



DIVERSION SYSTEM(1) California Coordinates, Zone     , N.                     , E.                      Is point of diversion as specified? yesIs change petition/correction required? (explain) noWould change cause any injury? no changeOwner of land at point of diversion: permitteeAssessor's Parcel No.: 20-03-08 Type of access:                     Is diversion system complete? yes If not, what remains to be done?                     Capacity of the limiting section: 8 cfsHow determined? visible waterline at H=1.25' on staff gage for 24" Parshall flume in ditch just below lift pump discharge represents output some years ago when pumps were new, according to Mr. Dick; he said current capacity with both pumps running is 8 cfs (1.0' on gage). Diversion at inspection (with 30 hp lift pump in use; 15 hp pump off): H=0.74'=5.02 cfs from tables. Mr. Dick said that this amount includes about half surplus (permit) water and half adjudicated water.PLACE OF USEName of place of use, if commonly known as such: Hole-in-the-Ground RanchDescribe any changes/corrections from the place of use as described in the permit or order: no changes; POU shown on E-map was both field checked and checked against aerial photos (in field file; from TerraServer web page). E-map appears surprisingly accurate. Lighter (drier) areas on aerial photos are shallow-soiled, rocky ground which get effectively irrigated only when there is plenty of water, according to Mr. Scala. They appear unirrigated in photos, which were taken on July 25, 1994 (a drought year).Is change petition/correction required? (explain) noIs place of use developed to a point where full use of water may be made? (explain) yes.Does it appear that development has been pursued with due diligence? (explain) yesOwner of land at place of use: permitteeAssessor's Parcel No.: portions of 20-03-03, -04, -08, and -10Acreage: see assessor plats in field fileMAJOR USES OF WATERBriefly describe diversion works and method of applying water to major use: A concrete and flashboard dam is used to raise the water level in the Shasta River so that a portion will flow by gravity into a concrete ditch about 300' long. The concrete ditch leads to a lift station with 15 and 30-hp electric pumps which discharge via 14" steel pipe to short section of concrete ditch thence 24" Parshall flume with recorder (operated by DWR watermaster, Mr. Dick) thence concrete and earth ditch system. Interestingly, Mr. Dick said the purpose of the recorder and flume was not to keep diversion records but to ensure that water is not "stolen" by monkeying with the water levels. The ditch system is used to flood irrigate a portion of the Hole-in-the-Ground ranch on the west side of the river. Temporary tarp "dams" are typically used to turn water out of the ditch, but there are some permanent sliding gate turnouts in place.Does method appear wasteful, judging from local standards? (explain) No, this is the typical method for this area.List acreage/crop type or other units served during maximum season (show on attached sketch/map): 375 total acres, all meadow grass, is irrigated. All areas have been hayed and then pastured, although in certain years, some areas are pastured only. About 300 head of cattle are grazed on this portion of the ranch, possibly along with ranch horses.OTHER USESAverage number of persons served during maximum period: none Number of housing units: nonePlumbing facilities available: n/aArea of garden, lawn, orchard, dust control, etc. (show measurements on attached sketch): none knownNumber and type of domestic livestock served: none knownOther miscellaneous uses: (list and explain) none

EXTENT OF USE OF WATER

Season of use and/or diversion to storage: will have to be determined from diversion records to be kept by Mr. Dick or his successor. Apparently irrigation under this permit does not occur until late March at the earliest and continues until all surplus water is gone and all water being diverted by permittee is being released for him from Lake Shastina. Early irrigations may consist entirely of surplus water in good water years when Lake Shastina has filled, as leakage occurs at a much greater rate when the lake level is high. Mr. Dick is aware from our discussion that he will need to keep and provide diversion records, based on the Parshall flume measurements, to substantiate both the amount and season for this appropriation. According to Mr. Scala, it takes them 3 to 4 weeks to complete one irrigation of the area flood irrigated by this ditch. Mr. Dick estimates that in a good year the permittee may get 2 early irrigations using surplus water before he has to release stored (adjudicated) water for them.

Rate of use by direct diversion during maximum period: to be determined by future records (see above)

Beginning and ending dates of maximum period: to be determined by future records (see above)

Maximum annual diversion: to be determined by future records (see above) Year of maximum use: 19

Complete the following if storage is involved: NO STORAGE

Maximum amount diverted to storage in one season: \_\_\_\_\_ Year: 19 - 19

Maximum withdrawal in one season (if applicable): \_\_\_\_\_ Year: 19

PERMIT TERMS

Address compliance with each Permit term (by term number): terms 14 and 15: the watermaster has long been aware of these permits and has been providing service to the permittees, but only to the extent necessary to ensure their diversions do not injure other users, not to the extent of keeping diversion records; terms 16 and 17: Mr. Dick maintains that the 1 cfs fish bypass is NEVER an issue for several reasons: he must manage these diversions while still satisfying the needs of downstream diverters; if insufficient water is available the flow is augmented by releases from Lake Shastina. He understands, however that term 17 requires a device for actual measurement to enable him, us or others to tell at a glance whether the bypass is being met. He is to work with the permittee to come up with such device for each of their diversion dams. For this diversion (No. 166), this might mean adding a notch in top flashboard sized for a 1 cfs bypass. I told Mr. Scala that I would be writing to request that they provide plans for the measuring devices for both diversions along with an installation schedule (before the next irrigation season; probably in the fall after the current irrigation season), for my approval. I explained that we likely would not process their extension requests until such a plan and schedule are approved.

OTHER RIGHTS (show pertinent information)

Companion Permit 19163 (A26305) and Permit 19164 (A26306) were also inspected. Revocation is recommended for P19163, and an extension of time for diversion record-keeping is recommended for P19164. According to Mr. Dick, the Seldom Seen Ranch gets 924 ac-ft and the Hole-in-the-Ground Ranch 596 ac-ft under the Shasta River Adjudication (not verified - this is the water "banked" in Lake Shastina which the ranches can request each season on demand).

L11609 (A23767) covers two reservoirs on an adjacent ranch also owned by Emmerson.

L4151 (A8809) covers a spring on the bank of the Shasta River between the A26306 and A26307 PODs. This water is apparently rediverted at the A26307 POD, but I was not aware of L4151 at the time of this inspection, and therefore did not discuss it with Mr. Dick. This matter should be looked into to ensure that there is no duplication in Mr. Dick's diversion measurements, i.e. credit given towards P19165 for water already covered by L4151.



↑ LOOKING ACROSS DAM (DITCH TO 100 FT PUMPS FLOWS BEHIND KEITH DICK AND PETE SCALA)



POINT OF DIVERSION (No. 166 of Decree)  
FLASHBOARD DAM

~ 12' WIDE x 6' HIGH

← LOOKING UPSTREAM

PERMIT 19165  
A 26307  
6-13-00

WCS

**STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
DIVISION OF WATER RIGHTS  
REPORT OF INSPECTION  
FILING DATA**

APPLICATION NO.: 26306

FILING DATE: 4-21-80

NAME : Emmerson Investment, Inc.  
 ADDRESS : c/o Jack G. Frost, P.O. Box 496014, Redding, CA 96049-6014  
 SOURCE : Shasta River tributary to Klamath River  
 PT. OF DIV. : NE1/4 of NW1/4 of Section 22, T43N, R5W, MDB&M  
 AMOUNT : 5 cfs; 400 AFA total  
 PURPOSE : Irrigation and Stockwatering  
 PLACE OF USE: 112 acres within Sections 16, 21, and 22, T43N, R5W, MDB&M (see E-map for 1/4-1/4 breakdown)  
 SEASON : February 1 to November 1

COUNTY: Siskiyou

PERMIT NO. : 19164

DATE ISSUED: 3-23-84

EXPIRES: 12-31-95

Date of Inspection: June 13, 2000 Inspected By (signature/submit date): Wayne C. Smith 8-21-00  
 Accompanied By: Pete Scala (ranch foreman) Telephone: (530) 938-3874 (residence)  
(530) 598-4782 (cell phone)  
Keith Dick (DWR watermaster) Telephone: (530) 459-3876  
 Person(s) Interviewed: Jack Frost (agent) Telephone: (530) 378-8119

**RECOMMENDATION**

License  Extension  to 2005 No Action  Revoke  Other   
 conditional  
 Changes  Corrections  No Changes or Corrections   
 Owner  Address  Amount  Season  Purpose  Point of Diversion  Place of Use

Remarks: (explain basis for recommendation)

This permit, along with companions A26305 and A26307, was filed for water surplus to that distributed in accordance with the Shasta River Adjudication. Such surplus water generally consists of excess early season flows resulting from leakage from the dam for Lake Shastina. Each of the three separate PODs/POUs under these permits also has rights for their primary irrigation water under the Decree. At the time of construction of Dwinnell Reservoir (now Lake Shastina), a water right settlement allotted each POU a fixed amount of water, to be released each season upon demand and under watermaster supervision, from storage in the reservoir.

These diversions and POUs were developed years ago and therefore construction and use of water have been complete for some time. However two issues remain: compliance with the measuring device for fish bypass requirement and keeping of diversion records for licensing purposes.

These projects were deemed in compliance with the 1 cfs fish bypass in a 1986 inspection based on the watermaster's control of the diversions and his need to maintain flows greatly in excess of 1 cfs for downstream users. However, the permit clearly calls for a measuring device, presumably so that any interested party could tell at a glance if the bypass was being met. In addition, there have apparently been times early in the irrigation season when diversions have been made under this permit and watermaster service had not yet begun. The DWR watermaster, Keith Dick, has indicated that he will work with the permittee to devise a scheme to comply with this requirement.

A Parshall flume with recorder is in place at the head of the ditch used under this permit and while it is used by the watermaster, no diversion records are kept, even though a term in this permit requires the diversion to be under watermaster supervision, even though the last extension was granted (to a prior owner) for the purpose of keeping diversion records, and even though Mr. Dick was present at both of our last two inspections. We discussed in detail his need to maintain written records for submittal to us to establish both a maximum month and maximum annual use of water. This will require a breakdown between water diverted under this permit (surplus water) and water diverted under the adjudicated right (water banked in Lake Shastina).

My recommendation for this permit is to request a plan and schedule for installation of the measuring device for my approval. After approval, we would accept a petition for an extension of time for diversion records to be kept to support licensing.

**SOURCE**

Name: Shasta River Who measures flow? monitored by DWR watermaster  
 Tributary to: Klamath River  
 Flow at time of inspection: 25 cfs How and where determined? estimate of flow at POD of this permit, by Mr. Dick, including 10 cfs being added to river via cross canal from Montague WCD main canal  
 Is supply natural?: partially; at times includes releases from storage in Lake Shastina as mentioned above

*W* 8-22-00

DIVERSION SYSTEM(1) California Coordinates, Zone     , N.     , E.      Is point of diversion as specified?  
yesIs change petition/correction required? (explain) noWould change cause any injury? no changeOwner of land at point of diversion: permitteeAssessor's Parcel No.: 20-04-43 Type of access:     Is diversion system complete? yes If not, what remains to be done?     Capacity of the limiting section: 8 cfsHow determined? visible waterline at H=1.0' on staff gage for 24" Parshall flume in ditch just below POD; also backed up by statement of Mr. Dick. Diversion at inspection: H=0.81'=5.77 cfs from tables. Mr. Dick said that this amount includes about half surplus (permit) water and half adjudicated water.PLACE OF USEName of place of use, if commonly known as such: Hole-in-the-Ground RanchDescribe any changes/corrections from the place of use as described in the permit or order: no changes; POU shown on E-map was both field checked and checked against aerial photos (in field file; from TerraServer web page). E-map appears surprisingly accurate.Is change petition/correction required? (explain) noIs place of use developed to a point where full use of water may be made? (explain) yesDoes it appear that development has been pursued with due diligence? (explain) yesOwner of land at place of use: permitteeAssessor's Parcel No.: portions of 20-04-43, 20-03-04 and 20-03-08Acreage: see assessor plats in field fileMAJOR USES OF WATER

Briefly describe diversion works and method of applying water to major use: Scrap two-bys of various widths are used to partially block the entrances to two culverts (one 42" and one 36") through an earth/rock diversion dam (approx 6' high x 40' long) across the Shasta River. The water level is thereby raised so that a portion will flow by gravity into an earth ditch. Flow into the ditch is controlled by the boards placed in front of the culverts and by a screw gate on another culvert about 50' down the ditch. Not far below the screw gate flow in the ditch is measured by a 24" Parshall flume (with recorder) operated by the DWR watermaster, Mr. Dick. Interestingly, Mr. Dick said the purpose of the recorder and flume was not to keep diversion records but to ensure that water is not "stolen" by monkeying with the water levels. The ditch is used to flood irrigate a portion of the Hole-in-the-Ground ranch on the east side of the river. Temporary tarp "dams" are typically used to turn water out of the ditch, but there are some permanent sliding gate turnouts in place.

Does method appear wasteful, judging from local standards? (explain) No, this is the typical method for this area.

List acreage/crop type or other units served during maximum season (show on attached sketch/map): 112 total acres, all meadow grass, is irrigated, of which the northerly 75 acres (approx) is hayed, then pastured. The upper (southerly) 37 or so acres is pastured only. About 75 head of cattle are grazed on this portion of the ranch, possibly along with ranch horses.

OTHER USESAverage number of persons served during maximum period: none Number of housing units: nonePlumbing facilities available: n/aArea of garden, lawn, orchard, dust control, etc. (show measurements on attached sketch): none knownNumber and type of domestic livestock served: none knownOther miscellaneous uses: (list and explain) none

EXTENT OF USE OF WATER

Season of use and/or diversion to storage: will have to be determined from diversion records to be kept by Mr. Dick or his successor. Apparently irrigation under this permit does not occur until late March at the earliest and continues until all surplus water is gone and all water being diverted by permittee is being released for him from Lake Shastina. Early irrigations may consist entirely of surplus water in good water years when Lake Shastina has filled, as leakage occurs at a much greater rate when the lake level is high. Mr. Dick is aware from our discussion that he will need to keep and provide diversion records, based on the Parshall flume measurements, to substantiate both the amount and season for this appropriation. According to Mr. Scala, it takes them 2-1/2 to 3 weeks to complete one irrigation of the area flood irrigated by this ditch. Mr. Dick estimates that in a good year the permittee may get 2-3 early irrigations using surplus water before he has to release stored (adjudicated) water for them.

Rate of use by direct diversion during maximum period: to be determined by future records (see above)  
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 Maximum withdrawal in one season (if applicable): Year: 19

PERMIT TERMS

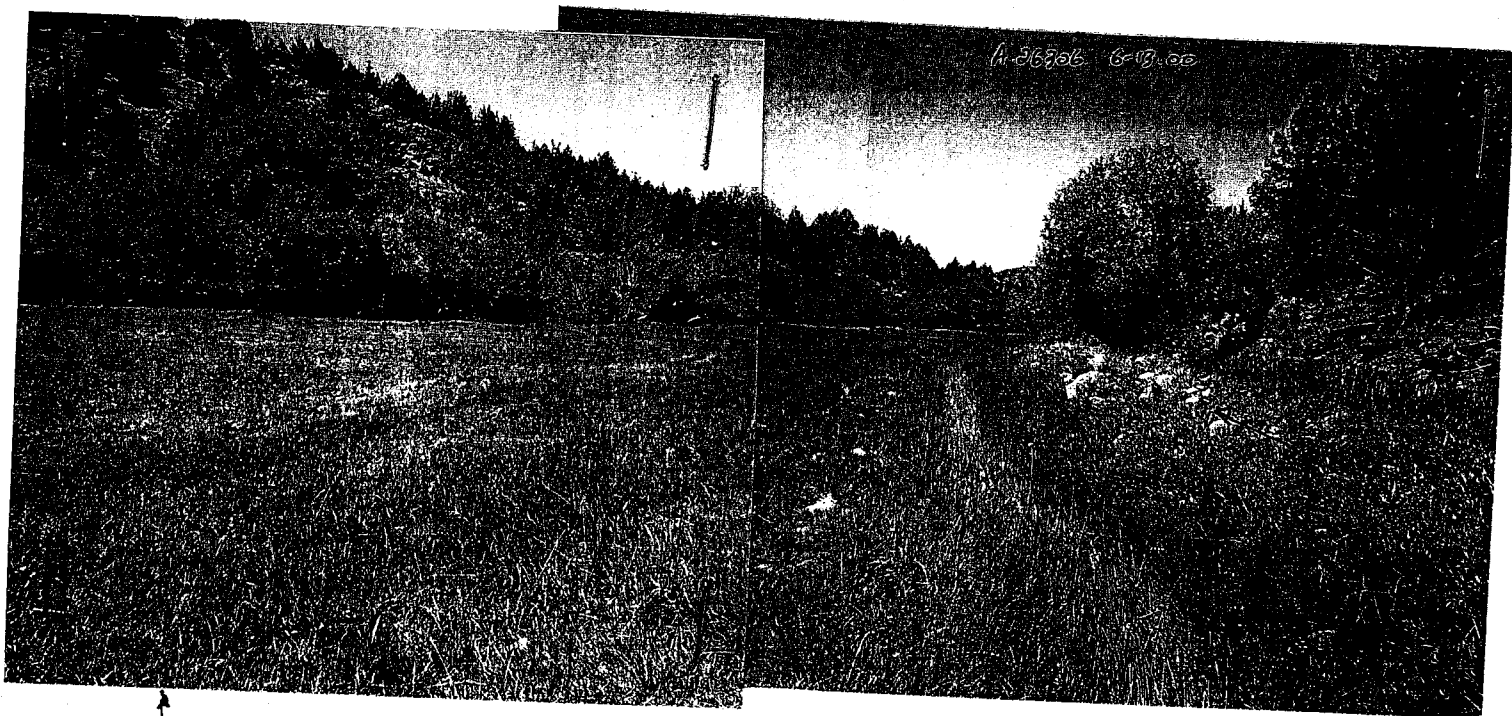
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OTHER RIGHTS (show pertinent information)

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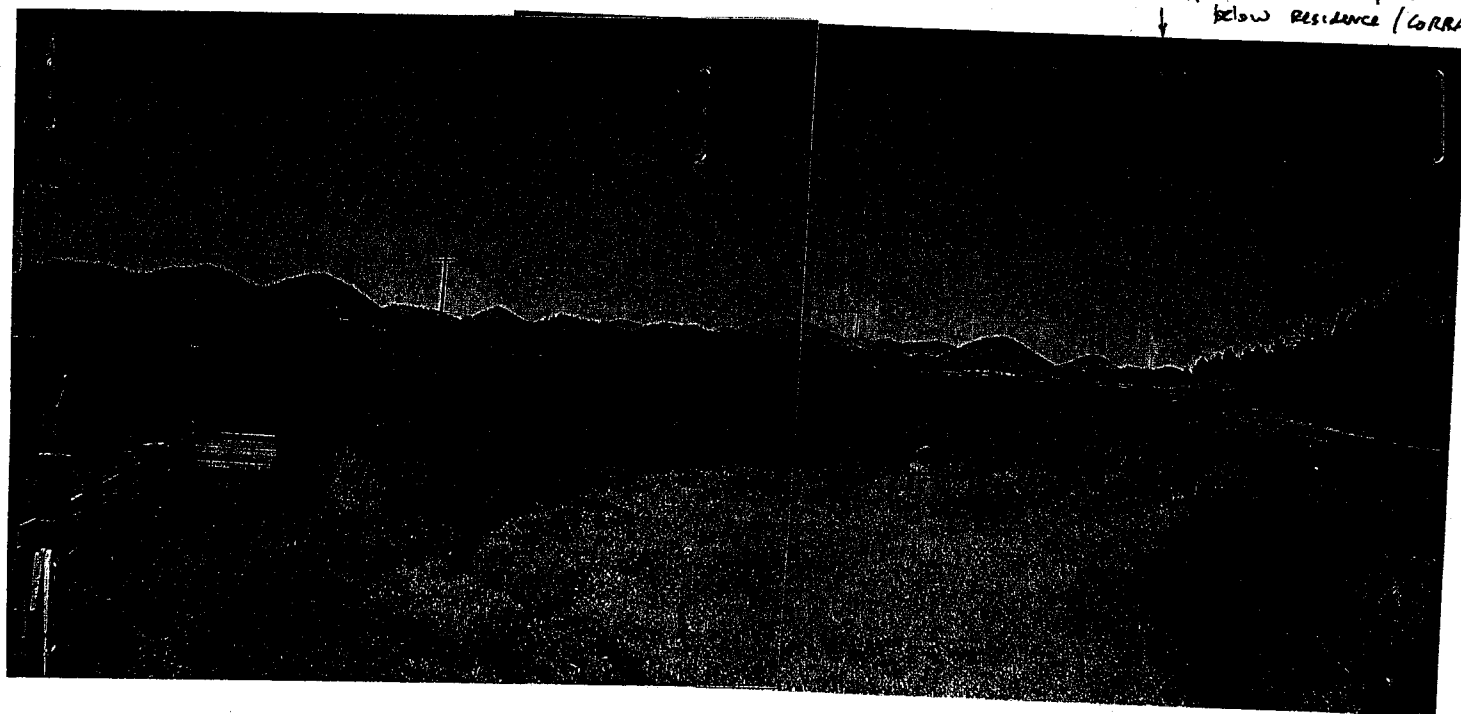
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NARROW STRIP  
ALONG UPPER DITCH

PORTIONS OF FLOOD IRRIGATED PLACE OF USE

UPPER END OF MAIN PASTURE  
↓  
BELOW RESIDENCE (CORRALS)



Permit 19164  
A-26306  
6-13.00 WCS



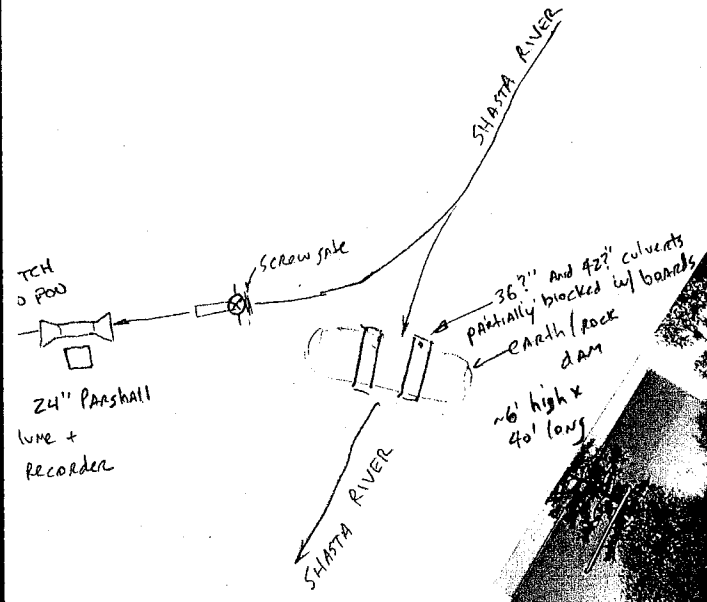


Screw gate on CMP  
in ditch ~ 50' below POD  
Recorder Box (below)  
CAN be seen to left rear



24" Parshall flume in ditch  
~ 75' downstream of POD  
Mr. Dick is checking recorder  
(in box)

Permit 19164  
A-26306  
6-13-00  
WES



TEH  
0 P00

24" Parshall  
tube +  
Recorder

36" and 42" culverts  
partially blocked w/ boards

Earth/Rock  
dam

~6' high x  
40' long



POINT OF DIVERSION (# 165 of Decree)

MR Scala and MR Dick are standing below  
the "diversion dam" which is a beam  
constructed of earth and rock with two CMP's  
which are blocked with boards to RAISE WATER  
so it flows into ditch entrance.

Permit 19164  
A-26306  
6-13-00  
WCS