

Memorandum

To : Files

Date: May 13, 1974

From : **Department of Fish and Game**

Subject: East Park Reservoir, Colusa County (Fish Rescue and Chemical Treatment)

East Park Reservoir was drained during the summer of 1972 so that repairs could be made to the outlet works. During maximum drawdown the lake contained about 7 acres averaging 18 inches deep (10 acre feet).

During the last week in July an attempt was made to salvage fish from the reservoir. The lake still contained 15 feet of water at the time. Some 269 fish weighing 235 pounds were collected with a 1000-foot seine. The following fish were removed from the reservoir.

46	LMB	ave.	1.5	lbs	each
75	SMB	"	"	"	"
78	RSF	"	0.5	lbs.	"
65	BG	"	0.3	lbs.	"
5	CCF	"	2	lbs.	"
400	SQF	"	1	lbs.	"
100	SKR	"	1	lbs.	"

Snags and deep mud made seining difficult.

On August 24 the reservoir was examined again. The reservoir was at maximum drawdown and the water temperature reached the mid 80's. The water was muddy and despite seepage inflow amounting to about 2 cfs many fish appeared to be in distress. Large redear sunfish, largemouth bass, and golden shiners could be observed on the surface.

Another attempt was made to rescue fish on August 30. The mud in the reservoir and along the banks was too deep for effective seining and it was not possible to drive a tank truck within 600 feet of the water. The pool below the dam which was accessible by truck was salvaged with a boat shocker. Some 90 channel catfish, 160 white catfish and about 60 large and smallmouth bass were rescued. Many fish were in distress and some were dying.

In order to determine whether significant numbers of game fish survived the adverse conditions and whether non game fish were numerous enough to justify chemical treatment, the reservoir was sampled on September 14, 1972 with 2 monofilament gill nets. The following fish were collected:

6 RSF 6-8"
 50 BG and small RSF 2-4"
 30 LMB 4-6"
 9 LMB 12-15"
 20 WCF 9-12"
 20 WCF 13-17"
 1 CCF 9"
 GSH 2-4" (hundreds)

No squawfish, suckers, threadfin shad or smallmouth bass were observed even though abundant one month earlier.

A decision was made to treat the reservoir and its tributaries excluding the Stoney Creek drainage above Rainbow Diversions Dam.(the latter diverts high flows into Cast Park Reservoir).

The reservoir was treated on October 10 with 30 gallons of pronoxfish dispersed by a pump mounted on a skiff. The reservoir contained less than 20 acre-feet of water during the treatment.

It is estimated that at least several hundred largemouth bass ranging from 1 to 4 pounds were present. Local residents collected nearly 100 bass. White catfish up to 5 pounds but averaging 2 pounds were even more abundant. Only a few channel catfish were observed. Bluegill, redear sunfish and golden shiners were the most numerous fish. Smallmouth bass, threadfin shad, suckers and squawfish were not observed. These fish were apparently more sensitive to the adverse water conditions in the reservoir (low DO, high water temp.).

In order to discourage rapid reinfestation of East Park Reservoir with nongame fish all of the tributaries were treated with rotenone. About 35 gallons of pronoxfish and 6 man-days were used to treat the tributaries. Since many of them were not flowing scattered pools had to be treated individually. Stoney Creek above Rainbow Diversion Dam was not treated because of local concern over trout losses.

The following tributaries were treated:

<u>Stream</u>	<u>Length treated</u>	<u>Flow</u>	<u>Species killed</u>
Little Stoney Cr.	8 miles	2 cfs	SQF, SKR, SCP, RCH, BG, RT, TP
Trout Creek	1.7 miles	1 cfs	SQF, SCP, RCH, RT
Sullivan Creek	0.7 miles	pools	SKR, SQF, RCH
Frenzel Creek	0.2 miles	0.2 cfs	RT
Hyphus Creek	1.5 miles	0.2 cfs	SKR, SQF, RT
Indian Creek	2.0 miles	0.2 cfs	SKR, SQF, BG, RCH, RT, WCF
Squaw Creek	0.1 Mile	pools	SKR, SQF, BG

Stream treatment details appear in individual stream survey files.

During the spring of 1973 East Park Reservoir refilled and was planted with Florida largemouth bass fingerlings, channel catfish, redear sunfish, black and white crappie, and threadfin shad. Alabama spotted bass will be planted when they become available.

In addition to the above fish planted by the Department of Fish and Game, local residents are reported to have rescued fish from the creek below the dam and planted them in the lake. This could interfere with our management plans and evaluation.

East Park Reservoir was surveyed by skin diving on June 20, 1973. Small schools of 2-inch bass, small sunfish and one-inch bullheads were observed. The latter were probably illegally planted. Anglers report catching a few adult bass also a probable result of illegal planting.

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