

BEFORE THE DIVISION OF WATER RESOURCES
DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

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In the Matter of Application 7360 of Tehama Crusade Placers, Ltd.,
to appropriate from Deer and Smoky Creeks in Tehama County
for Mining Purposes.

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DECISION A 7360 - D - 342

Decided

June 19, 1933

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APPEARANCES AT HEARING HELD AT SACRAMENTO, CALIFORNIA, JUNE 5, 1933.

For Applicant

Tehama Crusade Placers, Ltd.

M. E. Heiser, President

Tehama Crusade Placers, Ltd.

For Protestants

(a) Stanford Vina Ranch Irrigation Company Allison Ware of Ware & Ware, Attys.

(b) Deer Creek Irrigation District,
Board of Trustees of Leland
Stanford Junior University and
Bank of America National Trust
and Savings Association

Jacobs D. Peters, Attorney at Law

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EXAMINER: Everett H. Bryan, Supervising Hydraulic Engineer, for
Harold Conkling, Deputy in Charge of Water Rights, Division of
Water Resources, Department of Public Works, State of California.

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OPINION

DESCRIPTION OF PROJECT

Application 7360 is to appropriate 75 cubic feet per second from
Deer Creek in Tehama County within the SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 26, T 27 N, R 5 E,
MDBAM and 25 cubic feet per second from Smoky Creek, a tributary of Deer

Creek, in Tehama County, within the NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 16, T 26 N, R 3 E, M.D.B.M.; the water to be used for mining and domestic purposes within Sections 8 and 17 of said T 26 N, R 3 E, M.D.B.M. and to be returned to Deer Creek in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of said Section 17. A diversion ditch some six miles in length is proposed to conduct the water from Deer Creek to the place of use and a diversion ditch is proposed something over a mile long from Smoky Creek, and from the ends of the two ditches water will be led under pressure to the points of discharge by nozzle at the place of use.

The application indicates the ditch leading from Deer Creek will be constructed through earth and rock, and will be 41 inches wide on the bottom, 3.4 feet deep, and 10.8 feet wide at the water line, while the ditch leading from Smoky Creek will be 3 feet wide on the bottom, 2.0 feet deep, and 7.0 feet wide at the water line, the grades being one and two feet per thousand respectively. The application contains no reference to flumes, pipe lines at the ends of the ditches, and penstock lines, but considerable information concerning these was developed in the course of the hearing. It appears that wooden flumes will be used at various points on the Deer Creek conduit where the terrain is too steep, rocky, or otherwise unfitted for ordinary canal construction, and that the Smoky Creek conduit may discharge into Ditch Creek or be flumed over it and discharged into an existing ditch by which the water will be led to the head of the pressure pipe line leading to the penstock and nozzles.

There appeared from the testimony of witnesses for the applicant considerable uncertainty concerning the conduit line leading from Deer Creek, and other features of that phase of the development, and apparently no arrangements have yet been concluded with the Debris Commission for restraint of the debris which would originate therein. The Smoky Creek development

was more clearly in mind and testimony was to the effect that a permit had been secured from the Debris Commission for this phase of the project. Applicant explained that it was proposed to develop the Smoky Creek diversion first, because it was least expensive, and to test the ground before proceeding to construct the Deer Creek diversion works and conduit.

Deer Creek from the point of diversion to the place of use flows through a narrow canyon of rapid descent and steep slopes, and the map accompanying the application indicates that the proposed diversion conduit between the diversion dam and the place of use will in general be within a few feet to one quarter mile of the creek

PROTESTS

Protests against approval of the application were received from the Stanford Vina Ranch Irrigation Company, the Deer Creek Irrigation District, the Board of Trustees of Leland Stanford Junior University, H. W. Hanna, and the Bank of America National Trust and Savings Association. These protests were to the effect that the appropriation proposed would dissipate the waters diverted, thereby diminishing the flow available to protestants under prior and existing rights at points downstream, and that protestants would be further injured by the deposit of debris upon their lands and in their ditches and by the jeopardy of "a high and unstable log crib dam."

Stanford Vina Ranch Irrigation Company diverts from Deer Creek for the irrigation of some 5700 acres at a point somewhat over 20 miles below where applicant proposes to return the water to the stream. The Company claims riparian rights, and rights by appropriation initiated by the Board of Trustees of Leland Stanford Junior University and its predecessors in interest, all as confirmed by superior court decree of November 27, 1923, in the case of Stanford Vina Ranch Irrigation Company, a Corporation, v.

Charles Dicus, et al. A copy of this decree was placed in evidence by protestants as Protestants Exhibit No. 1. By virtue of this decree the Stanford Vina Ranch Irrigation Company claims an exclusive right to 65 per cent of the full flow of Deer Creek, and that the remaining 35 per cent is likewise distributed to others thereby leaving nothing in this stream subject to appropriation.

Deer Creek Irrigation District and Board of Trustees of Leland Stanford Junior University protest upon grounds similar to those of the Stanford Vina Ranch Irrigation Company, likewise basing their claims of right upon riparian ownership and prior appropriation as confirmed by the above described decree. Their claim is to the remaining 35 per cent allocated by this decree, the diversion being made some 20 miles downstream from the point where applicant proposes to return the water to Deer Creek.

R. W. Hanna bases his protest upon riparian ownership, prior appropriation, and beneficial use dating back to 1850, and it would appear, though protestant does not so state, this right is a part of the 65 per cent allotment to Stanford Vina Ranch Irrigation Company. Protestant states he diverts from about April 1st to September 15th or October 15th and indicates the protest may be dismissed and disregarded provided there is "no substantial diminution of water in Deer Creek suitable for irrigation."

Bank of America National Trust and Savings Association holds a deed of trust to some 1600 acres of land served by the Stanford Vina Ranch Irrigation Company which deed of trust it is about to foreclose and expects to soon become the owner of the property. It protests the appropriation upon the ground that deposition of silt and debris will occur upon their land with injurious effect as a result of the proposed operations of applicant if the application is approved.

the flow in Deer Creek passes by the diversion points of protestants and on into Sacramento River and San Francisco Bay serving little or no purpose.

WATER SUPPLY NORMALLY AVAILABLE IN DEER CREEK

A gaging station has been maintained by the U. S. Geological Survey on Deer Creek near Vina since 1911, except for the years 1915 to 1920, and there is therefore a record of the daily flow at this point for seventeen years. This record indicates that the flow in Deer Creek on the average falls below 150 second feet shortly after the first of May, although in one year it remained above 150 second feet until about July 19th, and that the flow generally falls below 100 second feet about June 15th but has in some years remained above 100 second feet throughout the season. During the winter and early spring the flow normally is well above 100 second feet and more than ample to serve any needs of protestants for beneficial use.

THE APPROPRIATION PROPOSED IS ESSENTIALLY NON-CONSUMPTIVE

The appropriation proposed by applicant is an essentially non-consumptive use within the watershed and it is altogether conceivable that it might be consummated without any appreciable net loss of water to downstream users. It is on an entirely different basis than an appropriation for irrigation use where in ordinary practice from 50 to 75 per cent of the diversion, and in some cases even a greater percentage, is entirely dissipated and lost to downstream users by reason of plant transpiration, deep percolation, and evaporation from large areas of irrigated land surface.

In the instant case the water which is diverted will be carried from the point of diversion to the place of use in a conduit constructed along a steep slope in close proximity to the natural stream in which it originated.

Its use at any one time must in the nature thereof be upon a rather restricted area, and will be in close proximity to the original stream channel, to which the water will be returned, except such as may be dissipated. Applicant's engineer was of the opinion such loss would be negligible while protestants engineer testified that it would in all probability be very considerable and that he had known cases of hydraulic mining where the entire diversion was lost and none returned to the stream. The record however is not clear as to very important and significant facts as to these cases cited by protestants engineer; i.e. the amount diverted, the nature of the conduits by which the water was conducted to the place of use, the distance thereof from the stream from which diversion was made, the nature of the soil and terrain between the conduit and said stream, the proximity to said stream of the pit where mining was carried on, etc., etc. Each of these elements would have a most significant effect upon the amount of the diversion which was lost to the stream from which diversion was made.

A diversion of a few second feet which is conveyed in large and unconfined conduits or natural water ways, at a great distance from the stream in which the water originates, and perhaps at times outside the watershed, and which is finally used in mining operations at a considerable distance from the stream of origin may well be entirely dissipated, and lost to downstream users. The loss would be caused by

1. Evaporation from exposed water surfaces in conduits, reservoirs, etc.
2. Evaporation from land surfaces wetted by leakage from the conduit and operations in the pit.
3. Deep percolation, and conduit leakage tributary to foreign sources.
4. Transpiration of plants dependant upon conduit flow and leakage.

In the instant case the applicant proposes very sizeable diversions (75 cubic feet per second from Deer Creek and 25 cubic feet per second from Smoky Creek) which at time of low water will dry up the natural streams. It is proposed to convey this water in confined, narrow, deep, and swiftly moving artificial water ways where the water surface exposed to evaporation may well be less than in the natural stream channels.

The conduits will be along the precipitous slopes of a narrow canyon and in close proximity to the natural stream channel. All leakage from the canals, flumes and pipe lines except such as is dissipated by evaporation from wetted land surfaces and by transpiration of plants between the conduit and the natural stream channel will be returned almost immediately to the stream channel from whence it came. There will doubtless be a considerable loss from the open canals by leakage unless these are concrete lined but it is anticipated that a considerable portion of this leakage will be returned to the stream. The net loss to downstream users which would result from the appropriation proposed cannot be estimated from the data at hand and will depend to large extent upon the diversion system which may be built.

Applicant was requested to stipulate and did so stipulate, that in order to ascertain the facts as to net loss to the protestants by reason of the diversion it proposed it would construct and maintain such measuring devices above and below its diversion points and points of return that the net loss might readily be determined. Under the conditions of uncertainty which exist, and in view of the fact that during certain seasons of the year there is a surplus over and above what water is needed to satisfy beneficial uses of the protestants it is felt this permit cannot be denied. If by actual test it is found the diversions proposed by applicant result in substantial loss to protestants then applicant must cease diverting during the low flow season. If on the other hand there is no substantial loss to protestants as a result of the diversion then protestants can have no reasonable objection to the appropriation proposed.

INSTABILITY OF DAMS NOT MATERIAL TO THIS PROCEEDING

Protestants objected to approval of the application upon the ground that the dam proposed would be insecure and this insecurity threatened damage to their lands. This is a matter which must come before this office in an entirely different proceeding. The Water Commission Act which regulates the appropriation of water does not vest this office with authority to deny an application to appropriate upon a showing that the dam proposed is insecure.

POSSIBLE DAMAGE FROM SILT DEPOSIT NOT MATERIAL TO THIS PROCEEDING

Likewise the Water Commission Act does not vest this office with authority to deny an application to appropriate upon a showing that the appropriation proposed may damage others by the deposit of silt and debris on their lands. The California Debris Commission is by law vested with authority to regulate the practice of hydraulic mining on these two streams so as to prevent such damage, and should it fail to exercise such authority, or should damage occur the courts are open for redress.

SUMMARY AND CONCLUSION

The use proposed is a beneficial one. During years of ordinary rainfall little or no water is diverted by protestants from Deer Creek during the period from about October 1st to about April 1st and the spring flow is considerably in excess of the requirements of the protestants until after May 1st. From some time early in May to some time during September protestants have need for beneficial uses, and appear to be entitled to the full flow of Deer Creek at their respective points of diversion. The use proposed by applicant is however essentially non-consumptive and it may well be could be carried on without appreciable loss of water to protestants. Applicant has consented to install and maintain such measuring devices above its points of diversion and below its points of return of water on Deer Creek and Smoky Creek as to estab-

lish the facts as to actual loss. Under the circumstances Application 7360 should be approved to allow diversions from about October 1st to about May 1st, subject of course to prior and existing rights and diversion may be allowed during the remainder of the year subject to the conditions that (a) applicant prior to such diversion shall install suitable measuring devices to establish the net loss to protestants as a result of its appropriation, (b) applicant shall maintain and operate such measuring devices and maintain a record of the flow thereof which shall be available to protestants, the Division of Water Resources, and other interested parties, and (c) ^{applicant} shall desist from such diversions when and if so ordered by the Division upon a showing there is a substantial loss to claimants of prior and existing rights.

O R D E R

Application 7360 for a permit to appropriate from Dear Creek and Smoky Creek having been heretofore filed with the Division of Water Resources, protests against the approval thereof having been received, a public hearing having been held, and the Division of Water Resources now being fully informed in the premises:

IT IS HEREBY ORDERED that said Application 7360 be approved subject to the usual terms and conditions and subject to the following special terms and conditions to wit:

"Prior to any diversions during the months of May, June, July, August and September applicant and permittee shall install such measuring devices above the points of diversion and below the points of return of waters appropriated as will enable interested parties to determine the net loss resulting therefrom and applicant and permittee shall maintain and operate said measuring devices and maintain an accurate record available alike at all times under reasonable supervision, to claimants of prior and existing rights and to the Division of Water Resources whereby it may readily be determined what losses are resulting from the appropriations made by appli-

oant and permittee, and applicant and permittee accepts this permit subject to the express condition that upon a showing that this appropriation appreciably diminishes the quantity of water to which prior and existing rights are entitled it will, when and if so ordered by the Division of Water Resources, cease diverting during the aforesaid months May to September both inclusive.

WITNESS my hand and the seal of the Department of Public Works of the State of California, this *19th* day of *June*, 1933.

EDWARD HYATT
STATE ENGINEER

BY MARGOLD CONKLING

Deputy

END:MP