

Millions Invested in Rogue River Power Plants

Power facilities of the Rogue River valley are greater than those of any region in the northwest. Abundant power has been developed to supply the valley's needs for years. Farming by electricity is an accomplished fact. Power and light lines are extending and being extended to all parts of the valley.

The year 1912 witnessed the completion of the first unit at the Prospect power plant at a cost of \$750,000, generating 8000 horsepower. The plant is planned for five such units, developing 40,000 horsepower at comparatively slight additional expenditure.

The location is an ideal one. A diverting dam takes the water out of the Rogue river. It is carried in a flume a mile in length across a pumice flat and dropped almost vertically in a steel pipe over 500 feet over a precipice.

The pole line is of unusually heavy construction and designed for a voltage of 66,000 volts. The poles are forty feet long and spaced thirty to the mile, the wires are No. 10 stranded aluminum cable and are carried on insulators fourteen inches in diameter and weighing thirty-three pounds each.

The pioneer power plant at Gold Ray generating 5,000 horsepower, is used for emergency purposes.

Companies Consolidated
The California-Oregon Power company was formed by the consolidation of a number of small lighting and power companies in southern Oregon and northern California, the most important of which was the Siskiyou Electric Power company of Yreka, Cal.; the Klamath Falls Light & Water company of Klamath Falls, Or., and the Rogue River Electric company of Medford, Or.

The transmission lines of the California-Oregon Power company extend from the Greenback mine, twenty miles north of Grants Pass, Or., on the north, to Dunsmuir and Costella, Ca., on the south, and Fort Jones, Cal., on the west to Klamath Falls and Bonanza, Or., on the east, reaching every important town in Josephine, Jackson and Klamath counties in Oregon and Siskiyou county, California. There being in all about 300 miles of high-tension transmission lines in the territory served by the company, supplying the following cities:

Oregon — Grants Pass, Rogue River, Gold Hill, Tolo, Central Point, Jacksonville, Eagle Point, Medford, Phoenix, Talent, Ashland, Klamath Falls, Merrill, Bonanza.

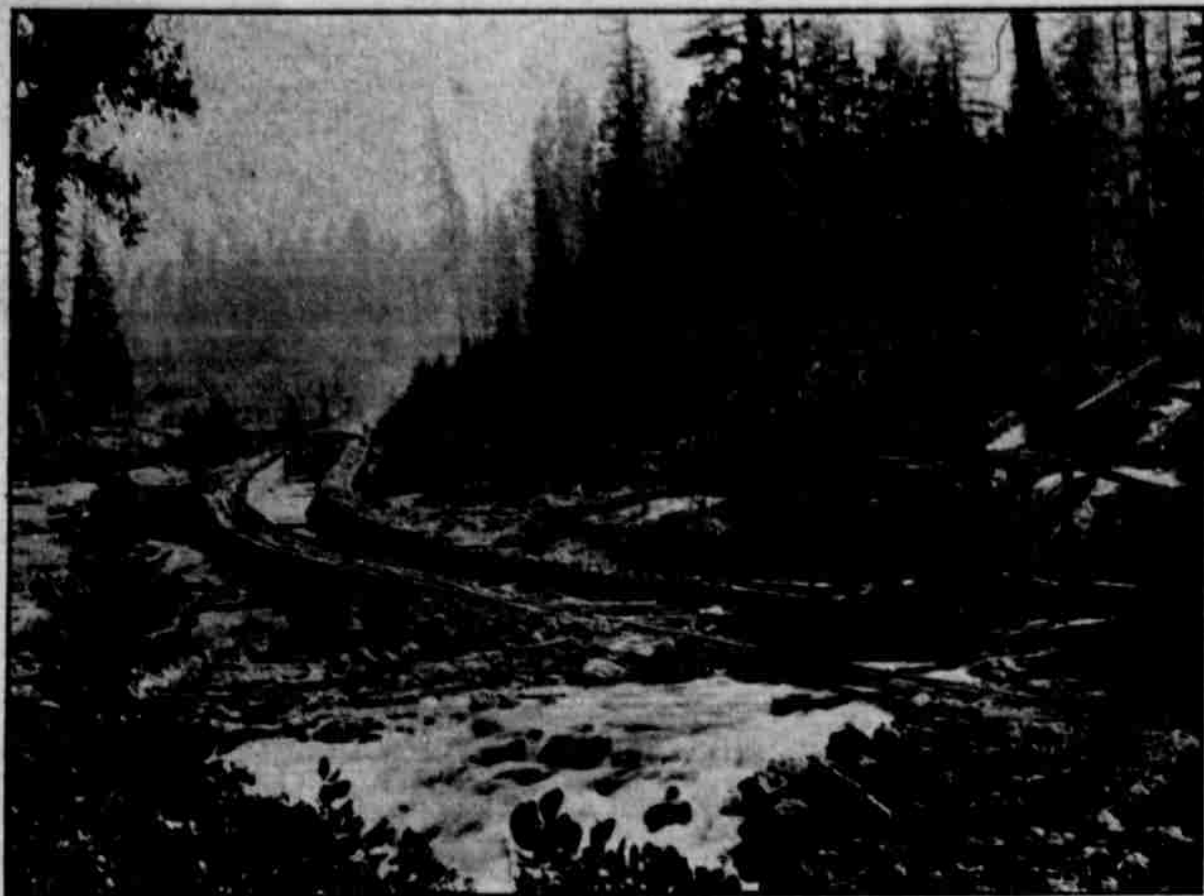
California—Yreka, Montague, Dorris, Etna, Weed, Dunsmuir, Hornbrook, Fort Jones, Greenview, Sisson, Costella.

Five Power Plants
There are five power plants in operation on the system: Gold Ray and Prospect in Oregon, and Shasta river, Fall creek and Klamath Falls, in California, with a sixth plant under construction on the Klamath river, at Ward canyon, Siskiyou county, California.

All five of the power plants are operated at once on the lines of the company, giving a more steady and reliable source of power than when one plant alone is operated. Any one of the five plants can disconnect from the line at any time and shut down for repairs, if necessary, without affecting the other four plants.

During the past four months a number of changes have been made in the switching system controlling the transmission lines and in case of a defect in the line at any point the defective section can be at once cut out and service supplied from the plants nearest the break until the damaged portion of the line can be repaired.

The California-Oregon Power company is supplying electric service



Intake for Prospect Power Plant— to left is Gold Ray Dam and Power Plant.



Prospect Power House, Showing 500 Foot Vertical Drop



Prospect Power Flume

within the territory covered by its lines for electric lighting, heating, cooking, pumping and power.

Modern Lights

Very few persons understand the wonderful change caused in the use of electric light by the modern Tungsten lamp. Ten years ago a sixteen-candle power lamp consumed seventy watts an hour, and the price of electric current was fifteen cents per thousand watts, making 94 hours' use of a sixteen candle power lamp cost a dollar. A modern Tungsten lamp, delivering sixteen candle power, consumes only twenty watts per hour, and at the present price of current—ten cents a thousand, four hundred hours' use of a sixteen candle power lamp can be secured for one dollar, or four times as much as was possible ten years ago.

The use of Tungsten lamps makes a marked decrease in the use of electric current for lighting and makes possible the extensive use of electric heating and cooking appliances.

In the Rogue River valley there are now over one hundred families that are doing all their cooking by means of electric current, and there are several hundred more who are mak-



Prospect Pole Line

ing a partial use of electric cooking service. The motto of the California-Oregon Power company is, "Cook by Wire," and they predict that the time

is rapidly coming when every family in the Rogue River valley within reach of the electric service lines will indeed "Cook by Wire."

Electric Heating

Electric heating is the latest application of the electric current, and a great improvement has been made in electric heating appliances in the last few years. This use of electric current is being developed in southern Oregon as nowhere else in the United States, being used in a larger number of cases for office rooms, store rooms where entire residences are heated by electric heat.

Another new development is the electric water heater that is connected in series with the water pipes and heats the water for the ordinary range or kitchen boiler. A number of residences on the power company's lines use this means of heating water and three large hotels have

all the water for baths, lavatories and kitchens by electric heaters.

Irrigation by means of pumping plants operated by electric motors is rapidly growing in favor in southern Oregon. Gravity ditches are often expensive to build and keep up and in many cases it is impossible to obtain a supply of water by gravity; but the electric pump can be installed wherever there is a well, spring or small stream, is easy to install and economical to operate and requires practically no attention except to open and close the switch operating the motors. The California-Oregon Power company has one pumping plant at Gold Ray with a twelve-inch pump having a capacity of two thousand gallons a minute that delivers water through about six miles of pipe line to an elevation of two hundred feet above the pumping plant and capable of pumping water enough for three thousand acres of land. On the company's lines in California are several large pumping plants pumping water from one hundred to three hundred feet high and some of the plants capable of pumping water for ten thousand acres of land.

Two Hundred Pumps

In the Rogue River valley about two hundred small pumping outfits have been installed, ranging in size from small outfits, pumping from a well for household use to larger outfits capable of irrigating twenty to forty acres of orchard. The irrigation problem of the foothills will probably be solved by means of the electric pump; as, given a water supply, the electric pump will deliver water through long lines of pipe to any height desired.

Electric motors are being used for innumerable power purposes, including the operation of quartz mills, quarries and brick yards, planing mills, box factories and ice plants, and the time is not far distant when a large quantity of electric power will be needed for interurban roads in this territory.

One thousand horse power of electric power from the plant at Prospect, Or., goes to operate the Weed Lumber Co. at Weed, Cal., this company having found that they could

make an actual saving in operation by shipping their slabwood and scrap material to San Francisco and selling it for fuel, instead of burning it under boilers for fuel, and using electric power to operate their plant.

The California-Oregon Power company during the season of 1912 has built over fifty miles of distributing lines along the country roads of the Rogue River valley, supplying electric current to ranches, orchards and country homes, the owners of which are quick to realize that electric current is no longer a luxury, but a necessity, and that as labor is uncertain and high-priced every labor-saving device in the home and on the ranch instead of being an expense is a true economy.

The line extensions built by the company in the Rogue River valley in 1912 cost over fifty thousand dollars.

Among the extensions contemplated for next season are: A service line for electric light and power down the Applegate from Jacksonville to Grants Pass, an extension of the main transmission lines from Grants Pass to Prospect, and from Prospect to Klamath Falls, giving two complete lines for transmission of power from each plant to any town on the system. A number of shorter lines in the Rogue River valley are contemplated in 1913, and special effort will be made to run service lines wherever there is a prospect of electric pumping for irrigation.

Finest Fly Fishing in the World

(By Walter F. Backus.)

We have some good average fishing near Portland. Anyone with a fair knowledge of the country can get trout fishing within 30 miles of the city. In the spring months we have salmon fishing that is considered mighty good sport. But if you want to know what real fishing is, you must go to southern Oregon and tackle an eight-pound steelhead trout in the Rogue river. It will make you forget any other fishing you ever had, and if you are lucky enough to get several days of this royal sport, it will spoil you for any other kind of angling. At least, that's what it did for me.

Everything is on a big scale. You have to wade to the very limit, cast every foot of line you can possibly get out, and then handle five or ten pounds of the gamest trout flesh that ever broke a man's tackle. There's nothing easy about this steelhead fly fishing. It's hard work, every minute of it, but for the man who enjoys fighting a big fish on a fly rod, it's worth all the energy it costs.

Steelhead Trout Fishing Unique

In the first place the fishing is quite different from ordinary trout fly fishing. The steelheads are found in a different sort of water, and take fly in a manner quite unlike the rainbow or cutthroat trout.

You may be a successful fly fisherman on the average mountain stream, and then fish the Rogue for a week without hooking a single steelhead. The experienced Rogue fisherman will walk along the stream, completely ignoring places that look very promising to the amateur, and pick out spot after spot where the steelheads are sure to be hiding. You don't find them in ordinary gravel bottom riffles, nor in deep, swirling eddies, but wherever there is a solid bedrock bottom, with crack and grooves scattered through it, and six or eight feet of water running over it at a moderate pace, then look out for trouble. Cast your fly straight across the current, and let it swing quietly around until it straightens out below you. Don't try to skip it along the surface or give it any motion whatever. Just let it sail quietly along, until it suddenly disappears, and you feel a tug that makes your blood tingle clear down to your toes.

Afternoon's Sport Is Great

I had a grand afternoon's sport on the Rogue about ten miles above Medford. At this point there was an unusually long and heavy rapid, and just above this fast water was the finest lot of bedrock I have ever seen. The channel here was probably a hundred feet across, with an average

depth of perhaps eight feet. There was quite a swirl to the water, but I could dimly see a series of crevices in the bedrock that looked very good indeed. So I put on a No. 4 Grizzly King, and sent it floating over the pool. No response at first, so I gradually lengthened the line until 40 feet was flying through the air. Then the fly settled a little farther out, drifted a yard or two when bang!—and my rod bent double and the reel began fairly to scream.

Out of the water he came, looking so big that he fairly scared me, and then he made a straight shoot for the rapids below. Down he went to the very brink, taking out line until my reel looked pretty sick. Here he stopped long enough to let me wade ashore, and I was then able to fight him or even terms. After ten minutes of plunging, during which he threatened to go over the falls several times, I finally drew him ashore. I had no scales at hand to weigh him just then, but after hanging up in the warm air all day, he weighed a strong eight pounds in the evening, so you can see he was "some fish."

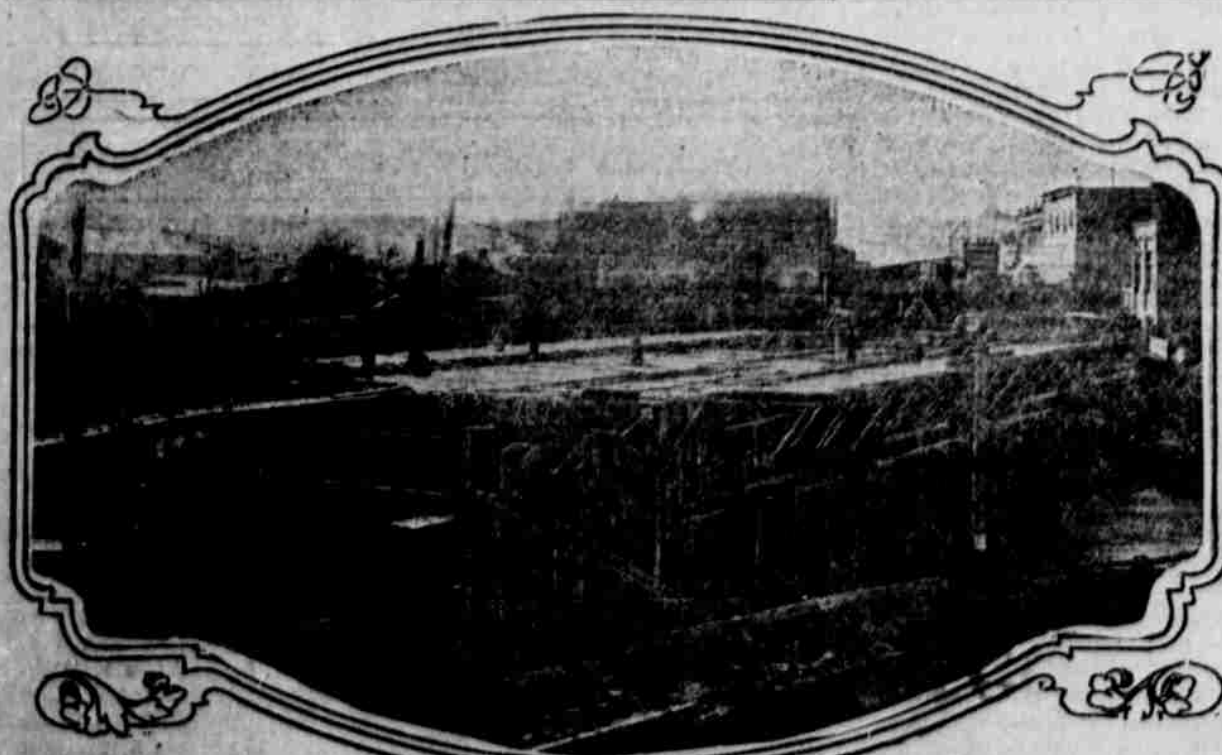
Four More Prizes Taken

Then I went at it again, using first the Grizzly King, and at times the yellow body gray hackle, and in the next hour landed four more out of the same water, none of which weighed less than four pounds. About this time they quit striking, and I went ashore to rest until the evening shadows reached the upper end of the pool, which I had not fished. This portion of the water was more difficult to reach. After wading out to the edge of deep water I found that the choicest part of the pool was still above me. The sun was now behind the trees, so I put on a No. 6 Royal Coachman, and began dry-casting it diagonally up stream. It settled just beyond the edge of a bedrock reef and came drifting down toward me. The water was fairly clear and quiet, and I felt sure I could see any fish that might rise. But these big fellows must be as fast as they are strong, for just as I was about to retrieve the cast there was a suspicious boll near the fly, it disappeared, and I struck just in time to hook a regular whooper. Straight into the air he went, three times within 10 seconds, the last time falling so close that he splashed water all over me. But the little hook held firm, and he came ashore in due order.

After a few minutes' rest, I went at it again, getting two more, one on an upstream cast of fully 40 feet, which is something unusual for steelhead fishing.

Medford is the home of the majority of the steelhead fly fishermen, and they are a most enthusiastic lot. They think they have the finest fly fishing in the United States, and I am inclined to agree with them.

Finest Concrete Bridge in Southern Oregon Nearing Completion at Medford



At a cost of \$25,000 there is now being constructed across Bear creek near the heart of this city, a concrete bridge which promises to be one of the most handsome structures of its kind in the state. The county pays \$18,000, the city \$13,500, and the Pacific & Eastern railroad \$2,500 for the privilege of laying its tracks below it.

The bridge is of concrete throughout. Cluster lights adorn the parapets on either side. Its center is paved with asphalt, and the city, with an eye to the future, had car tracks laid along its center in order that the bridge need not be damaged when a street car line is laid.

Contractor E. G. Perham, has charge of the work and is doing a splendid job. The structure will be completed March 1, 1913, and will link the city closely together.

Work on the bridge was delayed until winter owing to suit being instituted to check it. A supreme court decision sustained Medford's position and work was started late this fall.

The reinforced concrete structure at Medford, litigation over which has just been ended in the supreme court.