokanee recovery efforts for Flathead Lake. This hatchery collects eggs from wild spawning kokanee population, incubates them to eyed stage and ships some to other stations for hatching and rearing. Somers has the capability to handle over eight million salmon eggs. Available egg supplies have supported the stocking of two to four million kokanee into Flathead Lake over the past four years.

Miles City Hatchery - Miles City - Miles City Hatchery is located between I-94 and the city of Miles City and is the only warmwater hatchery in the state. Its production includes walleye, northern pike, largemouth and smallmouth bass, catfish, crappie and tiger muskie. In 1990, over 40 million fry and fingerling were stocked from Miles City to support fishery management of warmwater species.

Murray Springs Hatchery - Eureka - Murray Springs Hatchery is located seven miles northwest of Eureka and is owned by COE and operated by FWP. It was built as a mitigation hatchery to offset the loss of fishery habitat when Lake Koocanusa was impounded. Murray Springs rears approximately 1.2 million fish of several trout strains plus kokanee salmon. Most production from Murray Springs is utilized in and around Lake Koocanusa.

REF: DL292.5

# STATE FISH HATCHERIES AND MAJOR RIVER BASINS IN MONTANA



- 1 Murray Springs Trout Hatchery
- 2 Flathead Lake Salmon Hatchery
- 3 Jocko River Trout Hatchery
- 4 Washoe Park Trout Hatchery
- 5 Giant Springs Trout Hatchery
- 6 Big Springs Trout Hatchery
- 7 Yellowstone River Trout Hatchery
- 8 Bluestone Springs Trout Hatchery
- 9 Miles City Fish Hatchery (warm/cool water)

FISH STOCKED BY YEAR  
FISH STOCKED BY YEAR

SPECIES	TOTAL	1985	1986	1987	1988	1989	1990	1991	1992	1993
Rainbow (001)	42,497,738	3,521,798	4,468,030	4,674,966	3,992,599	3,622,029	3,348,357	3,504,795	5,285,921	5,237,030
Walleye (012)	7,539,801	1,302,000	916,824	649,864	697,443	765,632	685,365	355,357	706,446	749,364
Ysct (013)	4,207,841	223,448	459,835	504,947	481,300	710,320	452,906	443,711	208,448	450,678
Ct. undegnted. (002)	15,500	230	2,000	0	0	0	0	0	13,270	0
Brook Trout (003)	207,594	49,098	35,153	29,500	0	0	0	12,804	0	42,589
Bull Trout (005)	0	0	0	0	0	0	0	0	0	0
Brown Trout (004)	1,744,658	148,600	453,204	234,528	314,486	141,735	72,679	50,795	127,191	77,692
Golden Trout (007)	25,189	0	0	0	0	0	540	13,485	11,164	0
Lake Trout (006)	170,157	17,359	2,664	2,000	0	0	0	93,450	54,684	0
Kokanee (008)	29,516,255	2,087,361	2,975,925	2,235,697	3,510,226	5,535,757	4,432,150	4,025,860	1,187,824	1,758,024
Grayling (010)	576,283	4,834	1,230	68,000	100,000	30,000	0	0	101,888	82,283
Coho Salmon (009)	23,900	0	4,952	18,948	0	0	0	0	0	0
Chinook (087)	685,073	124,106	144,148	214,864	76,215	0	0	61,425	0	64,315
Whitefish (085)	20,000	0	0	0	0	0	20,000	0	0	0
Cisco (125)	24,049,988	10,050,000	13,999,986	0	0	0	0	0	0	0
Rb X Ct Hybrid (011)	19,656	0	0	5,000	0	0	0	0	13,156	1,500
<b>SUBTOTAL</b>	<b>111,299,631</b>	<b>17,528,834</b>	<b>23,463,951</b>	<b>8,638,314</b>	<b>9,172,269</b>	<b>10,805,473</b>	<b>9,011,997</b>	<b>8,561,682</b>	<b>7,709,992</b>	<b>8,463,475</b>
Walleye (082)	245,548,772	13,380,742	12,548,083	15,550,200	34,098,803	41,908,702	16,635,671	15,477,669	27,671,796	33,135,282
Largemouth Bass (017)	2,838,573	6,262	93,154	603,048	518,508	301,307	166,650	401,607	196,676	247,235
Smallmouth Bass (073)	947,664	0	62,185	0	0	248,640	101,791	175,260	128,133	152,100
Northern Pike (023)	15,834,797	3,725,336	7,151,878	52	2,675,000	171,752	441,300	712,200	617,320	339,234
Crapple (021,077,078)	307,084	3,775	14,546	527	0	0	110,117	116,885	15,893	125
Catfish (024)	181,095	0	0	0	11,700	15,000	20,363	29,192	45,800	30,800
Tiger Muskie (148)	20,233	0	0	1,170	2,500	7,600	0	6,828	906	1,229
SaugherXWalleye (149)	2,400	0	0	2,400	0	0	0	0	0	0
Sauger (081)	35	35	0	0	0	0	0	0	0	0
Bluegill (074)	2,800	0	0	2,800	0	0	0	0	0	0
Ling (026)	1,963	788	0	1,175	0	0	0	0	0	0
Perch (020)	56,131	25,294	19,172	6,665	0	0	0	0	0	0
Emerald Shiner (047)	4,015	0	3,300	715	0	0	0	0	0	0
Spottail Shiner (145)	6,750	0	550	6,200	0	0	0	0	0	0
Golden Shiner (053)	600	600	0	0	0	0	0	0	0	0
Fathead Minnow (052)	62,352	35,400	16,952	10,000	0	0	0	0	0	0
Black Bullhead (065)	5,354	5,194	160	0	0	0	0	0	0	0
White Sucker (057)	3,433	3,433	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	<b>285,824,051</b>	<b>17,186,859</b>	<b>19,909,980</b>	<b>16,184,952</b>	<b>37,306,511</b>	<b>42,653,001</b>	<b>17,475,892</b>	<b>16,919,841</b>	<b>28,676,524</b>	<b>33,906,005</b>
<b>TOTAL</b>	<b>377,123,682</b>	<b>34,715,693</b>	<b>43,373,931</b>	<b>24,823,266</b>	<b>46,478,780</b>	<b>53,458,474</b>	<b>26,487,889</b>	<b>25,481,323</b>	<b>36,386,516</b>	<b>42,369,480</b>



SPECIES	1994
Rainbow (001)	4,842,213
Wslct (012)	711,506
Ysct (013)	272,248
Ct. undsgntd. (002)	
Brook Trout (003)	38,450
Bull Trout (005)	
Brown Trout (004)	123,748
Golden Trout (007)	
Lake Trout (006)	
Kokanee (008)	1,767,431
Grayling (010)	188,048
Coho Salmon (009)	
Chinook (087)	
Whitefish (085)	
Cisco (125)	
Rb X Ct Hybrid (011)	
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SUBTOTAL	7,943,644
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Walleye (082)	35,141,824
Largemouth Bass (017)	304,126
Smallmouth Bass (073)	79,555
Northern Pike (023)	725
Crappie (021,077,078)	45,216
Catfish (024)	28,240
Tiger Muske (148)	
SaugherXWalleye (149)	
Sauger (081)	0
Bluegill (074)	0
Ling (026)	
Perch (020)	5,000
Emerald Shiner (047)	0
Spottail Shiner (145)	0
Golden Shiner (053)	0
Fathead Minnow (052)	
Black Bullhead (065)	0
White Sucker (057)	0
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SUBTOTAL	35,604,686
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TOTAL	43,548,330

# Job # 1

Facility summary for  
Hatchery Flathead Lake Salmon Hatchery  
Location Somers MT

## Buildings

Building #	Use	Size	Const. Type	Access or Occupant
1	Residence	32 x 42	Frame	Manager
2	Garage	22 x 24	Frame	Crew
3	Net House	12 x 24	Frame	Crew
4	Storage	22 x50	Frame	Crew
5	Hatchery	40 x 80	Frame	Crew/Public
6	Boat House	16 x 40	Metal	crew
7	Garage	14 x 20	Frame	crew

## Roads, Land and Water

Miles of Roads	Acres Land	Date Aquired	Water GPM	Water Rights Pri. Date
0.25	2.27	1911	1300	1899
	20	1992	450	1950

## Other Facilities

Raceways	Number	Size	Miles of Pipelines	Miles of Canals	Miles of Fence	Bridges/ Culverts
Concrete	36	14'x14"x8"	0.75	0	0	0
Concrete	2	28'x4'x2'				
Concrete	2	28'x4'x2.5'				
Concrete	2	14'x3'x2.5'				

## Job # 2

Facility summary for  
Hatchery Washoe Park Trout Hatchery  
Location Anaconda

### Buildings

Building #	Use	Size	Const. Type	Occupant
1	Residence	31 x 51	Frame	Manager
2	Residence	32 x 32	Frame	Fish Clts.
3	Residence	27 x 32	Frame	Fish Clts.
4	Hatchery	70 x 114	Block	Crew/Public
5	Shop	22 x 70	Frame	Crew
6	Garage	22 x 24	Frame	Crew
7	Ice House	18 x 36	Frame	Crew
8	Water Intak	15 x 15	Cement/Mtl.	Crew
9	Aeration	21 x 45	Cement/Mtl.	Crew
10	Spn. House	22 x 30	Fabric/Mtl.	Crew
11	Spn. House	22 x 30	Fabric/Mtl.	Crew

### Roads, Land and Water

Miles of Roads	Acres Land	Date Aquired	Water GPM	Water Rights Pri. Date
0.3	4.36	1908	673	1882
			399	1883
			1346	1883
			673	1883
			1010	1912

### Other Facilities

Raceways	Number	Size	Miles of Pipelines	Miles of Canals	Miles of Fence	Bridges/ Culverts
Concrete	16	100x10x4.5	2.04	0	.39	0
Concrete	1	25 dia.x4				

### Job # 3

Facility summary for  
Hatchery Jocko River Trout Hatchery  
Location Arlee

#### Buildings

Building #	Use	Size	Const. Type	Occupant
1	Hatchery	42 x 84	Frame	Crew/Public
2	Residence	24 x 48	Frame	Manager
3	Residence	24 X 32	Frame	Fish Clts.
4	Residence	24 x 32	Frame	Fish Clts.
5	Garage	24 x 57	Frame	Crew
6	Shop	12 x 24	Frame	Crew
7	Spn. House	13 x 24	Block	Crew
8	Pmp House	8 x 12	Frame	Crew
9	Feed Stg.	21 x 24	Metal	Crew

#### Roads, Land and Water

Miles of Roads	Acres Land	Date Aquired	Water GPM	Water Rights Pri. Date
1.6	10.0	1947	5000	1973
	3.26	1948		
	46.45	1951		

#### Other Facilities

Raceways	Number	Size	Miles of Pipelines	Miles of Canals	Miles of Fence	Bridges/ Culverts
Concrete	5	110x10x5.4	1.05	.53	1.4	4
Concrete	10	100x10x4				
Concrete	10	32X4.5x2.1				
Fiberglass	22	16x1.2x1.1				

# Job # 4

Facility summary for  
Hatchery Giant Springs Trout Hatchery  
Location Great Falls MT.

## Buildings

Building #	Use	Size	Const. Type	Occupant
1	Residence	28 x 28	Frame	Fish Clts.
2	Residence	32 x 42	Frame	Fish Clts.
3	Residence	27 x 44	Frame	Manager
4	Hatchery	122 x 60	Block	Crew
5	Shop	40 x 60	Block	Crew
6	Pmp. Hse.	12 x 14	Frame	Crew
7	Garage	40 x 20	Frame	Crew
8	Garage	20 x 12	Frame	Crew

## Roads, Land and Water

Miles of Roads	Acres Land	Date Aquired	Water GPM	Water Rights Pri. Date
0.75	0.34	1939	7000	1923
	2.82	1970	9000	1984
	1.04	1971		
	4.17	1989		

## Other Facilities

Raceways	Number	Size	Miles of Pipelines	Miles of Canals	Miles of Fence	Bridges/ Culverts
Concrete	24	64x8x2.3	0.36	0.05	0.38	3
Concrete	1	30 Dia. Rnd.				
Fiberglass	20	16x1.2x.7				
Fiberglass	21	16x2x1.6				

# Job # 5

Facility summary for  
Hatchery Big Springs Trout Hatchery  
Location Lewistown

## Buildings

Building #	Use	Size	Const. Type	Occupant
1	Hatch./Stg.	37 x116	Frame/Blk.	Crew/Public
2	Hatch/Office	70 x150	Frame	Crew/Public
3	Residence	24 x 33	Frame	Fish Clts.
4	Residence	25 x 48	Frame	Manager
5	Residence	27 x 43	Brick	Fish Clts.
6	Residence	27 x 43	Brick	Fish Clts.
7	Ware./Shop	50 x 82	Metal	Crew
8	Fire Eqpt.	12 x 12	Frame	Pump/Crew
9	Fire Pump	5 x 12	Metal	Pump/Crew

## Roads, Land and Water

Miles of Roads	Acres Land	Date Aquired	Water GPM	Water Rights Pri. Date
0.3	1.0	1953	5600	1924
	0.48	1958	13917	1960
	3.49	1957	8289	1960
	1.63	1960		
	1.57	1958		
	16	Lease 1971 - 2049		
	2.06	Lease 1970 - Perpetual		

## Other Facilities

Raceways	Number	Size	Miles of Pipelines	Miles of Canals	Miles of Fence	Bridges/ Culverts
Concrete	17	95.6x7.3x2.	0.5	0.3	1	1 Veh.
Concrete	13	59.6x7.3x2.3				5 Walk Way
Concrete	8	60x7x2.2				
Concrete	24	31.5x3x2.3				
Fiberglass	20	15x2x1.3				

# Job # 6

Facility summary for  
Hatchery Yellowstone River Trout Hatchery  
Location Big Timber MT.

## Buildings

Building #	Use	Size	Const. Type	Occupant
1	Residence	61 X 28	Frame	Manager
2	Residence	33 x 27	Frame	Fish Clts.
3	Hatchery	100 x 64	Block	Crew/Public
4	Shop/Grg.	55.5 x 24	Frame	Crew

## Roads, Land and Water

Miles of Roads	Acres Land	Date Aquired	Water GPM	Water Rights Pri. Date
.13	5.09	1927	1000	1926
	3.26	1934	60	1926
	.90	1926	24	1926
			1860	1983

## Other Facilities

Raceways	Number	Size	Miles of Pipelines	Miles of Canals	Miles of Fence	Bridges/ Culverts
Concrete	6	100x6x3.5	.45	.01	.41	1
Concrete	5	31x2.5x2.8				
Concrete	8	31x2.5x1.8				
Fiberglass	5	15.4x1.2x.75				

# Job # 7

Facility summary for  
Hatchery Bluewater Springs Trout Hatchery  
Location Bridger MT

## Buildings

Building #	Use	Size	Const. Type	Occupant
1	Residence	26 x 32	Frame	Fish Clts
2	Residence	26 x 32	Frame	Fish Clts
3	Residence	28 x 48	Frame	Manager
4	Shop	40 x 50	Frame	Crew
5	Hatchery	22 x 96	Frame	Crew/Public
6	Feed/Frزر.	34 x 38	Frame	Crew
7	Storage	12 x 20	Block	Crew
8	Fire Pump	12 x 12	Frame	Crew
9	Office	14 x 16	Frame	Crew
10	Garage	28 x 34	Frame	Crew
11	Latrine	4 x 4	Frame	Public

## Roads, Land and Water

Miles of Roads	Acres Land	Date Aquired	Water GPM	Water Rights Pri. Date
.6	70.3	1947	600	1947
	20	1965	2034	1947
			1066	1947
			28	1947

## Other Facilities

Raceways	Number	Size	Miles of Pipelines	Miles of Canals	Miles of Fence	Bridges/ Culverts
Concrete	8	50x10x2	.25	0	2.5	3
Concrete	6	100x12x1.5				
Fiberglass	16	16x1.66x1.5				
PVC	1	16x2x.75				
Display	1	15x6x1				



# Job # 8

Facility summary for  
Hatchery Miles City Fish Hatchery  
Location Miles City

## Buildings

Building #	Use	Size	Const. Type	Occupant
1	Residence	27 x 50	Frame	Fish Clts
2	Residence	27 x 50	Frame	Manager
3	Hatchery	99 x 122	Brick	Crew/public
4	Shop	72 x 28	Frame	Crew
5	Storage	28 x 66	Frame	Crew
6-1	Well House	6 x 8	Brick	Crew
7-2	Well House	6 x 8	Brick	Crew
8	Storage	12 x 8	Brick	Crew
9	Y.R. Intake	20 x35	Block	Crew

## Roads, Land and Water

Miles of Roads	Acres Land	Date Aquired	Water GPM	Water Rights Pri. Date
5	163	1983	850	1958
			4500	1977

## Other Facilities

Raceways	Number	Size	Miles of Pipelines	Miles of Canals	Miles of Fence	Bridges/ Culverts
Concrete	8	70x7x4	6	.45	.35	0
Concrete	16	13x3x2.5				
Fiberglass	6	6 dia.x3				
Fiberglass	43	10x3x1.6				

Job # (U.S.A.C.O.E. Property)

Facility summary for

Hatchery Murray Springs Trout Hatchery

Location Eureka

Buildings

Building #	Use	Size	Const. Type	Occupant
1	Residence	28 x 40	Frame	Fish Clts.
2	Residence	28 x 40	Frame	Manager
3	Residence	28 x 40	Frame	Fish Clts.
4	Hatchery	30 x 70	Concrete	Crew/Public
5	Storage	30 x 40	Steel	Crew
6	Spn. House	15 x 15	Concrete	Crew
7	Pump Hse.	20 X 20	Concrete	5 Pumps

Roads, Land and Water

Miles of Roads	Acres Land	Date Acquired	Water GPM	Water Rights Pri. Date
.5	10	1979	6000	1979

Other Facilities

Raceways	Number	Size	Miles of Pipelines	Miles of Canals	Miles of Fence	Bridges/ Culverts
concrete	16	80x8x5	1.5	01	1.2	1
Concrete	16	19.5x4x3.5				
Concrete	2	16x2x1.5				