

PROPERTY OF
DIVISION OF WATER RESOURCES
BRANCH OFFICE
LAS VEGAS, NEVADA

STATE OF NEVADA

REPORT

OF THE

STATE ENGINEER

For the Period

January 1, 1931, to June 30, 1932, Inclusive

GEORGE W. MALONE
State Engineer of Nevada



CARSON CITY, NEVADA

STATE PRINTING OFFICE - - JOE FARNSWORTH, SUPERINTENDENT
1933

WHITE RIVER

White River is located about twenty-four miles southwesterly from Ely, Nevada, and has its origin in the White Pine mountains. The stream is somewhat similar to Currant Creek, inasmuch as some of the flow is derived from seepage springs occurring on the meadows along the stream, which flow is augmented by a run-off from the mountains during the forepart of the irrigation season.

The Order of Determination of the State Engineer in the matter of determination of the relative rights in and to the waters of White River and its tributaries was filed with the Clerk of the Ninth Judicial District Court of the State of Nevada, in and for White Pine County, on or about July 26, 1922. Although a hearing in this matter was held before the court on December 4, 1922, the records do not disclose that a final decree in the adjudication has ever been entered. Consequently, pending a final decree in the matter, the Order of Determination of the State Engineer must be considered as being in full force and effect.

In the past there has been no regular service by a water commissioner on this stream. At intervals the water users have called on the State Engineer's office for a water commissioner's service, and it has been the practice at such times to lend temporarily the services of the Duckwater and Currant Creeks commissioner for making such adjustments in the diversions as found necessary. One trip was made by the commissioner during the irrigation season of 1931, and three trips were required during the early part of the 1932 irrigation season.

In the latter part of May, 1932, the stream was at flood stage, and due to the daily fluctuations in the flow it was found that an equitable distribution of the water was impossible unless a water commissioner made frequent visits to the weirs. Consequently, D. T. Nicholas was regularly appointed a water commissioner for White River, and placed in charge of distribution during what was considered the flood water period. Mr. Nicholas served in this capacity until the latter part of June, 1932, at which time the flow of the stream had diminished to a point where it was no more than sufficient to satisfy the earlier priority rights of the up-stream users.

It is recommended that adequate weirs and gates be installed by the water users of the stream, in order that a more equitable distribution of its waters can be made.

PAHRANAGAT LAKE

A deficiency in the water funds of Lincoln County, contracted during the early years of water distribution in Pahrnagat Lake Valley led some of the water users to request that a water commissioner be appointed for only the low water flow of the season. Consequently a three months' period was decided upon for 1931.

The water law provides for a three-year period, dating from the entry of the court decree, in which any water user may petition the court for a modification of said decree, in so far as it fixes the duty of water. The final decree of the court in the Pahrnagat Lake adjudication was entered on October 14, 1929. Hence, the water

users of this stream system now have until October 14, 1932, in which to apply to the court for any modification in the decree with respect to the amounts of water now allotted to their lands.

The distribution of water in this valley depends not only on the water supply, but upon the effectiveness of the drainage system and the cleanliness of the distribution channels. Due to the fact that weeds and grasses grow so rapidly, sixty days' time will entirely stop the flow of water in most channels. The water users on their own initiative have not properly taken care of this work, thus it was necessary for the water commissioner, in order to secure an equitable distribution of the water, to assist the water users in rehabilitating and reconstructing their distribution and drainage system. Therefore, this fact combined with the idea mentioned before, that is, the necessity for a system to gain the required duty of water measurements before October, 1932, made the 1931 season a very heavy burden on the water users as they were compelled to do all of the work themselves.

The main drainage channel at the lower end of the valley was the first to receive attention. About two hundred acres of water logged land was drained in 1931 by lowering the water level from three to five feet by deepening, widening, and straightening the old water course. This was done at the expense of the Pioche Bank, Inc. They thereby reestablished water rights to some valuable acreage that had become inundated during recent years.

The next problem taken up was to finish draining the three hundred and sixty acres listed in the decree as the Henry Sharp fling and known as the Sharp swamp. The season previous a drainage channel through the center of the swamp had been constructed, five feet wide and from three to ten feet deep. The main body of the swamp land is made up of decayed tules, and as this channel drew the water away, this soft porous material settled, leaving depressions ten feet deep in some places, and many of them a quarter of a mile back from the channel. Consequently, water would seep from the drainage channel through this porous formation into said depression for the reason that the channel was as deep as the valley below would permit, and this seepage will continue two or three years until enough clay washes into the bottom and sides to stop it. Therefore two new ditches were constructed in 1931, one on each side of the valley as high as the above grade would permit. Designed to carry most of the water around the swamp, the Sharp ditch on the west side of the valley as constructed is ten feet wide, average depth three feet, and about two miles long, while the East Sharp ditch has the same length, but three feet wide and two feet deep. To gain a reasonable point for diversion the first quarter of a mile of the East ditch was cut through a ridge ten feet high. Five cement headgates were installed for diversions, drain ditches were cleaned as well as diversion and irrigation ditches. Diversions were regulated in accordance with the court decree except those south of the Sharp swamp which were subject to slight variations because of the erratic flow, as coming through this area about forty-eight per cent of the water was lost.

The construction of the new ditches has almost entirely eliminated this loss, and it is estimated that for an expenditure of less than ten

thousand dollars the present drainage and irrigation system in the Pahrana-gat Valley has increased property values one hundred thousand dollars.

The present needs are as follows: Those areas listed in the Final Order of Determination under Alamo Irrigation Company and H. Sharp's filings as swamp are now drained and should be permitted to continue their former use of water. Lateral drains every half mile should be constructed. A main drain eight to ten feet deep through the entire valley should be constructed and maintained. A main drain into Pahrana-gat Lake and lateral drains for that area known as the Lincoln Land and Livestock Company's Lower Ranch should be constructed. A drainage channel connecting the Crystal Springs channel with the Hiko area should be built. Highline ditches on each side of the valley through its entire length are a vital need.

Water distribution for the season of 1932 commenced on June 1 and has continued in a satisfactory manner up to the present time.

TONY CREEK

The water supply of this creek during the year 1931 was so low that the services of a water commissioner were dispensed with.

During the year 1932, the water supply was of sufficient volume to satisfy all users on the stream system and only the part-time services of a commissioner were required. The office has met with no success in its efforts to have the water users on this stream agree to installation of some mechanical means for dividing the water in accordance with the priority rights and thus dispensing with the expense of a water commissioner.

MUDDY RIVER

The distribution of water on this stream has been handled in a satisfactory manner by S. D. Conger during the biennial period, and no complaint of any kind has been received from the water users.

SIX MILE CREEK

In the early part of the 1931 irrigation season several complaints were made to the State Engineer regarding the use of water on this stream, and a request was made for the services of a water commissioner. On April 25 a field engineer from the office made an investigation of the water supply on this creek, with both water users present.

On account of the flow in the creek being so low, it was agreed the services of a commissioner would be needless expense.

In June, 1932, a complaint was made relative to the use of water of this creek, but as rains occurred in the vicinity at about that time the complaint was not investigated, and up until June 30 no regulatory service has been required.

Unit Amounts Assessed for Distribution Purposes on Streams Under the Administration of the State Engineer

Humboldt River—	Unit Assessment—	
	1928	1929
Elko County.....	0.0500	0.0600
Eureka County.....	0.0500	0.0600
Lander County.....	0.0500	0.0600
Humboldt County.....	0.0500	0.0600
Pershing County.....	0.0500	0.0600