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BY *John V. Mueller*

U.S. DISTRICT COURT  
BY *John V. Mueller*

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEVADA

THE UNITED STATES OF AMERICA, Civil No. D-183 BRT  
Plaintiff,  
vs.  
ALPINE LAND & RESERVOIR COMPANY,  
a corporation, et al.,  
Defendants.

O P I N I O N

This is a quiet title suit to adjudicate the rights to the use of the water of Carson River in Nevada and California. The case was tried before the Court and John V. Mueller, a Special Master, the Master having heretofore submitted proposed findings of fact, conclusions of law and decree. Objections to the Master's report have been filed by the parties and further trial proceedings to resolve those objections have been held before the Court as provided by the proposed preliminary pretrial order heretofore filed and approved by the Court on October 20, 1977.

This Court has jurisdiction over this matter under 28 U.S.C. §1345 and the Act of September 19, 1922, 42 Stat. 849. The question of the jurisdiction of the Court over successors in interest to the original defendants, including

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1 those in California, was briefed. On February 15, 1974, the  
2 Court concluded in open court:

3 that the Court does continue to have  
4 jurisdiction over the successors in  
5 interest of all parties who were ori-  
6 ginally parties to this litigation.

7 As provided in the proposed preliminary pre-trial  
8 order, the proposed Mueller findings of fact, conclusions of  
9 law and decree, submitted in June 1951 and later amended,  
10 shall, except where modified and supplemented in resolving  
11 the issues hereinafter set out, constitute the final findings  
12 of fact, conclusions of law and decree in this case.

13 The following is the Court's opinion regarding var-  
14 ious issues of law and fact and mixed law and fact covered  
15 by the evidence received and the extensive briefs of the  
16 parties. If certain contentions made or issues stated in the  
17 pre-trial orders are not discussed, they are considered irre-  
18 levant.

19 THE WATER RIGHTS FROM THE UNITED STATES' APPROPRIA-  
20 TION FOR THE NEWLANDS PROJECT.

21 The water rights on the Newlands Project covered by  
22 approved water right applications and contracts are appurte-  
23 nant to the land irrigated and are owned by the individual  
24 land owners in the Project. These rights have a priority of  
25 July 2, 1902. The United States may have title to the irri-  
26 gation works, but as to the appurtenant water rights it main-  
27 tains only a lien-holder's interest to secure repayment of  
28 the project construction costs.

29 Section 8 of the Reclamation Act of 1902, 43 U.S.C.  
30 §372, states:

31 "The right to the use of water acquired under  
32 the provisions of this Act [5§485, §§372, 373,  
381, 383, 391, 392, 411, 416, 419, 421, 431,  
432, 439, 461, 491, 498 of this title] shall be  
appurtenant to the land irrigated, and benefi-  
cial use shall be the basis, the measure, and  
the limit of the right."

1 43 U.S.C. §542 states:

2 "Every patent and water-right certificate  
3 issued under this Act [§§541-546 of this title]  
4 shall expressly reserve to the United States a  
5 prior lien on the land patented or for which  
water right is certified, together with all  
water rights appurtenant or belonging thereto  
... " (Emphasis added.)

6 Furthermore, 43 U.S.C. §498 empowers the Secretary  
7 of the Interior to transfer the operation and management of  
8 irrigation works to project landowners once payments for a  
9 major portion of the project lands are made. Section 498  
10 specifically states that despite any transfer of operation  
11 and management responsibilities, title to the reservoirs and  
12 works remains in the government. The lack of mention of  
13 water right title in this section implies that title to the  
14 water right had already passed to the farmers with their land  
15 patents. The Supreme Court discussed the Reclamation Act in  
16 conjunction with the western doctrine of appropriative water  
17 rights in Ickes v. Fox, 300 U.S. 82 (1937). The court em-  
18 phatically stated that although the government diverted,  
19 stored and distributed the water, the ownership of the water  
20 or water rights did not vest in the United States. "Appro-  
21 priation was made not for the use of the government, but,  
22 under the Reclamation Act, for the use of the land owners  
23 ... ." Id. at 95. Thus any property right of the government  
24 in the irrigation works is separate and distinct from the  
25 property right of the land owners in the water right itself.  
26 In California v. United States, 438 U.S. 645 (1978), the  
27 court concluded, after an extensive survey of the older cases  
28 and the legislative history of the Reclamation Act, that  
29 state law was supposed to control the Act in two major ways:

30 "First ... the Secretary would have to  
31 appropriate, purchase or condemn necessary  
32 water rights in strict conformity with state  
law.

\* \* \* \* \*

1 "Second, once the waters were released from  
2 the dam, their distribution to individual land-  
owners would again be controlled by state law."

3 Id. at 665-7. In all the arid states, including Nevada, it  
4 is settled state law that the right to use water is acquired  
5 by an appropriation to some beneficial use. In Fox the court  
6 held that this type of right is a property right, which,  
7 "when acquired for irrigation, becomes, by state law and here  
8 by express provision of the Reclamation Act as well, part and  
9 parcel of the land upon which it is applied." 300 U.S. at  
10 95-6.

11 In Nebraska v. Wyoming, 325 U.S. 587 (1945), the  
12 court reiterated the Fox analysis, once more defeating the  
13 government's claim to project water rights. More recently,  
14 in the California case, the court pointed out that an impor-  
15 tant unifying factor in the long working relationship between  
16 the United States and the several arid western states in the  
17 area of reclamation projects is the "purposeful and continued  
18 deference to state water law by Congress." California v.  
19 United States, id. at 653. The only area where state law may  
20 not control is where it conflicts with explicit congressional  
21 directives in the Reclamation Act, a concern not relevant to  
22 this case. It cannot be disputed that under Nevada's appro-  
23 priative water right statutes the water appropriated and  
24 beneficially used on the land is appurtenant to that land and  
25 those water rights are owned by the land owner.

26 The United States relies upon Ide v. United States,  
27 263 U.S. 497 (1924), and United States v. Humboldt Lovelock  
28 Irrigation Light & Power Co., 97 F.2d 38 (9th Cir. 1938), as  
29 supporting its claim to title to the project water rights.  
30 These cases reveal little, if any, support for the govern-  
31 ment's position. The plaintiff land owners in Ide had ac-  
32 quired parcels of a former school site owned by the state of  
Wyoming but located in the midst of a federal reclamation



1 project. These land owners got patents from Wyoming with no  
2 water rights; the surrounding lands were sold to farmers by  
3 the federal government with a project water right. The plain-  
4 tiff land owners, all of whom got patents from Wyoming,  
5 attempted to assert appropriation of seepage water from the  
6 irrigation of the surrounding project lands.

7 In discussing the general nature of the entire pro-  
8 ject, the court clearly stated that a water right vests in  
9 the holder of a project land patent from the federal govern-  
10 ment. "The lands are disposed of in small tracts ... each  
11 disposal carrying with it a perpetual right to water from  
12 project canals." Ide v. United States at 499. The court held  
13 that there could be no appropriation of the seepage water be-  
14 cause, although the federal government passed water rights  
15 with the project land patents, it did not give up all inci-  
16 dents of control, and so could collect and redistribute seep-  
17 age water as against the land owners with Wyoming patents and  
18 no original project water rights. This holding is merely a  
19 slightly different way of stating what was said in Fox, that  
20 the government diverts, stores and distributes water but the  
21 project farmers with government patents, not the government  
22 itself, have title to the water right.

23 In United States v. Humboldt Lovelock Irrigation  
24 Light & Power Co., the question was whether a motion to dis-  
25 miss for failure to state facts sufficient to constitute a  
26 cause of suit was proper where the United States sought an  
27 injunction against a private reservoir company to prevent  
28 diversions of water allegedly in violation of earlier priori-  
29 ties owned by the government. The government owned no land;  
30 the defendant maintained that the government could own no  
31 water rights without owning land, and thus that the government  
32 did not state facts establishing a property right. The water  
rights in question had originally been appurtenant to pri-

1 irrigated lands and had been conveyed to the United States by  
2 the private owners. The appellate court held that the rele-  
3 vant Nevada statute "authorizes conveyance to, and ownership  
4 by, appellant (United States) of the water rights in question,  
5 regardless of whether it does or does not own land to be  
6 irrigated." United States v. Humboldt Lovelock Irrigation  
7 Light & Power Co., at 45. The appellate court also quoted  
8 with approval from Prosole v. Steamboat Canal Co., 37 Nev.  
9 154, 140 P. 720, 144 P. 744 to the effect: "a water right for  
10 agricultural purposes, to be available and effective, must be  
11 attached to the land and become in a sense appurtenant there-  
12 to by actual application." (at p. 43). The essence of the  
13 decision in the case is that the United States had sufficient  
14 interest in the water rights to have standing to maintain the  
15 suit.

16 This case is thus of little relevance to the present  
17 problem since it is not disputed here that water rights can  
18 be conveyed to the United States or that the United States can  
19 own water rights. Rather, the issue here is what happened to  
20 the water rights after they were properly acquired by the  
21 United States. The United States passed title to the water  
22 rights to the project farmers and the rights are appurtenant  
23 to the land irrigated.

24 IS THE CARSON RIVER THE PRIMARY SOURCE OF WATER FOR  
25 THE CARSON DIVISION OF THE NEWLANDS PROJECT?

26 The parties have in the pre-trial order stated the  
27 foregoing as an issue. It is not easily understood why an  
28 answer is needed. Lake Lahontan is serviced by the Carson  
29 River and by diversions from the Truckee River through the  
30 Truckee Canal. Obviously, all Carson River water which reach-  
31 es the Lahontan Reservoir is captured and stored there. Under  
32 section 8 of the Reclamation Act of 1902 (43 U.S.C. §372),  
the Nevada statute (N.R.S. 533.035), and all applicable judi-

1 cial precedent, beneficial use is the basis, the measure and  
2 the limit of a water right. Hence, additional water diverted  
3 through the Truckee Canal is limited to the amount required  
4 for beneficial use. While Claim No. 3 on page 10 of the  
5 Truckee River Final Decree grants to the United States the  
6 right to divert 1,500 cubic feet per second of water flowing  
7 in the Truckee River for use on the Newlands Project, the  
8 Truckee River Decree itself, on page 87, expresses the bene-  
9 ficial use limitation as follows: "Except as herein specially  
10 provided no diversion of water into any ditch or canal in  
11 this decree mentioned shall be permitted except in such  
12 amount as shall be actually, reasonably necessary for the  
13 economical and beneficial use for which the right of diver-  
14 sion is determined and established by this decree."

15 THE VESTED RIGHTS ACQUIRED BY PURCHASE BY THE UNITED  
16 STATES.

17 In the early stages of the Newlands Project the  
18 United States acquired by contract the vested water rights to  
19 29,884 acres of land with priority dates ranging from 1865 to  
20 1902. These rights were conveyed to the United States by  
21 private land owners in exchange for the government's promise  
22 to deliver Project water to these farms.

23 The defendant upstream users make three separate  
24 arguments in regard to these rights. First, the defendants  
25 contend that it is physically impossible to bring water down  
26 the river during low flow periods to satisfy these earlier  
27 priorities in derogation of later priorities upstream from  
28 the Project; water decrees must be practical and there is no  
29 point in adjudicating a right which cannot physically be  
30 satisfied. Second, the defendants argue that since the  
31 United States has never actually asserted or used these rights  
32 . . . . .

1 with an identity separate from the rest of the Project water,<sup>1/</sup>  
2 the separate title to these rights has been abandoned or for-  
3 feited. Third, the defendants assert that, since the United  
4 States failed to make applications to change the place of  
5 diversion and place of use pursuant to state law, the claimed  
6 rights have been forfeited.

7 A. Impossibility.

8 The upstream defendants assert that these rights  
9 should not be adjudicated since it is physically impossible  
10 to assert the claimed earlier priorities in derogation of  
11 junior priorities located upstream. Regardless of the valid-  
12 ity of this argument, the defendants ignore the possibility  
13 that the United States may assert these rights against others  
14 in the Newlands Project. For example, if the TCID wanted to  
15 drain the reservoir entirely in order to satisfy the farmers'  
16 1902 irrigation priority, the United States could prevent  
17 that drainage to the extent of its assigned priorities dated  
18 before 1902. Thus the rights in question are not merely il-  
19 lusive or paper rights; the adjudication of these rights can  
20 have an impact on the parties and the course of events on the  
21 river.

22 B. Failure to Assert the Rights Separately.

23 The defendants' argument that the United States  
24 has failed to assert the vested rights with a separate iden-  
25 tity is equivalent to the argument that the United States  
26 has failed to beneficially use the water. United States v.  
27 Humboldt Lovelock Irrigation Light & Power Co. holds that the  
28 United States may own a water right regardless of whether or  
29 not it owns irrigable land. In Humboldt, however, the ques-

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30  
31 <sup>1/</sup> All the waters of the Carson are diverted at the same  
32 place by the Lahontan Dam and thus are comingled for  
storage and distribution.

1       tion was not whether the United States had failed to benefi-  
2       cially apply water under a water right; rather, the question  
3       was whether the United States had stated a property right  
4       sufficient to sustain a cause of action where private parties  
5       had transferred water rights to the United States and the  
6       United States owned no irrigable land. This distinction is  
7       crucial to the present problem. It is not disputed that the  
8       United States may validly acquire a water right. The ques-  
9       tions here are: assuming the rights to be properly acquired,  
10      has the United States used these rights beneficially, and, if  
11      not, then what are the consequences?

12             The United States owns lands within the Newlands  
13      Project. Referred to in this case generally as the Carson  
14      Pasture area and the Stillwater area, these lands comprise  
15      some 17,000 to 20,000 acres. Testimony indicated that these  
16      areas receive water largely from drainage or seepage from  
17      Project farms and very occasionally from direct flows. The  
18      amount of land actually irrigated varies greatly from year  
19      to year depending on the available water. The United States  
20      specifically denies that it claims or holds any direct water  
21      right for the federally owned land in the Project.

22             An issue is stated on page 6 of the approved pre-  
23      trial order as follows:

24                     "9. Do the Carson Pasture and other custo-  
25                     dial lands have a water right and, if so, what  
26                     is their priority?

27                     "The parties agree that the Carson Pasture  
28                     and other pasture lands within the project have  
29                     an irrigation water right with a priority of  
30                     July 2, 1902."

31             The foregoing is not a stipulation that the pasture  
32      lands are entitled to direct diversion from the Carson River  
33      of water for the irrigation of the pasture lands with a spe-  
34      cific acre foot per acre duty. It is a recognition of an  
35      historic condition, that is, that the pasture lands are en-

1 titled to the use of whatever waters flow from the lower por-  
2 tion of the Project vested right lands to the exclusion of  
3 anyone who might seek to appropriate the waters for other  
4 uses.

5 The United States asserts that the federally owned  
6 lands are entitled only to receive whatever quantity of  
7 drainage water flows off the bottom of the Project. Addi-  
8 tionally, the United States points to the contract executed  
9 in 1926 between the Truckee-Carson Irrigation District and  
10 the United States wherein the United States turned over oper-  
11 ation and management of the Project to the District. Para-  
12 graph 35 of this contract prohibits the delivery of water "to  
13 lands other than vested right land ... ." The United States,  
14 then, not only does not claim a water right for these lands  
15 but strongly argues against any entitlement to direct flows.  
16 Under these circumstances, the United States has never used  
17 its purchased and appropriated rights beneficially on the  
18 federally owned land in the Project and has represented to  
19 this Court that it does not claim any vested right as to that  
20 land.

21 The failure to beneficially use the water for irri-  
22 gation purposes does not end the problem, however. There are  
23 other beneficial uses to which water can be applied; among  
24 these other uses are fishing and public recreation. State  
25 ex rel. State Game Commission v. Red River Valley Co., 51  
26 N.M. 207, 182 P.2d 421 (1945); Surface Creek Ditch & Reservoir  
27 Co. v. Grand Mesa Resort Co., 168 P.2d 906 (Colo.S.Ct. en  
28 banc, 1946); State, Department of Parks v. Idaho Department  
29 of Water Administration, 96 Idaho 440, 530 P.2d 924 (1974);  
30 Brasher v. Gibson, 2 Ariz. App. 91, 406 P.2d 441, vacated on  
31 other grds, 101 Ariz. 326, 419 P.2d 505 (1966); Clark "Waters  
32 and Water Rights" 1967 Ed. Vol. 1, p. 375. The Nevada legis-  
lature has expressly declared "any recreational purpose" to

1 be a beneficial use of water. N.R.S. 533.030, 1969 St. 141.  
2 A similar statute was interpreted by the Arizona Court of  
3 Appeals in McClellan v. Jantzen, 26 Ariz. App. 223, 547 P.2d  
4 494 (1976), which commented as follows:

5 "Originally, the concept of 'appropriation of  
6 waters' consisted of the diversion of that water  
7 with the intent to appropriate it and put it to  
8 a beneficial use. Arizona v. California, 283  
9 U.S. 423, 51 S.Ct. 522, 75 L.Ed. 1154 (1931).  
10 Being the first to have properly performed these  
11 functions, the appropriator acquired a vested  
12 right to the use of these waters as against the  
13 world which could not be taken from him except  
14 by his consent. Gila Water Co. v. Green, 27  
15 Ariz. 318, 232 P. 1016 (1925), modified in 29  
16 Ariz. 304, 241 P. 307 (1925); Adams v. Salt  
17 River Valley Water Users Ass'n., 53 Ariz. 374,  
18 89 P.2d 1060 (1939). The concept of diversion  
19 to effect the beneficial use was consistent  
20 with the stated purposes for which an appropri-  
21 ation could be made prior to 1941, that is,  
22 domestic, municipal, irrigation, stock watering,  
23 water power and mining. However in 1941 when  
24 'wildlife, including fish' and in 1962 when  
25 'recreation' were added to the purposes for  
26 appropriation, the concept of in situ appropri-  
27 ation of water was introduced - it appearing to  
28 us that these purposes could be enjoyed without  
29 a diversion. We find nothing, however, which  
30 would indicate that the legislature intended  
31 that such an in situ appropriation would not  
32 carry with it the exclusive vested rights to  
use the waters for these purposes. We there-  
fore find that by these amendments the legisla-  
ture intended to grant a vested right to the  
State of Arizona to subject unappropriated waters  
exclusively to the use of recreation and fishing.  
Conceivably then, and assuming a first in right  
appropriation, the Game & Fish Department could  
prohibit the draining of a lake for irrigation  
purposes for example, if that draining inter-  
fered with the fish therein. This obtaining  
of a vested right to use the water for fish is  
to be contrasted with the statutory authority  
vested in the Department by A.R.S. § 17-231 (B)  
(6) allowing it to stock fish in public and  
private waters."

Inasmuch as the concept of in situ appropriation of water to  
a beneficial use had been recognized by the Nevada Supreme  
Court long prior to the 1969 statutory amendment (Steptoe  
Live Stock Co. v. Gulley, 53 Nev. 163, 295 P. 772 (1931)) we  
have no difficulty in recognizing recreation and fishing as  
beneficial uses of water.

The Court takes judicial notice of the fact that



1 fishing and public recreation have taken place on Lahontan  
2 Reservoir virtually since the construction of the dam. Thus  
3 the water has been beneficially used and the United States  
4 has not abandoned or forfeited these rights.

5 C. Failure to Make Change Applications.

6 In general, the United States is required to  
7 conform to applicable state water law in carrying out the  
8 Reclamation Act. Section 8 of the Reclamation Act of 1902,  
9 43 U.S.C. §383 provides in pertinent part:

10 "Nothing in this Act shall be construed as  
11 affecting or intended to affect or to in any  
12 way interfere with the laws of any State or  
13 Territory relating to the control, appropri-  
14 ation, use, or distribution of water used in  
15 irrigation, or any vested right acquired there-  
16 under and the Secretary of the Interior, in  
17 carrying out the provisions of this Act, shall  
18 proceed in conformity with such laws ... ."

19 As previously discussed, in construing the Reclamation Act  
20 the Supreme Court has held that state law was meant to con-  
21 trol the Act unless in conflict with explicit congressional  
22 directives in the Act. California v. United States, supra.  
23 See also, United States v. Gerlach Live Stock Co., 339 U.S.  
24 725 (1950); Nebraska v. Wyoming, supra; California Oregon  
25 Power Co. v. Beaver Portland Cement Co., 295 U.S. 142, 164  
26 n.2 (1935); United States v. District Court of Fourth Judi-  
27 cial District in and for Utah County, 238 P.2d 1132 (Utah  
28 1951).

29 A careful examination of the Reclamation Act re-  
30 veals no explicit congressional directives relating to the  
31 transfer of vested water rights to the United States. In  
32 fact, the conspicuous absence of transfer procedures, taken  
in conjunction with the clear general deference to state  
water law, impels the conclusion that Congress intended  
transfers to be subject to state water law. Thus, the United  
States was and is required to conform to applicable Nevada  
law with respect to changing the place of diversion or place



1 of use.

2 The defendants assert that in failing to make change  
3 applications the United States has forfeited the claimed  
4 rights. An examination of the contracts reveals widely vary-  
5 ing dates of agreement. Of the eighty contracts totaling  
6 29,884 acres of water rights, there are eleven contracts cov-  
7 ering a total of 9,045 acres that are dated after 1913 and  
8 sixty-nine contracts covering a total of 20,839 acres of  
9 water rights dated before 1913. It was in 1913 that Nevada's  
10 appropriative surface water right scheme (now Chapter 533  
11 N.R.S.) was enacted.

12 As far as the pre-1913 contracts are concerned,  
13 they are governed by the Nevada case law existing before the  
14 enactment of the statutory scheme. See N.R.S. 533.085  
15 [84:191:1913; 1919 R.L p. 3247; N.C.L. §79701]; Humboldt Land  
16 & Cattle Co. v. Allen, 14 F.2d 650, 653 (9th Cir. 1926).  
17 This Court can find no requirement in the pre-1913 common law  
18 for notices of, or applications for, changes in the place of  
19 diversion or place of use for water rights vested and trans-  
20 ferred prior to 1913. Indeed, Union Mill & Mining Co. v.  
21 Dangberg, 81 Fed. 73 (C.C.D. Nev. 1897), directly holds that  
22 the place of diversion or place of use may be changed at any  
23 time as long as other rights are not injured. Therefore  
24 there could be no penalty as to those rights for failure to  
25 make the change applications.

26 As to the post-1913 contracts, even were the Court  
27 to agree with the requirement that the government make change  
28 applications, a failure to do so would only incur a loss of  
29 priority date, not a complete forfeiture of the right. See  
30 N.R.S. 533.040 [4:140:1913; 1919 RL p. 3225; N.C.L. §7893]  
31 and 533.325 [59:140:1913; A 1919,71; 1951, 132]. However,  
32 the Court does not agree that the government was even re-  
quired to make change applications. The entire plan for the

1 Project was formulated around 1902 and many of the contract  
2 rights were acquired in 1906 and 1907. The United States is  
3 entitled to carry out and complete the Project under the  
4 Nevada law as it existed when the Project plan was formulated  
5 and activity commenced. Thus the intervening enactment of  
6 Nevada's statutory water code should not be used to destroy  
7 the priorities of rights acquired by the United States pur-  
8 suant to completion of the original plan.

9 The comments in the Congressional Record during  
10 the passage of the Reclamation Act, cited in California v.  
11 United States, supra, pp. 665, 666 and 668, indicate that a  
12 major factor in the Secretary's decision on the feasibility  
13 of a reclamation project was to be the status of relevant  
14 state water law. It would be unfair to allow the government  
15 to make decisions based on the applicable state law at the  
16 time the project was authorized and commence action on an  
17 enormously expensive project and then allow the state to  
18 change the rules for the government in midstream. For the  
19 Newlands Project the applicable Nevada law was the state  
20 water law as it existed in 1902. Of course now that the Pro-  
21 ject has been completed for many years, the government is  
22 subject to all the strictures of the state law as discussed  
23 in California v. United States, supra. The defendants' argu-  
24 ment that the failure to make change applications has an  
25 effect on the government's water rights is meritless.

26 THE WATER DUTIES FOR THE WATER RIGHTS ON THE NEW-  
27 LANDS PROJECT AND BELOW LAHONTAN.

28 This section deals with the duty for the privately  
29 owned Project farm lands, and the duty for the United States's  
30 right for fishing and recreation on the Lahontan Reservoir.

31 . . . . .  
32 . . . . .

1                   A. Water Duties for the Project Farmlands.

2                   The arguments as to these duties can be sepa-  
3 rated into legal contentions and evidentiary or factual con-  
4 tentions. The legal contentions concern alleged limitations  
5 on the farmland duties resulting from contractual agreements  
6 and from Nevada's State Cooperative Act of 1903. The factual  
7 contentions concern what is the proper amount of water rea-  
8 sonably necessary to grow alfalfa on the Project farms.

9                   (1) Legal Arguments. Section 2 of the State  
10 Cooperative Act of 1903 limited:

11                                 "the quantity of water which may be appro-  
12 priated or used for irrigation purposes  
13 in the State of Nevada [to] ... three acre  
feet per year for each acre of land sup-  
plied." (1903 Nev. Stats. Chap. IV, §2)

14 This very section of the Act was singled out for repeal two  
15 years later in 1905. See 1905 Nev. Stats. Chap. XLVI, §1.  
16 Nonetheless, the United States argues that this section limits  
17 all rights obtained on the Newlands Project to three acre  
18 feet per acre.

19                   The United States, as well as the other parties,  
20 stipulated before trial that the priority date for the New-  
21 lands irrigation rights is July 2, 1902. It is difficult to  
22 see how the 1903 Cooperative Act could constitutionally limit  
23 or impair rights in existence prior to 1903. The United  
24 States, however, argues that the July 2, 1902 priority date  
25 is arrived at by the doctrine of relation back and the Secre-  
26 tary did not actually claim the water right until May 26,  
27 1903; the rights are therefore said not to have been in exis-  
28 tence before the enactment of the 1903 Act.

29                   This theory fails because the United States ser-  
30 iously misapprehends the doctrine of relation back. This doc-  
31 trine does not pick the date of priority out of thin air; the  
32 date of priority is the date that work commenced on an appro-  
priation. The nature of a water right is such that it takes

1 time to perfect the right. It may, in fact, take years of  
2 diligent work to build dams, ditches and canals, clear and  
3 prepare fields and finally use the water to grow crops on  
4 those fields.

5 The doctrine of relation back tells an appropriator that if the work of appropriation is pursued diligently,  
6 the date of priority will be the date work was commenced, not  
7 the date of application or the date of perfection. The Nevada  
8 Supreme Court has stated:

9 "[w]hen any work is necessary to be done to  
10 complete the appropriation, the law gives  
11 the claimant a reasonable time within which  
12 to do it, and although the appropriation  
13 is not deemed complete until the actual  
14 diversion or use of water, still if such  
work be prosecuted with reasonable diligence, the right relates to the time when  
the first step was taken to secure it."

15 Ophir Mining Co. v. Carpenter, 4 Nev. 534 at 543,44 (1869).

16 See also Farmers' High Line Canal & Reservoir Co. v. South-  
17 worth, 13 Colo. 111, 21 P. 1028 at 1029 (1889); Nevada Ditch  
18 Co. v. Bennett, 30 Or. 59, 45 P. 472 at 480 (1896).

19 In stipulating to the 1902 priority, the parties  
20 have agreed that the first steps were taken to secure these  
21 rights in 1902. The date that the Secretary formally claimed  
22 the rights is irrelevant. Upon the diligent perfection of  
23 these rights, the law recognizes that the rights have been  
24 in existence since 1902 and the 1903 Cooperative Act cannot  
25 limit the rights to three acre feet per acre.

26 Furthermore, the repeal of the limiting section of  
27 the Act is significant. In the absence of legislative his-  
28 tory, it would at least be arguable that the repeal of Sec-  
29 tion 2 of the 1903 Act and the subsequent enactment of what  
30 is now N.R.S. 533.035 (beneficial use shall be the basis, the  
31 measure and the limit of the right to the use of water) re-  
32 presents a legislative judgment that a specific limitation  
was ill-advised under the varying conditions of climate and

1 soil in Nevada.

2 The United States makes the additional legal argu-  
3 ment that certain of the Project farmlands are limited by  
4 contract to a water right of three acre-feet per acre. A  
5 number of representative contracts were put into evidence as  
6 Exhibit 38. These are all contracts between the United  
7 States and private landholders for the delivery of water from  
8 the Reclamation Project. Some of the contracts contain no  
9 specific acre foot limitation, but rather refer to "an amount  
10 necessary for the proper irrigation" of X acres, or the  
11 "quantity of water which shall be beneficially used for the  
12 irrigation" of the lands in question. These contracts are  
13 not at issue.

14 Those at issue are the contracts covering some  
15 42,447 acres in which a specific acre foot limitation is ex-  
16 pressed. Representative of these contracts are the contract  
17 between Oswald J. Leet and the United States, and that be-  
18 tween Julius M. Christensen and the United States. Mr. Leet's  
19 contract states:

20 "II. That the party of the second part  
21 hereby agrees to deliver without charge  
22 except as hereinafter provided and free  
23 of all cost or charge for building the  
24 irrigation works, water not exceeding  
25 three (3) acre-feet per acre for the pro-  
26 per irrigation of seventy-six (76) acres  
27 of land. . . ."

28 Mr. Christensen's contract states:

29 "2. The quantitative measure of the water  
30 right hereby applied for is that quantity  
31 of water which shall be beneficially used  
32 for the irrigation of said irrigable lands  
up to, but not exceeding three acre-feet  
per acre per annum, measured at the land;  
and in no case exceeding the share, pro-  
portionate to irrigable acreage, of the  
water supply actually available as deter-  
mined by the Project Engineer or other pro-  
per officers of the United States, or of  
its successors in the control of the pro-  
ject, during the irrigation season for the  
irrigation of lands under said unit."

1 The United States maintains that these types of contracts  
2 limit those 42,447 acres to a maximum duty of three acre-  
3 feet per acre. The defendants argue that reasonable benefi-  
4 cial use is the measure and limit of their rights regardless  
5 of the contract language.

6 A similar problem arose in the state of Washington  
7 in connection with the Sunnyside Division of the Yakima Pro-  
8 ject. There, the farmers had various contracts with the  
9 government, some of which expressed a three acre-foot limi-  
10 tation. The contract language provided:

11 "The quantity of water to be furnished  
12 hereunder shall be 3 acre feet per acre  
13 of water per annum per acre of irrigable  
14 land, ... measured at the land; or so  
15 much thereof as shall constitute the pro-  
16 portionate share per acre from the water  
supply actually available for the lands  
under said project; Provided, That the  
supply furnished shall be limited to the  
amount of water beneficially used on said  
irrigable land ... "

17 Lawrence v. Southard, 192 W. 287, 73 P.2d 722, 723 (1937).

18 The Secretary of the Interior attempted to limit the Sunnyside  
19 farmers to 3 acre-feet under all the contracts except that  
20 the farmers could rent more water for an additional charge  
21 beyond the original payment for the Project's construction  
22 costs. The conflict over the Secretary's attempted action  
23 resulted in years of lawsuits. The cases of Lawrence v.  
24 Southard, Ickes v. Fox, 300 U.S. 82 (1937), and Fox v. Ickes,  
25 137 F.2d 30 (1943) all deal with the question of whether the  
26 Secretary could limit the water supplied under the contracts  
27 to 3 acre-feet per acre and charge an additional fee for  
28 water above that amount.

29 In Ickes v. Fox, the Supreme Court engaged in a  
30 lengthy explication of the Reclamation Act in holding that  
31 the United States was not an indispensable party to an action  
32 against the Secretary of the Interior to set aside his orders  
limiting farmers' contract water rights to 3 acre-feet per

1 acre. There followed a trial on the merits of the claims  
2 which was appealed in Fox v. Ickes. The District of Columbia  
3 Court of Appeals held that: "[r]eading the Reclamation Act  
4 in the light of the decision in Ickes v. Fox, we find the  
5 situation in this case to be as follows: The water rights of  
6 appellants are not determined by contract but by beneficial  
7 use." Fox v. Ickes, 137 F.2d at 33; and that "the water  
8 rights here are not based upon the construction or enforce-  
9 ment of contracts with the government." Id. at 35.

10 Similarly, the Supreme Court of Washington held  
11 that beneficial use determined the water right and that the  
12 "order of the Secretary of the Interior under date of October  
13 17, 1930 limiting the water right to 3 acre-feet is a nul-  
14 lity. That order was not authorized by Congress." Lawrence  
15 Southard, 192 W. 287, 73 P.2d 722 at 728. Although these  
16 cases also involved issues as to prescriptive rights and the  
17 validity of appropriations, the holdings as to the contractual  
18 limitations stand on their own.

19 The United States argues that the contract language  
20 in our case is so different that the above authorities do not  
21 apply. This argument is meritless. Although the exact word-  
22 ing of the contracts in our case is not the same as in the  
23 Yakima Project contracts, the attempt to limit the water right  
24 to 3 acre-feet is exactly the same. The discussion in Fox v.  
25 Ickes is not so much a close examination of the contract lan-  
26 guage as it is a broad statement that the limit of water  
27 rights is beneficial use, not specific contractual limita-  
28 tions.

29 This Court finds the reasoning in Fox and Lawrence  
30 persuasive. Even more explicitly, it appears that the Secre-  
31 tary not only acted without authority from Congress in insert-  
32 ing a specific acre-foot limitation in the contracts, but  
acted in clear contravention of Congressional intent. Section

1 8 of the Reclamation Act, 43 U.S.C. §372, states that as to  
2 water rights acquired under the Act, "beneficial use shall be  
3 the basis, the measure, and the limit of the right." Con-  
4 gress's intent could neither be more clear nor more specific.  
5 The contractual limitation to 3 acre-feet per acre could  
6 only be authorized if that amount were the amount required  
7 for beneficial use. Since this Court finds that the amount  
8 required for beneficial use exceeds 3 acre-feet, the contrac-  
9 tual limitation thwarts the Congressional intent of the Re-  
10 clamation Act and is without any legal effect on the defen-  
11 dants' water rights. Cf. United States v. Joyce, 240 Fed.  
12 610 (8th Cir. 1917); United States v. Washington, 233 F.2d  
13 811 (9th Cir. 1956) (the requirements of acts of Congress  
14 must be read into and are automatically part of conveyances  
15 of land by patents which have ignored such requirements.)

16 2. Evidentiary Contentions.

17 (a) Water Duty. One of the central tasks  
18 in this case is to establish a clear and specific water duty  
19 for both the Newlands Project farmlands and the upper Carson  
20 farmlands. Because of the mechanism adopted by the court  
21 with regard to changes in place or manner of use of the water  
22 rights, specific findings must also be made as to the con-  
23 sumptive use.

24 Alfalfa is by far the dominant crop grown on the  
25 lands in question in this case. Because of the relatively  
26 short growing season and other weather conditions in this  
27 part of the state, alfalfa is one of the few cash crops the  
28 Carson River farmlands can support.

29 Relying on Farmer's Highline Canal & Reservoir Co.  
30 v. Golden, 272 P.2d 629 (Colo. 1954), the United States argues  
31 that a water duty should be based on historical production.  
32 This Court's interpretation of that decision, however, is that  
the Colorado court based the water duty on the kind or type



1 of crops historically grown on the lands - not the amount of  
2 crops historically grown. In other words, if the farmers have  
3 been growing sugar beets, the water duty will be the amount of  
4 water reasonably necessary to grow sugar beets, not the water  
5 needed for onions or avocados. In this case, alfalfa is the  
6 crop historically grown on the lands in question and under  
7 Nevada law and the Reclamation Act, the water duty for these  
8 lands is that amount of water reasonably necessary to grow  
9 alfalfa.

10 The United States presented lengthy expert testimony  
11 to the effect that a water duty of 3 acre-feet per acre ap-  
12 plied to the land should be reasonably sufficient to grow al-  
13 falfa on all the Project farmlands. The defendants presented  
14 equally lengthy expert testimony to the effect that a water  
15 duty of at least 3.5 acre-feet per acre applied to the land  
16 should be reasonably sufficient to grow alfalfa on the bottom  
17 lands in the Project and at least 4.5 acre-feet per acre ap-  
18 plied to the land should be reasonably sufficient to grow al-  
19 falfa on the bench lands in the Project.

20 After examination and comparison of the expert evi-  
21 dence, particularly with regard to conveyance efficiency, on-  
22 farm efficiency, soil slope and character, weather and con-  
23 sumptive use, the Court finds the defendants' expert evidence  
24 more credible. As a result, the Court finds that the water  
25 duty for farm lands on the Newlands Project is 3.5 acre-feet  
26 per acre applied to the land on the bottom lands and 4.5 acre-  
27 feet per acre applied to the land on the bench lands subject  
28 always to the limitation of beneficial use.

29 (b) Consumptive Use. The water duty is  
30 the amount of water required to properly irrigate the farm  
31 lands. This duty differs depending on physical conditions.  
32 For example, in parts of the upper valley, the ground is so  
steep and the soil character is such that a relatively high

1 duty is required for proper irrigation. Differing water  
2 duties do not imply that the alfalfa uses different amounts  
3 of water, however. In an area such as Western Nevada a cer-  
4 tain amount of water is needed to irrigate the land, but some  
5 lesser quantity is actually consumed by the crop growth. This  
6 section addresses the issue of how much water is actually con-  
7 sumed in growing a ton of alfalfa on an acre of land in the  
8 Newlands Project area.

9 Both plaintiff and defendants presented considerable  
10 expert testimony as to lysimeter test results, actual commer-  
11 cial yields, lysimeter yields, and effective rainfall. There  
12 was a great deal of conflict over the proper interpretation of  
13 the lysimeter data. The most credible evidence indicates that  
14 the lysimeter yields have to be adjusted to reflect actual  
15 field conditions when estimating actual consumptive use. Be-  
16 cause of the factors described by the defendants' experts, the  
17 actual commercial yields tend to average some 30% below lysi-  
18 meter yields. The average production on the Newlands Project  
19 farms over the ten-year period from 1969-1978 is about 5 tons  
20 per acre. The lysimeter evidence showed that 6 inches of  
21 water is required per ton; the total actual consumption figure  
22 is therefore 3.25 acre-feet per acre after the lysimeter data  
23 is adjusted for production under actual field conditions.  
24 Since this case concerns the consumption of surface water from  
25 the Carson River, effective rainfall must be deducted from the  
26 total consumption figure. The evidence showed that the effec-  
27 tive rainfall is 0.26 acre-feet. Therefore, the consumptive  
28 use of irrigation water is 2.99 acre-feet per acre for the  
29 Newlands Project.

30 B. Water Duty for the Fishing and Recreation Rights.

31 The water stored in the Lahontan Reservoir for  
32 irrigation rights also functions coincidentally to provide  
water for fishing and recreation. The question here is: to

1 how much water is the United States entitled for supplying the  
2 uses of fishing and recreation?

3 In the irrigation of crops there is an absolute up-  
4 per limit to how much water can be applied; productivity drops  
5 or the crops may even drown if over-watered. Unlike irriga-  
6 tion, there is no apparent practical limit to the water that  
7 can be used for fishing and recreation; the more water there  
8 is, the more room there is for fish, boats and swimmers. The  
9 only physical limitation at the reservoir would be the capa-  
10 city of the site. Since, however, water is such a scarce re-  
11 source in this state and there are so many competing demands  
12 on the limited supply of water, each use can be assigned only  
13 the minimum reasonably required for that use. The evidence in  
14 this case indicates that the minimum amount of water that must  
15 be retained in the reservoir to support the fish habitat and  
16 provide swimming and boating areas is some 20,000 to 30,000  
17 acre-feet. Therefore this Court finds that the duty for the  
18 United States's fishing and recreation right is 30,000 acre-  
19 feet. *Over turned on appeal*

20 THE WATER DUTIES AND IRRIGATION SEASON FOR LANDS  
21 ABOVE THE LAHONTAN REGION.

22 The lands upriver from the Newlands Project consist  
23 largely of the Carson Valley and Alpine County farmlands with  
24 some smaller acreages between Carson City and the Lahontan  
25 Reservoir.

26 A. Irrigation Season.

27 All parties agree that the Federal Water Master  
28 should determine the irrigation season.

29 B. Water Duties.

30 The United States asserts that in the Carson  
31 Valley portion of the river the Court should not only find  
32 water duties and consumptive use figures, but also should  
adopt the so-called historical depletion approach. The es-

1 sence of this idea is that measurements are available from  
2 gauges on each fork of the Carson as it enters the valley and  
3 from the river gauge as it exits the valley. The government  
4 urges the Court to use the historical data and subtract out-  
5 flows from inflows to obtain an average historical depletion  
6 or disappearance of water in the Carson Valley. The govern-  
7 ment suggests that the Carson Valley users not be allowed to  
8 exceed this average historical depletion level and that the  
9 Federal Water Master enforce the restriction. The United  
10 States cites United States v. Gila Valley Irrigation District,  
11 Globe Equity No. 59 (D.Ariz., June 29, 1935) as authority for  
12 the use of the historical depletion approach.

13 In Gila Valley, the court set a permissible irriga-  
14 tion season consumptive use of 120,000 acre-feet for the upper  
15 valleys and held that the consumptive use would be determined  
16 by adding the recorded inflows from gauging stations located  
17 on the San Francisco River and on the Gila River at Red Rock  
18 Box Canyon and subtracting the outflow from a gauging station  
19 on the Gila River near Calva, Arizona. This method of mea-  
20 surement was adopted "as sufficiently accurate for practical  
21 purposes and as better suited for administering (the) decree  
22 than any more refined method of determining actual consumptive  
23 use." *Id.* at 107.

24 For the very reasons the Arizona court adopted the  
25 depletion approach, this Court rejects it. The conditions in  
26 the Carson Valley indicate that the use of only two inflow  
27 measuring points would be inaccurate. Unlike the semi-arid  
28 surroundings of the Gila River Valley, the Carson Valley is  
29 bounded on the west by the Sierra Nevada mountains and on the  
30 east by the Pinenut Range. The evidence showed that both  
31 mountain ranges can contribute substantial water flows from  
32 springs, creeks and snow melt; all of this water flows direct-  
ly into the valley downstream from the inflow measuring gauges

1 and is thus unmeasured. Furthermore, this Court has the bene-  
2 fit of considerable expert evidence on actual consumptive use  
3 and the benefit of evidence showing how the entire system has  
4 actually operated amicably and efficiently for well over 50  
5 years. The Court does not consider the depletion approach  
6 practical or accurate in this case.

7 Exclusive of pressing the depletion approach, the  
8 United States has agreed with all other parties that this  
9 Court should recognize the historical customs, practices and  
10 agreements by which water has been distributed in the upper  
11 river areas. The United States stated many times, both in  
12 its briefs and through the testimony of its expert witnesses,  
13 that the government had no interest in the daily irrigation  
14 practices of the upstream users but rather desires a reason-  
15 able quantification of the upstream rights so as to clarify  
16 the protection of its downstream rights. The United States  
17 presented no evidence as to water duties for the upstream  
18 area but urged in the post-trial briefs that the Special  
19 Master's recommendation of 5 acre-feet per acre delivered to  
20 the farm be adopted for three segments of the upper river and  
21 4.7 acre-feet per acre should be allowed for the remaining  
22 segment. The Master's recommendation of 5 acre-feet per acre  
23 was a limitation to be imposed only when the river is on re-  
24 gulation; this is not a meaningful restraint in the Court's  
25 view.

26 The defendants presented extensive expert evidence  
27 on the water duties for the upstream area. The evidence  
28 showed that, as in the lower river area, the water duties  
29 must be varied to take into account soil character and slope.  
30 However, even where a relatively high water duty is assigned,  
31 other water users are not injured because the water not con-  
32 sumed all flows either back into the river or onto the water  
rights lands of another appropriator. In other words, some

1 lands need large amounts of water just to achieve adequate  
2 irrigation coverage but the extra water is not wasted. Water  
3 duties not accounting for these variable factors would force  
4 the abandonment of many presently productive acres, especially  
5 in the Alpine County and Southern Carson Valley areas.

6 The lands on the upper Carson River must be classi-  
7 fied into three broad categories according to soil character  
8 and slope:

9 (1) Benchland or river terrace - coarse textur-  
10 ed, highly permeable, excessively drained and low water hold-  
11 ing capacity soils; deep ground water depth (4 to 20 feet);  
12 moderately sloping topography; cobbles or boulders on the  
13 surface.

14 (2) Alluvial fan - medium textured, moderately  
15 permeable, moderately drained and moderate water holding  
16 capacity soils; moderate ground water depth (4 to 7 feet);  
17 gently sloping topography.

18 (3) Bottomland or meadowland - medium to fine  
19 textured, low permeability, poorly drained and medium water  
20 holding capacity soils; shallow ground water depth (0.3 to 3  
21 feet); level topography.

22 One of the difficulties presented by the evidence  
23 is that the expert who testified for the Carson Valley defen-  
24 dants recommended duties in terms of canal diversion require-  
25 ments, whereas the expert for the Alpine County defendants  
26 recommended duties in terms of water delivered to the farm.  
27 However, this is only a superficial inconsistency since most  
28 of the users in Alpine County are very close to the river so  
29 that the farm delivery requirement and the canal diversion  
30 requirement are essentially the same. The most credible ex-  
31 pert evidence showed, and the Court finds, that the water  
32 duties, stated in terms of the canal diversion requirement,  
are 4.5 acre-feet per-acre for the bottomland, 6.0 acre-feet

1 per acre for the alluvial fan, and 9.0 acre-feet per acre  
2 for the benchlands.

3 No map delineating the areas of these three land  
4 types has been introduced in evidence but one expert made a  
5 planimeter study of the Upper Carson and the amounts of the  
6 three different types of land in each segment of the river.  
7 The Court finds that:

8 Segment 1 is almost entirely riparian and is ig-  
9 nored for these purposes;

10 Segment 2 contains a 25,916 acre irrigated area  
11 with 2,595 acres of benchland, 10,366 acres of alluvial fan,  
12 and 12,958 acres of bottomland;

13 Segment 3 is almost entirely riparian and is ig-  
14 nored for these purposes;

15 Segments 4 and 5 contain a 12,058 acre irrigated  
16 area from the Fredericksburg ditch to the confluence of the  
17 two forks with 4,335 acres of benchlands and 5,568 acres of  
18 bottomland (comparable data is not available for the area  
19 above (south) of Fredericksburg ditch);

20 Segment 6 contains a 5,007 acre irrigated area with  
21 the areas on the right bank having the 6.0 acre foot duty be-  
22 cause of the deep ground water table and the left bank areas  
23 having the 4.5 acre foot duty because of the higher ground  
24 water table;

25 Segment 7 contains a 6,450 acre irrigated area with  
26 2,244 acres of benchland, 2,065 acres of alluvial fan and  
27 2,142 acres of bottomland. {

28 The evidence is inadequate specifically to identify  
29 the acreages falling within each of the three land types and  
30 the column in the Special Master's Report assigning an acre  
31 foot per acre duty to each claim will be eliminated from  
32 the final decree. The Water Master will exercise discretion  
in distributing the water to meet the demands of the various

1 land types hereinabove noted, insofar as it is practical to  
2 do so.

3 C. Consumptive Use.

4 The most credible expert evidence showed that  
5 the net consumptive use of surface water on the upper river  
6 irrigated lands is 2.5 acre-feet per acre. The upper river  
7 consumptive use is somewhat lower than the Lahontan region  
8 consumptive use because the upper river climate is cooler and  
9 the growing season shorter. One region slowly shades into  
10 the other in the area between the reservoir and Carson City  
11 but for practical reasons the decree treats Lahontan as the  
12 dividing line.

13 HISTORIC PRACTICES, CUSTOMS, AGREEMENTS AND DECREES  
14 FOLLOWED IN THE UPSTREAM AREAS.

15 The upstream users presented detailed testimony as  
16 to historic water distribution practices followed by the  
17 water users and by the Federal Water Master not only before  
18 but since the entry of the temporary restraining order in  
19 1950. We have the advantage of almost thirty years of exper-  
20 ience under that order. An example of these customs is the  
21 practice of rotating an entire head of water in a ditch among  
22 users during low flow periods rather than giving each user a  
23 small portion of the available supply.<sup>2/</sup>

24 The position of the United States on the historic  
25 practices issue is succinctly stated at page 49 of the United  
26 States's Post Trial Memorandum:

27 "the United States has only one concern:  
28 that the upstream users do not deplete from  
29 the stream any more water than reasonably  
30 needed to satisfy the historical requirements  
31 for the irrigated acreage in accordance with  
32 the priorities determined in this case."

31 <sup>2/</sup> For a detailed listing of the historic customs, practices,  
32 agreements and decrees see the Decree.



1 The United States appears to be mainly, if not solely, con-  
2 cerned with quantification of the rights and a consumptive  
3 use finding. The expert witnesses for the United States  
4 stated several times that the defendants could continue their  
5 historic practices as long as net depletion was not in-  
6 creased.<sup>3/</sup>

7 The Court finds that the continuation of the his-  
8 toric practices would not increase net depletion. In fact,  
9 the evidence presented by the defendants showed that through  
10 years of practical experience and cooperation, the farmers  
11 have developed a reasonable and workable system of water dis-  
12 tribution. The evidence showed that the historic practices  
13 are highly efficient, practical and enhance the maximum bene-  
14 ficial use of the water. This Court approves and adopts the  
15 customs, practices, agreements and decrees set forth in the  
16 Decree; the Water Master is directed to include these prac-  
17 tices in his administration of the river.

18 THE IMPACT OF IRRIGATION OF WATER RIGHT LAND BY  
19 "RETURN FLOW" OR "TAIL WATER" FROM OTHER LANDS.

20 The evidence showed that large portions of the Al-  
21 pine County and Carson Valley lands are irrigated by so-  
22 called return flows. This practice occurs because water is  
23 diverted into large ditches or canals and the water is run  
24 over the second appropriator's lands and so on until even-  
25 tually the water returns to the river or to another diversion  
26 canal. The evidence specifically showed that all appropri-  
27 ators could irrigate their lands by direct diversions but that  
28 it is much more efficient to use a large canal and the return

29  
30 <sup>3/</sup> In the Stipulated Pre-trial Order filed January 11, 1979,  
31 the United States specifically agreed that the administration  
32 of the river in autonomous segments was an historic practice  
and thus the United States has implied approval of this prac-  
tice as well. Nowhere did the United States attack the seg-  
mentation practice.

1 flow method. The vested water rights recognized by the Decree  
2 are rights to direct diversions from the stream system, which  
3 may be exploited by use of return flows from other lands.

4 This Decree therefore does not differentiate be-  
5 tween water right land irrigated by direct diversions and  
6 water right land irrigated by return flows. The return flow  
7 method should be encouraged as it appears to be a more econo-  
8 mical, practical method of water distribution than hundreds  
9 of small direct diversion ditches.

10 SEGMENTATION OF THE RIVER IN ENFORCING PRIORITY  
11 RIGHTS.

12 The evidence shows that the physical characteris-  
13 tics of the Carson River do not nicely conform to strictly  
14 traditional legal concepts of enforcing priorities. Under a  
15 pure or theoretical view, a senior priority appropriator on a  
16 river should never go without water when a junior priority  
17 appropriator has water. The Carson River system presents  
18 several obstacles to the application of this theoretical con-  
19 cept.

20 First, the upper reaches of the river are separated  
21 into two forks: the East Fork and the West Fork. These dif-  
22 ferent branches of the river are, until close to their con-  
23 fluence, separated by a considerable distance and varied topo-  
24 graphy, including steep foothills. An example, then, of the  
25 difficulties presented is a situation where there is a senior  
26 appropriator on the West Fork and a junior appropriator on  
27 the East Fork and the senior user is low on water yet the  
28 junior user has a full supply. There is no physical way to  
29 deprive the junior user to satisfy the senior user.

30 A second example of the peculiarities of the river  
31 system is the late season appearance and disappearance of  
32 water from the river bed. The testimony indicated that in  
the late summer when the river is quite low, the river bed

1 will be entirely dry for some stretches but that water re-  
2 appears further downstream. The reappearance of water is  
3 the result of underground drainage from upstream irrigation  
4 or surface return flows from irrigation. This water is then  
5 available for use further downstream. This state of affairs  
6 makes it virtually impossible to "bring" water from an up-  
7 stream junior appropriator down to a senior appropriator.

8 The Court is presented with a conflict between the  
9 pure theory of priority rights and the practical realities of  
10 the river system. In effect, this conflict is between the  
11 priority concept and the well-established principle of wes-  
12 tern water law that water must be economically, practically  
13 and beneficially used, so far as is possible. In this Court's  
14 view, the waste of water must be avoided, for wasted water  
15 benefits no one. Thus, the pure priority concept, which would  
16 waste large amounts of water and other resources were it to  
17 be strictly applied, must be modified. For these reasons, the  
18 Court finds that the river must be divided into 8 segments.<sup>4/</sup>

19 Each of these 8 segments shall be treated autono-  
20 mously once the river is on regulation. For example, the  
21 Water Master shall distribute water in Segment 3 in accord-  
22 ance with the priorities in the limits of Segment 3. The  
23 Water Master shall not enforce a senior priority in one seg-  
24 ment of the river against a junior priority in another seg-  
25 ment of the river. The Court finds that this arrangement  
26 provides for by far the most economical and beneficial use of  
27 the available water and the most practical rule for adminis-  
28 tration by the Federal Water Master.

29 PROVISIONS REGARDING CHANGES IN THE PLACE OF DIVER-  
30 SION, PLACE OF USE AND MANNER OF USE.

31 <sup>4/</sup> See the Decree for a specific description of the segments  
32 and subsegments.

1           It appearing to the Court that the state law pro-  
2 cedures for change applications are markedly different in  
3 California and Nevada, the Court adopts a different approach  
4 as to each state.

5           A. Nevada - Nevada's comprehensive scheme of water  
6 rights regulation is found in Titles 532-544 of the Nevada  
7 Revised Statutes. N.R.S. 533.325 requires any appropriator  
8 who wishes to change the place of diversion, manner of use or  
9 place of use of water already appropriated to make an appli-  
10 cation to the State Engineer for a permit for such a change.  
11 N.R.S. 533.345-533.365 discuss application contents, notice  
12 procedures, protest procedures and other administrative de-  
13 tails. N.R.S. 533.370 sets forth the State Engineer's duties  
14 in approving or rejecting applications. N.R.S. 533.370(4)  
15 states:

16                       "Where there is no unappropriated water in  
17 the proposed source of supply, or where its  
18 proposed use or change conflicts with existing  
19 rights or threatens to prove detrimental to  
the public interest, the state engineer shall  
reject the application and refuse to issue  
the permit asked for."

20 The testimony presented by the State of Nevada at trial fur-  
21 ther indicated that the State Engineer considers it his duty  
22 to reject change applications which would adversely affect  
23 the rights of other appropriators.

24           Clearly under this statutory scheme the State Engi-  
25 neer has the authority and expertise to address change appli-  
26 cations on an individual basis. This Court, of course, has  
27 the power to review decisions by the State Engineer. See  
28 N.R.S. 533.450. Since the State Engineer's decisions are  
29 governed by the correct legal principle that change applica-  
30 tions are not permitted where other, and even junior, priority  
31 users would be adversely affected, Clark on Waters and Water  
32 Rights, Vol. 5, page 158; Trelease, Changes and Transfers of  
Water Rights, 13 Rocky M.M.L. Inst. 507 (1967), and in view

1 of the existing comprehensive regulatory scheme, all Nevada  
2 change applications will be directed to the State Engineer  
3 and will be governed by Nevada law.

4 This Court has drawn a distinction in this opinion  
5 and decree between the water duty allowed for proper irriga-  
6 tion and the net consumptive use of the surface water. The  
7 State Engineer is directed that change of manner of use appli-  
8 cations should only be permitted for the consumptive use  
9 amounts determined in this decree (2.99 acre-feet per acre  
10 for the areas below Lahontan Reservoir and 2.5 acre-feet per  
11 acre for the areas above Lahontan Reservoir) when use is  
12 changed from irrigation to any other purpose. Water that has  
13 been allowed in the duties for purposes of irrigation cover-  
14 age could not then be changed to a consumptive use and dis-  
15 appear from the return flows to other water right lands or the  
16 river.

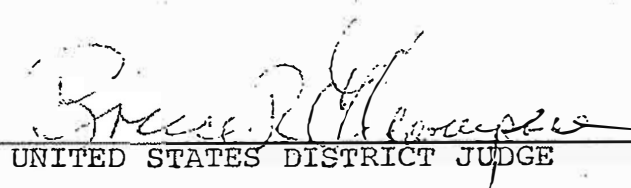
17 B. California - California law for change proce-  
18 dures does not provide adequate advance protection of all in-  
19 terests in all circumstances. Therefore all petitions for  
20 changes in place of diversion, manner of use or place of use  
21 must be submitted to this Court. As noted above, a change  
22 from irrigation use to any other use will only be permitted  
23 for the consumptive use amount. Riparian rights as recognized  
24 by California law shall be fully enforced and protected.

25 A special hearing was held on October 15, 1980  
26 concerning claims of the United States to reserved rights for  
27 water on the Toiyabe National Forest. At the conclusion of  
28 the hearing three classes of rights were recognized and have  
29 been included in the tabulations in the final Decree. In  
30 addition, the United States asserted a reserved claim to cer-  
31 tain instream flow rights in the streams and tributaries  
32 above the Nevada-California state line. The claim asserted  
is that the rate of flow in the stream system should not be

1 permitted to fall below the mesne monthly rate of flow at  
2 nine gauging stations based on data compiled by the United  
3 States Geological Survey. The compilation of such data was  
4 received in evidence as Exhibit E. The evidence to support  
5 the assertion that maintenance of such minimum flows is nec-  
6 essary for watershed protection and timber production (the  
7 purposes of national forest reservations) was insignificant.  
8 We interpret United States v. New Mexico, 438 U.S. 696 (1978)  
9 as not recognizing a reserved right to instream flows in  
10 these circumstances.

11 Nevertheless, it will be appropriate in the future  
12 for the Nevada State Engineer and this Court to take into  
13 consideration the effect of any proposed change of place or  
14 manner of use or point of diversion upon the average mesne  
15 monthly flows at the several gauging stations as established  
16 by the evidence referred to.

17 DATED *Oct. 28, 1980*

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UNITED STATES DISTRICT JUDGE  
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