

1927-1928

A report concerning the sport vs Commercial
Fishing on the Rogue with pertinent information on
phases of fish conservation throughout the river.

FISH LADDERS	PAGES 80 - 86
GOLD RAY DAM	86
WATER SUPPLY DATA	87
MILES OF STREAM BED - EFFICIENCY	88
STREAM BED MAP	89
EFFECTS OF OCEAN TROLLING	90 - 93
EFFECTS OF DUAL CONTROL	94 - 1000
LAW VIOLATION CASES.	101 - 106
COMMERCIAL CODE WEAKNESSES BY L.A. LIEBQUIST	107 - 121
CONCLUSIONS.	

by
Ralph Cowgill

See page 35 -

ROGUE RIVER HISTORY.

The controversy known as the Rogue River fish fight has been one of long standing. The statutes of Oregon are full of laws passed, amended and repealed, in attempts to solve the continuous squabble between the commercial interests, to whom every pound or can of fish represented a profit in money, and the other interested parties, who spent their spare time and money seeking to catch a great salmon or steelhead with the hook and line for the sport it afforded. To each party fish was food. The first party wanted it principally to sell, and the more he could get the more he could make. The second party wanted the sport of catching his own fish, but not for profit, and objected to giving the gill netter and the middleman a monopoly on this natural resource.

These, then, were the principals in a fight that has rocked the state of Oregon for years. Commercial fishing seasons have been shortened, fishing areas limited, and the size and kind of gear regulated, but the supply of fish for all parties concerned has decreased year by year, until now it is a mere shadow of what it once was.

For years this struggle was confined mainly to the opposing forces mentioned, but with the construction of our wonderful highways there sprang up almost overnight an ever increasing army of tourists from within and without the state, attracted to the Rogue by the lure of an opportunity to catch a fish. Many of these people have become residents and taxpayers of Oregon, and because of the extent of this movement we find business of all kinds increased to a point never before fully realized possible, and with the result that there has entered into the fish controversy a third party composed of the hotels, auto camps, garages, stores of all description, the oil companies, and landowners who have suddenly discovered that land holdings along the bank of a good fishing stream are valuable.

In order to give a general view of the situation, the history of the Rogue will be sketched from the building of the first cannery on the Rogue in 1876, and I quote from R. D. Humes book, "Salmon of the Pacific Coast", as follows:

"Hearing that salmon of a fine quality were very plentiful at the Rogue River, I purchased a location and built a cannery there the latter part of 1876, and in the spring of 1877, much to my surprise, packed only 3197 cases, which was all that could be obtained by the utmost

exertion, which proved that the reports, except as to quality, were but echoes of the past."

- Salmon of the Pacific Coast, by R. D. Hume. -

The record of 3197 cases is interesting and it is unfortunate that I have not been able to get the record of the yearly catch between 1877 and 1900. The record from 1900 to date is a part of this report, and will be discussed later.

The first hatchery was built by Mr. Hume to bolster up the salmon run on the Rogue and apparently the run of salmon was built up considerably, but it is assumed that the supply of fish for natural propagation and for eggs for the hatchery was not sufficient to keep up with the increased pack at the cannery. Fewer fish came up the river, and thus started the Rogue River fish fight.

Rogue River was closed to commercial fishing by the Initiative Act of 1910 by a vote of 49712 to 33397, and remained closed during the years 1911 and 1912.

Mr. Hume passed out of the picture and his Rogue River interests were taken over by the Macleay Estate Company.

The legislature of 1911 repealed the initiative act of 1910, but Governor West vetoed it, and the legislature passed it over his veto in 1913; and the Macleay cannery operated again in 1913.

In 1913 a law was passed prohibiting seining in the Rogue from November 1 to September 15 of the following year. This left a 45 day seining period.

In 1917 seines were prohibited, but the referendum was invoked in 1918 and the bill defeated.

In 1919 the legislature closed Rogue River to commercial fishing with seines, but the bill was vetoed by Governor Withycombe while on his deathbed.

In 1920, after years of struggle, an agreement was reached between Mr. Macleay and upper fishermen, and the present law was enacted, which provided for -

An open commercial season May 15 to October 1.

Fishing with drift nets of 8½ inch, or larger, only.

Dead lines at Doyles Rock and Lobster Creek.

49712
33397
16315

Saturday night to Sunday night closed period.

Up to 1927 commercial fishing was permitted between Grants Pass and Hell Gate, but the people of Josephine County finally became disgusted over the rapid depletion of the stream and they led the movement in the 1927 legislature which ended in a law prohibiting fishing between Grants Pass and Hells Gate.

Thus after a long period of years we find commercial fishing confined exclusively to the twelve mile stretch of river between Doyle's Rock near the mouth ~~to~~ Lobster Creek, and still the controversy went on. The salmon pack at the canneries decreased, Mr. Macleay was dissatisfied and claimed that he had made a bad bargain in the agreement which resulted in the 1921 law.

The upper river fishermen were disgusted because of the continued decrease of the steelhead and smaller runs of salmon each year, and the rumors of wide open illegal fishing.

Thus again in 1927 we find both parties on the firing line ready for a war unto death.

ROGUE RIVER SURVEY.

For several years prior to 1927 the upper river fishermen had been considering the advisability of having an impartial survey made of Rogue River.

The final decision to stake their hopes on this survey came after Mr. Macleay appeared before a meeting of upper river fishermen, at Medford, Oregon, and asked that they approve changes in the present laws. The changes requested and the arguments therefore were as follows:

- (1) That the run of salmon during the open commercial season May 15 to October 1, had become badly depleted.
- (2) That the greatest percentage of the spring run of salmon passed on up the river before the commercial season opened, and that this run was now so large that the commercial interests should be allowed to change the opening date to April 15, in order that they might take a larger percentage of this run.

- (3) That the closing date, October 1, be extended in order that a larger percentage of the silverside run might be taken.
- (4) That the commercial interests be allowed to take the winter steelhead, for the reason that the winter steelhead were a different run than the summer run, and were of no benefit to the sportsmen. That the State Game Commission was propagating winter steelhead from spawn taken during January, February, March and April, and that they should instead take spawn from the summer run of steelhead if they wanted to build up the steelhead for angling purposes.
- (5) That in exchange for these changes a summer closed season be established to build up the summer salmon run and the summer run of steelhead.
- (6) That if these changes were made and the law changed to prohibit all gill netting, and in place thereof permit only seines to be used, he would see that all laws were lived up to rigidly, etc.

The result of this request and argument was that the meeting broke up in a row, with charges and counter charges being made.

The argument of the upper river fishermen was -

The commercial interests entered into an agreement as to the division of the fishing seasons. They have depleted their fish, and now they want ours, and are violating our laws to get them.

If the Game Commission has been propagating the wrong kind of steelhead, whats the matter with the State Game Commission? If all the money and work expended in an effort to improve the steelhead fishing has been wasted, there is only one remedy left, and that is to close Rogue River tight to all commercial fishing.

In answer to this, Mr. Macleay later charged that the de-

pletion of fish was due to upper valley people in allowing all the young fish to be killed in the power turbines, by sewage pollution of the river, by allowing the fish to run through unscreened irrigation ditches onto the alfalfa fields, and that the unlimited diversion of water for irrigation purposes had so diminished the summer flow of water in the Rogue that fish would not ascend the river, and therefore there was only one solution for him, and that was to open the river wide open to commercial fishing.

This situation finally resulted in Mr. Macleay joining with upper river fishermen in a united request that the State Game and Fish Commission employ some one to make a survey of the Rogue, to determine as far as possible all the facts, and make recommendations for a settlement of the controversy.

After some delay the writer hereof was selected by the two commissions to make the study, and began work about April 15, 1928. On April 15, 1929, the State Fish Commission withdrew its support, and since that time the State Game Commission has paid all expenses incidental thereto. During this time many investigations have been made concerning other projects than the Rogue.

Some parts of the investigation have not been completed, but will be as soon as all information needed can be obtained, therefore, subject to the additional information to be reported, this report is made.

RALPH P. COWGILL.

5

1907 LAW

Under Chapter 177, Section 3, Laws of 1907, commercial fishing for salmon on the Rogue was limited as follows:

1. Closed season from mouth of Illinois to mouth of Rogue

March 1 to April 15,	45 days
Aug. 5 to Sept. 5,	30 days

which left an open season of $9\frac{1}{2}$ months on the lower Rogue.

2. Closed season from Jackson-Josephine county line to mouth of Illinois river

Feb. 15 to April 15	2 months
Aug. 1 to Nov. 15	$3\frac{1}{2}$ months

which left an open season of $6\frac{1}{2}$ months on the upper river.

This law did everything but conserve the salmon and steelhead. The closed period March 1 to April 15 on the lower river allowed a good part of the spring run of chinook to get up the river, where the upper river commercial fishermen could get them beginning April 15. The main run of spring chinook would, under ordinary conditions, just about be in the river between Grants Pass and Hell Gate - the fishing ground of upper river commercial fishermen. In other words, this law was framed so that either the lower river or upper river fishermen would be able to get almost the entire run.

The closed period August 5 to September 5, of thirty days, had a paper effect of letting some of the fall run get up the river, but as the main run of silversides came in after September 5, it meant that the lower river fishermen had a complete monopoly on the fall and winter runs of chinook, silverside and steelhead.

The closed period on the upper river from August 1 to November 15 let what few silversides that got by the lower river fishermen get up the river to spawn.

To fully appreciate how this law worked to deplete the salmon and steelhead, it is necessary to know the

habits of the spring and fall salmon on the Rogue.

The real effect of this law was one of the reasons that brought on the initiative act of 1910; closing Rogue River to commercial fishing.

Up to this time there was no limit as to size or kind of gear. Small mesh nets and seines were used with the result that few fish got by.

Section 11, chapter 384, Laws of 1913, limited fishing in the Grants Pass - Hell Gate section to gill nets of 8 $\frac{1}{2}$ inch mesh or larger, but no regulation of the size or kind of gear was provided for the lower river section.

Section 1, chapter 207, Laws of 1917, prohibited purse seining in all streams south of the Columbia.

Section 2, chapter 201, Laws of 1917, provided a Saturday night to Sunday night closing period on the upper river, but no similar closed period on the lower river.

The fight continued.

The board of State Game & Fish Commissioners authorized by the 1915 legislature was an attempt to solve the everlasting fish fight. The legislature elected the members as follows:

Five members of Game Commission				
Three	"	"	Fish	"

and these two bodies elected a third member who became the chairman. Each commission had one vote, and in case of a tie vote, the chairman had the deciding vote. The two interests were in constant conflict, and there is no evidence of any constructive program emanating from this body. Public sentiment finally became so strong that a demand was made for the complete separation of the two commissions, and in 1920 a special session of the legislature passed a law creating separate commissions, namely, the present State Game Commission, and State Fish Commission.

Before entering upon a discussion of this law and its effect, it is necessary to revert to a further discussion of conditions affecting commercial fishing at the mouth of the river from the time Hume established the first cannery down to 1921.

HUME'S ATTEMPT TO CORNER THE
ROGUE RIVER SALMON INDUSTRY.

With the establishment of the first hatchery by Mr. Hume came the problem of protecting the future of his investment. Not only did he establish a salmon hatchery to replenish the decreasing salmon runs, but he also began acquiring all the lands fronting on the river from both sides of the mouth of the Rogue to Lobster Creek, a distance of approximately 12 miles, and such lands as could be obtained along the ocean front adjacent to the mouth of the river. It is probably safe to say that these lands would not have been acquired had not the competition for salmon become so keen that he saw the future of his industry imperiled - unless he could prevent competition.

This attempt to create a monopoly on Rogue River fishing was doomed to failure for the reason that rival commercial interests were antagonized, and the failure to recognize the claims of upper river people for their just share of this national heritage.

The following newspaper account of Hume's activities is copied from a Portland paper of 1920:

"R. D. Hume established a giant cannery at the mouth of the Rogue river and sought to create a monopoly on the salmon fishing in the stream. Hume's fishing grounds extended from the mouth of the river for a distance of eighteen miles, and he was a prominent figure in the legislative fights that occurred with the sportsmen and independent fishermen years ago.

In 1908 he transferred his fight for a monopoly of the stream to the Supreme Court of the state, instituting suit to establish an exclusive right for his cannery to take fish in the river.

He based his claims first on a grant from the state, second on custom and usage, and third of prescription. In an exhaustive opinion the Supreme Court ruled against his contention and the battle between Hume and the sportsmen was renewed before the legislature. Following the

death of Mr. Hume the Macleay Estate acquired the fishing grounds and inherited with them the feud."

Up to 1910 the battle of upper river fishermen was carried on in the legislature for laws that would insure an ample supply of salmon and steelhead for upper river fishermen.

No headway was being made and it was openly charged that the state legislature was controlled entirely by the commercial interests and therefore no relief might be expected.

Then came the direct appeal to the people under the Initiative Act of 1910 which closed Rogue River to commercial fishing.

ENTER MACLEAY ESTATE CO.

Rogue river remained closed two years and during this period the Macleay Estate Company acquired the Hume interests and immediately asked the state legislature to set aside the initiative law passed by the people. The legislature did as the Macleay Estate Company wished and set aside the law, but Governor West vetoed it. The 1913 legislature passed it over his veto.

There are two things to be remembered; the first is that the Rogue was closed to commercial fishing at the time the Macleay Estate Co. acquired the Hume Cannery and lands. The second is that the charge made that the legislature was controlled by the commercial fish interests proved to be true when the legislature set aside a law passed by the people by a majority of 16,315 votes.

From this time on until 1921 follows one of the most hectic periods of the Rogue river fish controversy. A battle of upper river interests to save the steelhead and salmon, and a battle of opposing commercial fishermen against the Macleay Estate Co. having a monopoly of the commercial fishing on the lower river.

With the reopening of commercial fishing again in 1913 there followed a continuous battle between commercial interests for the very last salmon. In spite of the fact that the Macleay Estate owned practically all the shore lands,

and attempted to prevent any competition, if all the reports are true, they were literally between two fires, one being the upper river fishermen who wanted to close the river to all commercial fishing, and the other being the opposing commercial interests who were actually taking a large part of the salmon on the lower river in spite of anything the Macleay Estate Co. could do.

The reports of this conflict are as hair-raising as any Diamond Dick story. If reports are to be believed, threats were made against the life of Roderick L. Macleay, manager of the Macleay Estate. Prior to 1920 the main fight was over the use of seines and it is reported that during 1916 one of the Macleay seines was pulled out on the bank and burned.

The 1917 legislature abolished seines, but the referendum was invoked in 1918 and the bill defeated.

The fight was resumed in the 1919 legislature, and a bill was passed, but Governor Withycombe vetoed it while on his deathbed.

To illustrate more vividly, if possible, the seriousness of the legislative fight in 1917, the following newspaper account of a speech delivered by Senator Gus Moser of Portland is given:

"Who is opposing this bill?", continued Moser. "It is the Macleay Cannery. Roderick Macleay is one of my best friends. There is a lobby here composed of some of my best friends. They say they will turn against me if I fight for this bill. I do not believe they will carry out their threats, but if they do I can only say that I have done what I think the majority of the people want.

There are plenty of fish in the Rogue river for everybody, but this monopoly wants them all. This bill will not do away with the commercial fishing industry, but will give the people down in that part of the country a chance to make a living. Gentlemen of the Senate, what are we going to do? Are we going on record as favoring one corporation against the interests of 98% of the people? 'No.' You are going to say 'No'."

"We are going to divide up and give the poor man as well as the rich a chance to fish in Rogue River."

About this time an act of God intervened to break the strangle hold of the Macleay Estate Co. During a flood period on the Rogue a new channel was cut at upper tide-water and a considerable portion of the Macleay river frontage was washed away. This change in channel gave two tracts of land river frontage where later a man named Seabury put up a cannery and operated during the years 1915-1916. During this period it is said that the Macleay Estate Company ordered its seiners to surround gill net fishermen and haul them in, and it is further related that certain gill netters attached scythe blades to their boat oars in order to cut their way through the seines. The gill netters also adopted another method of dealing with the Macleay seines. It is related that they placed jumpers in the river at selected locations and as the Macleay seine was hauled in the jumper would raise the seine and thereby release large numbers of salmon which the gill netters would attempt to catch by immediately dropping their gill nets.

The following excerpts from the Portland Oregonian of Jan. 24, 1917, and headed, "FISH HEARING BOILS" is quoted for the reason that it is a report of a hearing before a legislative committee and is therefore more or less authentic.

"State Capitol, Salem, Ore., Jan. 23. (1917) (Special).

The Rogue River fishing fight broke out with unexpected violence before the House Committee on fisheries tonight and many a man's reputation for veracity was sadly shattered and besmirched.

Macleay Attacks Settlers

The principal commercial fishing interests at the river mouth are those of Roderick Macleay. Thomas' bill would seriously curtail the Macleay activities. Macleay was on hand tonight to save his privileges and vigorously assailed the upper river people.

He pointed out that they already denied him the right to take steelheads and that now they

come "like spoiled babies", to cripple his operation further. He contended that the steel-head are lost in the irrigation ditches along the stream. The upper river people answered that the Macleay operations kill them.

In an effort to corroborate his assertion Macleay introduced W. W. Smith, a special agent for the State Fish and Game Commission -

"Didn't you testify in a case for the Macleay interests when you were down there?" - interrupted Thomas. "Well--" faltered Smith.

Seines Scoop Up Man

"Don't you remember that the Macleay fishermen scooped up a man and his boat in their seine, dumped him out on the shore and then had him arrested for trespassing?"

"Yes, I believe there was a case of that kind."
"I guess so."

"What has that got to do with this bill," demanded Representative Cullan, a member of the committee.

"I merely want to show the animus of these people, insisted Thomas. "

"Attorney's Statement Denied."

"Another little flurry came up when Collier Buffington, district attorney of Curry County, presented petitions which he said were signed by 500 residents of that county, asking for more stringent regulations on the Rogue. He said he is the only attorney in Curry County not retained by the Macleay interests."

"Those are all mis-statements, denied Macleay. "

The following trespass notice taken from a Gold Beach publication is made a part of this report as it shows in part to what extent the Macleay Estate Co. had to go to try to control the lower river fishing:

NOTICE

Notice is hereby given that any person or persons, who are not in our employ, and who are engaged in fishing or packing fish, or transacting any business in connection with, or in the interest of, the fishing industry, are warned not to trespass or enter upon or use, any of the tide lands, beaches, water front or other property belonging to the undersigned Company, under penalty of prosecution to the fullest extent of the law.

The Macleay Estate Company

Aug. 1, 1918.

By Roderick L. Macleay, President.

THE 1921 LAW

Until 1921 there is no evidence of any constructive effort on the part of the commercial interests or of the state legislature to heed the demand of upper river interests for a fair division of the Rogue river fish. Rogue river salmon and steelhead were but a political football. The star players were continually on the side of the commercial interests, and it is said that the money was there to pay the players. Evidently it never occurred to these players that this particular football would wear out, but it did, and we find that during 1920 opposing forces were again lined up for a real battle in the 1921 legislature. Upper river interests were organized as never before. Fishing in the upper river was poorer than it ever had been, and public feeling was aroused to a high pitch.

The battle opened up in the legislature, but the opposing interests for the first time in the history of the Rogue river controversy, had entered into a compromise agreement in 1920 that had some elements of protection for the salmon and steelhead, and it was enacted into a law.

Here follows a discussion of the 1921 law, and the reader is requested to keep in mind the fact that Mr. Roderick L. Macleay, manager of the Macleay Estate Co., (successor of the Hume interests) was the representative of the Rogue river

commercial interests in this agreement, and that he had had eight years in which to study the Rogue river fish situation, besides such information as had been handed down from the Hume interests.

In the conference at which this agreement was reached were such men as Frank Warren, generalissimo of the commercial fishing interests in the legislature. Representing the upper river non-commercial interests were such men as H. B. VanDuzer (now member State Highway Commission) whose services in behalf of the conservation of the salmon and steelhead should never be forgotten, and R. W. Price, former member of the Game Commission, George Mansfield, now deceased, and Senator C. M. Thomas of Jackson County, upon whose shoulders fell the brunt of the battle in the legislature.

This agreement, in my opinion, saved the salmon and steelhead from certain extinction. That these men representing the upper river interests stood fast and forced this agreement in spite of opposition and political trickery at home and in the legislature, entitles them, in my opinion, to the highest respect for the services rendered. That the 1921 law was not made even more protective than it was, may be credited to the forces which were fighting a just settlement of the controversy.

There follows a discussion of the 1921 law:

1921 LAW

1. Classified steelhead as a trout.
2. Open commercial season May 15 to Oct. 1 - 4½ mos.
3. Prohibited seines of all kinds.
4. Limited commercial fishing to drift nets having not less than 8½ inch mesh.
5. Lower dead line at Doyles Rock.
6. Upper dead line just below Lobster Creek.
7. Saturday to Sunday night closed period.

UPPER RIVER

8. Open commercial season May 25 to Oct. 1 - 4-1/6 mos.

Comparing this law with the 1907 law we find that the 1921 law took off 5 months of commercial fishing on the lower river, and 2-1/3 months from the upper river. To anyone who has not made a thorough study of the situation, the changes made would seem to have been a wonderful victory for the upper river fishermen, and for the conservation of both the salmon and the steelhead. It was a partial victory, but under the conditions that existed and that were to follow, it was not much more than a paper victory.

To give a better idea of how this law was to work it will be discussed first as to its good points, and secondly as to its weak points.

GOOD POINTS 1921 LAW

1. Classification of steelhead as a trout.
2. Abolition of seines, and limiting commercial fishing to drift nets with drift nets of not less than 8½ inch mesh. This provision let the bulk of all fish under 5 pounds in weight go by.
3. Limiting commercial fishing on lower river to the period May 15 - Oct. 1, was an excellent provision in that it let a large percentage of the early run of chinook salmon get up the river.
4. Limiting commercial fishing on the upper river to the period May 25 to Oct. 1, was a vast improvement, in that it gave all fish that passed the dead line at Lobster Creek 10 days to get by the upper fishing grounds, a distance of 102 miles.
5. The establishment of the lower dead line at Doyles Rock was a limitation for the betterment of conditions, but it has never been generally observed.

WEAK POINTS OF 1921 LAW

1. The weak point of the 1921 law was the establishment of the upper dead line on the lower river at Lobster Creek, some six miles above tidewater. This dead line should have been established at the South Ferry landing at Gold Beach.
2. Another weak point was the Saturday to Sunday night closed period which, owing to its wording, could not be enforced. Further discussion of this section of the law, and the specific attitude of the fishermen toward this law during 1929 will be discussed later.
3. The third weakness of the 1921 law was the elimination of a summer closed season. Under the 1907 law the lower river was closed from August 5 to September 5, in order that a portion of the summer run might escape to spawn.

It is my opinion, however, that a summer closed period August 5 to September 5, would have been of no material benefit during the year 1929, or any year, unless the dead line had been located at or near the south Ferry landing at Gold Beach.

In reviewing the evidence submitted to the Rogue River Committee at Gold Beach in 1920, it is found that local fishermen at Gold Beach recommended that the upper dead line should be below upper tidewater in order to protect the future of the summer and fall runs of salmon, and that a closed summer period be required.

4. The fourth weakness of the law was that it did not eliminate commercial fishing on the upper river, and this had to be done in 1927.
5. The fifth, and one of the serious defects in the 1921 law was that it did not place the entire control of this river in the hands of the State Game Commission. The subject of dual control of streams will be treated in a separate paragraph.

The records show (see chart) that the yearly average pack from 1913 to 1920 inclusive was 878,382 pounds for the seven year period. Previous to this the greatest pack on record is for the four year period, 1903 to 1906, inclusive, with the average pack at about 1,100,000 pounds, and this catch so depleted the river that in my opinion the Initiative Act of 1910 was the result.

Beginning with the year 1921, one would naturally expect to hear that commercial fishing had been badly crippled by the 1921 law and that the upper river was teeming with salmon and steelhead.

The pack for the years 1921 to 1923, inclusive, averaged 845,319 pounds, only a little less than the seven year period previous to 1921; and then in 1924 a great miracle happened--the catch jumped to 1,939,822 pounds, or over twice as great as the average yearly catch since 1913.

NOTE. (Individual fishermen at Gold Beach claim that the catch in 1923 was the largest ever made. The records show 1924.)

Then the decline started. It really did not affect the commercial interests until the year 1927, when only 644,000 pounds were taken. Here for the first time the commercial interests got a taste of what upper river interests had undergone during all the past years of the Rogue river controversy. But the decline didn't stop, and in 1928 the pack was only one-third of the 1927 pack or 232,390 pounds, and in 1929 the pack was only 229,433 pounds, and it is my opinion that two cannies cannot operate on 230,000 pounds of fish, and profit.

General consternation reigned within the ranks of the commercial interests, and quite naturally. The same feelings come to the bank depositor who is awakened from a restful sleep to be told that his favorite bank has gone broke.

13

To complete the story of the Rogue controversy up to the year 1930, it is necessary to refer back to certain events and happenings.

First, it was Hume, and then it was Macleay, against the field, in the mad race to monopolize the salmon on the Rogue. Until 1917 these two men practically had their own way, but in 1917 we find a young man named Collier Buffington, district attorney of Curry County, representing a large part of the citizens of Curry County, lined up with the upper river interests in demanding more stringent regulations. The same lineup occurred in bringing about the 1920 agreement which resulted in the 1921 law. In reviewing the testimony submitted by Gold Beach commercial fishermen during the 1920 hearing it is evident that certain resident fishermen had real knowledge of the situation and were interested in protecting the future of both the salmon and steelhead, as may be seen from a study of the following recommendations.

- 1 - That seines are destructive to small fish, including steelhead and trout, and should be abolished.
- 2 - That set nets should also be abolished.
- 3 - That fishing with hook and line or otherwise should be prohibited in the jaws, outside in the breakers, and at all points below the dead line (lower dead line).
- 4 - That the great silverside salmon that used to fill our streams in the fall, and only a short time ago is practically extinct, and should be protected by law with the hope that they may increase.
- 5 - That after July 1, on account of extreme low water, as well as conditions of the fish, no chinook salmon get above tidewater until after fall rains.
- 6 - That the present law prohibiting commercial fishing from six P.M. on Saturday, to 6 P.M. on Sunday, during season, utterly fails to permit fish to pass, as before July 1st the fishermen net further up the stream on Sunday night and get all that have passed.

After July 1st the fish do not ascend the river, but lay in the deep water.

- 7 - That the period of closing from August 25th to September 10th was and is of no value to the upper river, as the salmon lay in the deep water during this time, and are caught when the season opens.
- 8 - Intensive propagation, paid for from a fund raised by a tax on the product of the cannery, or upon the fish caught.
- 9 - A bitterness against the state fish and game commission for opposing the elimination of seines and permitting conditions to continue under which the silverside salmon have been commercially destroyed, the chinook run threatened, and propagation diminished.
- 10 - A continuation of the present twenty four hour closing period, from 6 P.M. Saturday to 6 P.M. Sunday, during the open season.
- 11 - The fishing area restricted and limited to tidewater.
- 12 - The number of boats and fishermen should be restricted and preference given to local fishermen, for a non-resident has no interest in the future of the stream. This remedy would have to be worked out through the cooperation of the canneries and the fishermen's union.
- 13 - All commercial fishing should be confined to trolling, or drift nets having a mesh of not less than nine inches, and the law should specifically define a drift net, and the manner of its operation.
- 14 - Screening of irrigation ditches, etc., and the elimination of the Ament dam.
- 15 - That law enforcement is inadequate, and that more than one warden is needed to enforce the laws.

Comparing these recommendations with the 1921 law we find as has been pointed out before, that the recommendations were not followed out except in part, and that the most important recommendation of all was entirely eliminated, namely, to restrict commercial fishing to tidewater entirely.

As might have been expected, the animosity between commercial interests at the mouth of the river did not cease with the passage of the 1921 law. Under the law there was no limit to the number of gill net licenses that could be issued. It is presumed that the Macleay interests foresaw that if the number of gill net licenses was limited that the holders of these licenses would then hold the whip hand and could control the price of fish, and otherwise dominate the situation, and it is said that no agreement could be reached between the Fishermen's Union and the Macleay Cannery, and then began the mad scramble of the gill netters on the Rogue.

It is reported that at times there have been as high as 175 boats operating at one time, and only a small part of which were local resident fishermen. At times the nets were so thick that they became entangled and in the scramble to get the fish, the nets were cut regardless of ownership. It became therefore a question of the survival of the fittest, and the future of the salmon and steelhead was forgotten.

For many years these commercial fishermen opposed to the Macleay interests apparently lacked leadership.

BUFFINGTON ELECTED DISTRICT ATTORNEY AS PROTEST AGAINST MACLEAY.

It is reported that Collier H. Buffington was elected district attorney as a protest against the Macleay domination of Curry County fishing, and we find him reported as representing a very large number of lower river fishermen in the fights against Macleay during the 1917-1919 and 1920-21 sessions of the legislature.

BUFFINGTON DISPLACES MACLEAY

In order to retain his leadership in Curry County it became necessary, it is asserted, for Mr. Buffington to find some way of completely breaking the Macleay monopoly. This he did by establishing a cannery on a barge in the river, and by his knowledge of law was able to protect it even though the Macleay Estate Company owned all the land on both sides of the river. Later on this cannery was to become a sub-

stantial structure permanently located on shore land, and in free and open competition with the Macleay Cannery.

BUFFINGTON - MACLEAY AGREEMENT

By the year 1928 the rivalry and resulting entanglements in this bitter feud between canneries was interfering with the peace, health and business to such an extent that Gold Beach citizens are reported to have made overtures to Mr. Buffington to get together with Mr. Macleay in some kind of an agreement over the Rogue River fish. It is reported that Mr. Macleay readily accepted this conciliation move and that the two men met and agreed on a division of boats or fish as follows: Sixty percent to Macleay Estate Company, forty percent to Gold Beach Packing (Buffington).

It is interesting to note that the 1929 pack was divided according to Fish Commission records as follows:

<u>Total for 1929</u>	<u>Chinook</u>	<u>Silversides</u>	<u>Total</u>	
Gold Beach Packing Co.	81,018#	21,223#	102,241#	44 $\frac{1}{2}$ %
Macleay Estate Co.	107,108#	20,084#	<u>127,192#</u>	55 $\frac{1}{2}$ %
		Total Pounds	229,433	

This record shows that the actual pack was within 4 $\frac{1}{2}$ per cent of the reported agreement between the parties thereto.

It took fifty years of fighting to bring about this settlement between commercial interests, but the settlement came too late.

SATURDAY NIGHT TO SUNDAY NIGHT

CLOSED PERIOD AND DEAD LINES.

Section 3, chapter 39, Laws of 1921 is worded as follows:

"It shall be unlawful for any person, firm or corporation to fish for, or take or attempt to take, any salmon from the waters of the Rogue river, or its tributaries, between the points and the times mentioned in the preceding section, by means of any driftnet, having a mesh of eight and one-half inches, between the hour of 8 o'clock A.M. on any Saturday and the hour of 8 o'clock P.M. on the following Sunday."

The agreement which resulted in the 1921 law called for a Saturday to Sunday night closed period. It was the intent of the parties to the agreement to so provide, but in the law as drawn up, or as passed, the law had the peculiar wording as underscored above. In effect this law says that it is legal to fish during this period with any net except an eight and one-half inch mesh net.

I have been informed that this law has never been generally lived up to. The peculiar wording of this section was known to the Fish Commission and an amendment was submitted to the 1929 legislature to remedy it. This amendment and all other changes and amendments to the commercial fish code was turned down by the fisheries committee, for reasons which it is not necessary to state.

On Saturday August 3, 1929, the State Fish Warden sent deputy fish warden J. Smith to Gold Beach. That night he arrested the following named fishermen for violating this law, namely:

Robt. F. Miller, Carl Lewis, Olson, Alex
Scott, Lewis Clock, Hugh Hayes and Gordon
Asher.

He also seized a net belonging to John Rhinert - Rhinert got away.

On Sunday morning, August 4, I was talking to a Gold Beach citizen on the main street, when John Rhinert came up and said, "I came to get my net." I said, "What net?" and he replied,

23

WESTERN UNION

COPY

Portland, Oregon
August 30, 1929.

Mr. R. L. Macleay
Gold Beach, Oregon

No law to prohibit receiving fish Saturday
and Sunday if legally taken stop District
Attorney's ruling probably right exclusive
of eight and one half inches

M. T. Hoy.

ATTITUDE OF THE
COMMERCIAL INTERESTS.

I had a conference with Mr. Macleay on August 30, 1929,
the day the above telegrams were exchanged.

Mr. Macleay expressed the opinion that the intent of the
law should govern and that there should be no fishing Saturday
night, but if the other interests were going to fish, that his
men would have to fish for self protection.

As was to be expected after what had happened, fishermen
of both canneries were out in force on Saturday nights until
the end of the season.

In my opinion, had Mr. Buffington as district attorney,
and as an interested party in the Gold Beach Packing Company,
and Mr. Macleay, approved the Saturday night closing law, it
would be in full force and effect. As the matter now stands
no fish will escape to spawn from May 15 to October 1, 1930,
and this will result in a further decrease of fish for
commercial purposes in the years to follow.

This section of the law was intended for the specific
purpose of allowing a small percentage of each weeks run
to escape to insure a future supply of fish. It was, and is,
of course, more important to the spring run than it is to the
summer and fall run, owing to the peculiar habits of the
latter.

The spring run of salmon and steelhead keep on moving up the river after leaving the ocean, while the summer and fall runs of salmon remain in tidewater until river water conditions are suitable for their advance upstream. Therefore a weekly closed period, in my opinion, is of no particular value in saving the fall fish, unless a protected area at upper tidewater is provided, and this was not provided for under the 1921 law, the upper dead line being at Lobster Creek about 6 miles above tidewater.

Supporting this argument is the story told by Gold Beach fishermen of how they took from John's Hole at upper tidewater six thousand salmon in one night, during one of the better seasons, a few years back.

Carrying this investigation further, I find that many of our Oregon streams where commercial fishing is permitted do not have dead lines at all. This is true on the Winchuck, Chetco, and Pistol rivers, and it is also reported to me that it has been the custom of certain fishermen to raid the holes at upper tidewater on these streams, and to take therefrom all the salmon that could be caught. In certain cases these fish have been in so poor a condition that they only brought a few cents per pound.

~~That a condition like this has been allowed to go on for years is a very serious matter. It is a condition which has been allowed to go on for years, and it is a condition which has been allowed to go on for years. RRC.~~

To this condition, in my opinion, may be laid the major blame for the almost complete failure of the summer and fall run of salmon in the Rogue in 1928 and 1929, and if allowed to continue, may mean the practical extinction of the salmon entering the Rogue between May 15 and October 1.

SALMON STUDY

This study to be of any value, had to take into consideration all facts and other information relating to its past history, and such conditions as will effect the future of the salmon industry.

To begin with, the records of the State Fish Commission were gone over to get a yearly record of the commercial catch of salmon on the Rogue. In addition to this, Mr. Macleay was asked to submit such records as he had concerning the pack made by R. D. Hume, and by the Macleay Estate Company. In some cases these yearly records differ as much as 200,000 pounds. This difference is probably due to the failure of past fish commissions to realize the importance of keeping a complete and accurate record of the salmon take on each stream.

The records for the last six years are accepted as accurate, and the record for the years 1913 to 1923, both inclusive, are accurate enough for the purpose of this study.

The record from 1900 to 1910 is accurate enough to show the yearly fluctuation.

The chart on the following page shows graphically the yearly fluctuation of the salmon pack on the Rogue as from the records mentioned above, from 1900 to 1929 inclusive.

YEARLY LIBERATION FROM HATCHERIES

The second chart shows the yearly liberation of young salmon from the Rogue River Hatcheries. It was the study of the information contained on these two charts that caused the writer to estimate over a year ago that the salmon take on the Rogue for 1929 would be less than it was in 1928. How near true this prediction was, and such other information as is necessary to a clear understanding of the actual conditions on Rogue River follows.

CHART
 Speys salmon pack
 from 1900 to 1929
 in pounds
 Roquet River

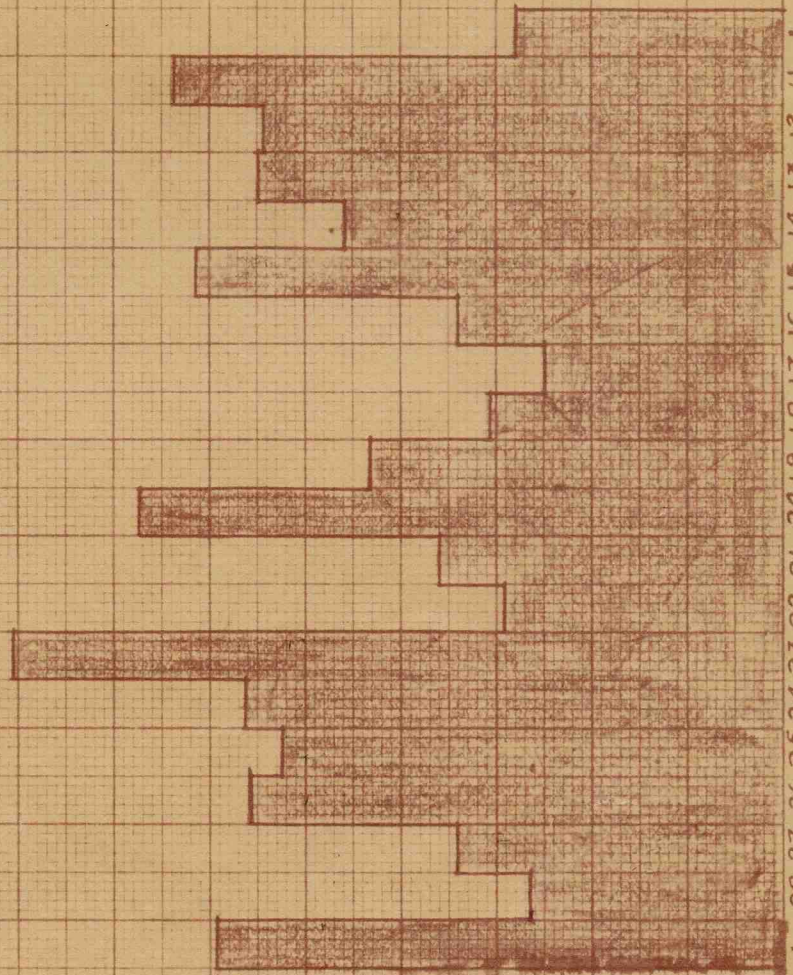
Chart in 6 inch lines

30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 09 08 07 06 05 04 03 02 01 1900

SALMON LIBERATION CHART

1910 - 1929

8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000



Year

CHINOOK SALMON

SPRING RUN.

Chinook salmon are variously called Springs, King or Tyee in different localities of the northwest. On the Rogue they average about twenty-two pounds in weight, but individual specimens are taken that weigh from fifty to seventy-five pounds.

It is said that in Alaska, Puget Sound, and British Columbia that at times as much as one-third of the pack is white meated; specimens have been taken with one side white and the other side red, and some with mottled flesh.

The Rogue has two main runs of the Chinook salmon, commonly called the spring and fall runs. Were water conditions nearly the same throughout the summer period, it is probable that there would be a continuous run of the chinook. It is said that in the Quinault river there is practically a continuous run over a seven months period.

On the Rogue the spring run begins with a few fish in February, and gradually increases until the peak is reached about May first or May fifteenth, and then gradually decreases, and ends about July first. This run proceeds directly up the river to the deep pools below the natural spawning riffles, where they await nature's call to spawn. These fish are spawned at the Elk Creek hatchery from about August 15th to October 5th of each year. The main spawning beds of the spring chinook are above the Gold Ray dam, and confined almost entirely to the main stream.

Before 1913 considerable numbers of these salmon could be seen spawning on Rogue River riffles, but since that time there has been a noticeable yearly decrease. The climax of the decrease occurring during the season of 1929, which is further shown in another chapter of this report, under the head "The Debauch of 1928-1929."

Commercial Fisherman's report - also McClellan

The spring chinook do not strike a spoon on the lower river, but do on the upper river, and are much in demand as a sport and food fish.

It is considered a fact that all salmon die soon after spawning. It is quite probable that nature intended they should, in order that their off-spring might feed during the critical period of their life on their forbears flesh. If

this be true, the lack of salmon for natural spawning purposes may have a very serious effect on the salmon, the steelhead and the trout in all streams where propagation is almost entirely dependent on hatcheries, and as the Rogue is now.

It is the practice now to kill all salmon before spawning them. The carcasses are dressed and salted down to provide food for the young fish while in hatching ponds. In some cases many thousands of pounds of salmon are given away to people to eat. The result is that there is little salmon flesh left in the streams when the young fish are finally released to make their own way.

FALL RUN.

The fall run commence entering the Rogue in July and continue into October or November.

These fish enter the Rogue during low water. Lower river fishermen report that these fish go back and forth with the tide for from five to seven days, before they finally school up at upper tidewater to wait for the fall rains to cool and raise the flow of the river so that they can move up the river to spawn.

These fish are very heavy with spawn when they enter the river, and spawn on the lower river riffles. Few, if any, of these fish can get as far up the river as Grants Pass.

They take a spoon hook readily and great numbers are caught by fishermen in the jaws and bay of the lower Rogue.

SILVERSIDE SALMON.

Cohoe, Medium Red, or Silver.

Average weight about six to eight pounds. The flesh is firm, but considerably paler than the chinook, and therefore worth less.

Packers paid seven cents per pound during 1929 season. Excellent flavor.

Run starts in August and lasts until November. During 1929 the main silverside run remained in the bay until about December first. A half dozen or so passed the Gold Ray fish ladder about October 5th, and small schools were noted at Agnes about October first. These fish had a hard time getting over the Canfield Riffle and could be heard at night floundering in the shallow water.

A few silverside were seen at the Gold Ray Dam on February 17th 1930 on their way up stream, being probably the very last of the run.

Ordinarily the silverside run reaches the upper river early in October. These fish take a small spoon hook readily on the entire river, and provide wonderful sport for the angler. No silverside salmon have been propagated or liberated in the Rogue since 1925, from the Elk Creek hatchery.

The silverside salmon is next to the steelhead in importance on the Rogue, and propagation must be resumed if this fish is to survive the onslaught of the fly fishermen, the gillnetter and the ocean troller.

Silverside salmon constituted eighteen per cent of the total pack on the Rogue for the 1929 season.

In order to get some information as to the size and kinds of fish taken during September, the records of the Gold Beach Packing Company for September 28, 1929, Book #33, is shown herewith:

FISHERMEN

M. Miller	1	Chinook	20#	7	Silverside	99#
H. Bothwell				9	"	89
Fred Sorber				10	"	125
Jim Hiller	9	"	272	4	"	54
Walker-Fry	1	"	24			
Averill Bailey	5	"	116			
	3	"	71	5	"	52
G. Asher	2	"	55	2	"	23
John Reinert	1	"	25	1	"	13
G. Chenoweth	4	"	80	13	"	162
H. Edwards	4	"	107			
Norman Chenoweth	8	"	237	6	"	53
Freeman & Mumpower	7	"	167	28	"	369
Hoskins	18	"	457			
Anderson & Ingram	9	"	212			
B. A. York	9	"	232	16	"	218
Total	81	"	2075#	101	"	1257#

Average weight of chinook salmon 25.6#

" " " silverside " 12.4#

About six thousand four-inch silverside salmon from the Game Commission hatchery at Butte Falls were liberated in the Rogue below the Savage Rapids dam February 25, 1930.

For the effect of fly fishing see article on Trout.

For the effect of ocean trolling see article on Effect of Ocean Trolling.

STEELHEAD

A booklet published by the Pacific American Fisheries on "The Salmon Industry" says:

"Steelhead: Although commercially classed as salmon, properly belong to the trout family. They are much sought after in the fresh fish market, but few are canned."

All authorities on fish culture class steelhead as a trout.

On the Rogue the steelhead is classed as the greatest sport fish and the major portion of the Rogue River fish controversy is over this fish. Commercial fishermen report that they were paid 18 cents per pound for steelhead during the closed season 1928-29. Several commercial fishermen have said: "Give us the steelhead and we will give up all the salmon". They are sold mainly as fresh fish. In a frozen state they are shipped long distances, and are in great demand.

In the opening statement of this report reference is made to the claim that there are two distinct runs of steelhead on the Rogue, namely, summer and winter runs. To determine the life and habits of the steelhead a most complete survey is necessary. The scope of the investigation necessary is as follows:

1. Determination of period of run or runs.
2. Period or periods of spawning.
3. Location of spawning grounds.
4. Does the steel spawn more than once.
5. Does the steelhead, after spawning, remain in fresh water or return to ocean.
6. Length of time taken to reach spawning beds.

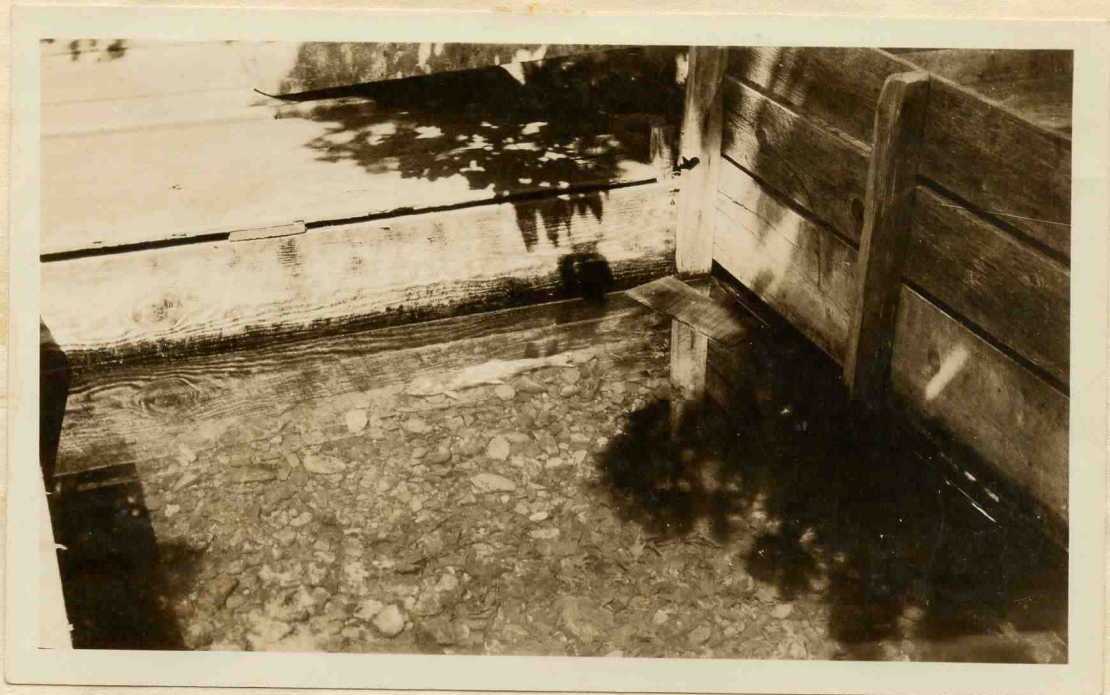
MARKING STEELHEAD

The first investigation was started during the spawning season of 1929. Mr. Ryckman, Superintendent of Hatcheries for the Game Commission, ordered all steelhead marked that were spawned at Bear Creek, Antelope and Little Butte Creek. The fish were marked by cutting off the left ventral fin. So far only two of these fish have been reported. Two were caught in the Rogue. These fish were reported as being in fine condition. Probably the only way to get any definite data on the habits of the steelhead after spawning will be to tag a goodly number each year. Eventually

4 at Little Butte Cr. Apr 1-1930
1 " Bear Cr Apr 2-1931
4 " Little Butte 1931

enough of these tagged fish will be caught to give some real facts. The only steelhead noticed at the dams returning down stream after spawning are those fungused and in a very weak condition.

The following picture shows a badly fungused steelhead after having spawned. It is reported that some forty fish in this condition were held unintentionally in one of the holding ponds. Some six weeks later these fish were noticed and released. Practically all had discarded the fungus growth and were in excellent condition.



Another case is reported where two badly fungused steelheads were placed in a pool above the hatchery at Indian Creek. In about sixty days these fish had completely recovered.

During 1929 numerous specimens were taken at intervals of about two weeks in an endeavor to find a steelhead that would spawn during the period from June 1 to December 1. No such specimen could be obtained. I took specimens that commercial fishermen called the summer run. The eggs were very small and months distant from maturity. Skeins of these eggs have been bottled for reference.

TAGGED STEELHEAD

By Ralph P. Cowgill

The State Game Commission through Mr. Ryckman, Superintendent of Hatcheries, made an arrangement with the United States Bureau of Fisheries to tag steelhead on the lower river. 677 steelhead were tagged during July, August and September. Following is a list showing dates of tagging, place tagged, numbers of tagged fish and data on such of these tagged fish as are known to have been caught to date.

1. July 1, 1929 - at Canfield Riffle

Tags used 2651-2823 inclusive

Tags spoiled (2697, 2703, 2748, 2813, 2817, 2802, 2815)

Total tagged fish 166.

Tagged Fish Caught

1.	Tag 2789	- Caught	Sept. 20	1929	1 mile above Calice
2.	" 2694 2997"		Oct. 3	1929	1 " " Agness
3.	" 2737	"	Oct. 6	1929	At Lobster Creek
4.	" 2718	"	Oct. 10	1929	" Alameda Riffle
5.	" 2781	"	Oct. 25	1929	" Winkle Bar

2. July 2, 1929 - at Johns Hole, 1 mile below Bagnell Ferry

Tags used 2824-2842 inclusive, except tag 2839

Number of fish tagged 18

None of these tags reported to date

3. August 29, 1929 - Bagnell Ferry

Tags used 2839, 2843 to 2850 inclusive

3846 to 3850 "

2901 to 3000 "

4151 to 4200 "

4201 to 4221 "

Tags spoiled -- 2929, 2933, 2953, 2956, 2972, 2989

4172, 4206

Number of fish tagged 177.

Tagged Fish Caught

1.	Tag	2945	-	Caught	Sept. 16, 1929	at	Canfield Riffle
2.	"	4168		"	Oct. 22, 1929	12 miles below	Grants Pass
3.	"	2981		"	Oct. 24, 1929	at	Hell Gate
4.	"	4185		"	Oct. 24, 1929	"	Galice
5.	"	2995		"	Nov. 12, 1929	"	above Galice
6.	"	2946		"	Dec. 21, 1929	"	Savage Rapids Dam
7.	"	2914		"	Jan. 26, 1930	Savage Rapids "	
8.	"	2935		"	Mar. 14, 1930	Bear Cr. Medford	
9.	"	2977		"	May 18, 1930	Little Butte Cr - hook	(Thayer)
10.	"	2694		"	Oct. 2, 1929	1 mile below Agency	

4. August 30, 1929 - 4 Miles Above Canfield Riffle

Tags used 4222 - 4244 inclusive less tag 4228 spoiled

Number of fish tagged. 22.

None reported caught to date.

5. August 31, 1929 - at Canfield Riffle

Tags used - 4245 - 4250 inclusive

4251 - 4300 "

4101 - 4121 "

Tags spoiled - 4114, 4108, 4296, 4299

Fish tagged - 73.

Tagged Fish Caught

1. Tag 4104 - Caught Oct. 7, 1929 at Agness

2. " 4118 " Dec 21, 1929 at Gold Ray Dam

3. 4277 " Mar 18, 1930 Bear Cr

4. 4287 " Apr. 5, 1930 Bear Cr.

5. 4297 Apr. 24, 1930 Gold Ray Dam - spanned - 17 mile

6. 4248 " Mar. 15, 1930 Kanes Cr. Spanned out dead (Swift)

by C. Thompson - Gold

6. September 26, 1929 - at Bagnell Ferry

Tags used - 4122 - 4150 inclusive

4301 - 4350 "

4351 - 4400 "

4401 - 4450 "

4451 - 4462 "

Tags spoiled - 4127, 4128, 4138, 4359, 4362, 4365,

4367, 4369, 4368, 4450, 4461.

Number of fish tagged - 180.

Tagged Fish Caught

1. Tag 4319 - Caught Oct. 24, 1929 - 2 miles below Galice

2. " 4393 " Feb. 3, 1930 Applegate Hatchery

3. " 4326 " Mar. 6, 1930 " "

4. 4383 Oct. 20, 1930 Rogue River. Orville Dingle

5. 4447 Mar 1931 Applegate Hatchery

7. September 27, 1929 - at Canfield Riffle

Tags used - 4470 - 4496 inclusive

At Bagnell Ferry

Tags used - 4463 - 4469 inc. less tag 4468 spoiled

4502 - 4505 " less tag 4504 spoiled

Above Canfield Riffle

Tags used - 4497 - 4501 inclusive

Total fish tagged 41.

Tagged Fish Caught

1. Tag 4498 - Caught Oct. 20, 1929 At Agness
2. " 4483 " Jan. 27, 1930 " Bybee Bridge
3. " ? lost Little Butte Cr Apr. 1, 1930

Total of tagged fish reported caught - ²⁷~~16~~ out of 677 tagged.
Probably more tags will be reported before the season is over.
One tagged fish is known to have been caught at Gold Ray Dam
about January 20, 1930.

The information gained so far is very interesting and tends to prove the theory of two distinct runs a fallacy. ?

The tagging experiments should be continued and should begin in May.

From observations to date it is my opinion that there is, practically speaking, a continuous run of steelhead in the Rogue, the run starting about May with mostly fish up to 2½ pounds, or perhaps a little larger, and increasing in size until winter, when the largest fish finally enter the Rogue. There will undoubtedly be exceptions to this theory for on May 5, 1929, a 12½ pound steelhead was taken on a fly at Dodge Bridge. On June 1, 1929, I personally took a 10½ pound steelhead at Savage Rapids Dam that I considered a fresh run fish. Beside this fish in the pool was a steelhead that I estimated would weight approximately 15 pounds.

In addition to this information, W. R. Coleman took several steelheads during the spring chinook run that he pronounced fresh run fish, weighing 2½ to 4 pounds, that had never spawned, and the egg sacks were so small as to be negligible.

A later report will be made giving Mr. Coleman's theory on these fish.

SCALE STUDY

During 1929 scales were taken from specimen steelheads to be forwarded for study to Dr. Rich of the United States Bureau of Fisheries. The State Game Commission, through Mr. Ryckman, has ordered hatchery employees to take steelhead scales during the spawning season of 1930. Too much importance cannot be placed on this work and it should be carried on until every possible bit of data has been obtained on the steelhead.

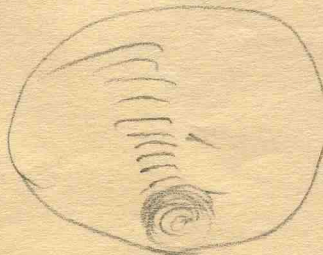
During 1929 the upper Rogue was practically a depleted steelhead stream. Very few were caught. The take of eggs at the Little Butte Hatchery was almost a complete failure. About 600,000 eggs were taken from Bear Creek and approximately a like amount from Antelope Creek.

The Government Hatchery on the Applegate transferred sufficient steelhead eggs to make up the deficiency for the Butte Falls Hatchery.

The yearly decrease of salmon has been paralleled with a yearly decrease of steelhead. Can it be possible that the steelhead is somewhat dependent on the salmon?

The almost complete failure on the upper river for the period October 1, 1928, to December 1, 1929, in my opinion, was largely due to the alleged quantity of steelheads taken illegally during that period.

There are other factors entering into the situation that will be made the subject for a further and more complete report during the year 1930.



TROUT.

1.

" Cut - Throat Trout".

Cut-throat trout are sometimes called Mountain Trout, or Black-spotted trout.

These fish are found in the Rogue from its mouth to its headwaters. They are a very fine sport fish, and readily take a fly, spinner, or bait, and are much sought after as a table fish. These fish grow to about 24 inches in length and a weight of about four and one half pounds. When fresh from the ocean they are of a very bright color, and the flesh is a deep pink, and after being in fresh water for some time become darker in color and the flesh turns light and in some cases almost white. The name cut-throat comes from a blood red streak running lengthwise of the throat by the opening of the gills.

Cut-throat trout are getting scarce in the Rogue and the supply from natural propagation is not keeping up this species.

2.

" Eastern Brook".

The eastern brook trout is proving to be one of the very best species for certain tributaries of the upper Rogue. At Fish Lake- the headwaters of the North Fork of Little Butte Creek these fish have made that lake an attraction for hundreds of people during 1929. Thousands of fine large eastern brook trout were taken in a short time, and it became necessary to establish a deadline at the upper end of the lake and to further restrict the bag limit in order to stop the wholesale capture of these fish. It is believed that fishing on Fish Lake should be prohibited from on or August 15 to April 15 of the following year. Fish Lake is a reservoir and the waters are used for irrigation purposes. The stored water is generally withdrawn by August 15. Fishing will have to be prohibited during the period of minimum storage or a bag limit of not more than five or ten fish provided for if good fishing is to remain.

Rogue River Trout.

Thousands of fishermen whip the waters of the Rogue each year for trout, other than the steel-head.

During 1928 and 1929 several limit catches were made for the purpose of ~~ascertaining~~ whether these so called trout belonged to the trout or salmon family. In one case the entire catch was classified as young salmon. In another catch 80 per cent were classified as young salmon.

It is of course impossible to make an accurate estimate of the number of young salmon caught each season by fly and bait fishermen. The number of fishermen on the Rogue is increasing each year, and a very liberal estimate should be used in all calculations for the liberation and return of fish on the Rogue.

CLASSIFICATION OF COMMERCIAL FISHERMEN
AT GOLD BEACH AND WEDDERBURN 1929.

In order to establish a Who's Who of the commercial fishing industry on the lower Rogue, I secured the Macleay Estate Company's fishermen list for May and July 1929, and the Gold Beach Packing Company's list for September 1929.

The classification given may not be correct in all cases, but is near enough to give an idea of the situation.

COMBINED TOTALS.

	<u>Total Fishermen</u>	<u>Non Resident</u>	<u>Residents</u>	<u>Tax- payers</u>	<u>Non Tax- payers</u>
Gold Beach Pack. Co.	45	23	22	11	34
Macleay Estate Co.	<u>38</u>	<u>11</u>	<u>27</u>	<u>13</u>	<u>25</u>
Totals	83	34	49	24	59

Following are the charts showing the individual classification. Time was not available to make a careful check, and there may be a few errors. It is also probable that a check for the entire season would show that more fishermen should be added to each list.

CLASSIFICATION OF FISHERMEN
FOR
GOLD BEACH PACKING CO.
SEPT. 1929.

Name	Resident Taxpayer					Resident Taxpayer			
	:Yes:	No:	:Yes:	No:		:Yes:	No:	:Yes:	No:
Joe Anderson	Yes		No		And Carl Ingram	Yes		No	
Moss Averill	Yes		No						
Gilbert Anderson	Yes		Yes		And Roy Miller	Yes		No	
Blanchard		No		No	And Jones		No		No
Harry Bothwell	Yes			No					
Chas Briggs		No		No					
Norman Chenoweth	Yes		Yes						
George Chenoweth	Yes		Yes						
Curtis		No		No	Sorber	Yes		Yes	
Finucane		No		No	And Kirch		No		No
Wm. Freeman		No		No	And Mumpower		No		No
Geo. E. Lawson		No		No					
G. C. LeClaire	Yes			No					
Pete Long		No		No					
Ira Ludke		No		No					
Ivan Ludke		No		No					
Louie Ludke		No		No					
Miller		No		No	And Lewis	Yes			No
Jim Miller	Yes			No					
Ted Miller	Yes		Yes						
Emel Oldenberg		No		No	And Sorber	Yes			No
Frank Pennington		No		No					
John Reinert	Yes		Yes		And Clarno	Yes		Yes	
Fred Sorber	Yes			No	And Loran Forty	Yes		Yes	
Bob Starr		No		No					
Geo. Stafford	Yes		Yes		And P. Huntley	Yes		Yes	
D. VanDorn		No		No					
Vojkuvka		No		No	And Vojkuvka		No		No
Cal Woodward	Yes		Yes						
Earl York		No		No	And Oren Hess	Yes			No
Frank Oldenberg		No		No	And Miller		No		No
Totals	13	18	7	24		9	5	4	10

MACLEAY ESTATE COMPANY
May and July 1929

Name	Yes	No	Yes	No	Name	Yes	No	Yes	No
Anderson V.E.	Yes			No					
Anderson J.N.	Yes		Yes		Schneidau Gus	Yes			No
Asher G. G.	Yes		Yes		Scott Alex		No		No
Alford J. H.		No		No	Smith M. L.		No		No
Briggs Harry	Yes			No	Smith Ike	Yes		Yes	
Clarno Vance	Yes		Yes		Rockman E. H.		No		No
Chenowith B.	Yes		Yes						
Clarno H. W.	Yes		Yes		Woodward J.		No		No
Donoca R. W.	Yes			No					
Dye E. H.	Yes		Yes						
Edwards H.	Yes		Yes			2	4	1	5
Fitzhugh G. C.		No		No		25	7	12	20
From Geo.	Yes			No					
Hall A. W.	Yes		Yes						
Hansen N. C.		No		No	Total	27	11	13	25
Hayes J. C.	Yes			No					
Hogue C. C.	Yes			No					
Hoskin W. H.	Yes		Yes						
Johnston Henry		No		No					
Johnston Earl		No		No					
Landil L.	Yes			No					
LeClaire J. W.	Yes			No					
Long A.		No		No					
Miller Walter	Yes		Yes						
Morgan L. O.	Yes			No					
Olson John	Yes			No					
Owen H. H.	Yes			No					
Owen G. P.	Yes			No					
Parker R. B.	Yes			No					
Pugh Dick	Yes		Yes						
Roney H.	Yes		Yes						
Reckman E.H.		No		No					
	25	7	12	20					

Total

83 Fishcannery

24 were tax payers

24 were on paper
36 only were recorded

36 only were ~~marked~~
47 only were seen ~~marked~~

NATURAL OBSTRUCTIONS.

During the course of this study several obstructions in tributaries of the Rogue have been reported. Some of these have been partially investigated, but the part that the tributaries affected play in the development of the Rogue has not been determined, and therefore must be the object of further investigation. Three major obstructions however have been the subject of considerable study, as follows:

1. CANFIELD RIFFLE.

This riffle is located just up the river from the Bagnell Ferry, about one mile above upper tide water, and six miles above the mouth of the Rogue. This riffle is caused by a gravel bar extending diagonally across a naturally wide stretch of the river for a distance of about eighteen hundred feet. During the low flow period of Rogue River there is only enough water to cover the riffle in parts with a maximum depth of but a few inches.



During this period steelhead and salmon can be heard at

night splashing and fighting in an attempt to get over. During the early morning hours steelhead have been watched darting here, there and all over the bar, and then to drop back to the still waters below.

Another condition noted was that when the gulls and other river birds began flying, not a fish of any size remained on the riffle. Steelhead do get over, but the difficulty in getting over causes the fish to school up in the still waters below this riffle and there they can easily be scooped out by any law breaking individual with a fairly short net, and there is some evidence that this has been done.

Nearly all the steelhead tagged by the Bureau of Fisheries were taken below this riffle. The net used was a short one, yet they were able to catch a large number of steelhead at one haul.

These steelhead were handled as easily as possible, but it was noted that when these fish were released that the majority were in a very weakened condition. In one case a fish was retaken a month later and a mile below where it had been tagged. It is a generally accepted fact that the vitality of fish is materially decreased during the period of low warm water, and therefore it is my opinion that any obstruction which causes undue exertion will cause the steelhead to stop in their advance up stream for periods of rest and recuperation.

It is my opinion that a good sized channel should be opened through this riffle during the season of 1930, and if the channel does not remain, that plans be made to construct a low wing dam that will confine the waters to a definite channel.

RAIMEY FALLS



This natural obstruction does not constitute a menace except during the low water period. This period is ordinarily from July to September, but this year, 1929, the low period lasted until about December first.



This picture shows the main channel and the direction of the flow of water marked by arrow points. The channel leading up to the falls is very deep and fish pass by the fishway and wear themselves out trying to jump the falls at the point marked by an X. The right angle turn of the main current is caused by a projecting ledge from the south bank.



Picture of lower end of fishway showing rocks that blocked entrance before being blown out.

It is my opinion that the only solution of this problem is to blow out the main channel of the river at point marked "X", Picture No. 1. No matter how good a fishway is provided in its present location, the fish will continue to pass by it up to the main falls. Mr. E. C. Sanderson of Grants Pass submitted a bid of \$200 for doing the job as suggested.



This picture shows upper end of present fishway after the boulders were blown out that blocked the channel.

Before the boulders were blown out there was only a narrow passageway between the boulders, and during the season of 1928 on a visit to the falls a piece of chicken wire was found stretched across the opening to prevent fish ascending.

BUTTE FALLS.

Butte Falls is a natural obstruction in Big Butte Creek at Butte Falls, Oregon, and at a point about three-quarters of a mile downstream from the Butte Falls hatchery. Some years ago the Game Commission built a wooden fish ladder over this obstruction but the ladder has been destroyed.

Big Butte Creek is a natural habitat for chinook salmon, steelhead and trout. With an unobstructed channel over these falls a large part of all salmon and steelhead allowed to pass up river past the hatchery would ascend Big Butte Creek directly to the Game Commission hatchery.



Butte Falls.

This picture shows lower end of wooden fish ladder
wrecked by flood waters several years ago.

EVANS CREEK DIVERSION DAM.



OLD MILL DAM.

Ladder wrecked. Game Commission had egg taking station here for several years. Diversion canal screened some distance below intake.



Seely Ditch Diversion Dam.

Poor fish ladder. Ditch screened with ratchet type screen. Length of screen 36 in. Diameter 15 inches.

EVANS CREEK DIVERSION DAM.



Mill Ditch Diversion Dam.
Did not find screen.



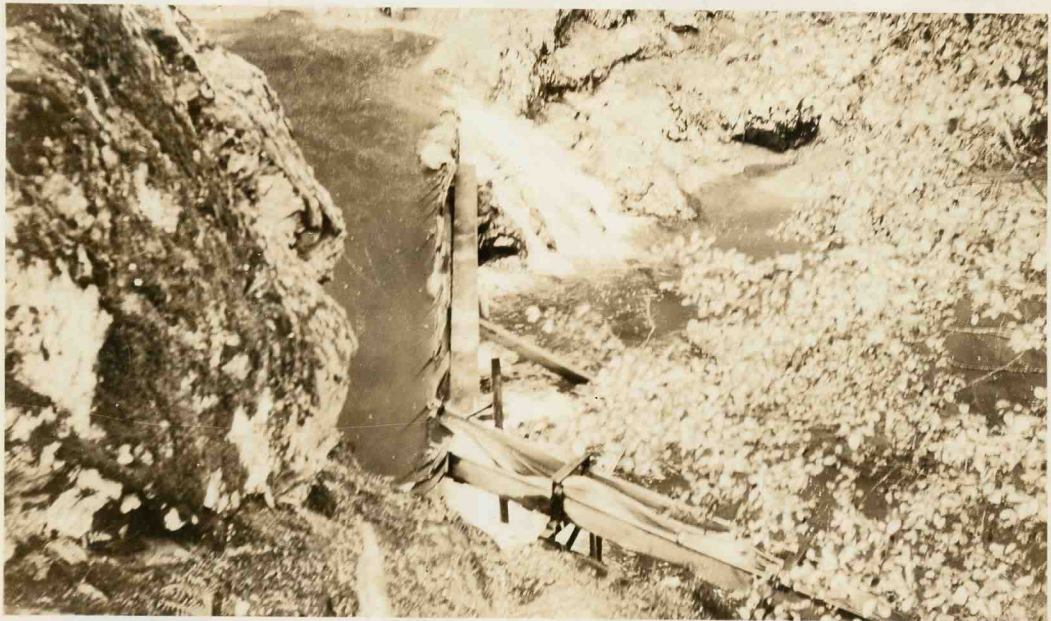
Thalen Ditch Diversion Dam.
Ditch screened with ratchet type screen.
Length of screen 62 inches. Diameter 20 inches.

EVANS CREEK DIVERSION DAMS.

Picture of Neathamer diversion dam was spoiled.
Ditch screened.



Sievers Ditch Diversion Dam.
Chain type screen. Diam. 20", Length 34'.



Temporary diversion not screened.

FISH SCREENS

Section 61 of the game laws of Oregon provides the legal machinery to enable the State Game Commission to require the screening of all canals, ditches, millraces, or artificial water courses.

Attention is called to that part of Section 61, which reads as follows:

"But before said state game commission shall adopt any permanent place for a screen or other device to be placed in irrigating ditches, it shall be its duty to conduct a competitive examination, and at such examination all persons desiring to do so may submit to said state game commission for its approval or rejection, working models of its (theirs) respective screens or other devices for the protection of fish."

It is my opinion that the clause quoted should be stricken from the law. It has been reported to me by the service superintendent of the game commission that there is some question as to the constitutionality of Section 61.

It is recommended that the constitutionality of this section be determined by legal opinion, and if the law is incapable of enforcement then it should be amended to give the Game Commission full authority in the matter.

To my own knowledge the Game Commissioner has spent many thousands of dollars in experimenting with, and the construction of screens for canals in the state of Oregon, and this is especially true in Jackson and Josephine counties.

Attention is invited to a report attached hereto giving information, and the condition of screens on all diversions from the Rogue below Prospect.

Commercial fishermen on the Rogue are continually publically charging that the canals on the upper Rogue are not screened and that young salmon and steelhead can be picked up by the bucket full in the alfalfa fields. Occasionally this has been done, due to the fact that some screens have been out of working order temporarily. In some cases fish have gotten into canals from going up ordinarily dry stream beds during the time these channels were full of water, caused by heavy rains.

On the whole it can be said without fear of contradiction that the Rogue is the best screened river in Oregon. There are, however, four diversions that are not screened, that still constitute serious menace to fish life, namely,

California Oregon Power Plant Canal,	Prospect
"	"
"	"
"	"
"	"
Gold Hill	Gold Hill
Grants Pass Irr. Dist.	Pumping Plant Grants Pass.

Experiments with the electric screen are being carried on by the United States government under the U. S. Bureau of Fisheries at Gold Ray and at the Savage Rapids dam. The California Oregon Power Company is cooperating to the fullest extent possible, and it is to be hoped that from these experiments an efficient electric screen will be developed that will solve the problem of large diversions.

A large percentage of the smaller diversions are far from sources of electric energy and the cost of supplying electric power will be too great to expect ditch owners to provide electric screens in the event that the electric screen proves efficient.

The stationary screen is efficient, and the program should be carried out.

For further discussion see chapter on stationary screens.

For general information, the following statements as to the conditions on the Rogue and its tributaries is given.

LITTLE BUTTE CREEK

The Game Commission has a dam at its egg taking station about one mile east of Eagle Point. No salmon or steelhead get above that point. Before this dam was built, and before all of the Little Butte waters were diverted for irrigation, some twenty-three ditches were screened. The Rogue River Valley canal was screened some 20 years ago.

ANTELOPE CREEK

This stream is a tributary of Little Butte, below Eagle Point. This stream is raked about a quarter of a mile above its mouth. Goes dry during summer months, and always has.



Little Butte Creek Egg Taking Station State Game Commission.



Bear Creek racks. Operated by State Game Commission.

BEAR CREEK

This stream is racked by the Game Commission about one mile southeast of Medford. Goes practically dry during summer months, and always has.

APPLEGATE

Fish do not get further up the stream than U. S. B. F. hatchery eight miles southeast of Grants Pass. Goes practically dry during summer. Diversions below dam screened. Diversions above dam not screened.

The upper Applegate has some wonderful trout waters and the stream as a whole would be one of the greatest natural nurseries for steelhead. Since the establishment of the hatchery by the U. S. Bureau of Fisheries very few fish have been allowed to go up stream above the hatchery. This has resulted in the general discard of fish screens by ditch owners up stream from the dam.

ELK CREEK

This stream was once an excellent trout stream. Goes practically dry during summer. Ditches screened.

EVANS CREEK

Practically all diversions from this stream are screened, in spite of the fact the fishway is practically impassable over the old mill dam, which is about four miles upstream from its mouth. Landowners are interested in protecting fish, as is evidenced by the condition of screens. Permanent fish ladder should be required over the Old Mill dam, and some improvements made to ladders over several of the other dams.

ILLINOIS RIVER

Some eleven diversions were screened some years ago. No check has been made to see what the conditions are now. Deer Creek, a tributary, has some excellent trout waters.

No study has been made of the Illinois river for the reason that it is mu opinion that until placer mining operations cease, or are controlled, the results of fish culture would be doubtful. A close study might show however that my opinion is wrong, at least for certain tributaries.



U.S.B.F. Hatchery, Elk Creek.
Property owned by Macleay Estate Company.



Dwellings for operatives Elk Creek Hatchery.
Property owned by Macleay Estate Company.



Applegate Dam and racks U.S. Bureau of Fisheries.

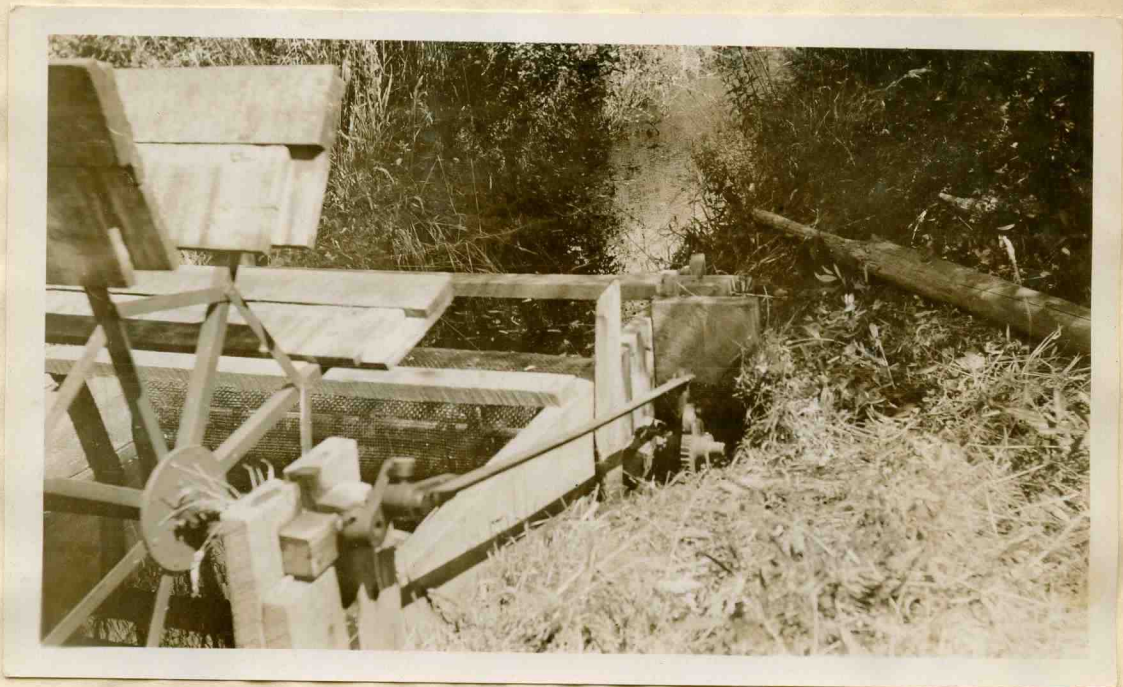


Applegate hatchery U.S. Bureau of Fisheries.

STATIONARY SCREENS IN USE

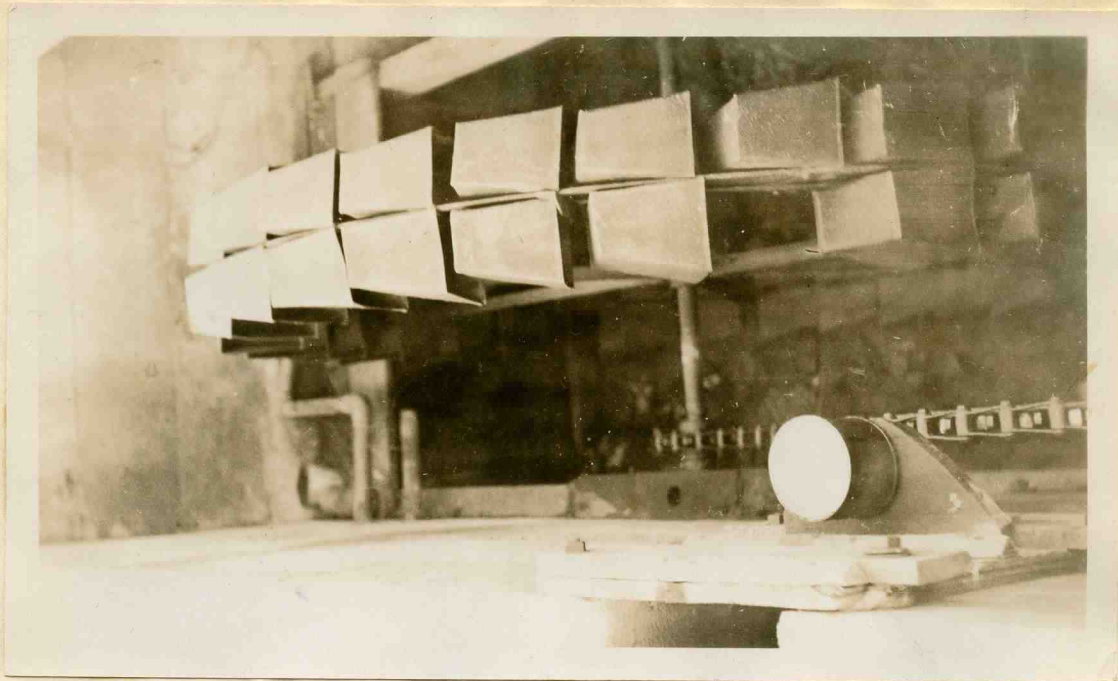
The screen in use on the canals and ditches of Southern Oregon has proven its worth, if kept in running order. Like all things mechanical, wear and tear has its destructive effects, and more or less attention is required to keep the screen working.

There are four types of screens now in use, the only difference being in the mechanical arrangement for the power, and the method used in applying the power to the turning of the screen.



This picture shows one of the earlier screens installed in Jackson County on the Nichols-Natwick ditch out of Rogue River. Notice that the axle of the paddle wheel is connected to the axle of the screen by a ratchet gear.

This type of screen is less efficient than any of the other types.

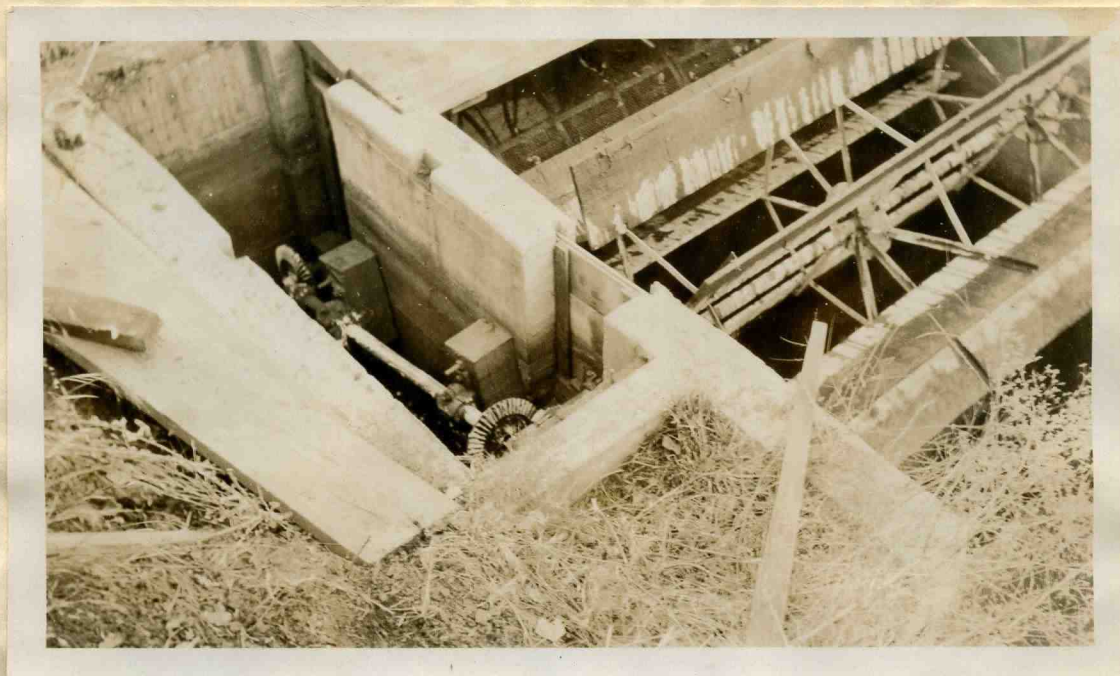


This picture shows the bucket wheel type. The one in use on the main canal of the Grants Pass Irrigation District has given but very little trouble.



This is a picture of the fish screen in operation in the Eagle Point Irrigation District canal out of Big Butte Creek.

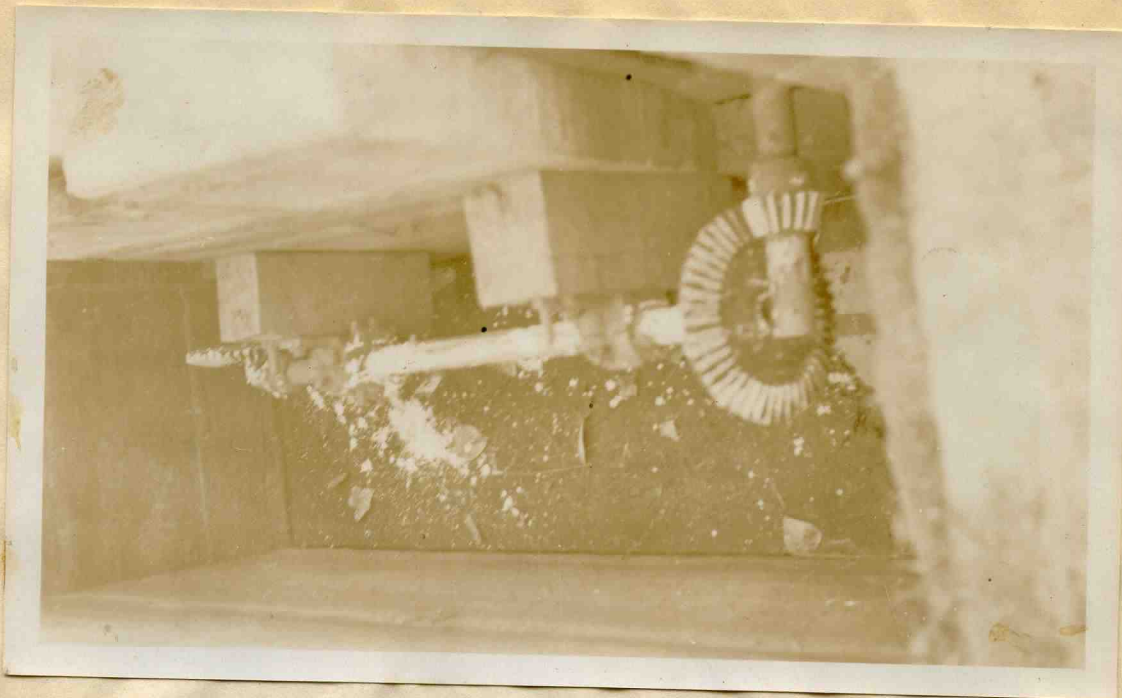
The power of the paddle wheel is transmitted to the screen by sprocket wheels and link chain. The chain drive gives considerable trouble because the links weaken by wear, and then spread, and break or jump the sprocket wheels.



This is a picture of the Talent screen in operation at the diversion point of the Talent lateral from Bear Creek (Talent Irrigation District).

Notice that the power is transmitted from the axle of the paddle wheel to the axle of the screen by bevel gears. This screen has operated continuously for two years and has given no trouble. It is my opinion that the bevel gear transmission is the solution of the fish screen trouble, and should be used exclusively in both the paddle and bucket type screens.

Credit for this type of transmission should go to the Talent Irrigation District and its superintendent, Olen Arnsperger, who constructed it.



Close up view of bevel gear transmission.

Generally speaking, the screening program is approved by the water users of Rogue River and its tributaries. In a few cases owners have refused to install screens.

All large irrigation canals have been screened immediately following the construction of the canals. There still remain a number of small ditches on tributaries of the Rogue that should be screened.

SCREEN SUPERINTENDENT

The work of making and installing screens could be materially helped by providing the screen superintendent with the necessary tools and equipment, and a workshop. This he does not have at the present time. With an effective law and active work by the screen superintendent in installing screens, it is believed that the screening program could be completed in a period of not more than two years, - and this leads to another situation, namely -

RACKING INTERMITTENT STREAMS.

There are a number of streams entering the Rogue that go dry during the summer. Salmon and steelhead enter these streams to spawn, and they always have. During the summer the flow stops, and many thousands of young salmon and steelhead die. For a number of years employees of the Game Commission in Jackson County have been seining holes in these stream beds and liberating the young fish in Rogue River. About seventy-one thousand were saved by this operation in 1929.

In the interest of conservation, the problem of racking these streams should be studied and the plan put into effect as rapidly as conditions and finances will permit where results can be had to justify the expenditure.

In view of the situation as stated above, it is my opinion that the charges made by commercial interests that upper river fishermen are responsible for the depletion of the salmon and steelhead, because of unscreened ditches, etc., are not well founded. What amount of money, if any, has been spent by the State Fish Commission in cooperation with the State Game Commission on the screening program on Rogue River has not been ascertained.

Continuing this investigation to the mouth of the Rogue, my attention was called to a gravel bar on the Rogue opposite the south ferry landing at Gold Beach.

This gravel bar is under water at high tide, and there were two depressions, which as the tide receded, held all the fish that happened to be over the gravel bar at the time. By the time low tide stage was reached, all the water in the depression had seeped into the river, leaving all the fish stranded high and dry, to die. Here, for a period of a year or more, the gulls, buzzards and other water fowl have had their fill of fish. Here too, residents of Gold Beach had made daily excursions to gather the choicest of salmon, steelhead or trout.



This picture was taken on the morning of August 5, 1929. The numbers and classification of fish left stranded were as follows - (the picture shows only the shiners).

- 17 salmon from 4 to 13 inches in length
- 2 steelhead, 22 $\frac{1}{2}$ inches in length
- 4 smelt
- 15 herring
- 2 mudcats
- 1 pen fish
- 400 shiners

and I was told that I had chosen a poor day.

Commercial fishermen estimated that more than one hundred thousand young salmon liberated from the Indian Creek hatchery had died in this trap this year.

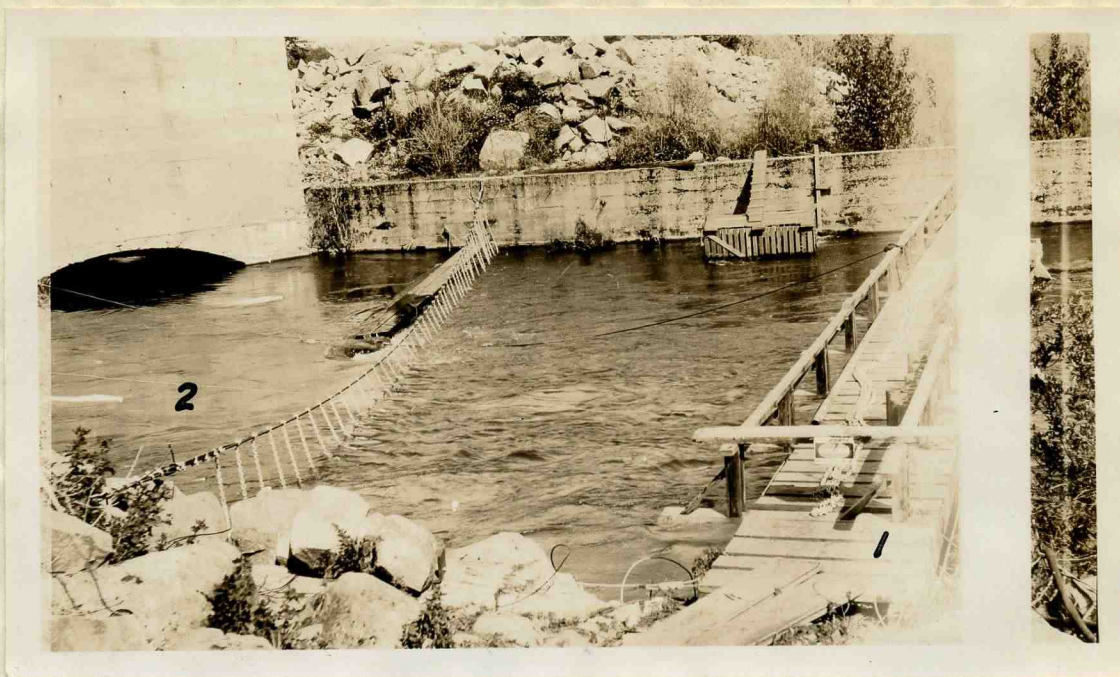
On calling Mr. Macleay's attention to this trap he admitted knowledge of the situation and estimated that not less than one hundred thousand young salmon had been allowed to die there this season.

About a week or ten days after this investigation Mr. Macleay furnished a team and grader to deputy game warden Townsend and deputy fish warden Smith, and they opened a channel through the gravel.

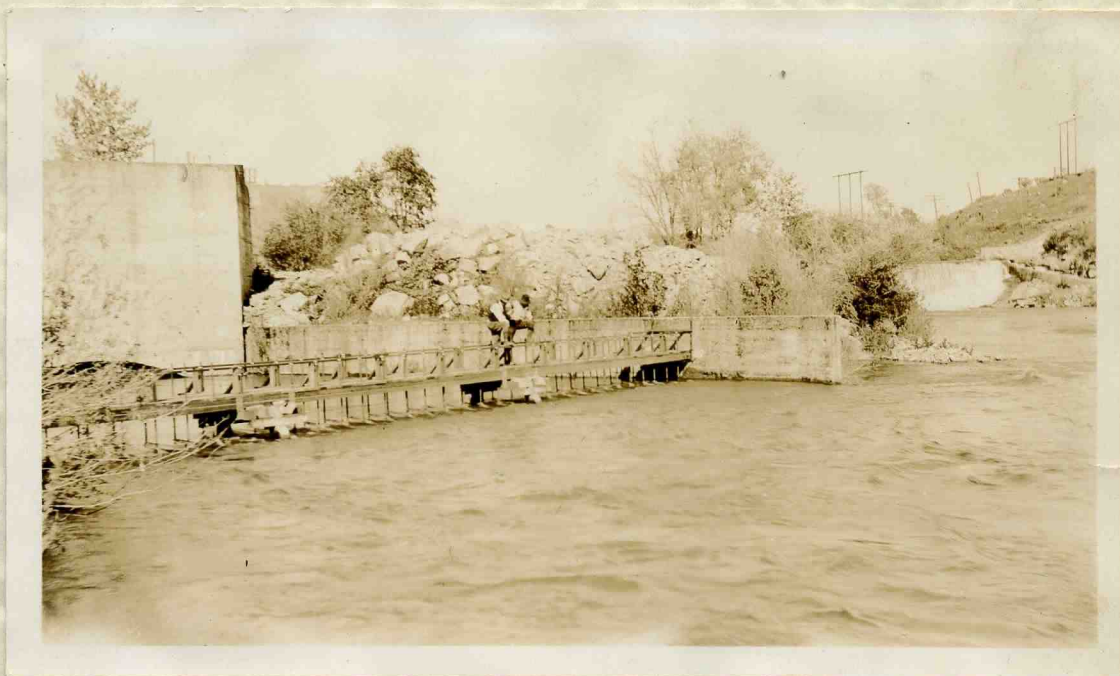
In view of the charges made against upper river screening conditions by the commercial interests, I could not help but feel that the commercial interests were not unduly excited about the future of the salmon industry, when they allowed a situation like this to exist, right in the heart of the industry.

This indictment may be too severe, but nevertheless there is some truth to it.

ELECTRIC SCREENS.



Electric Screen Experiments in Tail Race Gold Ray Dam.
Fig.1 shows original screen designed by Prof. McMillan.
Fig.2 shows screen constructed by Baker and Gilroy.
Note trap next to concrete wall. No fish entered trap.



This picture shows original screen same as fig.1. above.
Experiments with the improved screen are now being
conducted on location of original screen.



This picture shows location of experimental electric screen in power race to divert fish going down stream thru fish ladder. This location was apparently too close to the ladder and it has been moved down stream to point just below four trees shown in foreground.

From observations made at Gold Bay and elsewhere it is my opinion that the electric screen as a diverter of fish going up stream is fairly efficient now, and that it will be made more efficient as a result of the experiments being carried on under the supervision of Baker and Gilroy.

The electric screen as a diverter of fish going down stream, in my opinion is not liable to be a success in power races where the water has a high velocity. With a low water velocity, and a bypass with sufficient water provided the electric screen may be proven aaaaaaaazzzzz efficient.

POLLUTION

It has been charged that sewage pollution has been responsible to a certain degree for the depletion of the run of fish in Rogue River.

Ashland, Medford, and Central Point dump their sewage into Bear Creek. Both Ashland and Medford constructed septic tanks when their sewer systems were installed, some twenty years ago. In those days septic tanks were considered the cure-all for sewage disposal, and credit should be given to both these municipalities for the attempt to prevent pollution of Bear Creek and Rogue River at a time when most towns of Oregon were dumping raw sewage into the nearest water courses.

It is now known that septic tanks do not prevent pollution, and the accepted practice now is to construct sewage disposal plants of a different type.

PICTURE ASHLAND SEPTIC TANK.



Medford's septic tank is badly overloaded and its usefulness is at an end.

The situation at Ashland is worse than at Medford.

All of the sewage waters from Ashland, Medford and Central Point are dumped into Bear Creek. The waters of Bear Creek are diverted into irrigation ditches during the irrigation season, and this lessens the flow of sewage into the Rogue. Enough sewage remains in Bear Creek however to make the waters decidedly nauseous and unfit for drinking purposes for even animals. Bear Creek goes practically dry during the summer, except for sewage waters and seepage from irrigated lands. Tests by the State Board of Health show Bear Creek waters during this period in Class "C", as follows:

Hygienic Laboratory
Oregon State Board of Health
Portland, Oregon

In cooperation with the
U.S. Public Health Service

WATER REPORT

Date 7/20/29

Lab. No. 38606 Date collected 7/16/29 Date Received 7/17/29
City Gold Hill Collected by R. P. Cowgill
Source Bear Creek, Co. Road $\frac{1}{2}$ mi. below Septic Tank.
The bacteriological analysis shows the water to be in C condition.

A-Safe for drinking purposes.

B-Suspicious, probably contaminated. Another specimen should be sent.

C-Polluted and unsafe for drinking purposes.

Report to

be sent to Mr. R. P. Cowgill,
Gold Hill,
Oregon.

F.D. Stricker, M.D.
State Health Officer.

William Levin, Dr. P.H.
Director of Laboratory,
Asst. Collaborating Epidemiologist, U.S.P.H.S.

Hygienic Laboratory
Oregon State Board of Health
Portland, Oregon

In cooperation with the
U.S. Public Health Service

WATER REPORT

Date 7/20/29

Lab. No. 38605 Date collected 7/16/29 Date received 7/17/29
City Gold Hill Collected by R.P. Cowgill
Source Bear Creek $\frac{3}{4}$ mi. below Central Point Sewer outlet.

The bacteriological analysis shows the water to be in C condition.
A-Safe for drinking purposes.
B-Suspicious, probably contaminated.
Another specimen should be sent.
C-Polluted and unsafe for drinking purposes.

Report to Mr. R. P. Cowgill
be sent to Gold Hill, Oregon.

F. D. Stricker, M. D.
State Health Officer

William Levin, Dr. P. H.
Director of Laboratory
Asst. Collaborating
Epidemiologist, U.S.P.H.S.

Hygienic Laboratory
Oregon State Board of Health
Portland, Oregon

In cooperation with the
U.S. Public Health Service

WATER REPORT

Date 7/20/29

Lab. No. 38604 Date collected 7/16/29 Date received 7/17/29
City Gold Hill Collected by R. P. Cowgill
Source Bear Creek, Lower Bear Creek Bridge, #3
The bacteriological analysis shows the water to be
in C condition.

A-Safe for drinking purposes.
B-Suspicious, probably contaminated. Another
specimen should be sent.
C-Polluted and unsafe for drinking purposes.
Report to Mr. R. P. Cowgill,
be sent to Gold Hill, Oregon.

F. D. Stricker, M. D.
State Health Officer.

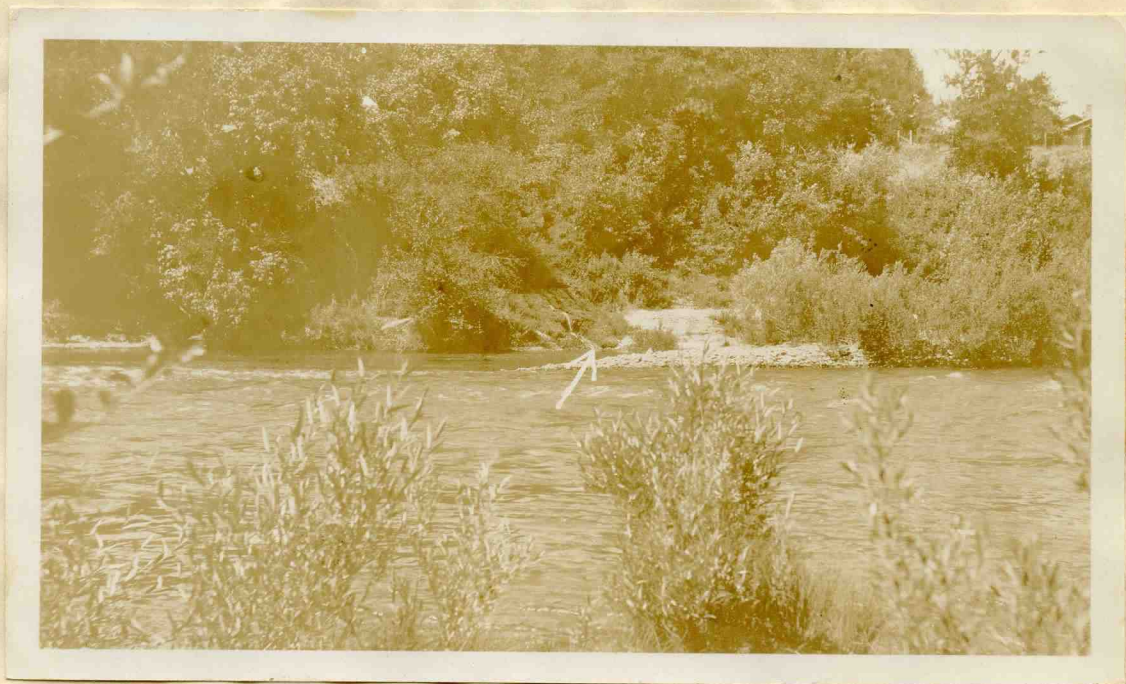
William Levin, Dr. P. H.
Director of Laboratory
Asst. Collaborating
Epidemiologist, U.S.P.H.S.

The use of Bear Creek waters for irrigation presents the serious situation in that it is my opinion that it is only a question of time until all wells below the Bear Creek division ditches will be polluted.

The city of Medford realizes the sewage problem, and plans are under way for a sewage disposal plant.



The town of Central Point dumps its sewage into Bear Creek. The amount of sewage is estimated at 0.25 second feet. The financial condition of Central Point will not permit of any large expenditure for a sewage disposal plant at this time.



The town of Gold Hill dumps its sewage into the Rogue. The amount is estimated at an average of 0.25 second feet.

The city of Grants Pass dumps its sewage directly into the Rogue also. The people of Grants Pass do not approve of this, but the finances of the city are such that no disposal plant can be built at this time.

The sewer system was so designed that a disposal plant can be constructed when the financial condition of the city will permit. It is my opinion that the people of Grants Pass will insist on the construction of a sewage disposal plant at the earliest possible moment.

During the period July to September, the average flow of Bear Creek at its junction with Rogue river does not exceed 5 second feet.

There is a period each year, at a time when the weather is hottest and the water lowest, that hundreds of suckers and catfish float down dead to the Gold Ray dam. Bear Creek enters the Rogue just a short distance above the dam and it is my opinion that these fish die from the effects of entering the waters of Bear Creek.

The total sewage entering the Rogue from the Rogue River Valley towns is estimated as follows:

Ashland	2.5	second	feet
Medford	3.5	"	"
Central Point	.25	"	"
Gold Hill	.25	"	"
Grants Pass	2.50	"	"
	<u>9.00</u>	"	"

The low flow of Rogue River averages about 1000 second feet, and the lowest flow known is about 800 second feet. It is therefore safe to say that under present conditions sewage pollution will not seriously endanger fish life for some years. The amount of sewage however is sufficient to make the water decidedly unsafe to drink except when heavily chlorinated.

The future of Rogue River as an attraction for tourists and fishermen depends largely on how pure its waters are kept.

It is therefore recommended that every effort be made to induce all the Rogue River Valley towns to construct approved sewage disposal plants at the earliest possible moment.

These plants should be so designed as to provide a one hundred percent stable flow with the oxygen content satisfied.

When the larger towns provide the proper sewage disposal plants, then we may expect that the smaller places, such as Talent, Phoenix, Butte Falls, Prospect, and all river auto camps, to fall in line.

FRUIT WASH POLLUTION

The government's requirement that all apples and pears be washed to free them of spray residue added a new kind of pollution to Bear Creek waters. This wash includes a one percent solution of hydrochloric acid, and some fear was expressed as to the effect of this solution on fish.

Neutralizing limestone boxes were at once provided, and now competent authority reports that there is no danger at all from this source.

OIL POLLUTION

The most serious source of oil pollution has been at Ashland. Considerable oil has escaped from the Southern Pacific Railway Company at times. Local officials have promised that they will cooperate and will prevent this source of pollution in the future.

SAWDUST POLLUTION

During 1928 several sawmills were piling sawdust on the banks of water courses, where sudden freshets would wash it down into the main streams. In all cases investigated the operators promised to burn the sawdust and in the future to put the same where there was no chance for it to get into the streams.

In all cases checked on, this has been done, and I wish to pass the credit for this work on to Roy Parr, deputy state game warden in Jackson County, and for similar services rendered by deputy state game warden Merrill in Josephine County.

It is my opinion that sawdust is one of the greatest enemies of fish life, and my opinion is based on personal observations in the state of Washington, and dates back to the first movement to prevent sawmills dumping sawdust into the streams.

Rogue River is practically free of sawdust pollution.

DREDGING POLLUTION

For some years sand and gravel plants operating on Bear Creek have muddied the waters to some extent, but the operations have been mostly during the summer period when there was but little water in the stream, and the water practically clarified itself before reaching Rogue River.

Some two years ago Von der Hellen and Pierson opened up a gravel plant on the bank of the Rogue between Gold Ray and Gold Hill. So far but little mud has reached the Rogue.



Von der Heilen-Person

During the fall of 1928 dredging for gold was started on Footh Creek. For a short time the waters of the Rogue were very muddy and much ill feeling was aroused. The manager, however, came to the rescue and by expending several thousand dollars in the construction of holding ponds, was able to stop muddy water reaching the Rogue.



Fooths Creek Dredge

At this time (January), however, there is a considerable run-off from Foots Creek and there is sufficient mud entering the river to color the entire stream a dark yellow. What the effect will be on spawn can only be guessed. Owing to the late date of the silverside run this year, it is estimated that a large percentage of the total run will deposit their spawn on the riffles of the Rogue below Foots Creek. It is further believed that the continued flow of muddy water will result in very heavy loss of natural spawn.



Spoil bank Fooths Creek Dredge.

Some placer mining has been done on the Applegate river for years. At the present time plans are under way for the re-opening of placer operations at the Sterling Mine on a large scale. If this operation opens up the Applegate river will furnish enough mud to color the entire river to its outlet.

The most noticeable effect of placer or hydraulic mining operations is on the Illinois River. This stream is literally flowing mud for many months of the year. It is said that the run of salmon and steelhead is but a small

proportion of what it once was.

As to the effect of this form of pollution, I quote from R. D. Homes book as follows:

"The Sacramento river, prior to the introduction of hydraulic mining in 1853 was, during the running season, so plentifully stocked with salmon that no use could be made of but a moiety of the supply, and we have an illustration of the destructive force of this new agent when we consider the fact that eleven years after its introduction the Sacramento river was rendered useless for commercial purposes as a salmon stream.

The Klamath river furnishes another illustration of the destructive action of hydraulic mining upon the salmon streams of the coast. In 1850 in this river during the running seasons, salmon were so plentiful, according to the reports of the early settlers, that in fording the stream it was with difficulty that they could induce their horses to make the attempt, on account of the river being alive with the finny tribe. At the present time the main run, which were the spring salmon, are practically extinct, not enough being taken to warrant the prosecution of the business in any form. The river has remained in a primitive state, with the exception of the influence which mining has had, no salmon of the spring run having been taken except a few by Indians, as a reservation by the Government has been maintained, until within a few years, and no fishing has been allowed on the river by white men; and yet the spring run has almost disappeared, and the fall run reduced to very small proportions, the pack never exceeding six thousand cases, and in 1892 the river producing only 1047 cases."

It is recommended that the next legislature be asked to pass a law giving the State Game Commission complete control over this form of pollution on the Rogue.

SAVAGE RAPIDS DAM



This dam has been the subject of much controversy. Note the fish screen in the diversion canal.

In the sluiceway immediately above the screen a small opening has been cut and a gate operated by a wooden lever provided for the release of young fish held up in the canal on their way downstream.

The definite dates or periods of the migration of the different species of fish downstream has not been determined, but that migration which takes place during May, June and July has been watched. This run is heaviest during the month of June and the early part of July. At this time spent steelhead, and young fish by the hundreds of thousands pack the canal above the screen. When the sluiceway is opened the swirl of the water catches these fish and they are shot through the opening into the river below. Actual counts here show from one to two hundred fish going through in a minute.

After the canal intake has been practically freed of fish, and the sluiceway closed, it is only a short time until the canal intake is again literally alive with young fish.

Watching this situation has convinced me that young fish, or for that, any fish, will not go downstream over the crest of a

dam unless it is forced to. On several occasions young fish have been taken that had their tails completely worn off from the long-drawn-out fight against screens in the attempt to get downstream. During the downward migration period this sluiceway should be kept open day and night.

On the north side of the river is the fish ladder and power plant used to pump water to two high line canals, one on the north side, and one on the south side of the river. The percentage of fish killed by this plant is not known, but on occasions a considerable number of mutilated young fish can be picked up at the outlet of both pipes through which water is pumped.

An experiment with the electric screen was attempted during 1928, but the installation of the electric screen was too late in the season to secure any data. Reports on this installation undoubtedly will be covered in the Bureau of Fisheries report.

FISH LADDERS.

The irrigation season is approximately April 1 to September 15. During the balance of the year, the fifteen gates in this dam are lowered, and fish can pass up the ladder or over the dam through the three south gates.

During the irrigation season the gates are up and all fish must pass up through the ladder. Generally the main run of spring chinook salmon reach the Savage Rapids dam just after the gates have been raised, and we find the salmon fighting the swift waters on the south side of the dam - see pictures. They fight the dam at this point until they are worn out, and in many cases badly battered, before falling back and over to the fish ladder side.

The writer has previously submitted a report on this situation and recommended that a large pool ladder be constructed on the south side. Apparently there is no money available from any source for this ladder.

The situation at Savage Rapids could be helped materially if it could be arranged to stop the water flowing over the south end of the dam, and instead waste this water through the third and fourth gates on the north side of the dam. The fish would then follow the main flow of the stream up to the ladder.

In my opinion the long fight at this dam was the cause of many chinook salmon dying before they reached the main upper river spawning grounds or the hatchery this year.

GOLD HILL POWER PLANT

The city of Gold Hill has a diversion canal out of Rogue River about one and one-half miles east of Gold Hill. The water is diverted through a canal about one-third mile in length to the power house. The diversion is not screened.

Attention is invited to a report made December 24, 1928 in which attention was called to the fact that the permit for this development was for 1322 second feet of water, or more water than is in the river at certain periods, and recommending that a protest be filed with the state engineer, and that from 250 to 500 second feet of water should be maintained in the main channel of the stream. The present plant uses only a small portion of the flow.

The time expired on the permit to the city of Gold Hill not long after the above report was made, and the state engineer extended the time. The construction work on this project has been held up by litigation. It is again recommended that steps be taken to prevent the entire low flow of the river being diverted.

GOLD RAY DAM

This dam is provided with two ladders. One or more special reports have been made on the condition of these ladders.

The condition of the north ladder has been materially improved this year by improvements made by W. R. Coleman, employee of the Game Commission, under direction of the State Game Warden. All fish that succeeded in reaching the dam were taken over through this ladder.

The south ladder is practically useless and should be replaced with a larger structure. If the present dam is to be replaced with a new concrete dam, the construction of this ladder can be delayed for another year.

Pictures of the dam, ladders, and the electric screens under test at this place are made a part of this report.

CALIFORNIA OREGON POWER COMPANY'S DAM

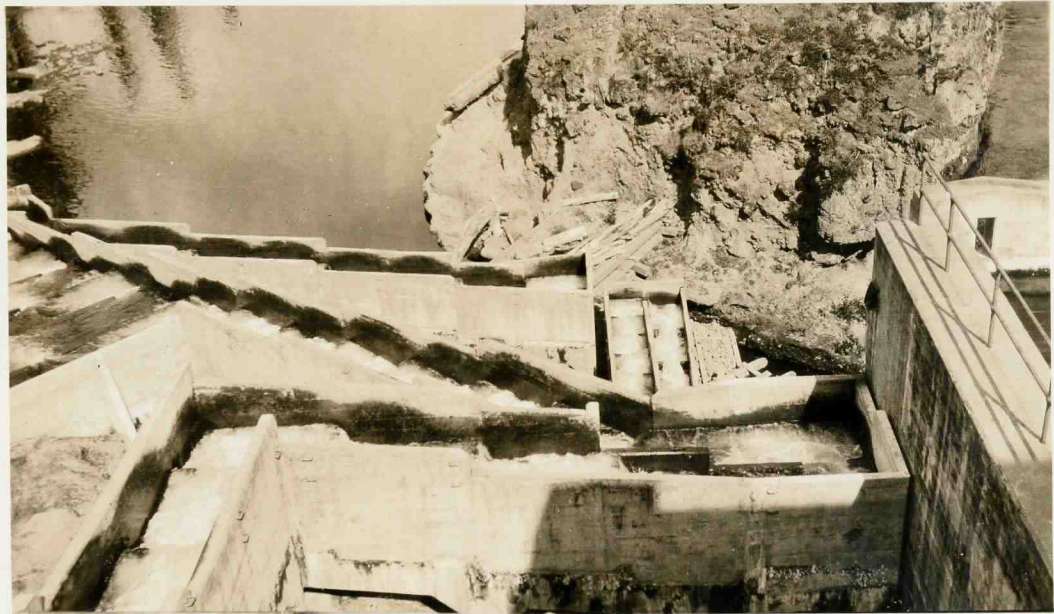
At Prospect.

This dam is on the North Fork of the Rogue. Diversion canal is not screened, nor is there a fish ladder over the dam.

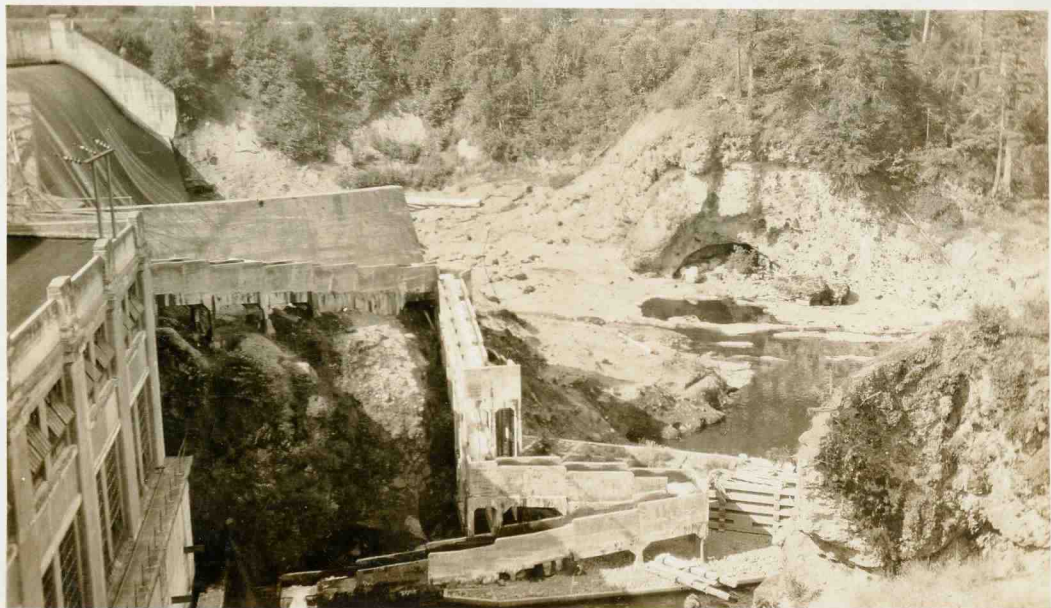
It is doubtful if any fish ever ascended the Rogue River Gorge, and there is probably no need for a fish ladder over this dam.

The diversion canal should be screened. If the electric screen proves a success, we may count on the California Oregon Power Company installing one there at once.

This dam and diversion can only effect the future of trout in the North Fork, and has no bearing on salmon or steelhead future.



Looking down from the top of an 87 foot dam on the upper portion of the fish ladder. This ladder has many courses and right angles turns. There are 104 pools approximately 5 x 6 feet in size. So far as I can learn no salmon have been able to negotiate this ladder. It is reported that a few steelhead did get over. The ladder is considered an absolute failure. It is reported that this ladder was approved by the proper authorities.



This picture shows the lower portion of the above ladder. Built of concrete at a heavy cost this ladder will long remain a monument to inefficiency in fish ladder designing.

Hodley (H. Hallis) designed the ladder

INEFFICIENT FISH LADDERS.



This picture shows a fish ladder of the small pool type carrying a small volume of water. In this case all the water left in the stream below the dam is that carried thru the ladder and a small amount of seepage from the dam. The combined flow being estimated at five second feet. This river was once one of the greatest streams for salmon, steelhead and trout. As the result of the condition shown here propagation of salmon has ceased entirely on this stream. The last attempt to take salmon eggs occurred in 1924, and it is reported that all the salmon held below this dam died because of insufficient water.

The Commercial Fish Code provides that the Master Fish Warden may demand and cause to be provided "a durable and efficient fishway, of such form and capacity and in such location, etc." The Game Code has same provisions.

Sandy?

The future of migrating fish in many of our streams depends ^{on} efficient fish ladders as well as screens.

In my opinion a ladder of the size shown in the picture cannot be called an efficient fishway. There are many more like it int the state. A complete change as to size of ladders should be demanded by both the Fish and Game Commissions on all streams important for fishing.

ROGUE RIVER.

For the Rogue it is recommended that the south ladder at the Gold Ray dam be reconstructed as soon as possible. That the length of the pools with the current be not less than 16 feet. Slot in baffle walls to be not less six feet, and slope 45 degrees to water level of succeeding pool. By sloping baffle walls solid water will be provided and fish can swim over raise from one pool to another without jumping.

It is now the practice to have the baffle walls vertical which causes an air pocket or air space between the falling water and the baffle wall. This makes it necessary for fish to jump in oder to get over.

The size of the ladder will be somewhat controlled by whether the water diverted at a dam is returned to the stream at the base of the dam or some distance down stream. It is necessary that sufficient water be put thru the ladder to attract fish to the ladder. The depth of water should be not less than four meet in a majority of the pools in order to provide sufficient resting areas.



Gold Ray Dam. C.O.P.Co.

This picture shows the condition existing during low water period at the north fish ladder.



South side
Fish Ladder
Gold Ray Dam.

Fish Ladder South Side Gold Ray Dam.

Picture taken Feb. 17, 1930. Baffle walls in lower part of ladder in bad condition. Water pours thru this ladder at terrific rate of speed which makes it difficult for fish to ascend ladder. This ladder has a submerged orifice inlet to make its inefficiency more complete. The pools are entirely too small.

WATER SUPPLY DATA.

The following data is taken from the U.S. Geological Survey records for the Rogue at Gold Ray.

Year	Run off in acre feet.	Low flow in second feet.
1905-06	2,030,000	Sept. 1320
1906-07	3,030,000	" 1320
1907-08	2,280,000	" 1400 1400
1908-09	2,560,000	" 1320
1909-10	2,650,000	Aug. 1180
1910-11	2,250,000	Sept. 1180
1911-12	2,570,000	Aug. 1250
1912-13	2,210,000	Sept. 1180
1913-14	2,060,000	Aug. 1180
1914-15	1,393,000	Sept. 980
1915-16	2,070,000	Sept. 1170
1916-17	2,250,000	Sept. 1230
1917-18	1,760,000	July, Aug. 1060
1918-19	2,040,000	Aug. Sept. 1000
1919-20	1,490,000	Aug. Sept. 937
1920-21	2,980,000	Aug. 1580
1921-22	1,220,000	Aug. Sept. 813 ←
1922-23	1,620,000	Sept. 1110
1923-24	1,220,000	July, Aug. 846 ←
1924-25	2,310,000	Aug. 1110
1925-26	1,100,000	July, Aug. Sept. 777 ←
1926-27	2,490,000	Aug. 1140
1927-28	2,016,200	Aug. 1070
1928-29		Aug. Nov. 875 862
1929-30		
1930-31		
1931-32		
1932-33		
1933-34		
1934-35		

The complete record for the year 1928-1929 is not yet available.

Averageing the yearly runoff the records show practically a twenty per cent decrease in the last twelve years. The rainfall records will show approximately a 25 per cent decrease in fall for the same period.

These records show that Rogue River was lower in 1922, 1924 and 1926 than it was in 1929. In 1929 however the Rogue remained low until the latter part of November.

These records are also proof that low water was not the entire cause of the lack of fish in the upper river during 1929.

MILES OF STREAM BED AVAILABLE
FOR NATURAL PROPAGATION OF FISH.

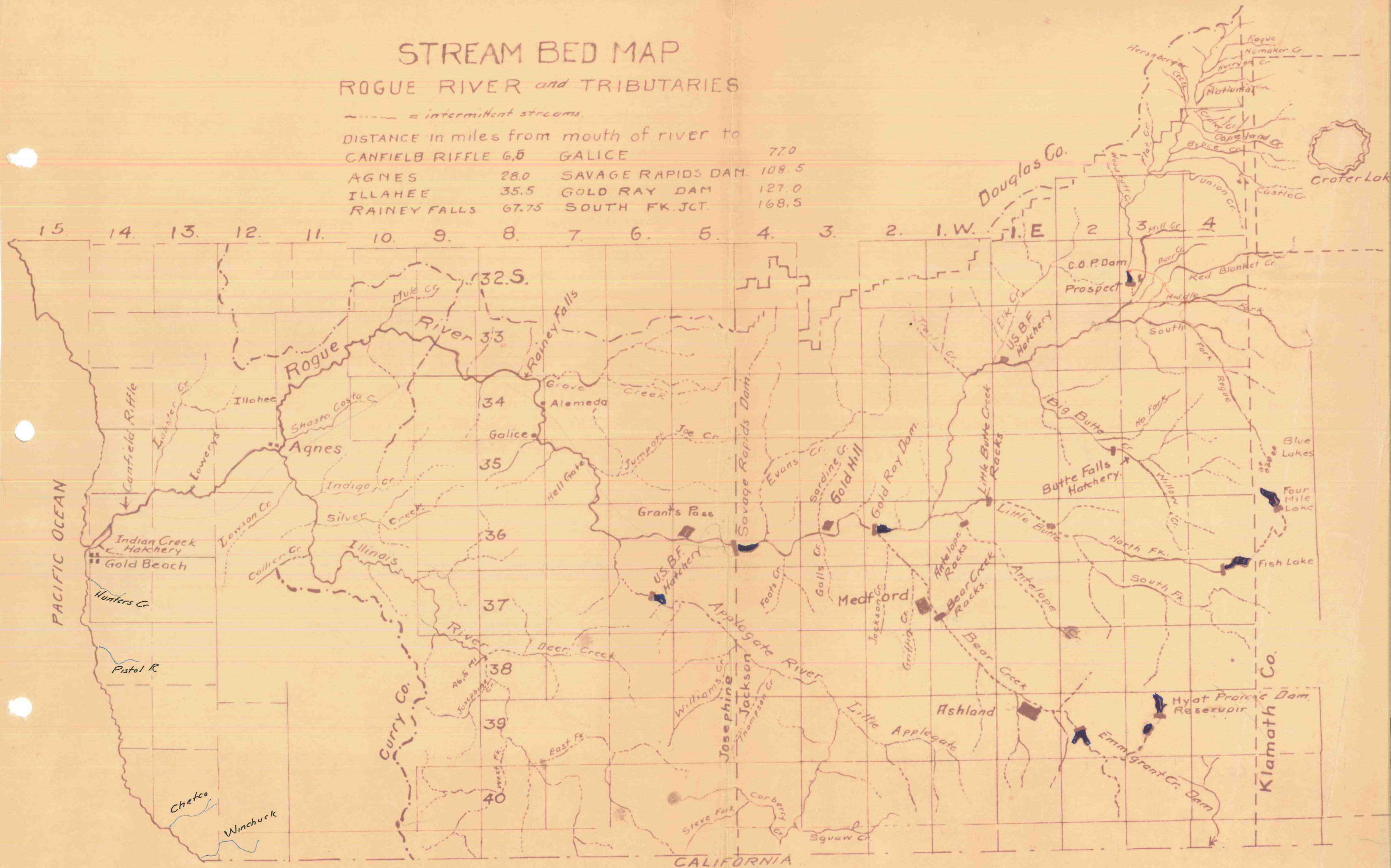
Following is estimate of miles of stream bed originally available for the natural propagation of trout, steelhead and salmon,- and present mileage due to the following causes,

- a. Decrease in rainfall.
- b. Decrease due to irrigation.
- c. Decrease due to mining and dredging operations.

1. Estimated original stream bed mileage including permanent and semi-permanent flow.	1250 miles.
2. Estimated mileage now available for chinook salmon. Permanent flow.	175 or 15%.
3. Estimated mileage now available for silverside salmon. Permanent and semi-permanent flow.	250 or 20%.
4. Estimated mileage now available for steelhead. Permanent and semi-permanent flow.	250 or 20%.
5. Estimated mileage now available for trout. Permanent and semi-permanent flow.	625 or 50%.

See stream map. Subject to revision.

CANFIELD RIFFLE	6.5	GALICE	77.0
AGNES	28.0	SAVAGE RAPIDS DAM.	108.5
ILLAHEE	35.5	GOLD RAY DAM	127.0
RAINEY FALLS	67.75	SOUTH FK. JCT.	168.5



EFFECTS OF OCEAN TROLLING.

Coastal stream fishermen are complaining that ocean trolling is having the effect of seriously depleting the run of salmon in all coastal streams.

No extended investigation was made but affidavits were taken from fishermen on the Winchuck, Pistol and Chetco rivers. The average estimate of the amount of salmon taken that were troll marked was about fifteen percent. Some estimates were as high as twenty-five percent, and included all streams except the Rogue, from the California line to the Coquille river inclusive. Some fish were reported taken that had an eye out, jaw torn off, or nose split, and in one case a salmon was reported taken that had five hooks in his mouth.

For some unaccountable reason no such evidence was submitted as effecting Rogue River. While some salmon were caught in the Rogue that showed effects from troll hooks, the percentage was so small as to be negligible. Further investigation may tend to raise the percentage.



This picture shows the first auto load of ocean

trolled fish delivered at noon, May 15th at the Gold Beach Packing Plant. There were 227 fish in the lot classified as follows:

Lot 1 -	12 fish	14# and over	Total wt.	207#
2 -	70 "	7# to 14#	" "	688#
3 -	145 "	7# and under	" "	737#

Lots 1 and 2 were chinook salmon, and lot 3 was estimated by a cannery employee as 50% chinook and 50% silver-sides. In this lot were many fish weighing between three and four pounds. Out of a total of 227 fish only 12 were matured salmon.



This picture shows a three and one-quarter pound salmon from Lot 3, and there were many more.



This picture shows three and one-half tons of trolled salmon landed at Brookings, Oregon, and delivered to the Gold Beach Packing Company, on August 27, 1929.

The lot was estimated as 50% chinook and 50% silver-sides by an employee of the cannery. The largest fish I saw in the lot weighed nine pounds. Taking what I considered a fair average, the weight was four and one-half pounds.

It was reported to me that hundreds of tons of these immature salmon were landed and sold along the California and Oregon coast this year. Since the salmon are propagated in the streams along the Pacific Coast it is evident that somewhere there is a stream or streams being robbed of its future quota of mature salmon.

Inasmuch as the salmon industry is kept up in Oregon by collecting a poundage tax of one-half cent per pound, it would be interesting to know if a poundage fee is paid for all trolled fish landed in Oregon. And again it would be of further interest to know the percentage of Oregon propagated fish that go to swell the coffers of some other state.

While this question is serious, so far as the salmon industry is concerned it apparently does not affect the future of the steelhead. So far as I have been able to learn, very few if any steelhead are caught by ocean trollers.

Ocean trolling probably cannot be regulated with justice to all parties concerned, except by a treaty between the United States and Canada. For several reasons this treaty may never be accomplished.

There is one thing that can be done however, and that is for the states of California, Oregon and Washington to adopt uniform laws covering the seasons that trolled fish may be landed. It would seem that in this age of business efficiency that the commercial fishing interests would be looking to the welfare of the future of the industry and join in a movement to restrict the wholesale slaughter of immature salmon.

EFFECTS OF DUAL CONTROL

OF ROGUE RIVER

The administration of the game and commercial fish codes under the one commission plan was discontinued because it was unsatisfactory to both interests, but the division of the duties and authority under two commissions has not solved the question of law enforcement.

Under the present law the game commission is charged with the enforcement of all laws pertaining to game and game fish, and the fish commission is charged with the enforcement of all laws pertaining to salmon.

A complication arises from the fact that both the chinook and silverside salmon are a game fish in the Rogue.

The fish commission derives its revenues from the following sources:

Cannery license fee	\$25.00
Gill net license fee	7.50
Boat pullers license fee	1.00
Poundage tax of $\frac{1}{2}$ cent per pound	

The fish commission, therefore, is only interested in the propagation and protection of the salmon for the commercial interests.

Following is a table showing the year, the pounds of fish taken, and the poundage fee received each year from 1921 to 1929 inclusive:

1921	945,620 pounds	\$4,728.10
1922	812,630	4,063.15
1923	778,308	3,891.54
1924	1,939,822	9,699.11
1925	1,438,000	7,190.00
1926	1,117,054	5,585.27
1927	644,000	3,220.00
1928	232,390	1,161.95
1929	229,433	1,147.16

A study of this table will show that with exception of the years 1924-5 the amount of money received from poundage fees has been very small. The receipts from other

fees would increase these amounts a few hundred dollars per year. It is my opinion that the yearly commercial revenues from the Rogue are not sufficient to maintain a proper hatchery program, let alone proper warden service. It has been charged by commercial fishermen and sportsmen that the lack of efficient warden service at the mouth of the river is responsible for the anti-enforcement feeling of the fishermen in general of Curry County prior to 1929. The warden service of the fish commission for the Rogue has generally consisted, it is charged, of one warden for the period of the commercial fishing season only, at the mouth of the Rogue, and no warden service on the upper river.

As compared to this we find that in general the game commission, being charged only with the protection of trout, has maintained one game warden in Curry County to protect both the game and game fish which of course is, and always has been, a physical impossibility, owing to the rugged character of the mountains and the many miles of streams.

On the upper river in Josephine and Jackson counties the entire burden of law enforcement has been with the game wardens of these counties.

Under these conditions law violators found it easy to evade the wardens. On the other hand, the wardens found it almost impossible to convict these violators unless they were caught red-handed in the act, because of the loopholes in the commercial law code. Net fishing is done only at night, and the warden had little chance of even locating the violator on twelve or more miles of the lower Rogue. The same difficulties confronted the game wardens at times on the upper river.

In 1928 when this investigation started I interrogated a goodly number of citizens and commercial fishermen at Gold Beach. Every person interviewed made practically the same statement, i.e.

"That law enforcement was a joke, and that there was universal disrespect for the State Fish Commission for the way things had been allowed to go - "

It was also charged that non-resident fishermen had made considerable sums of money from the sale of illegally taken fish during the closed period October 1, 1927, to May 15, 1928, and that if outsiders could come in and violate the law and could get away with it, that the local resident

fishermen could and would do the same. In fairness to a number of resident fishermen it should be said that they deplored violation of the laws, but under the conditions that existed they were powerless to stop it. I was also informed by members of the fishermen's union that they had tried to get the union to go on record as against all law violations, but were unable to do so because there were too many non-resident fishermen who cared nothing for the future of the streams.

The reader should remember that it was prior to the asserted violations of 1927-28 that Mr. Macleay had started a campaign for a change in the laws as stated in the opening statement of this report.

From the very beginning of this investigation practically every purely commercial fisherman has re-echoed the claims made by Mr. Macleay, and it is my opinion that Mr. Macleay, because of these claims, is equally responsible with Mr. Buffington in the reported participation of the commercial fishermen in the wholesale violation of the law which became a "debacle" during the closed period October 1, 1928, to May 15, 1929.

THE DEBAUCH OF 1928-29

What occurred during the closed season of 1927-28 has been told and now we come to a story of the preparation for and the violations of the closed period October 1, 1928 to May 15, 1929.

During 1928 it is said that practically every commercial fisherman replaced his low horsepower boat motor with a Star, Chevrolet or other high powered automobile engine in order to compete in the most dastardly outrage ever permitted against the laws of any state. High powered boats were necessary in order that the fishermen might within the period of a few minutes or an hour, be far distant from a rival fisherman or a possible warden.

The commercial fishing season closed legally at 6:00 A.M. October 1, 1928, and it is said by persons in a position to know that the open violation of the law began on that night and continued throughout the closed season up to May 15, 1929. It is reported that these outlaw fishermen became so bold that they invaded the river from the upper dead line at Lobster Creek clear to Copper Canyon near Agness. This invasion of the upper river brought forth a general protest in December of 1928, and a force of deputy game wardens were detailed to raid the lower Rogue, which they did during February 1929, under the direction of A. M. Fish, deputy game warden.

The first raid took place on the night of February 1st. A total of 14 nets were confiscated.

The second raid was made on the night of February 11th. A total of 12 nets were confiscated.

It is said that because of these raids these outlaw fishermen sunk John Adams' power boat while he was in the upper part of the state asking that something be done to stop the illegal fishing. This is only one of several reported cases where persons who have antagonized law violators have suffered property damage.

From confidential sources I received information from which I made an estimate that a total of 150 tons of salmon and steelhead were taken illegally during the period October 1, 1928 to May 15, 1929. It is estimated that of this amount 50 tons were steelhead and the balance silverside and chinook salmon.

The Curry County Reporter under date of October 3, 1929, is quoted as follows:

"Poor Fishing Season Ends"

"The commercial fishing season on the Lower Rogue closed on Monday night. The past season has been the most disastrous to both fishermen and packers.

Fishermen failed to make wages; some of them did not make enough to pay for their gear. The packers experienced a like lean season.

The season opened on May 15, just as a mighty run of spring chinook had passed up stream for the upper Rogue. The summer run of chinook was unusually light. The season closed just as the fall run of chinook and large silverside entered the stream. The lower Rogue is now filled with commercial fish."

The mighty run mentioned above never reached the upper river. The State Game Commission had a force of wardens on the lower Rogue during April and May, but they were without a high powered motor boat and while they worked to prevent poaching below Lobster Creek it is reported that the poachers were active up the river.

Following is a partial list of dates and numbers of nets reported as observed in Rogue River during 1929:

On Wednesday, April 24, 1929, 12 nets were reported between Gold Beach and Copper Canyon.

On May 1, 1929, 5 nets were reported between Bagnells Ferry and Lobster Creek.

On May 6, 1929, the mail boat plying between Gold Beach and Agness became entangled in a set net above Bagnells Ferry, and lost more than one hour's time in getting free. The net was piled on the bank and it is reported that the net was back in the river the next day.

On May 10, 1929, the writer rode as an unrecognized passenger on the mail boat from Bagnells Ferry to Agness, Ore. Three set nets submerged were observed and returning down stream at daylight on May 11, one of those nets was picked up, one missed, and one had been removed.

There was evidence of set nets having been used in practically every eddy from the mouth of the river to Copper Canyon. I was handicapped in this investigation by the fear of boat owners that if it were found out that they were hauling me around, their boats would be sunk as was John Adams' boat, and for that reason I was unable to make a complete and careful search.

It should be said that the Game Commission did not have a power patrol boat on the lower Rogue until late in the 1929 season. The patrol boat owned by the Fish Commission was not then in operation, and even if it had been it would have been worthless, as it later proved to be. A number of commercial fishermen told me that they knew the Fish Commission patrol boat was slow and unsafe, and that they had no fear of being caught by any warden or wardens using it. This boat was equipped with a 5 H.P. motor, and it took the wardens four or five hours to make six miles up stream.

During 1928 the U. S. Bureau of Fisheries hatchery at Elk Creek took over 4,000,000 chinook eggs.

The writer estimated the 1929 run at 25% of the 1928 run. The Elk Creek hatchery took only 600,000 eggs during 1929, or about 15% of the 1928 take. Various arguments have taken place over the size of the 1929 run. The writer watched the river at Savage Rapids during 1928 and 1929, and from the observations made deduced the 25% estimate.

A further comparison was made and for this estimate and the following data was used:

Average weight of chinook salmon 22 lbs.

Average number of eggs per salmon 3000

1928 - $\frac{4,011,000}{3000}$ =	1337 salmon	@ 22 lbs.	= 29,414 lbs.
1 male for each female	1337	@ 22 "	29,414 "
Caught by anglers	1000	@ 22 "	<u>22,000 "</u>
			80,828
			= 40½ tons

1929 -	$\frac{600,000}{3000}$	=	200	salmon @	22 lbs.	4,400 lbs.
	1 male each female		200	" @	22 "	4,400 "
	Caught by anglers		500	" @	22 "	11,000 "
	Killed through experimental work		100	" @	22 "	<u>2,200 "</u>
						21,000 "
						= 10 $\frac{1}{2}$ tons or approx. 25%

There were a few salmon spawning on the riffles during 1928, but very, very few during 1929. The average pack at the mouth of the river for the last five years was approximately 700,000 pounds or 350 tons.

The estimate of fish taken illegally, plus the salmon taken on the upper river is still far below the average and shows that if the estimate of illegally taken fish is unfounded then the salmon of the Rogue has reached a new low mark - practically depleted.

Continued reports of law violations on the lower Rogue have been broadcasted by anglers, and commercial fishermen, for a number of years. With the continued yearly decrease of fish of all species in the upper river there has risen a general resentment against both the Fish Commission and the Game Commission for non-enforcement of the laws.

During 1929 the State Game Commission maintained a force of wardens on the Rogue and built a new patrol boat. This boat is conceded the fastest on the river. Poaching has been very materially curbed, but the cost of checking the poaching has fallen on the State Game Commission funds in the estimated ratio of six to one for the State Fish Commission.

Therefore, it can be said that practically the entire burden of protecting both the commercial fish and the game fish has been placed on the State Game Commission. The result of dual control.

LAW VIOLATION AND SENTENCES.

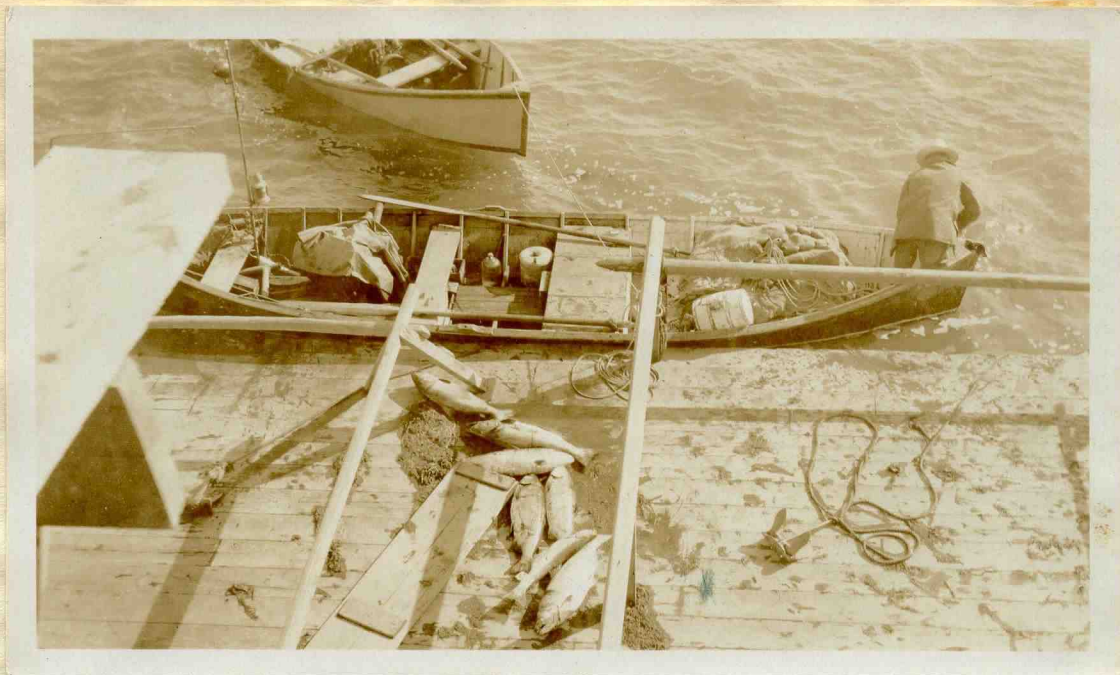
During April 1929 the wardens arrested George Ludke and Al Schultz with some 1200 pounds of salmon. These men were sentenced and released as follows:

		<u>Sentenced</u>	<u>Released</u>	
Geo. Ludke,	60 days	April 26	June 8	42 days
Al Schultz,	60 "	May 3,	June 13	41 "

It is a matter of common talk around Gold Beach that the jail doors were seldom, if ever, locked on these two men. It is also said that they were sent out to work on the road, but refused to work, and the road foreman then refused to take them out. It is also said that after this, these men were allowed to come and go as they pleased, and the records show that they were released after serving forty-two days, instead of sixty.

This case is cited merely to show that apparently a conviction for violating the fish laws was not taken very seriously at that time. It must be said, however, that there were many people in Gold Beach who did not approve of these men being allowed such liberty -- but in all cases the persons so stating were afraid to make a public protest, for fear of personal injury, or that their homes or business would be destroyed.

This fear was also manifested by several commercial fishermen who apparently were against the outlaw fishing.



The above picture was taken at the landing wharf of the Gold Beach Packing Company on the morning of August 16, 1929.

The picture shows six of the twelve salmon and one steelhead caught during the night by Finucane. The salmon and steelhead were delivered into the cannery. Following into the cannery I asked an employee who the fish belonged to, and he pointed to Finucane. Having seen him deliver the fish, of course I already knew. I walked over to Finucane and asked him if I might take the eggs from that fish, pointing to the steelhead, -having already observed that it was a female fish. Finucane replied, "It belongs to the cannery - you will have to see the superintendent.

Finucane had not seen me while I was taking the picture, and I am quite sure that he did not know who I was when I asked him for the privilege of taking the eggs.

I walked over to the superintendent and asked him if I might cut the steelhead open and take the eggs. He looked up, and recognizing me said, angrily, "Who brought that steelhead in here? You know we don't allow steelhead in here! Take it out of here -- take it home and eat it, or do something with it!"

I got the eggs and Finucane took the steelhead out of the cannery.

The steelhead weighed ten and three-quarter pounds and was thirty inches in length. The eggs were very small, being

about one-sixteenth inches in diameter.

Up to the time the superintendent recognized me the whole transaction went on as though it were an every day affair.

The amusing reaction to this incident was the report going around in Gold Beach the next day that Finucane had tried to get the Gold Beach Packing Company in bad.

PIDGEON - FELLER CASE.

On Saturday, November 30, 1929, deputy game wardens Fish and Herring seized a load of fish at Marshfield, Oregon, and later arrested O. J. Pidgeon of Brookings, Oregon.

The following news item is copied from the Coos Bay Times of December 2, 1929:

"8000 POUNDS SALMON SEIZED BY FISH WARDEN.

First Load of Illegally Caught Fish
Taken at Local Plant Saturday.
Complaints Filed.

O. J. Pidgeon Named in Action; Many
Salmon Ready to Spawn.

The largest seizure of illegally caught salmon ever taken in Southwestern Oregon was made late Saturday by Assistant Game Warden Arthur Fish and C. A. Herring, deputy warden. The seizure was made at the plant of Clarhes Fellers, wholesale fish dealer of Marshfield, resulted in filing of two complaints against O. J. Pidgeon this afternoon.

Eight thousand pounds of chinook salmon, steel-head and silverside salmon were seized.

One complaint charged Pidgeon with unlawfully dealing, handling and selling of fish without a license, and the other charge alleged that O. J. Pidgeon was the unlawful possessor of salmon unlawfully caught in the waters of the state of Oregon"

"The haul consisted of about 50 per cent prime fish and 50 per cent which were not at the prime stage. A great many of the fish were ready to spawn and hundreds of pounds of eggs were taken from the fish when they were dressed."

In checking the weights and classification of the seized fish the following information was obtained -

There were in lot,

1887# Red meated Chinook Salmon
1763# Pink meated " "
1154# Gull " "
716# Red meated silverside Salmon
329# Gull " "
430# Steelheads

And the pounds of eggs estimated at 500.

These fish were originally purchased by the Chas. Feller Company, and were bid in by the same company when offered for sale to the highest bidder.

The Feller Fish Company paid for these fish by check and later stopped payment on the check.

The trial of Pidgeon was set for February 13, 1930. Pidgeon entered a plea of guilty.

The Coos Bay Times reports the case as follows in its issue of February 14, 1930.

"PIDGEON DOES NOT MAKE PROMISE OF ASSISTANCE.

// O. J. Pidgeon of Gold Beach who yesterday was fined \$50 on each of two charges growing out of illegal possession of salmon, made no promise of any sort in connection with the state and county efforts to break up allegedly illegal fishing operations in this district, according to C. H. Buffington of Gold Beach, his attorney. //

The statement was made in reference to a Times story yesterday in which the information was published that Pidgeon had agreed to plead guilty and take light fines on the charges and assist the authorities in their attempts to break up illegal fishing operations."

The state is now in a position to sue the Feller Fish Company for the amount of the check on which payment was stopped.

This case is cited to show,

- 1 - The interests connected therewith.
- 2 - The smallness of the fine in comparison with the seriousness of the crime.

- 3 - The weakness of the law in that the law does not provide for confiscation of all landcraft used, etc.
- 4 - The condition of the fish.

So long as commercial fish packers or dealers are willing to buy illegally caught fish, outlaw fishermen will continue to violate the law to catch them. A law should be passed making it mandatory upon the law enforcing agency to cancel the license of any fish packer or dealer who traffics in illegally taken fish.

The following defects in Oregon commercial fisheries code, or certain provisions rendering prosecutions difficult, are reported by L. A. Liljeqvist, attorney at law, who made an investigation of conditions during 1928-1929.

"Sec. 38. Requires in a prosecution for the purchase of salmon illegally caught, the prohibition shall be construed to mean that it shall be unlawful to knowingly purchase. Does the word "knowingly" qualify purchase, or does it qualify the words "illegally caught."

Sec. 51. This section applies to fish traps, pound nets, gill nets, set nets, fish wheels, fishing boats and vessels used in fishing, and apparatus and appliances and devices made use of in fishing or operating; where the same are illegal, may be seized. Certain duties are placed on the Master Fish Warden, and it is the duty of the prosecuting attorney to institute a condemnation suit. This section is defective in that it does not give the same remedy to private citizens.

Sec. 52. All transportation companies, common carriers, or other agencies handling, transporting, or shipping salmon or other food fish are required before accepting the shipment to obtain from the shipper a signed statement containing certain information, which are forwarded to the Fish Commission. This statute is defective in that the rule of ejusdem generis applies to the words "other agencies", making such agencies, agencies such as transportation companies and common carriers. There is apparently no requirement in the statutes requiring individuals who are not common carriers or transportation companies but who are hauling salmon on specified contracts with the shippers to make these reports. Every truck driver or man operating a vehicle of any kind on the public roads or highways and hauling salmon from the fisherman or dealer to a cold storage plant or to another dealer or for shipment should be required to make the record.

Sec. 59. It is doubtful whether a prosecution can be maintained under this section, which makes it unlawful to take or fish for salmon in any river, bay, inlet or other waters, unless the officers are able to prove the particular stream from which the salmon were taken.

Sec. 60. The same observation applies to this section, which makes it unlawful to take, catch or fish for, or deal in or handle any salmon, etc., in the state, or in any waters of the state, etc., except during the times and in the manner by means of the appliances elsewhere provided.

Sec. 61. The same observation applies to this section, which makes it unlawful to receive or have in possession, or sell or offer for sale or transportation, or transport during the closed season on any stream in the State of Oregon, any salmon or other food fish caught or taken during the closed season on said stream.

Sec. 63, as amended by Sec. 10, Chapter 428, Laws of 1929

This section, which relates to the operation of set nets which extend more than one-third of the distance across the waters of a stream, should be enlarged to cover the situation on streams where a considerable portion of land is covered and uncovered by the fluctuating tides.

Sec. 73. Providing that any person found fishing or taking, catching or transporting salmon, etc. in, or upon any of the waters of the state, or over which it has concurrent jurisdiction, or found making use of any boat or boats, vessel or vessels, or any fish trap, weir, poundnet, gillnet, setnet, fish wheel, seine, or any other device intended for or capable of being used to catch or transport salmon or other food fish in or upon any waters of the state, or who shall leave any of said devices in condition to take fish, during any existing closed season, or who may purchase salmon or other food fish or have in its or their possession salmon or other food fish unlawfully caught during any existing closed season, shall be guilty of a misdemeanor, and in addition thereto shall forfeit the boat or boats, vessel or vessels, fish trap or fish traps, weir or weirs, poundnet or poundnets, gillnet or gillnets, setnet or setnets, fish wheel or fish wheels, seine or seines, or any other device or devices so unlawfully used, and the salmon or fish found in his or their possession; the fish to be forfeited. The possession of the fish is made prima facie evidence that they were unlawfully

caught during the closed season, and it is provided that it shall be no defense that the fish are caught or taken outside or within the state.

This is one of the best drafted statutes in the Code. It leaves open the question whether it is necessary to allege in the indictment the particular waters from which the fish were unlawfully caught. This is the subject of a present test suit, the defense being that the fish were caught outside the State of Oregon and that under the law it is not unlawful to sell fish caught outside the state. The statute also fails to cover the use of motor vehicles or other land vehicles of any nature for the carrying or transporting of fish unlawfully caught.

Sec. 104. The weekly closed season on the Rogue River has a joker in it in that it is made unlawful to fish between six A.M. on Saturday to six P.M. on Sunday with a driftnet having a mesh of eight and one-half inches, but makes it legal to fish with nets of all sizes above eight and one-half inches.

There are various minor provisions with reference to the local streams in Coos and Curry Counties, as well as the fundamental problem of when is the proper season on these streams. The ability to take fish across the state line without being tagged and to bring them in from the Pacific renders the defense which is always made available in the event fish are seized, that the fish seized came from California or from the Pacific Ocean.

Sec. 130, 137. The sections as to records are defective in that sufficient information is not required to be kept - a proper check on the fishermen who sell fish, a proper check on the individual transporting the fish by land craft - a copy of the record only being required to be kept on the scow, pick-up boat or other craft used in buying, receiving or transporting fish. Furthermore, the record is made only available under subpoena produced in court. The record should be a public record open to the inspection of the public generally, like other records.

Chapter 309, Laws of 1929, is practically useless as an enforcing act. All the fishermen need to do is tie a rope around the net, and it is no longer a wet net or dry net untied; or, the two ends are looped together and tied in a knot. This act takes but a minute to perform and the nets are always tied, although the officers are satisfied that they have been removed from the stream but a few moments before the attempted seizure.

One of the chief difficulties with the Commercial Fisheries Code is, that the commercial fishing gets into big business, and in the event there are higher-ups purchasing fish who are in conspiracy to purchase fish illegally caught, it is very difficult to get testimony, because all concerned are accomplices. The fishermen, boatmen, automobile truck drivers, servants of packers and cannery-men are all able to stand upon their constitutional rights to refuse to testify on the grounds that the testimony may incriminate them.

To cure this situation a statute should be enacted providing that in any action or proceeding for the enforcement of laws affecting fish and game, or in any investigation before a Grand Jury, District Attorney or other officer, or any criminal proceeding, no person shall be excused from testifying concerning any offense committed by another, on the ground that his testimony may incriminate him, but such testimony shall not be used against him in any prosecution for any crime or misdemeanor under the laws of the state, nor shall he be subjected to any penalty or forfeiture for or on account of any transaction matter or thing concerning which he has been compelled to testify, or to produce evidence, documentary or otherwise.

This is similar to the section which is embraced within the intoxicating liquor code, statutes against gambling and certain other statutes. There are many times when it is necessary to compel a truck driver or a boat man to testify when it may be deemed necessary by the officers to stop the market for illegally caught fish, and this provision would constitute a very effective improvement on the present statutes.