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(4) Should a landowner believe that the number of acres of eligible land he or she is entitled to irrigate is different from the number of acres as approved by the Bureau, the landowner must notify the District and present appropriate documentation regarding the subject acreage. The District must record the information and present the claim to the Bureau for further consideration.

(i) If the Bureau determines there is sufficient support for the landowner's claim, then adjustments will be made to accommodate the changes requested by the landowner.

(ii) If the Bureau disallows the landowner's claim, the Bureau must notify the District in writing. The District will, in turn, inform the landowner of the disposition of the claim and the reasons therefore, and will further instruct the landowner that he or she may seek judicial review of the Bureau's determination under the decrees. If the dispute affects the current year, then the Bureau and the District will seek to expedite any court proceeding.

(b) *Changes in domestic and other uses.* By March 1 of each year, the District must report to the Bureau all anticipated domestic and other water uses. This notification must include a detailed explanation of the criteria used in allowing the use and sufficient documentation on the type and amount of use by each water user to demonstrate to the satisfaction of the Bureau that each water user is in compliance with the criteria. With adequate documentation, the District may notify the Bureau of any changes in domestic water requirements at any time during the year.

§ 418.10 Determining the amount of water duty to be delivered.

(a) Eligible land may receive no more than the amount of water in acre-feet per year established as maximum farm headgate delivery allowances by the decrees. All water use is limited to that amount reasonably necessary for economical and beneficial use under the decrees.

(b) The annual water duty as assigned by the decrees is a maximum of 4.5 AF per acre for bench lands and a maximum of 3.5 AF per acre for bottom lands. The water duty for fields with a mixture of bench and bottom lands must be the water duty of the majority acreage. Bench and bottom land designations as finally approved by the United States District Court for the District of Nevada will be used in determining the maximum water duty for any parcel of eligible land. The annual water duty for pasture land established by contract is 1.5 AF per acre.

§ 418.11 Valid headgate deliveries.

The valid water deliveries at the headgate are set by the product of eligible land actually irrigated multiplied by the appropriate water duty in accordance with §§ 418.8 and 418.10. The District will regularly monitor all water deliveries and report in accordance with § 418.9. No amount of water will be delivered in excess of the individual water user's headgate entitlement. In the event excess deliveries should occur, such amount will be automatically reflected in the efficiency deficit adjustment to the Lahontan storage. Water delivered in excess of entitlements must not be considered valid for purposes of computing project efficiency.

§ 418.12 Project efficiency.

(a) The principal feature of this part is to obtain a reasonable level of efficiency in supplying water to the headgate by the District. The efficiency targets established by this part are the cornerstone of the enforcement and the incentive provisions and when implemented will aid other competing uses.

(b) The efficiency is readily calculable at the year's end, readily applicable to water appropriate to that year, able to be compared to other irrigation systems even though there may be many dissimilarities, appropriate for long term averaging, adjustable to any headgate delivery level including droughts or allocations, automatically adjusts to changes during the year and accurately accounts for misappropriated water. Efficiency also can be achieved through any number of measures from operations to changes in the facilities and can be measured as an

end product without regard to the approach. Thus it is flexible enough to allow local decision making and yet is fact based to minimize disputes.

(c) Assuming the headgate deliveries are valid and enforceable, conveyance efficiency is the only remaining variable in determining the quantity of water needed to be supplied to the District. Conveyance efficiency is a measure of how much water is released into the irrigation system relative to actual headgate deliveries. Differences in efficiency, therefore, are directly convertible to acre-feet. The differences in efficiency, expressed as a quantity in acre-feet, may be added to or subtracted from the actual Lahontan Reservoir storage level before it is compared to the monthly storage objective. Thus, the diversions from the Truckee River, operation of other facilities (e.g., Stampede Reservoir) and decisions related to Lahontan Reservoir are made after the efficiency storage adjustments have been made. Operating decisions are made as if the adjusted storage reflected actual conditions.

(1) *Efficiency incentive credits.* In any year that the District's actual efficiency exceeds the target efficiency for the actual headgate delivery, two-thirds of the resultant savings, in water, will be credited to the District as storage in Lahontan. This storage amount will remain in Lahontan Reservoir as water available to the District to use at its discretion consistent with Nevada and Federal law. Such uses may include wetlands (directly or incidentally), power production, recreation, a hedge against future shortages or whatever else the District determines. The storage is credited at the end of the irrigation season from which it was earned. This storage ''floats'' on top of the reservoir so that if it is unused it will be spilled first if the reservoir spills. The District may use all capacity of Lahontan Reservoir not needed for project purposes to store credits.

(2) *Efficiency disincentive debits.* In any year that the District's actual efficiency falls short of the target appropriate to the actual headgate deliveries, then the resultant excess water that was used is considered borrowed from the future. Thus it becomes a storage debit adjustment to the actual Lahontan Reservoir storage level for determining all operational decisions. The debit may accumulate but may not exceed a maximum as defined in § 418.13(b). The debit must be offset by an existing incentive credit or, if none is available, by a subsequent incentive at a full credit (not a ⅔ credit), or finally by a restriction of actual headgate deliveries by the District. This would only be done prospectively (a subsequent year) so the District and the water users can prepare accordingly. Since the debit does not immediately affect other competing uses or the District (except in a real drought), it allows for future planning and averaging over time.

(3) *Efficiency targets.* To determine the efficiency target, the system delivery losses were divided into categories such as seepage, evaporation and operational losses. The ''reasonable'' level of savings for each category was then determined by starting with current operating experience and applying the added knowledge from several measures. Means of achieving the efficiency targets, including the specific conservation measures and amounts, are identified in the table Possible Water Conservation Measures for the Newlands Project. Applicable target efficiencies will be determined each year as described in § 418.13 (a)(4).

(4) *Available conservation measures.* The water conservation measures referred to in paragraph (c)(3) of this section and others currently available to the District are listed in the following table. The table has been revised based upon the Bureau of Reclamation's Final Report to Congress of the Newlands Project Efficiency Study, 1994.

POSSIBLE WATER CONSERVATION MEASURES FOR THE NEWLANDS PROJECT

Conservation measures[1]	Expected savings in acre-feet (AF) per year[2]	Notes
1. Water ordering	1,000	Require 48-hour advance notice.
2. Adjust Lahontan Dam releases frequently	++[3]	Match releases to demand with daily adjustments.
3. Increase accuracy of delivery records and measurement devices	12,000	Account for deliveries to nearest cfs and to nearest minute.
4. Change operation of regulating reservoirs	??[4]	Eliminate use of all or parts of regulating reservoirs; drain at end of season.
5. Shorten irrigation season	4,000	Reduce by 2 weeks.
6. Control delivery system	++	Eliminate spills, better scheduling, grouping deliveries.
7. System improvements	??	O&M activity: repair leaky gates, reshape canals, improve measuring devices.
8. Dike off 2/3 S-Line Reservoir	2,720	500 ft. dike; (5′ evaporation, 0.75′ seepage).
9. Dike off south half of Harmon Reservoir	2,130	5,000 ft. dike; large savings considering canal losses (5′ evap., 1.8′ seepage).
10. Dike off west half of Sheckler Reservoir	2,400	6,000 ft. dike.
11. Eliminate use of Sheckler Reservoir	4,000	Use for Lahontan spill capture only; restore 200 ft. of E-Canal; A-Canal is OK.
12. Line 20 miles of Truckee Canal[5]	20,000	Reduces O&M.
13. Line large canals	26,100–31,000	Line large net losers first.
14. Line regulatory reservoirs	2.3 AF/acre	
15. Reuse drain water for irrigation	7,100	Assuming blended water quality would be adequate
16. Ditch rider training each year	??	
17. Canal automation	??	Reduced canal fluctuations.
18. Community rotation system	??	Grouping deliveries by area.
19. Reclamation Reform Act water conservation plan:	??	District implementation of water conservation plan.
a. Weed and phreatophyte control		
b. Fix gate leaks		
c. Water measurement		
d. Automation		
e. Communication		
20. Pumps and wells for small diverters	400	
21. Water pricing by amount used	++	Incurs administrative costs to implement.
22. Incentive programs	??	For District personnel and/or water users.
23. Drain canals	1,065	At the end of each irrigation season.
24. Acquire parcels with inefficient delivery[6]	22,280	Acquire and retire water rights from irrigated acreage with particularly inefficient delivery. Lesser savings from transferring water rights to lands with more efficient delivery.

[1]The first seven measures were considered in developing the water budget in Table 1 for the 1988 OCAP. Additional measures could be implemented by the District to help achieve efficiency requirements.
[2]Water savings have been updated in accordance with Bureau of Reclamation's Report to Congress on Newlands Project Efficiency, April 1994.
[3]++ indicates a positive number for savings but not quantifiable at this time.
[4]?? indicates uncertainty as to savings.
[5]This measure was included in the 1988 OCAP and effects overall Project efficiency; it is recognized that savings from this measure are not accounted for in the OCAP.
[6]Identified in the 1994 BOR Efficiency Study: 31 Corporation, below Sagouspe Dam, and N Canal.

(5) The measures in paragraph (c)(4) of this section are discretionary choices for the District. The range of measures available to the District provides a level of assurance that the target efficiency is reasonably achievable. The resultant efficiency targets were also compared to the range of efficiencies actually experienced by other irrigation systems that were considered comparable in order to provide a further check on ''reasonable.'' Most of the delivery losses are relatively constant regardless of the amount of deliveries. The efficiency will necessarily vary with the amount of headgate deliveries.

(6) The target efficiency for any annual valid headgate delivery can be derived from the table in Appendix A to this part.

§ 418.13 Maximum allowable limits.

(a) *Maximum allowable diversions.* (1) A provisional water budget in the Newlands Project Water Budget table must be recalculated for each irrigation season to reflect anticipated water-righted acres to be irrigated. At the start of the irrigation season, the maximum allowable diversion (MAD)