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THE DEMAND FOR AGRICULTURAL WATER IN UTAH

by

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THE DEMAND FOR AGRICULTURAL WATER IN UTAH

Nature of the Problem

Utah is often considered to be an area of chronic water shortage. It has been estimated that nearly two-thirds of the state's irrigated land has access to only partial supplies of water and that supplemental irrigation on those lands could significantly increase yields. However, the state has over 2 million acres of swamps, marshes, mud flats, and valley bottoms which are currently saturated. In fact, more water is evaporated from streams and ponds and used in transpiration than is withdrawn for public supplies. In addition, a major share of Utah's allotment of the Colorado River water flows out of the state unused.

Between 2, and 3 percent of Utah's total land area (84,916 square miles) is irrigated. There are approximately 1,408,600 acres of land which are presently irrigated and approximately 5,528,100 more acres which are of sufficient quality that they could be converted to irrigated production if adequate supplies of relatively inexpensive water were available at the right place and time. Production on many existing farms could shift to more intensive, more profitable crops if supplemental irrigation water were available. (Pacific Southwest Interagency Committee (PSIAC), 1971b, 1971c, 1971e, 1971f; Pugh, 1971; Shafer, 1971.) While it may not be economically feasible to provide this supplemental irrigation and/or to bring some portion of the potentially irrigable land into production, the possibility does exist and some sources of water are available.

In the past, many water resource developments have been planned one project at a time, with little concern for the overall demand for water in the state or region. Many of these decisions have been based on local self-interest or short-run considerations. Since such capital investment is substantial and permanent, analysis of alternatives, which requires study of the demand for water, must be undertaken.

There have been many shifts occurring in Utah's economy in recent years. The population, labor force, and employment have increased substantially. It has been projected that the future average population growth along the eastern edge of the Great Basin region, primarily comprised of the cities of Provo, Salt Lake City, Ogden, and Logan, where the majority of the citizens live, will be approximately 2.5 percent per year (U. S. Water Resources Council, 1968). Projections of the future suggest that there will be a continuing increase in urban, commercial, and industrial activities in this region. It is also possible that

other areas which have shown little urban growth in the past may grow as a result of developments in oil shale, electrical power generation, etc. The demand for water, especially for municipal and industrial (M&I) uses, will increase, even if no new lands are opened to cultivation and irrigation. It is essential that future demands be analyzed if an optimal allocation of water and water-related resources is to be achieved.

Water uses fall into three main categories: Agricultural, municipal and industrial (M&I), and recreation and maintenance of natural vegetation and wildlife. In Utah agriculture uses many times more water than M&I uses and will undoubtedly continue to do so. Therefore, this report will examine the demand for irrigation water in each of the hydrologic subregions for both presently and potentially-irrigable acreages, with varying underlying assumptions.

Objectives

The objectives of this study are as follows:

1. To develop demand functions for irrigation water in each of the ten hydrologic subregions in Utah. Separate demand curves are developed for water to be used on presently-irrigated and on potentially irrigable land.
2. To compare the regional demand curves in order to isolate policy alternatives which might be indicated by the results.
3. To provide information on water resource allocation to be used by those responsible for water resources planning in Utah, such as the Bureau of Reclamation, Corps of Engineers, Soil Conservation Service, the Utah Department of Natural Resources, and the Four Corners Commission.

Theory

A demand curve for water is a schedule showing what a user is willing to pay (based on its productivity) for various quantities of water utilized over a given period of time. The demand curve for water in agriculture is derived from the value of agricultural crop production which results from the application of an increment of water. Included is consideration of the production functions for the various crops, the price of the crops, and the price of other inputs such as land, labor, fertilizer, and capital, soil quality, farming methods, and level of technology used.

No user will pay more than the net value of production, since to do so would yield diminished net return.

If water is a constraining input in agricultural production, then optimal allocation occurs when the returns to water itself are maximized and the marginal productivity of water is equal among every agricultural use and user. If this condition is not met, increases in total water productivity could be achieved by transferring some of the water resource from uses or areas of lower marginal productivity to those of higher productivity. Thus, knowledge of the demand function is crucial to decision-making.

Derivation of these marginal productivity curves can be achieved using mathematical programming. Linear programming (LP) is used in this study. Solving the primal LP problem yields the combination of resources, given the constraints, that will lead to the greatest net benefit (where revenues exceed costs by the greatest possible amount). Every linear programming problem has both a primal problem and a counterpart problem called the dual. If the primal problem maximizes output with a given cost outlay, the dual minimizes the costs for the given product output. In the dual problem, values (shadow prices) are imputed to the fixed facilities. The dual thus determines the shadow price or marginal value product of water used in irrigated farming. The total resource values from the dual solution equal the maximum revenue from the primal solution (Leftwich, 1966).

This analysis assumes that water is the main constraining resource on production. The dual solution allocates the marginal value product to irrigation water and maximizes net returns to irrigation water, given water availability and rotation constraints. As water availability is reduced using parameterizations, fewer acres are irrigated and the rotations changed to rotations which are less water intensive, so that the marginal value of irrigation water increases. Thus, a demand schedule, or curve, is produced by these parameterizations. Somewhat similar studies have been reported by Gisser (1970), Hartman and Whittlesey (1960), Hiskey (1972), Johnson (1966), Miller, Boersma, and Castle (1965), Moore and Hedges (1963), and Stults (1966).

The Utah Model

The geographic unit which is most commonly used for water resources planning and development is the river basin, or a closely related group of basins which drain to a common point and in which the visible and invisible water supplies are connected and continuous. There are three such major drainage basins in Utah: The Colorado River Basin, the Great Basin, and a small portion of the Columbia River Basin. Within each of these drainage basins, many streams and stream systems make up smaller hydro-

logic areas which are especially suited for analysis as individual units, referred to as "hydrologic regions" or "hydrologic subregions" in this report.

The State of Utah has been divided into ten hydrologic subregions as in Figure 1 (King et al., 1972). The Columbia region is excluded from this model because it covers an insignificant portion of the state, has little arable land, and has few prospects for the development of irrigated agriculture. The hydrologic regions and their numbers are as follows:

Hydrologic Subregion	Area Explanation
1	Great Salt Lake Desert
2	Bear River
3	Weber River
4	Jordan River
5	Sevier River
6	Cedar-Beaver
7	Uintah Basin
8	West Colorado
9	South and East Colorado
10	Lower Colorado

Demand curves for each hydrological subbasin are developed using separate, but compatible, LP models. Some general assumptions apply to all these models:

1. Prices are the same for all models.
2. Input-output, output-output, and input-input relationships are assumed to be linear.
3. A firm water-right is assumed to exist. That is, the present use of water on presently-irrigated land must be met before water within a region can be released for new development.
4. The process of agricultural production can be divided into separate, independent activities.
5. Fractions of these production activities can be used.
6. Constant returns to scale and fixed proportions among inputs characterize each of these activities.
7. Projected requirements for water to be used in municipal and industrial activities must be met before water will be released for agricultural uses.
8. No external economies or diseconomies exist.
9. The level of farm managerial ability is slightly above the present average to approximate 1980 conditions and is reflected in the yields and cost coefficients.
10. Yields for each land class are assumed to be constant within each county in each hydrologic subregion.

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ABSTRACT

Water is recognized as an essential element in Utah's agricultural economy. It is the subject of much controversy and litigation and yet most discussion of the subject is based on opinions and prejudice rather than upon the basis of sound scientific evidence. This paper attempts to provide some of the economic information necessary for sound decisions in the development and use of Utah's water resources with respect to agriculture.

Utah has been divided into ten drainage regions (hydrologic subregions) and the presently irrigated and potentially irrigable land according to land class were estimated for each county or portion of a county within each of the regions. Water use factors, crop rotation constraints, costs of production, yields, product prices, and costs of bringing new land into production were also estimated. These values were then used in a linear programming model to estimate a normalized demand (marginal value product) schedule for water to be used in agricultural production within each region. The amount of water made available to the production model for each hydrologic subregion was varied so that the model created a shadow price (marginal value product) at each level. These were then combined to estimate the relationship between the quantity of water and its economic value (a demand schedule or function).

The general conclusions from the study indicate that most parts of the state suffer from a water shortage in that more production could be obtained from the presently irrigated land through the use of more water and/or the transfer of water from lands with low productivity to higher quality land. There are, however, many cases of water waste. The model is not designed to adequately evaluate the economic feasibility of water importation projects but those regions with the greatest potential for development are identified. The models indicate that, given the present cost and price structure, agriculture alone probably could not economically justify most water importation schemes at this time.

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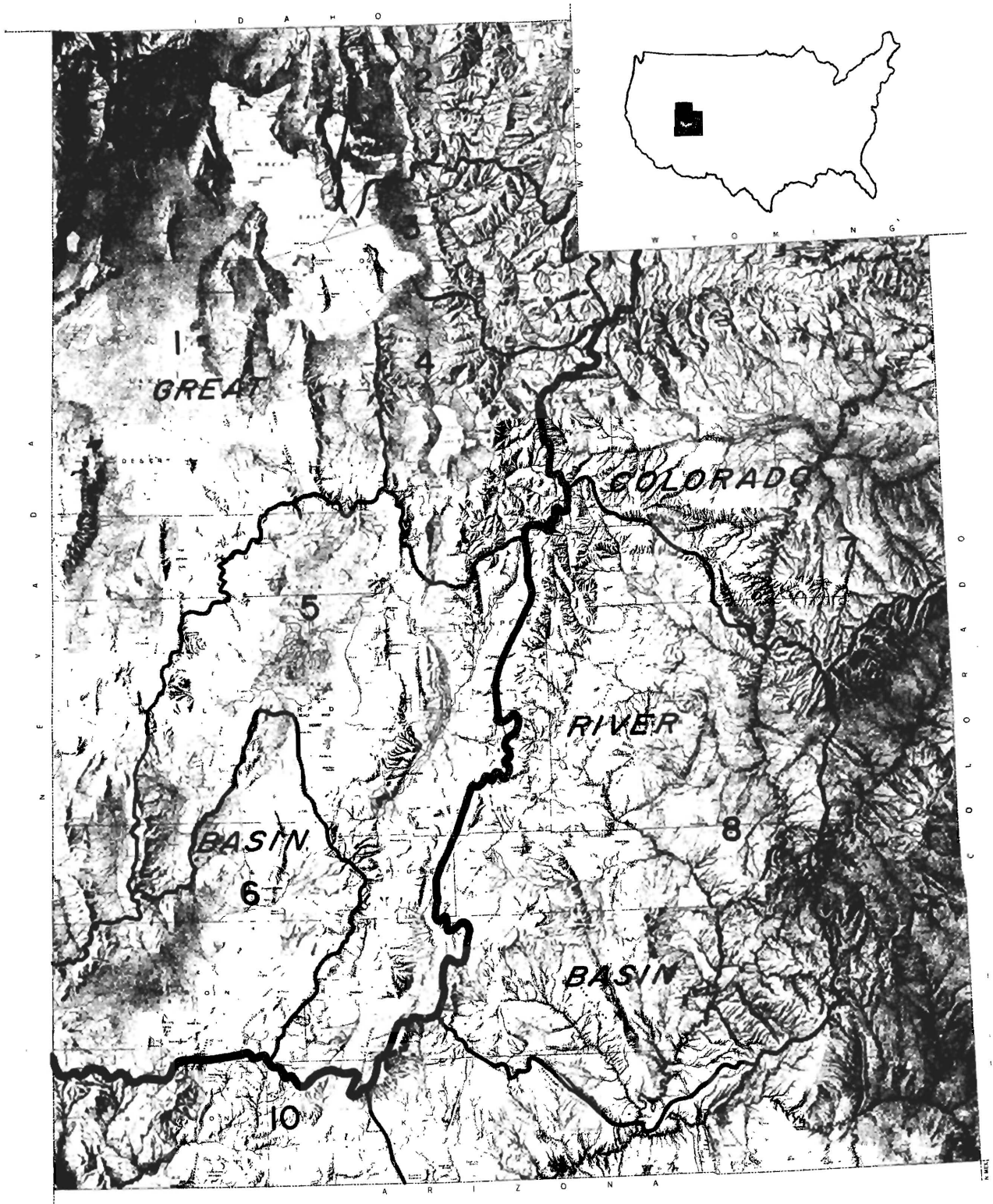


Figure 1. Map of hydrologic study units of Utah.

In Figure 2, various components of the models have been separately identified. The segments that are not found in the illustration have zero coefficients. Matrix A_{11} and vector C_1 represent selling activities where each unit of production is converted to its dollar value. In the model, variable costs (those costs which change as the level of output per acre of the agricultural products change) are represented by C_2 , while the associated activities are represented by A_{12} . The bulk of the matrix is made up of the production activities (A_{13}). The set C_3 represents the costs which do not vary with output per acre of crop. A_{23} is a vector of water requirements for each of the various crop activities. The input of land into the crop activities is represented by A_{33} . The amount of irrigable land in each sub-region is represented by b_3 . The rotation constraints are represented by A_{43} . For a more complete discussion of the demand models, see Anderson (1972).

Three demand curves for water used in agricultural production have been estimated for each hydrologic sub-

region. The first demand curve pertains only to presently irrigated land. Both the second and third demand curves independently estimated marginal value product schedules (demand curves) for water on presently undeveloped land. For one set of solutions, the model could bring potentially irrigable land into production according to its profitability. All class I land in a county would be developed before any class II land, class II would be developed before class III, and class IV land would be developed last, if at all. In deriving the other demand curves, potentially irrigable land was constrained so that it would be brought into production in proportions identical to those of the presently irrigated land in each county.

The first set of assumptions is unrealistic because it is unlikely that the areas of class I soil will be in large enough blocks for efficient development. The latter set of assumptions is also unlikely. While large areas of class I land may not exist, there will probably be areas with relatively large amounts of the higher producing classes

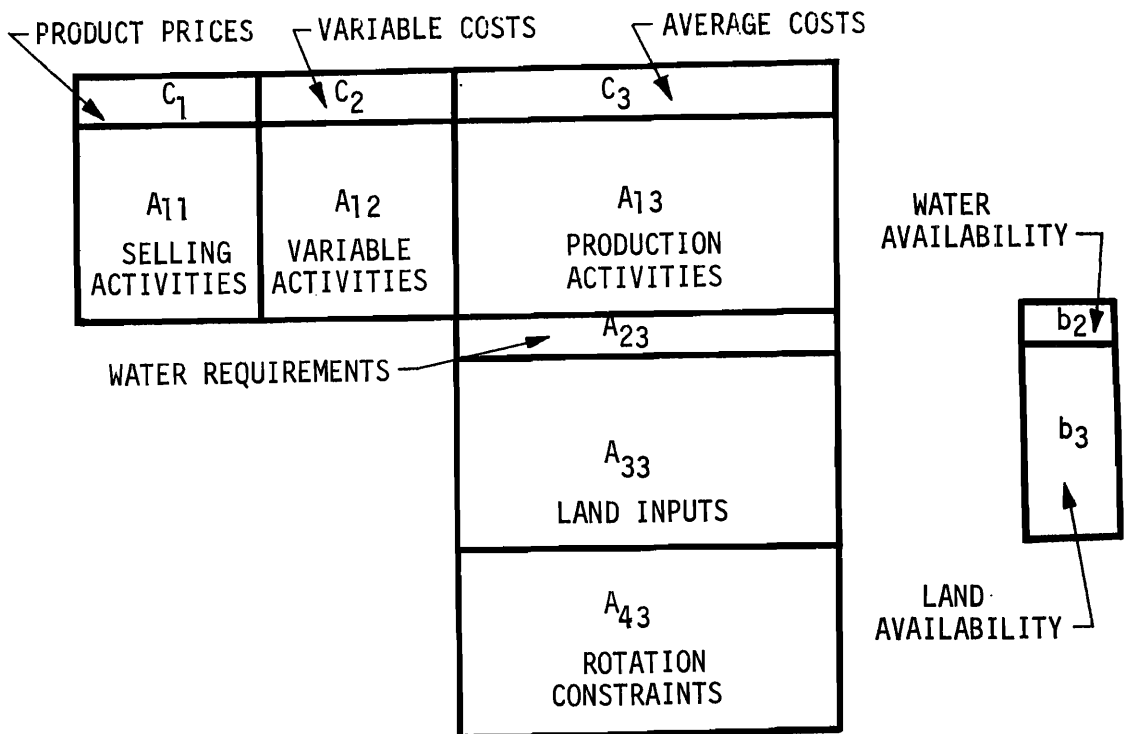


Figure 2. Illustrative linear programming model.

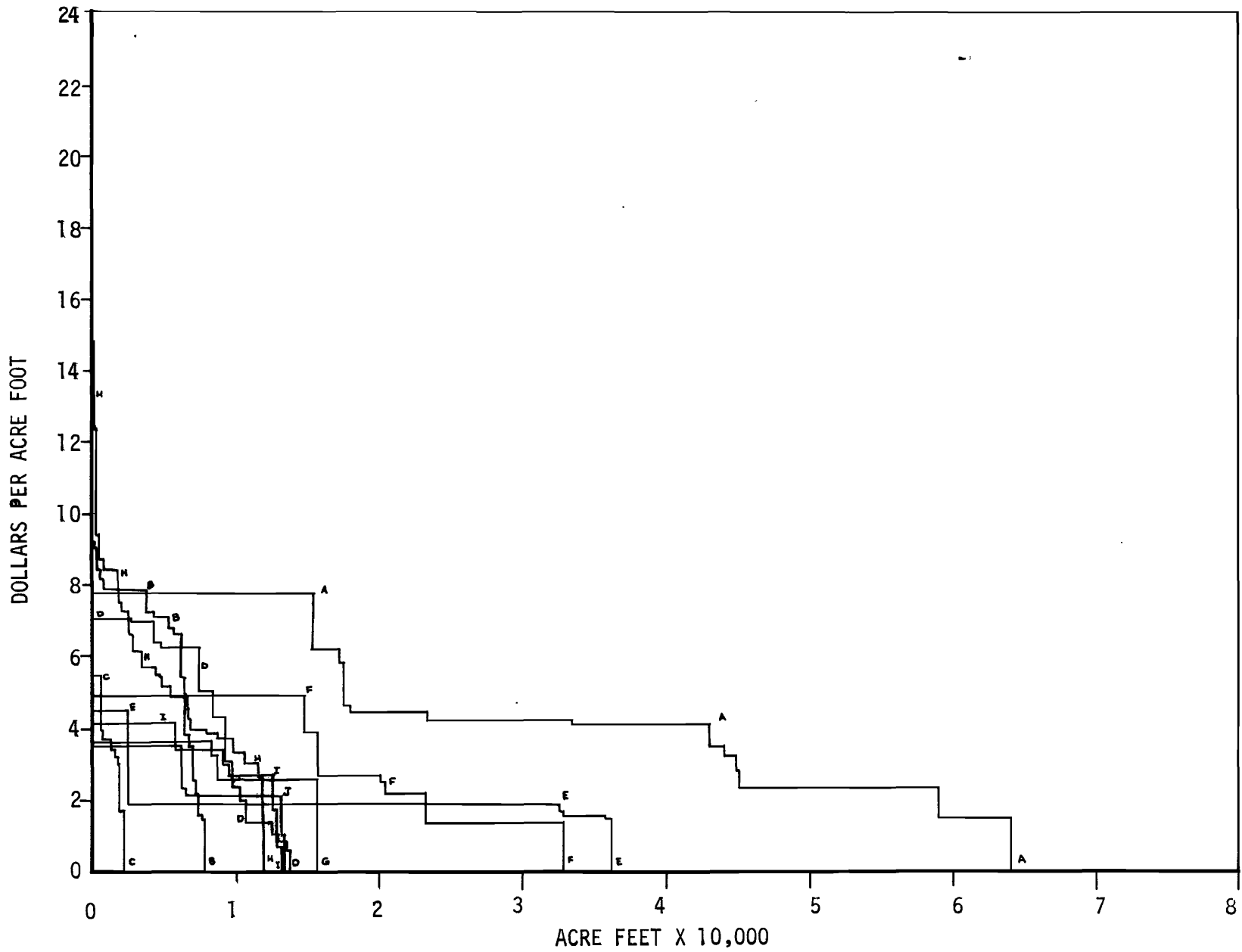


Figure 6. Demand for water on new land with restrictions.

pared to the marginal value product of the water on both presently irrigated (for supplemental irrigation) and potentially irrigable land in those subregions. It may well be that agriculture alone cannot justify importation at this time. Many factors, such as market changes and technological advancements, could occur in the future which would enhance the desirability of such water transportation schemes. More information on this subject can be found in Keith, Andersen, and Clyde (1973).

Based on the marginal value product levels developed by the model, Regions 5 and 6 have the highest marginal value of production for supplemental irrigation. It is difficult to isolate two or three areas that show the most promise for opening new lands to irrigation from the information in the marginal value productivity schedules. Some of the regions have very high marginal value product levels which fall quite rapidly as water is made available. Water development schemes as small as those indicated by the high marginal value product levels are not practical. Therefore, the region with the lower high value may be just as meritorious to receive water for development purposes as the area with the higher maximum curve.

Region 9 is clearly least likely to be able to adequately support water importation because of the extremely low marginal value product levels. Although Region 1 has a moderately high marginal value product curve, physical as well as economic barriers may block large scale importation. Many of the areas which appear to be the most realistic for further development are also the areas which presently have relative large water supplies (Regions 2, 3, and 4). However, in Region 3, and to a lesser extent in Region 4, there is little land available for such development, and M&I uses are projected to remove agricultural land from irrigated production. Region 5 may have some potential for importation for development purposes, but only if reasonably large tracts of land which include a low proportion of the poorer yielding land can be developed. Regions 6, 8, and 10 apparently could provide for agricultural expansion, especially if large tracts of high quality land could be developed.

Finally, it appears that mathematical programming is a potential tool for examining water allocations. It is adaptable and flexible, although it requires substantial data inputs.

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APPENDICES

Appendix I. Summary of arable land acreage by county within hydrologic sub-regions in Utah.

LAND CLASS	Great Salt Lake #1						Bear River #2			Weber #3				Jordan #4			
	Tooele (East)	Tooele (West)	Box Elder	Juab	Millard	Beaver	Cache	Box Elder	Rich	Weber	Morgan	Summit	Davis	Salt Lake	Utah	Juab	Wasatch
(in thousands of acres)																	
Presently Irrigated																	
I	.2	.1	2.8				1.1	12.5		11.4			18.0	7.5	10.0		
II	2.4	1.7	5.7	1.1	4.4		50.0	25.0		32.7	7.3		11.9	9.2	43.3	6.4	
III	6.4	4.3	9.4	1.0	.5		31.5	41.7	5.2	17.0	.9	25.1	9.2	20.3	46.4	5.4	16.3
IV	2.3	1.5	.9	.2	.1		19.1	3.9	39.7	3.9	2.0	6.9	4.4	11.0	26.3	1.2	9.1
>IV	.1	--	2.2	.3	--		2.3	9.9	4.1	1.0	1.8	3.7	2.5	4.0	4.0	1.4	2.8
TOTAL	11.4	7.6	21.0	2.6	5.0	0	104.0	93.0	49.0	66.0	12.0	35.7	46.0	52.0	130.0	14.4	28.2
Potentially Irrigable																	
I	7.0	3.0	88.9				1.1	13.8		.5			.2	13.1	11.4		
II	100.0	80.0	175.5	46.2	66.1	19.5	50.7	27.3		3.3			4.7	23.8	54.1	14.5	
III	95.6	122.4	209.7	43.8	100.6	38.9	25.6	32.6	10.2	10.9		.3	7.6	29.5	48.4	13.5	9.2
IV	44.2	59.8	117.9	77.4	118.3	61.6	25.6	18.3	83.8	14.3	2.0	.6	7.5	17.6	29.1	26.6	5.9
TOTAL	246.8	265.2	592.0	167.4	285.0	120.0	103.0	92.0	94.0	29.0	2.0	.9	20.0	84.0	143.0	54.6	15.1
Total Arable																	
I	7.2	3.1	91.7				2.2	26.3		11.9			18.2	20.6	21.4		
II	102.4	81.7	181.2	47.3	70.5	19.5	100.7	52.3		36.0	7.3		16.6	33.0	97.4	20.9	
III	102.0	126.7	219.1	44.8	101.1	38.9	57.1	74.3	15.4	27.9	.9	25.4	16.8	49.8	94.8	18.9	25.5
IV	46.5	61.3	118.8	77.6	118.4	61.6	44.7	22.2	123.5	18.2	4.0	7.5	11.9	28.6	55.4	27.8	15.0
>IV	.1	--	2.2	.3	--	--	2.3	9.9	4.1	1.0	1.8	3.7	2.5	4.0	4.0	1.4	2.8
TOTAL	258.2	272.8	613.0	170.0	290.0	120.0	207.0	185.0	143.0	95.0	14.0	36.6	66.0	136.0	273.0	69.0	43.3

Source: PSIAC (1971b, 1971c, 1971e, 1971f); Pugh (1971); Shafer (1971); Utah Conservation Needs Committee (1970); Wilson, Hutchings, and Shafer (1968); Richardson (1971); Shafer (1972); and Wilson (1972).

Appendix I. (Continued)

LAND CLASS	Sevier #5							Cedar-Beaver #6				Uintah #7		
	Garfield	Piute	Sevier	Millard	Sanpete	Juab (East)	Juab (West)	Iron	Beaver (Central)	Millard	Beaver (East)	Daggett	Uintah	Duchesne
(in thousands of acres)														
Presently Irrigated														
I								.3						
II	1.9	6.1	39.4	93.8	41.2	3.9		31.4	8.1	9.8		26.9	29.2	
III	10.5	11.2	22.0	11.9	26.8	3.5		8.3	6.1	7.5	4.0	31.6	47.4	
IV	1.5	1.9	1.4	1.3	6.5	.7		5.6	1.0	1.2	3.9	15.1	31.1	
>IV	.1	.8	1.2	--	9.5	.9		.4	.1	.2	1.7	10.7	16.2	
TOTAL	14.0	20.0	64.0	107.0	84.0	9.0	0	46.0	15.3	0	18.7	9.6	84.3	123.9
Potentially Irrigable														
I								.2						
II	14.8	3.4	4.0	121.3	7.1	39.2	32.1	163.1	26.6	26.6	9.7		62.9	36.4
III	39.5	2.0	2.8	192.1	4.2	37.1	30.4	123.6	76.1	40.6	27.8	6.4	74.0	53.0
IV	13.7	25.6	11.2	234.6	41.7	65.6	53.6	117.1	129.5	47.8	47.3	7.4	35.5	44.6
TOTAL	68.0	31.0	18.0	548.0	53.0	141.9	116.1	404.0	232.2	115.0	84.8	13.8	172.4	134.0
Total Arable														
I								.5						
II	16.7	9.5	43.4	215.1	48.3	43.1	32.1	194.5	34.7	26.6	19.5		89.8	65.6
III	50.0	13.2	24.8	204.0	31.0	40.6	30.4	131.9	82.2	40.6	35.3	10.4	105.6	106.4
IV	15.2	27.5	12.6	235.9	48.2	66.3	53.6	122.7	130.5	47.8	48.5	11.3	50.6	69.7
>IV	.1	.8	1.2	--	9.5	.9	--	.4	.1	0	.2	1.7	10.7	16.2
TOTAL	82.0	51.0	82.0	655.0	137.0	150.9	116.1	450.0	247.5	115.0	103.5	23.4	256.7	257.9

Appendix I. (Continued)

LAND CLASS	West Colorado #8					Southeast Colorado #9			Lower Colorado #10	
	Garfield	Wayne	Emery	Grand	Carbon	Grand	San Juan	Kane	Washington	Kane
(in thousands of acres)										
Presently Irrigated										
I		.4	.5	.1		1.0			3.2	
II	.6	.3	20.1	.1	7.6	1.3		.8	10.9	1.0
III	3.0	16.5	13.4	.2	9.0	2.1	7.4	3.2	4.3	.9
IV	.4	.6	6.3	--	1.4	.5	1.8	.4	.5	.1
>IV	--	.3	12.0	--	2.1	.1	.4	--	.1	--
TOTAL	4.0	18.1	52.3	.4	20.1	5.0	9.6	4.4	19.0	2.0
Potentially Irrigable										
I		1.0	1.0	5.0		5.4			7.8	
II	7.8	12.1	46.9	25.6	20.4	27.2	100.0	4.8	18.0	19.6
III	21.0	16.9	35.3	23.2	22.4	24.4	252.1	13.5	44.0	59.4
IV	8.5	9.9	17.4	14.2	15.8	15.0	83.2	7.8	41.5	53.8
TOTAL	37.3	39.9	100.6	68.0	58.6	72.0	435.3	26.1	111.3	132.8
Total Arable										
I		1.4	1.5	5.1		6.4			11.0	
II	8.4	12.4	67.0	25.7	28.0	28.5	100.0	5.6	28.6	20.6
III	24.0	33.4	48.7	23.4	31.4	26.5	259.5	16.7	47.8	60.3
IV	8.9	10.5	23.7	14.2	17.2	15.5	85.0	8.2	42.8	53.9
>IV	--	.3	12.0	--	2.1	.1	.4	--	.1	--
TOTAL	41.3	58.0	152.9	68.4	78.7	77.0	444.9	30.5	130.3	134.8

Appendix II. Upper bounds for sugar beets by land class in acres, Utah (on presently irrigated land).

	Land Class			Total
	I	II	III	
Region #2				
Box Elder	1,600	3,200	5,300	10,100
Cache	100	2,700	1,700	4,500
Region #3				
Weber	600	1,600	900	3,100
Davis	1,400	1,000	700	3,100
Region #4				
Salt Lake	700	800	1,900	3,400
Utah	400	1,800	1,900	4,100

Source: Utah Conservation Needs Committee (1970); U.D. Department of Commerce (1964);
PSIAC (1971b, 1971c, 1971e, 1971f).

Appendix III. Upper bounds for wheat by potentially irrigable land class in acres, Utah.

	Land Class				Total
	I	II	III	IV	
Region #1					
Box Elder	10,600	20,900	24,900	14,000	70,400
Tooele (east)	100	2,100	2,000	900	5,100
Region #2					
Box Elder	1,600	3,300	3,900	2,200	11,000
Rich	0	0	400	3,500	3,900
Cache	800	35,700	18,000	18,000	72,500
Region #3					
Morgan	0	0	0	4,600	4,600
Weber	100	500	1,800	2,300	4,700
Davis	0	400	700	600	1,700
Region #4					
Salt Lake	2,800	5,100	6,400	3,800	18,100
Utah	1,100	5,100	4,600	2,700	13,500
Juab	0	500	400	800	1,700
Region #5					
Juab (east)	0	1,200	1,200	2,100	4,500
Juab (central)	0	1,000	900	1,700	3,600
Millard	0	2,500	4,000	4,900	11,400
Sanpete	0	700	400	4,000	5,100
Region #9					
San Juan	0	4,000	10,200	3,400	17,600
Region #10					
Washington	200	400	1,000	900	2,500

Source: U.S. Department of Commerce (1964); PSIAC (1971b, 1971c, 1971e, 1971f).

Appendix IV. Normalized variable (harvesting) costs of production - Utah.

Activity	Unit	Cost Component	Cost	Total Cost
Barley Production	Bushel	Cash Cost	\$.13	\$.15
	Bushel	Labor Cost	.02	
Corn Silage Production	Ton	Cash Cost	1.65	2.25
	Ton	Labor Cost	.60	
Sugar Beet Production	Ton	Cash Cost	3.00	3.40
	Ton	Labor Cost	.40	
Alfalfa Production	Ton	Cash Cost	4.80	8.00
	Ton	Labor Cost	3.20	
Alfalfa Production	Cutting	Cash Cost	2.90	3.70
	Cutting	Labor Cost	.80	
Wheat Production	Bushel	Cash Cost	.05	.08
	Bushel	Labor Cost	.03	

Source: Christensen, Davis, and Richards (1972).

Appendix V. Normalized prices of agricultural commodities - Utah.

Crop	Unit	Price
Alfalfa	Ton	\$27.00
Barley	Bushel	1.20
Sugar Beets	Ton	16.00
Corn Silage	Ton	9.00
Pasture	Animal Unit Month	4.00
Wheat	Bushel	1.35

Source: Daly and Egbert (1966); PSIAC (1971d); Christensen and Richards (1969).

Appendix VI. Yearly costs of preparing potentially irrigable land for irrigated production by land class, using 7 percent interest rate, Utah.

Region	Land Development Costs				Distribution Costs				Total Cost			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
1	\$4.10	\$5.30	\$6.20	\$7.50	\$3.00	\$3.00	\$3.00	\$3.00	\$ 7.10	\$ 8.30	\$ 9.20	\$10.50
2	4.10	5.30	6.20	7.50	4.00	4.00	4.00	4.00	8.10	9.30	10.20	11.50
3	4.10	5.30	6.20	7.50	5.00	5.00	5.00	5.00	9.10	10.30	11.20	12.50
4	4.10	5.30	6.20	7.50	6.00	6.00	6.00	6.00	10.10	11.30	12.20	13.50
5		5.30	6.20	7.50		4.00	4.00	4.00		9.30	10.20	11.50
6	4.10	5.30	6.20	7.50	5.00	5.00	5.00	5.00	9.10	10.30	11.20	12.50
7		5.30	6.20	7.50		3.00	3.00	3.00		8.30	9.20	10.50
8	4.10	5.30	6.20	7.50	3.00	3.00	3.00	3.00	7.10	8.30	9.20	10.50
9	4.10	5.30	6.20	7.50	3.00	3.00	3.00	3.00	7.10	8.30	9.20	10.50
10	4.10	5.30	6.20	7.50	3.00	3.00	3.00	3.00	7.10	8.30	9.20	10.50

Sources: Wilson (1969); U.S. Department of the Interior, Bureau of Reclamation (1957, 1961, 1964); Stewart (1960); PSIAC (1971c, 1971f); U.S. Department of Agriculture (1958); U.S. Department of Commerce (1964, 1969); and Economic Report of the President (1968).

Appendix VII. Costs of productions, water requirements, and yields of crops by county and region for Utah.

	Alfalfa		Alfalfa--Full							Alfalfa--Partial						
	Cost (dollars)	Labor (hours)	Yield (t)				Irr. Req.	Irr. Hrs.	Cut- tings	Yield(t)				Irr. Req.	Irr. Hrs.	Cut- tings
			I	II	III	IV				I	II	III	IV			
Region I.																
Subregion																
Beaver	10.4	.4		3.6	3.0	2.4	2.1	4.75	2		2.3	1.9	1.4	1.1	2.5	1
Tooele Central	10.4	.4	4.3	3.9	3.3	2.5	2.0	4.0	3	3.3	2.8	2.4	1.9	1.5	3.25	2
Millard West	10.4	.4		4.0	3.4	2.5	2.5	5.5	3		3.1	2.6	1.9	1.9	4.0	2
Box Elder West	10.4	.4	4.8	4.2	3.4	2.5	1.9	4.0	3	3.7	3.2	2.6	1.9	1.4	3.25	2
Tooele East	10.4	.4	4.3	3.9	3.3	2.5	2.2	4.75	3	3.3	2.8	2.4	1.9	1.5	3.25	2
Juab West	10.4	.4		3.7	3.1	2.4	1.5	3.25	2		2.1	1.8	1.4	.7	1.75	1
Region II.																
Subregion:																
Box Elder East	10.4	.4	5.2	4.6	3.6	2.5	1.9	4.0	3	4.0	3.5	2.8	1.9	1.3	3.25	2
Rich	10.4	.4			2.4	1.8	1.3	3.25	2			1.6	1.0	.6	1.75	1
Cache	10.4	.4	4.9	4.3	3.5	2.5	1.3	3.25	3	3.8	3.3	2.7	1.9	.9	2.5	2
Region III.																
Subregion:																
Morgan	10.1	.4		4.1	3.4	2.4	1.4	3.25	2.5		2.7	2.3	1.6	.9	2.5	1.5
Summit	10.1	.4			3.1	2.2	1.0	2.5	2			1.8	1.3	.2	1.0	1
Weber	11.0	.4	5.3	4.7	3.7	2.5	1.9	4.0	3	4.1	3.6	2.8	1.9	1.3	3.25	2
Davis	11.0	.4	5.3	4.7	3.7	2.5	1.9	4.0	3	4.1	3.6	2.8	1.9	1.3	3.25	2
Region IV.																
Subregion:																
Salt Lake	11.0	.4	5.4	4.7	3.7	2.5	2.2	4.75	3	4.2	3.6	2.8	1.9	1.6	3.25	2
Utah	11.0	.4	5.3	4.7	3.7	2.5	2	4.0	3	4.1	3.6	2.8	1.9	1.4	3.25	2
Northern Juab	11.0	.4		4.1	3.5	2.5	2.3	4.75	3		3.0	2.5	1.9	1.1	2.5	2
Wasatch	11.0	.4			3.4	2.4	1.1	2.5	2				1.4	.4	1.0	1
Region V.																
Subregion:																
Juab East	10.5	.4		3.6	3.0	2.4	1.9	4.0	2		2.1	1.7	1.4	1.4	3.25	1
Piute	10.5	.4		4.0	3.3	2.4	1.9	4.0	2		2.1	1.8	1.4	.9	2.5	1
Sevier	10.5	.4		4.4	3.6	2.5	2.1	4.75	3		3.4	2.8	1.9	1.6	3.25	2
Garfield West	10.5	.4		3.7	3.2	2.4	1.2	2.5	2		2.1	1.8	1.4	.5	1.75	1
Millard East	10.5	.4		4.2	3.5	2.5	2.3	4.75	3		3.2	2.7	1.9	1.7	4.0	2
Sanpete	10.5	.4		4.2	3.5	2.5	2.0	4.0	2.5		3.2	2.3	1.7	1.5	3.25	1.5
Juab Central	10.5	.4		3.6	3.0	2.4	2.5	5.5	2		2.1	1.7	1.4	1.3	3.25	1.0
Region VI.																
Subregion:																
Iron	11.0	.4	4.9	4.3	3.5	2.5	2.0	4.0	3	3.8	3.3	2.7	1.9	1.5	3.25	2
Beaver Central	11.0	.4		4.0	3.3	2.4	2.1	4.75	2		2.5	2.0	1.4	1.1	2.5	1
Beaver East	11.0	.4		4.0	3.3	2.4	1.6	3.25	2		2.5	2.0	1.4	.8	1.75	1
Millard South	11.0	.4		4.3	3.5	2.5	2.3	4.75	3		3.3	2.7	1.9	1.7	4.0	2
Region VII.																
Subregion:																
Uintah	9.7	.3		3.6	3.0	2.4	2.1	4.75	2		2.1	1.7	1.4	1.1	2.5	1
Duchesne	9.7	.3		3.6	3.0	2.4	2.2	4.75	2		2.1	1.7	1.4	1.2	2.5	1
Daggett	9.7	.3			2.1	1.3	1.6	3.25	1			4.8*	3.0*	.7	1.75	0

Appendix VII. (Continued).

	Alfalfa		Alfalfa--Full						Alfalfa--Partial							
	Cost (dollars)	Labor (hours)	Yield (t)				Irr. Req.	Irr. Hrs.	Cuttings	Yield (t)				Irr. Req.	Irr. Hrs.	Cuttings
			I	II	III	IV				I	II	III	IV			
Region VIII.																
Subregion:																
Garfield East	11.0	.4		3.7	3.2	2.4	1.7	4.0	2		2.1	1.8	1.4	.8	1.75	1
Wayne	11.0	.4	4.5	3.9	3.4	2.4	1.4	3.25	3	3.5	3.0	2.6	1.8	.7	1.75	2
Carbon	11.0	.4		4.4	3.6	2.5	2.3	4.75	3		3.4	2.8	1.9	1.7	4.0	2
Grand West	11.0	.4	5.0	4.4	3.6	2.5	2.7	5.5	3	3.9	3.4	2.8	1.9	2.0	4.0	2
Emery	11.0	.4	4.8	4.1	3.6	2.5	2.0	4.0	3	3.7	3.2	2.8	1.9	1.0	2.5	2
Region IX.																
Subregion:																
Grand West	10.5	.4	5.0	4.4	3.6	2.5	2.8	5.5	3	3.9	3.4	2.8	1.9	2.1	4.75	2
San Juan	10.5	.4		3.9	3.3	2.4	1.9	4.0	2		2.3	2.0	1.4	.9	2.5	1
Kane East	10.5	.4		3.7	3.2	2.4	2.6	5.5	2		2.1	1.8	1.4	1.2	2.5	1
Region X.																
Subregion:																
Washington	11.1	.4	7.3	6.1	4.8	3.0	3.8	7.75	5	4.9	4.1	3.2	2.3	3.2	5.25	3.5
Kane West	10.5	.4		3.9	3.4	2.5	2.6	5.5	2.5		2.6	2.1	1.6	1.2	2.5	1.5

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Appendix VII. (Continued).

	Barley							Nurse Crop								
	Cost (dollars)	Labor (hours)	Yield				Irrigation Requirement (acre-feet)	Irrigation Hours	Cost (dollars)	Labor (hours)	Yield				Irrigation Requirement (acre-feet)	Irrigation Hours
			I	II	III	IV					I	II	III	IV		
Region I.																
Subregion:																
Beaver	35.1	2.7		68	55	44	1.2	3.25	41.4	3.1		50	39	30	1.7	4.0
Tooele Central	35.1	2.7	90	72	60	46	1.1	3.25	41.4	3.1	70	54	44	32	1.6	3.25
Millard West	35.1	2.7		70	58	46	1.4	4.0	41.4	3.1		52	42	32	2.0	4.0
Box Elder West	35.1	2.7	92	79	66	48	1.0	3.25	41.4	3.1	72	61	50	34	1.5	3.25
Tooele East	35.1	2.7	90	72	60	46	1.4	4.0	41.4	3.1	70	54	44	32	1.6	3.25
Joab West	35.1	2.7		70	58	46	0.9	2.50	41.4	3.1		52	42	32	1.2	2.5
Region II.																
Subregion:																
Box Elder East	35.2	2.7	96	84	70	50	0.8	2.5	41.4	3.1	76	66	54	36	1.4	3.25
Rich	35.2	2.7			54	42	0.8	2.5	36.8	2.7			38	30	1.0	2.5
Cache	35.2	2.7	90	78	65	48	0.6	1.75	41.4	3.1	70	60	49	34	1.0	2.5
Region III.																
Subregion:																
Morgan	35.7	2.7		78	65	46	0.7	2.5	34.3	2.5		60	52	32	1.0	2.5
Summit	35.7	2.7			60	44	0.5	1.75	37.3	2.5			44	30	0.8	1.75
Weber	35.7	2.7	96	84	70	50	0.8	2.50	41.4	3.1	76	66	54	36	1.3	3.25
Davis	35.7	2.7	96	84	70	50	0.7	2.5	41.4	3.1	76	66	54	36	1.3	3.25

Appendix VII. (Continued).

	Alfalfa		Alfalfa-Full						Alfalfa-Partial							
	Cost (dollars)	Labor (hours)	Yield (t)				Irrigation Requirement (acre-feet)	Irrigation Hours	Cost (dollars)	Labor (hours)	Yield (t)				Irrigation Requirement (acre-feet)	Irrigation Hours
			I	II	III	IV					I	II	III	IV		
Region IV.																
Subregion:																
Salt Lake	35.7	2.7	96	84	70	50	0.9	2.5	41.9	3.1	76	66	54	36	1.6	3.25
Utah	35.7	2.7	96	84	70	50	1.0	3.25	41.9	3.1	76	66	54	36	1.5	3.25
Northern Juab	35.7	2.7		74	62	46	1.1	3.25	41.9	3.0		56	46	32	1.7	4.
Wasatch	35.7	2.7			60	46	0.6	1.75	34.9	1.7			44	32	0.8	1.75
Region V.																
Subregion:																
Juab East	35.7	2.7		68	58	46	.9	2.5	41.4	3.1		50	42	32	2.0	4.
Piute	35.7	2.7		65	54	42	1.0	3.25	41.4	3.1		47	38	30	1.5	3.25
Sevier	35.7	2.7		80	66	48	1.2	3.25	41.4	3.1		62	50	34	1.7	4.
Garfield West	35.7	2.7		65	54	42	0.7	2.50	41.4	3.1		47	38	28	1.0	2.5
Millard East	35.7	2.7		72	60	48	1.0	3.25	41.4	3.1		54	44	34	1.9	4.
Sanpete	35.7	2.7		70	58	47	1.1	3.25	41.4	3.1		52	42	33	1.5	3.25
Juab Central	35.7	2.7		68	58	46	1.6	4.75	41.4	3.1		50	42	32	1.4	3.25
Region VI.																
Subregion:																
Iron	35.7	2.7	88	74	62	48	1.0	3.25	41.4	3.1	68	56	46	34	1.5	3.25
Beaver Central	35.7	2.7		72	60	48	1.2	3.25	41.4	3.1		54	44	34	1.7	4.
Beaver East	35.4	2.7		72	60	48	0.9	2.50	41.4	3.1		54	44	34	1.3	3.25
Millard South	35.4	2.7		72	60	48	1.0	3.25	41.4	3.1		54	44	34	1.7	4.
Region VII.																
Subregion:																
Uintah	35.2	2.7		72	59	46	1.2	3.25	37.3	2.8		54	43	32	1.6	3.25
Duchesne	35.2	2.7		68	55	44	1.3	4.0	37.3	2.8		50	39	30	1.6	3.25
Daggett									36.8	2.7			38	30	1.2	2.5
Region VIII.																
Subregion:																
Garfield East	35.6	2.7		65	54	42	0.9	2.50	41.4	3.1		47	38	30	1.3	3.25
Wayne	35.6	2.7	84	72	60	46	1.0	3.25	41.4	3.1	64	54	44	32	1.2	2.50
Carbon	35.6	2.7		74	62	47	1.2	3.25	41.4	3.1		56	46	33	1.8	4.
Grand West	35.6	2.7	90	74	62	47	1.4	4.	41.4	3.1	70	56	46	33	2.0	4.
Emery	35.6	2.7	86	73	61	46	1.2	3.25	41.4	3.1	66	55	45	32	1.6	3.25
Region IX.																
Subregion:																
Grand East	34.6	2.7	90	74	62	47	1.4	4.	41.0	3.1	70	56	46	33	2.1	4.75
San Juan	34.6	2.7		69	56	45	1.3	4.	41.0	3.1		51	40	31	1.6	3.25
Kane East	34.6	2.7		65	54	42	1.4	4.	41.0	3.1		47	38	30	2.0	4.
Region X.																
Subregion:																
Washington	35.7	2.7	96	82	68	49	1.5	4.	41.9	3.1	76	64	52	35	2.0	4.0
Kane West	35.7	2.7		70	58	46	1.1	3.25	41.4	3.1		52	42	32	1.8	4.0

Appendix VII. (Continued).

	Corn							Sugar Beets						
	Cost (dollars)	Labor (hours)	Yield(t)			Irrigation Requirement (acre-feet)	Irrigation Hours	Cost (dollars)	Labor (hours)	Yield (t)			Irrigation Requirement (acre-feet)	Irrigation Hours
			I	II	III					I	II	III		
Region I.														
Subregion:														
Beaver														
Tooele														
Millard West	48.9	4.8		19.3	15.8	1.7	5.5							
Box Elder	48.9	4.8	22.0	19.4	15.8	1.2	4.5							
Tooele East														
Juab West														
Region II.														
Subregion:														
Box Elder East	50.4	4.8	23.5	20.4	17.0	1.2	4.5	89.9	25.0	21.0	19.0	16.5	1.6	9
Rich														
Cache	50.4	4.8	22.5	19.9	16.0	.7	2.5	89.9	25.0	20.0	18.0	15.3	1.2	7
Region III.														
Subregion:														
Morgan														
Summit														
Weber	52.8	5.0	23.5	20.3	17.0	1.1	3.5	89.9	25.0	22.6	20.3	17.0	1.6	9
Davis	52.8	5.0	23.5	20.4	17.0	1.1	3.5	89.9	25.0	22.6	20.3	17.0	1.6	9
Region IV.														
Subregion:														
Salt Lake	52.8	5.0	23.5	20.3	17.0	1.4	4.5	89.9	25.0	22.6	20.3	17.0	1.9	10
Utah	52.8	5.0	23.5	20.3	17.0	1.4	4.5	89.9	25.0	21.0	19.0	16.5	1.7	9
Northern Juab														
Wasatch														
Region V.														
Subregion:														
Juab East														
Piute														
Sevier	49.2	5.1		20.4	17.0	1.4	4.5							
Garfield West														
Millard East	49.2	5.1		19.5	16.0	1.5	4.5							
Sanpete	49.2	5.1		19.5	16.0	1.3	4.5							
Juab Central														
Region VI.														
Subregion:														
Iron	48.0	4.5		20.0	19.7	1.3	4.5							
Beaver Central														
Beaver East														
Millard South	48.0	4.5		19.5	16.0	1.5	4.5							

Appendix VII. (Continued).

	Corn						Sugar Beets							
	Cost (dollars)	Labor (hours)	Yield (t)			Irrigation Requirement (acre-feet)	Irrigation Hours	Cost (dollars)	Labor (hours)	Yield (t)			Irrigation Requirement (acre-feet)	Irrigation Hours
			I	II	III					I	II	III		
Region VII.														
Subregion:														
Uintah	49.2	5.1	20.0	17.0	1.4	4.5								
Duchesne	49.2	5.1	18.0	14.5	1.5	4.5								
Region VIII.														
Subregion:														
Garfield East														
Wayne														
Carbon	48.6	4.6	19.8	16.2	1.5	4.5								
Grand West	48.6	4.6	21.0	19.2	1.8	5.5								
Emery	48.6	4.6	20.5	18.5	1.3	4.5								
Region IX.														
Grand East	48.6	4.6	21.0	19.2	1.9	5.5								
San Juan														
Kane East														
Region X.														
Subregion:														
Washington	53.4	5.3	30.0	26.9	2.3	6.5								
Kane West														

Appendix VII. (Continued).

	Pasture					Wheat		
	Cost (dollars)	Labor (hours)	Yield (AUM)	Consumptive Irrigation Requirement (acre-feet)	(W/hours)	Cost (dollars)	Labor (hours)	Yield (bushels)
Region I.								
Subregion:	9.8	.6	7.1	1.9	5.5			
Beaver	9.8	.6	7.1	1.9	5.5			
Tooele Central	9.8	.6	7.1	1.8	4.75			
Millard West	9.8	.6	7.1	2.2	6.25			
Box Elder West	9.8	.6	7.1	1.6	4.75	8.2	.5	11
Tooele East	9.8	.6	7.1	1.8	4.75	8.2	.5	10
Juab West	9.8	.6	7.1	1.4	4.0			
Region II.								
Subregion:								
Box Elder East	9.8	.6	7.1	1.6	4.75	8.2	.5	11
Rich	8.8	.5	5.0	1.1	3.25	8.2	.5	9
Cache	9.8	.6	7.1	1.1	3.25	8.2	.5	11
Region III.								
Subregion:								
Morgan	10.0	.7	6.8	1.2	3.25	8.2	.5	11
Summit	10.0	.7	6.2	.8	2.5			
Weber	10.6	.8	7.1	1.6	4.75	8.2	.5	11
Davis	10.6	.8	7.1	1.6	4.75	8.2	.5	11
Region IV.								
Subregion:								
Salt Lake	10.6	.7	7.1	1.8	4.75	8.2	.5	11
Utah	10.6	.7	7.1	1.7	4.75	8.2	.5	11
Northern Juab	10.6	.7	7.1	2.0	5.5	8.2	.5	10
Wasatch	10.0	.7	6.8	1.0	3.2			
Region V.								
Subregion:								
Juab East	9.8	.6	6.8	1.7	4.75			
Piute	9.8	.6	6.8	1.7	4.75			
Sevier	9.8	.6	7.1	1.9	5.5			
Garfield West	9.8	.6	6.8	1.2	3.25			
Millard East	9.8	.6	7.1	2.0	5.5	8.2	.5	8
Sanpete	9.8	.6	7.1	1.7	4.75	8.2	.5	10
Juab Central	9.8	.6	6.8	2.4	6.25	8.2	.5	10
Region VI.								
Subregion:								
Iron	9.8	.6	7.1	1.7	4.75			
Beaver Central	9.8	.6	6.8	1.9	5.5			
Beaver East	9.8	.6	6.8	1.4	4.0			
Millard South	9.8	.6	7.1	2.0	5.5			
Region VII.								
Subregion:								
Uintah	9.8	.6	6.8	1.8	4.75	8.2	.5	11
Duchesne	9.8	.6	6.8	1.9	5.5			
Daggett	4.9	.3	3.9	1.4	4.0			
Region VIII.								
Subregion:								
Garfield East	9.8	.6	6.8	1.5	4.0			
Wayne	9.8	.6	6.8	1.3	4.0			
Carbon	9.8	.6	7.1	2.0	5.5			
Grand West	9.8	.6	7.1	2.2	6.25			
Emery	9.8	.6	7.1	1.7	4.75			
Region IX.								
Subregion:								
Grand East	9.2	.8	7.1	2.4	6.25			
San Juan	9.2	.8	6.8	2.0	5.5			
Kane East	9.2	.8	6.8	2.5	7			
Region X.								
Subregion:								
Washington	10.0	.7	8.6	3.2	8.5	9.3	.6	11
Kane West	9.6	.5	7.1	2.1	5.5			

Appendix VIII. Ai. Demand for irrigation water on presently irrigated land (Region 1 - Great Salt Lake Desert).

Water Diverted		Water Consumed		Acres Irrigated		Acre-Feet Per Acre	
Amount Thousand Acre-Feet	Price Dollars	Amount Thousand Acre-Feet	Price Dollars	Old Land Thousand Acres	New Land Thousand Acres	Div- erted Acre Feet	Con- sumed Acre Feet
180.1	1.25	85.7	2.63	45.0	.	4.0	1.9
179.6	1.73	85.5	3.63	44.9	.	4.0	1.9
169.9	2.09	80.9	4.39	42.6	.	4.0	1.9
169.5	2.24	80.7	4.71	42.6	.	4.0	1.9
163.8	2.35	77.9	4.94	41.1	.	4.0	1.9
156.4	2.54	74.4	5.33	41.1	.	3.8	1.8
153.2	2.70	72.9	5.68	40.2	.	3.8	1.8
151.9	3.19	72.3	6.71	40.2	.	3.8	1.8
151.0	3.44	71.8	7.22	40.2	.	3.8	1.8
146.5	3.93	69.7	8.26	40.2	.	3.6	1.8
145.9	3.97	69.4	8.35	40.0	.	3.6	1.7
143.2	4.76	68.1	10.00	40.0	.	3.6	1.7
142.3	4.88	67.7	10.25	40.0	.	3.6	1.7
139.7	5.04	66.5	10.60	40.0	.	3.5	1.7
137.4	5.24	65.4	11.01	39.5	.	3.5	1.7
110.5	5.53	52.6	11.62	33.1	.	3.3	1.6
108.1	5.83	51.4	12.26	33.1	.	3.3	1.6
107.0	6.21	50.9	13.05	33.1	.	3.2	1.5
93.0	8.22	44.2	17.28	28.8	.	3.2	1.5
84.0	8.25	40.0	17.33	26.4	.	3.2	1.5
81.8	8.28	38.9	17.40	26.4	.	3.1	1.5
66.2	8.36	31.5	17.57	22.0	.	3.0	1.4
66.1	8.37	31.4	17.59	22.0	.	3.0	1.4
63.2	8.65	30.1	18.18	21.0	.	3.0	1.4
62.8	8.79	29.9	18.47	21.0	.	3.0	1.4
34.7	9.84	16.5	20.68	11.6	.	3.0	1.4
29.1	12.60	13.9	26.48	9.9	.	2.9	1.4
28.5	12.87	13.6	27.05	9.7	.	2.9	1.4
25.7	13.13	12.2	27.60	8.6	.	3.0	1.4
23.4	13.13	11.1	27.60	8.6	.	2.7	1.3
23.3	14.08	11.1	29.59	8.6	.	2.7	1.3
8.7	14.14	4.1	29.72	2.9	.	3.0	1.4
8.4	14.94	3.4	31.40	2.8	.	3.0	1.4
7.2	18.87	3.4	39.66	2.8	.	2.6	1.2

Appendix VIII. Aii. Demand for irrigation water on new land where development is not constrained to develop poor land with good land (Region 1 - Great Salt Lake Desert).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount Thousand Acre-Feet	Price Dollars	Amount Thousand Acre-Feet	Price Dollars	Old Land Thousand Acres	New Land Thousand Acres	Div- erted Acre Feet	Con- sumed Acre Feet
4762.3	.63	2265.9	1.33	.	1274.6	3.7	1.8
4539.3	2.45	2159.8	5.16	.	1197.2	3.8	1.8
4530.8	2.70	2155.8	5.68	.	1195.2	3.8	1.8
4488.4	2.71	2135.6	5.69	.	1195.2	3.8	1.8
4331.9	3.27	2061.1	6.87	.	1156.3	3.7	1.8
3866.7	3.29	1839.8	6.91	.	1055.7	3.7	1.7
3473.3	3.44	1652.6	7.22	.	962.1	3.6	1.7
3373.1	3.96	1604.9	8.32	.	962.1	3.5	1.7
2906.4	3.97	1382.9	8.35	.	839.7	3.5	1.6
2822.6	4.45	1343.0	9.35	.	839.7	3.4	1.6
2748.1	4.76	1307.5	10.00	.	814.8	3.4	1.6
2704.4	4.88	1286.8	10.25	.	814.8	3.3	1.6
2655.3	5.39	1263.4	11.33	.	814.8	3.3	1.6
2646.4	5.53	1259.2	11.61	.	812.7	3.3	1.5
2520.2	5.83	1199.1	12.26	.	768.9	3.3	1.6
2475.3	5.99	1177.7	12.59	.	768.9	3.2	1.5
2407.5	6.05	1145.5	12.71	.	749.4	3.2	1.5
1854.9	6.27	882.6	13.18	.	564.6	3.3	1.6
1488.3	6.47	708.1	13.60	.	466.7	3.2	1.5
1221.2	7.60	581.0	15.98	.	400.6	3.0	1.5
959.8	8.36	456.7	17.57	.	320.6	3.0	1.4
955.1	8.65	454.4	18.18	.	320.6	3.0	1.4
938.5	9.48	446.5	19.93	.	320.6	2.9	1.4
938.2	9.91	446.4	20.83	.	320.5	2.9	1.4
875.7	9.97	416.6	20.96	.	299.6	2.9	1.4
759.1	10.62	361.2	22.32	.	253.4	3.0	1.4
737.9	11.51	351.1	24.18	.	246.5	3.0	1.4
275.6	12.13	131.1	25.49	.	91.9	3.0	1.4
265.8	14.69	126.5	30.87	.	88.9	3.0	1.4
234.1	14.94	111.4	31.40	.	78.3	3.0	1.4
201.4	16.50	95.8	34.68	.	78.3	2.6	1.2

Appendix VIII. Aiii. Demand for irrigation water on new land where development is constrained to develop poor land with good land (Region 1 - Great Salt Lake Desert).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Div-erted	Con-sumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
6411.1	1.63	3050.4	3.42	.	1675.8	3.8	1.8
5928.4	2.26	2820.7	4.75	.	1555.8	3.8	1.8
4593.2	2.70	2185.5	5.68	.	1270.9	3.6	1.7
4550.8	3.13	2165.3	6.59	.	1270.9	3.6	1.7
4536.0	3.16	2158.2	6.64	.	1267.4	3.6	1.7
4531.0	3.19	2155.9	6.71	.	1266.2	3.6	1.7
4485.5	3.31	2134.2	6.96	.	1266.2	3.5	1.7
4485.1	3.44	2134.0	7.22	.	1266.1	3.5	1.7
4385.0	3.65	2086.4	7.67	.	1266.1	3.5	1.6
4384.7	3.97	2086.3	8.35	.	1266.0	3.5	1.6
4300.9	4.01	2046.4	8.42	.	1266.0	3.4	1.6
3334.0	4.07	1586.3	8.55	.	1024.4	3.3	1.5
2324.5	4.45	1106.0	9.34	.	759.3	3.1	1.5
1842.0	4.49	876.4	9.44	.	591.9	3.1	1.5
1777.7	5.90	845.8	12.40	.	591.9	3.0	1.4
1721.4	6.20	819.0	13.02	.	591.9	2.9	1.4
1517.4	6.78	722.0	14.25	.	521.7	2.9	1.4
1517.0	7.59	721.8	15.95	.	521.6	2.9	1.4
1516.1	7.84	721.4	16.47	.	521.3	2.9	1.4

Appendix VIII. Bi. Demand for irrigation water on presently irrigated land (Region 2 - Bear River).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
945.5	.84	323.6	2.45	246.0	.	3.8	1.3
932.3	.88	319.1	2.57	241.9	.	3.9	1.3
794.8	1.44	272.1	4.21	202.2	.	3.9	1.3
764.8	1.48	261.8	4.31	202.2	.	3.8	1.3
718.5	1.59	245.9	4.64	192.3	.	3.7	1.3
714.9	2.08	244.7	6.07	192.3	.	3.7	1.3
705.9	2.14	241.6	6.26	192.3	.	3.7	1.3
690.5	2.53	236.3	7.39	188.4	.	3.7	1.3
672.5	3.08	230.2	9.00	188.4	.	3.6	1.2
665.1	3.21	227.7	9.37	186.1	.	3.6	1.2
600.5	3.51	205.6	10.26	167.0	.	3.6	1.2
600.0	3.63	205.4	10.59	167.0	.	3.6	1.2
597.9	3.73	204.6	10.88	167.0	.	3.6	1.2
582.4	4.16	199.4	12.14	167.0	.	3.5	1.2
577.6	4.16	197.7	12.15	167.0	.	3.5	1.2
566.5	4.22	193.9	12.33	161.8	.	3.5	1.2
542.1	5.70	185.5	16.67	161.8	.	3.4	1.1
516.2	8.56	176.7	25.00	161.8	.	3.2	1.1
502.4	8.80	172.0	25.70	161.8	.	3.1	1.1
362.0	8.96	123.9	26.17	120.1	.	3.0	1.0
346.5	10.04	118.6	29.33	120.1	.	2.9	1.0
338.7	10.18	115.9	29.73	120.1	.	2.8	1.0
336.6	11.16	115.2	30.63	120.1	.	2.8	1.0
266.3	11.81	91.1	34.50	88.6	.	3.0	1.0
244.3	13.44	83.6	39.25	88.6	.	2.8	.9
243.8	13.80	83.5	40.31	88.6	.	2.8	.9
159.7	17.52	54.7	51.17	63.6	.	2.5	.9
102.3	17.86	35.0	52.18	37.9	.	2.7	.9
60.2	18.01	20.6	52.61	25.4	.	2.4	.8
2.6	22.81	.9	66.65	1.1	.	2.3	.8
2.1	23.62	.7	68.99	.9	.	2.4	.8

Appendix VIII. Bii. Demand for irrigation water on new land where development is not constrained to develop poor land with good land (Region 2 - Bear River).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
657.9	.10	225.2	.30	.	168.9	3.9	1.3
632.2	.80	216.4	2.32	.	161.3	3.9	1.3
630.8	1.44	215.9	4.20	.	160.9	3.9	1.3
596.8	1.44	204.3	4.21	.	151.1	3.9	1.4
573.4	2.08	196.3	6.07	.	151.1	3.8	1.3
563.4	2.53	192.9	7.39	.	151.1	3.7	1.3
543.8	3.51	186.1	10.26	.	151.1	3.6	1.2
543.3	3.73	186.0	10.88	.	151.1	3.6	1.2
530.7	4.22	181.7	12.33	.	151.1	3.5	1.2
505.9	4.81	173.2	14.06	.	151.1	3.3	1.1
490.3	5.53	167.8	16.16	.	147.2	3.3	1.1
455.3	5.70	155.8	16.67	.	134.2	3.4	1.2
437.5	5.71	149.8	16.69	.	134.2	3.3	1.1
423.6	6.06	145.0	17.72	.	129.2	3.3	1.1
326.9	7.42	111.9	21.69	.	100.5	3.3	1.1
305.8	8.96	104.7	26.17	.	92.9	3.3	1.1
288.8	9.92	98.9	28.97	.	92.9	3.1	1.1
277.7	10.04	95.1	29.33	.	89.6	3.1	1.1
269.2	11.33	92.1	33.11	.	89.6	3.0	1.0
188.4	11.68	64.5	34.13	.	65.6	2.9	1.0
117.2	11.81	40.1	34.50	.	39.2	3.0	1.0
107.2	12.50	36.7	36.52	.	39.2	2.7	.9
85.1	13.44	29.1	39.25	.	29.9	2.8	1.0
84.6	14.34	29.0	41.88	.	29.9	2.8	1.0
79.2	14.51	27.1	42.39	.	28.3	2.8	1.0
43.7	15.75	14.9	46.02	.	13.3	3.3	1.1
2.6	17.49	.9	51.11	.	1.1	2.3	.8
2.1	18.61	.7	54.38	.	.9	2.4	.8
.7	20.62	.2	60.25	.	.3	2.4	.8

Appendix VIII. Biii. Demand for irrigation water on new land where development is constrained to develop poor land with good land (Region 2 - Bear River).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
772.0	1.44	264.3	4.21	.	194.8	4.0	1.4
748.6	1.59	256.2	4.64	.	194.8	3.8	1.3
731.6	2.08	250.4	6.07	.	194.8	3.8	1.3
721.7	2.53	247.0	7.39	.	194.8	3.7	1.3
702.0	3.41	240.3	9.95	.	194.8	3.6	1.2
686.9	3.51	235.1	10.26	.	194.8	3.5	1.2
686.4	3.54	235.0	10.33	.	194.8	3.5	1.2
671.8	3.73	230.0	10.88	.	194.8	3.4	1.2
659.3	4.22	225.7	12.33	.	194.8	3.4	1.2
634.5	5.31	217.2	15.50	.	194.8	3.3	1.1
620.9	5.70	212.5	16.67	.	194.8	3.2	1.1
600.7	6.48	205.6	18.94	.	194.8	3.1	1.1
562.4	6.68	192.5	19.52	.	184.1	3.1	1.0
561.1	6.72	192.1	19.64	.	183.8	3.1	1.0
512.7	6.74	175.5	19.69	.	165.1	3.1	1.1
462.2	6.78	145.9	19.80	.	131.7	3.2	1.1
422.8	7.15	144.7	20.89	.	130.4	3.2	1.1
422.7	7.23	144.7	21.11	.	130.3	3.2	1.1
372.8	7.42	127.6	21.66	.	111.5	3.3	1.1
372.6	7.81	127.5	22.81	.	111.5	3.3	1.1
81.1	8.12	27.8	23.72	.	30.6	2.7	.9
80.9	8.56	27.7	25.00	.	30.5	2.7	.9
77.8	9.02	26.6	26.36	.	30.5	2.6	.9
71.5	9.04	24.5	26.42	.	28.0	2.6	.9

Appendix VIII. Ci. Demand for irrigation water on presently irrigated land (Region 3 - Weber River).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acres Feet	Acres Feet
612.4	1.54	224.6	4.19	150.7	.	4.1	1.5
608.1	1.54	223.0	4.19	150.7	.	4.0	1.5
597.2	1.57	219.0	4.29	150.7	.	4.0	1.5
593.1	1.73	217.5	4.72	150.7	.	3.9	1.4
589.7	1.96	216.3	5.33	150.7	.	3.9	1.4
582.8	2.15	213.7	5.87	150.7	.	3.9	1.4
570.8	2.17	209.3	5.93	150.7	.	3.8	1.4
556.5	2.18	204.1	5.95	146.8	.	3.8	1.4
549.7	2.25	201.6	6.13	144.8	.	3.8	1.4
534.1	2.58	195.9	7.05	140.4	.	3.8	1.4
520.5	2.84	190.9	7.75	140.4	.	3.7	1.4
514.7	2.84	188.7	7.75	140.4	.	3.7	1.3
506.6	3.03	185.8	8.27	140.4	.	3.6	1.3
497.7	3.34	182.5	9.10	140.4	.	3.5	1.3
474.6	3.85	174.0	10.33	140.4	.	3.4	1.2
466.5	4.24	171.1	11.56	140.4	.	3.3	1.2
449.6	5.51	164.9	15.04	133.5	.	3.4	1.2
445.6	6.19	163.4	16.88	133.5	.	3.3	1.2
445.2	7.27	163.2	19.83	133.5	.	3.3	1.2
439.6	7.27	161.2	19.83	133.5	.	3.3	1.2
429.1	8.25	157.4	22.50	133.5	.	3.2	1.2
390.0	9.08	143.0	24.77	133.5	.	2.9	1.1
363.9	9.43	133.4	25.73	124.6	.	2.9	1.1
355.7	9.46	130.4	25.81	121.7	.	2.9	1.1
353.2	9.60	129.5	26.17	120.8	.	2.9	1.1
346.1	9.60	126.9	26.17	120.8	.	2.9	1.1
325.8	9.65	119.5	26.31	120.8	.	2.7	1.0
300.8	9.96	110.3	27.15	112.7	.	2.7	1.0
281.9	10.15	103.4	29.33	106.4	.	2.6	1.0
271.1	10.76	99.4	29.33	106.4	.	2.5	.9
264.1	14.03	96.8	38.26	106.4	.	2.5	.9
243.2	14.43	89.2	39.34	99.1	.	2.5	.9
189.5	15.01	69.5	40.94	80.8	.	2.3	.9
181.3	15.65	66.5	42.67	77.9	.	2.3	.9
136.8	15.91	50.2	43.39	63.5	.	2.2	.8
114.3	16.17	41.9	44.11	38.4	.	3.0	1.1
87.3	18.63	32.0	50.80	29.4	.	3.0	1.1
69.7	19.34	25.6	52.75	23.4	.	3.0	1.1
54.5	20.23	20.0	55.16	18.0	.	3.0	1.1
37.8	20.88	13.8	56.94	12.6	.	3.0	1.1

Appendix VIII. Cii. Demand for irrigation water on new land where development is not constrained to develop poor land with good land (Region 3 - Weber River).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
118.2	1.96	43.3	5.33	.	27.5	4.3	1.6
112.4	2.15	41.2	5.87	.	27.5	4.1	1.5
104.7	2.58	38.4	7.05	.	27.5	3.8	1.4
104.5	2.84	38.3	7.75	.	27.5	3.8	1.4
104.2	3.03	38.2	8.27	.	27.5	3.8	1.4
100.6	3.34	36.9	9.10	.	27.5	3.7	1.3
98.3	4.58	36.1	12.49	.	27.5	3.6	1.3
91.9	4.72	33.7	12.88	.	25.7	3.6	1.3
89.4	5.91	32.8	16.12	.	25.0	3.6	1.3
73.0	6.10	26.8	16.62	.	20.4	3.6	1.3
67.7	6.50	24.8	17.71	.	18.9	3.6	1.3
51.2	6.67	18.8	18.19	.	14.4	3.6	1.3
31.9	6.89	11.7	18.79	.	9.0	3.5	1.3
31.2	9.60	11.4	26.17	.	8.7	3.6	1.3
28.4	9.60	10.4	26.17	.	8.7	3.3	1.2
26.4	9.63	9.7	26.27	.	8.7	3.0	1.1
24.9	10.03	9.1	27.36	.	8.2	3.0	1.1
23.8	10.76	8.7	29.33	.	7.8	3.0	1.1
23.6	10.76	8.7	29.33	.	7.8	3.0	1.1
23.3	11.26	8.5	30.70	.	7.8	3.0	1.1
20.4	11.72	7.5	31.96	.	6.8	3.0	1.1
18.4	12.64	6.7	34.47	.	6.1	3.0	1.1
12.8	13.07	4.7	35.65	.	4.3	3.0	1.1
2.0	14.24	.7	38.84	.	.7	2.9	1.1
1.7	15.87	.6	43.27	.	.6	2.9	1.1
.6	16.48	.2	44.93	.	.2	2.8	1.0

Appendix VIII. Ciii. Demand for irrigation water on new land where development is constrained to develop poor land with good land (Region 3 - Weber River).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
217.8	1.57	79.9	4.19	.	49.9	4.4	1.6
210.8	1.73	77.3	4.72	.	49.9	4.2	1.5
198.7	1.94	72.9	5.29	.	49.9	4.0	1.5
181.1	1.96	66.4	5.33	.	45.5	4.0	1.5
175.4	2.00	64.3	5.45	.	45.5	3.9	1.4
173.2	2.08	63.5	5.66	.	44.6	3.9	1.4
172.1	2.15	63.1	5.87	.	44.3	3.9	1.4
165.6	2.58	60.7	7.05	.	44.3	3.7	1.4
165.5	2.70	60.7	7.37	.	44.3	3.7	1.4
165.0	2.84	60.5	7.75	.	44.2	3.7	1.4
164.7	3.03	60.4	8.27	.	44.2	3.7	1.4
161.2	3.18	59.1	8.68	.	44.2	3.6	1.3
157.6	3.21	57.8	8.75	.	43.3	3.6	1.3
130.0	3.34	47.7	9.10	.	35.8	3.6	1.3
128.8	3.36	47.2	9.17	.	35.8	3.6	1.3
114.9	3.37	42.1	9.18	.	32.0	3.6	1.3
109.3	3.61	40.1	9.83	.	30.4	3.6	1.3
65.3	3.79	24.0	10.33	.	18.4	3.6	1.3
60.2	3.89	22.1	10.60	.	18.4	3.3	1.2
59.9	4.23	22.0	11.55	.	18.3	3.3	1.2
59.4	4.80	21.8	13.08	.	18.2	3.3	1.2
50.3	5.15	18.4	14.04	.	15.3	3.3	1.2
46.7	5.40	17.1	14.72	.	14.2	3.3	1.2

Appendix VIII. Di. Demand for irrigation water on presently irrigated land (Region 4 - Jordan River).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
976.6	.90	380.0	2.31	212.5	.	4.6	1.8
966.0	1.04	375.9	2.67	212.5	.	4.5	1.8
963.4	1.05	374.8	2.70	212.5	.	4.5	1.8
956.2	1.27	372.0	3.26	212.5	.	4.5	1.8
940.7	1.28	366.0	3.28	212.5	.	4.4	1.7
937.0	1.58	364.6	4.06	211.3	.	4.4	1.7
919.6	1.58	357.8	4.06	211.3	.	4.4	1.7
902.1	1.73	351.0	4.44	211.3	.	4.3	1.7
858.1	1.88	333.9	4.83	200.3	.	4.3	1.7
737.4	2.32	286.9	5.96	174.0	.	4.2	1.6
730.4	2.39	284.2	6.15	174.0	.	4.2	1.6
724.7	2.72	282.0	6.98	174.0	.	4.2	1.6
719.0	2.83	279.8	7.27	174.0	.	4.1	1.6
690.4	3.20	268.6	8.21	174.0	.	4.0	1.5
685.7	3.50	266.8	9.00	174.0	.	3.9	1.5
678.1	3.62	263.8	9.30	174.0	.	3.9	1.5
670.9	3.63	261.0	9.33	174.0	.	3.9	1.5
664.7	4.12	258.6	10.58	174.0	.	3.8	1.5
655.8	4.20	255.2	10.80	174.0	.	3.8	1.5
629.1	5.30	244.8	13.62	174.0	.	3.6	1.4
605.8	5.57	235.7	14.31	164.8	.	3.7	1.4
589.8	6.74	229.5	17.33	159.4	.	3.7	1.4
578.5	7.72	225.1	19.83	159.4	.	3.6	1.4
551.2	7.83	214.5	20.11	159.4	.	3.5	1.3
540.5	8.02	210.3	20.61	156.2	.	3.5	1.3
447.4	8.30	174.1	21.34	126.9	.	3.5	1.4
387.5	8.49	150.8	21.81	109.8	.	3.5	1.4
330.9	9.21	128.8	23.67	92.7	.	3.6	1.4
325.8	9.27	126.7	23.83	92.7	.	3.5	1.4
306.8	10.18	119.4	26.17	86.3	.	3.6	1.4
281.3	10.44	109.5	26.83	86.3	.	3.3	1.3
277.1	11.06	107.8	28.43	86.3	.	3.2	1.2
256.2	11.41	99.7	29.33	86.3	.	3.0	1.2
250.3	12.53	97.4	32.20	86.3	.	2.9	1.1
243.6	12.95	94.8	33.29	84.3	.	2.9	1.1
157.5	13.54	61.3	34.79	57.2	.	2.8	1.1
137.2	13.60	53.4	34.95	40.9	.	3.4	1.3
111.9	13.76	43.6	35.35	33.7	.	3.3	1.3
58.3	16.46	22.7	42.29	17.5	.	3.3	1.3
54.3	16.83	21.1	43.26	16.3	.	3.3	1.3
34.0	17.84	13.2	45.84	9.9	.	3.4	1.3
11.9	17.91	4.6	46.03	3.6	.	3.3	1.3

Appendix VIII. Dii. Demand for irrigation water on new land where development is not constrained to develop poor land with good land (Region 4 - Jordan River).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Div-erted	Con-sumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
1007.9	.37	392.2	.94	.	223.3	4.5	1.8
992.9	1.27	386.4	3.26	.	217.4	4.6	1.8
970.4	1.82	377.6	4.67	.	217.4	4.5	1.7
968.3	2.32	376.8	5.96	.	217.0	4.5	1.7
950.0	2.39	369.7	6.15	.	217.0	4.4	1.7
940.0	2.48	365.8	6.38	.	217.0	4.3	1.7
871.3	2.72	339.0	6.98	.	203.9	4.3	1.7
858.5	2.83	334.0	7.27	.	203.9	4.2	1.6
828.7	3.61	322.4	9.28	.	203.9	4.1	1.6
808.2	3.63	314.5	9.33	.	198.7	4.1	1.6
801.2	3.76	311.7	9.66	.	198.7	4.0	1.6
783.7	4.12	304.9	10.58	.	194.1	4.0	1.6
763.4	4.15	297.0	10.67	.	194.1	3.9	1.5
758.5	4.20	295.1	10.80	.	192.9	3.9	1.5
725.2	4.62	282.2	11.88	.	192.9	3.8	1.5
723.7	5.02	281.6	12.89	.	192.4	3.8	1.5
622.9	5.33	242.4	13.69	.	165.8	3.8	1.5
529.3	5.47	206.0	14.07	.	142.7	3.7	1.4
463.4	5.80	180.3	14.91	.	125.6	3.7	1.4
421.9	7.86	164.1	20.20	.	111.6	3.8	1.5
398.5	8.19	155.1	21.06	.	102.4	3.9	1.5
379.2	8.53	147.6	21.92	.	97.5	3.9	1.5
359.9	9.21	140.0	23.67	.	92.4	3.9	1.5
349.6	9.30	136.0	23.90	.	92.4	3.8	1.5
348.9	9.79	135.7	25.15	.	92.2	3.8	1.5
238.2	10.18	92.7	26.17	.	63.0	3.8	1.5
227.4	10.44	88.5	26.83	.	63.0	3.6	1.4
220.1	10.64	85.6	27.36	.	63.0	3.5	1.4
154.6	10.66	60.1	27.40	.	43.2	3.6	1.4
89.0	11.41	34.6	29.33	.	24.5	3.6	1.4
82.3	12.29	32.0	31.60	.	24.5	3.4	1.3
74.7	12.47	29.1	32.04	.	22.2	3.4	1.3
71.2	13.88	27.7	35.67	.	21.1	3.4	1.3
69.4	13.97	27.0	35.90	.	20.6	3.4	1.3
51.0	15.16	19.8	38.97	.	14.8	3.4	1.3
36.1	15.24	14.0	39.16	.	10.3	3.5	1.4

Appendix VIII. Diii. Demand for irrigation water on new land where development is constrained to develop poor land with good land (Region 4 Jordan River).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
1367.2	.64	532.0	1.66	.	296.4	4.6	1.8
1358.8	.81	528.7	2.08	.	294.8	4.6	1.8
1358.6	.90	528.6	2.31	.	294.7	4.6	1.8
1341.7	1.04	522.1	2.67	.	294.7	4.6	1.8
1284.9	1.16	499.9	2.98	.	294.7	4.4	1.7
1283.9	1.27	499.5	3.26	.	294.5	4.4	1.7
1261.3	1.38	490.8	3.55	.	294.5	4.3	1.7
1041.1	2.32	405.1	5.96	.	241.8	4.3	1.7
1022.9	2.34	398.0	6.02	.	241.8	4.2	1.6
1001.6	2.39	389.7	6.15	.	241.8	4.1	1.6
991.6	2.83	385.8	7.27	.	241.8	4.1	1.6
961.8	3.05	374.2	7.83	.	241.8	4.0	1.5
949.4	3.63	369.4	9.33	.	241.8	3.9	1.5
942.4	4.02	366.7	10.33	.	241.8	3.9	1.5
922.1	4.20	358.8	10.80	.	241.8	3.8	1.5
888.8	4.93	345.8	12.68	.	241.8	3.7	1.4
850.6	4.94	331.0	12.70	.	226.7	3.8	1.5
803.1	4.97	312.5	12.77	.	213.7	3.8	1.5
747.0	5.21	290.6	13.38	.	199.0	3.8	1.5
746.2	5.23	290.4	13.45	.	198.8	3.8	1.5
746.1	5.42	290.3	13.92	.	198.7	3.8	1.5
736.5	5.70	286.6	14.64	.	196.2	3.8	1.5
735.4	5.76	286.2	14.80	.	195.9	3.8	1.5
732.8	5.80	285.1	14.91	.	195.3	3.8	1.5
732.3	5.95	284.9	15.29	.	195.1	3.8	1.5
732.2	6.24	284.9	16.04	.	195.1	3.8	1.5
466.2	6.30	181.4	16.19	.	122.5	3.8	1.5
465.7	6.34	181.2	16.30	.	122.3	3.8	1.5
450.6	6.56	175.3	16.85	.	118.2	3.8	1.5
450.2	6.68	175.2	17.16	.	118.1	3.8	1.5
443.5	6.74	172.6	17.33	.	116.3	3.8	1.5
430.9	6.83	167.7	17.55	.	116.3	3.7	1.4
243.4	7.00	94.7	17.99	.	65.8	3.7	1.4

Appendix VIII. Ei. Demand for irrigation water on presently irrigated land (Region 5 - Sevier River).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
1670.4	1.09	542.9	3.37	285.5	.	5.9	1.9
1663.3	1.22	540.6	3.74	285.5	.	5.8	1.9
1655.1	1.28	537.9	3.94	284.2	.	5.8	1.9
1650.9	1.28	536.6	3.94	284.2	.	5.8	1.9
1646.2	1.31	535.0	4.02	284.2	.	5.8	1.9
1638.0	1.51	532.3	4.65	282.8	.	5.8	1.9
1588.3	1.66	516.2	5.12	282.8	.	5.6	1.8
1578.3	1.77	512.9	5.46	280.9	.	5.6	1.8
1574.4	1.81	511.7	5.56	280.2	.	5.6	1.8
1538.4	1.81	500.0	5.58	273.7	.	5.6	1.8
1538.1	2.73	499.9	8.39	273.7	.	5.6	1.8
1534.7	2.86	498.8	8.79	273.7	.	5.6	1.8
1530.9	3.13	497.5	9.62	273.7	.	5.6	1.8
1518.5	3.19	493.5	9.81	273.7	.	5.5	1.8
1421.5	3.20	462.0	9.84	273.7	.	5.2	1.7
1406.1	3.22	457.0	9.92	273.7	.	5.1	1.7
1378.5	3.26	448.0	10.04	273.7	.	5.0	1.6
1373.5	4.12	446.4	12.69	272.2	.	5.0	1.6
1357.8	4.54	441.3	13.98	268.7	.	5.1	1.6
1297.3	4.55	421.6	13.99	256.8	.	5.1	1.6
1238.3	5.25	402.4	16.16	245.6	.	5.0	1.6
1095.0	5.53	355.9	17.00	218.8	.	5.0	1.6
1081.5	5.55	351.5	17.08	218.8	.	4.9	1.6
985.1	6.52	320.2	20.06	196.8	.	5.0	1.6
967.7	6.72	314.5	20.68	192.9	.	5.0	1.6
939.4	6.92	305.3	21.28	192.9	.	4.9	1.6
907.3	7.32	294.9	22.52	186.8	.	4.9	1.6
430.7	7.45	140.0	22.91	93.0	.	4.6	1.5
395.2	8.00	128.4	24.60	82.5	.	4.8	1.6
371.1	8.07	120.6	24.84	82.5	.	4.5	1.5
179.0	8.80	58.2	27.09	41.3	.	4.3	1.4
6.4	10.34	2.1	31.81	1.9	.	3.4	1.1

Appendix VIII. Eii. Demand for irrigation water on new land where development is not constrained to develop poor land with good land (Region 5 - Sevier River).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
3116.0	.16	1012.7	.49	.	543.7	5.7	1.9
3069.6	.86	997.6	2.64	.	530.0	5.8	1.9
3063.5	1.37	995.6	4.22	.	529.1	5.8	1.9
2862.5	1.54	930.3	4.75	.	499.6	5.7	1.9
2856.0	2.19	928.2	6.73	.	498.4	5.7	1.9
2660.3	2.58	864.6	7.94	.	462.5	5.8	1.9
2653.5	2.64	862.4	8.13	.	461.5	5.7	1.9
2629.0	2.80	854.4	8.62	.	457.5	5.7	1.9
1478.7	2.80	480.6	8.62	.	269.4	5.5	1.8
1468.2	2.86	477.2	8.79	.	267.4	5.5	1.8
1430.0	2.88	464.7	8.85	.	267.4	5.3	1.7
1427.8	3.09	464.0	9.52	.	267.0	5.3	1.7
1215.9	3.19	395.2	9.81	.	235.9	5.2	1.7
1090.4	3.20	354.4	9.84	.	235.9	4.6	1.5
1088.4	3.22	353.7	9.92	.	235.9	4.6	1.5
1085.6	3.53	352.8	10.87	.	235.9	4.6	1.5
1065.3	3.70	346.2	11.40	.	232.1	4.6	1.5
1051.3	3.88	341.7	11.94	.	229.3	4.6	1.5
1046.0	4.66	339.9	14.35	.	228.1	4.6	1.5
875.9	4.73	284.7	14.55	.	190.1	4.6	1.5
742.2	5.34	241.2	16.44	.	150.6	4.9	1.6
724.3	5.50	235.4	16.91	.	147.2	4.9	1.6
711.6	5.68	231.3	17.49	.	144.7	4.9	1.6
108.0	5.69	35.1	17.52	.	25.9	4.2	1.4
104.3	6.35	33.9	19.53	.	25.2	4.1	1.3
70.1	7.04	22.8	21.67	.	18.8	3.7	1.2
50.1	7.88	16.3	24.26	.	14.8	3.4	1.1

Appendix VIII. Eiii. Demand for irrigation water on new land where development is constrained to develop poor land with good land (Region 5 - Sevier River).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
3630.9	1.77	1180.0	5.44	.	615.9	5.9	1.9
3561.2	1.81	1157.4	5.58	.	604.7	5.9	1.9
3289.5	1.82	1069.1	5.61	.	604.7	5.4	1.8
3289.1	1.86	1068.9	5.72	.	604.6	5.4	1.8
3288.9	1.93	1068.9	5.94	.	604.5	5.4	1.8
230.1	4.49	74.8	13.83	.	68.0	3.4	1.1

Appendix VIII. Fi. Demand for irrigation water on presently irrigated land (Region 6 - Cedar-Beaver).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
299.2	1.25	136.2	2.74	79.3	.	3.8	1.7
298.7	2.06	136.0	4.53	79.3	.	3.8	1.7
294.5	2.12	134.1	4.65	78.3	.	3.8	1.7
293.0	2.21	133.4	4.86	78.3	.	3.7	1.7
271.1	2.58	123.4	5.66	72.7	.	3.7	1.7
267.2	2.67	121.7	5.86	71.5	.	3.7	1.7
266.6	4.78	121.4	10.49	71.5	.	3.7	1.7
266.5	5.41	121.3	11.89	71.5	.	3.7	1.7
261.9	5.75	119.2	12.63	71.5	.	3.7	1.7
236.2	6.17	107.6	13.56	65.4	.	3.6	1.6
231.6	6.32	105.5	13.87	65.4	.	3.5	1.6
214.4	7.73	97.6	16.97	65.4	.	3.3	1.5
187.5	8.36	85.4	18.36	57.1	.	3.3	1.5
163.5	8.79	74.4	19.31	49.6	.	3.3	1.5
159.1	9.21	72.5	20.23	49.6	.	3.2	1.5
129.7	12.36	59.1	27.15	41.5	.	3.1	1.4
28.0	12.41	12.7	27.25	10.1	.	2.8	1.3
20.1	13.15	9.2	28.89	10.1	.	2.0	.9
1.0	14.30	.4	31.40	.3	.	3.2	1.5
.8	16.21	.4	35.60	.3	.	2.8	1.3

Appendix VIII. Fii. Demand for irrigation water on new land where development is not constrained to develop poor land with good land (Region 6 Cedar-Beaver).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
1928.4	2.73	878.0	6.00	.	494.3	3.9	1.8
1844.5	3.33	839.8	7.31	.	494.3	3.7	1.7
1524.5	3.75	694.1	8.23	.	418.2	3.6	1.7
1349.5	4.70	614.4	10.32	.	377.6	3.6	1.6
881.2	4.78	401.2	10.49	.	254.0	3.5	1.6
881.1	5.17	401.2	11.36	.	254.0	3.5	1.6
792.1	6.17	360.7	13.56	.	226.2	3.5	1.6
777.0	6.32	353.8	13.87	.	226.2	3.4	1.6
687.4	6.65	313.0	14.60	.	226.2	3.0	1.4
590.7	8.79	269.0	19.31	.	199.6	3.0	1.3
586.4	9.49	267.0	20.84	.	199.6	2.9	1.3
58.0	9.56	26.4	21.00	.	36.5	1.6	.7
31.3	13.45	14.3	29.54	.	26.8	1.2	.5
30.7	14.74	14.0	32.37	.	26.6	1.2	.5
22.5	22.73	10.3	49.93	.	26.6	.8	.4

Appendix VIII. Fiii. Demand for irrigation water on new land where development is constrained to develop poor land with good land (Region 6 Cedar-Beaver).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
3295.8	1.47	1500.6	3.23	.	835.8	3.9	1.8
2319.9	2.21	1056.3	4.85	.	603.7	3.8	1.7
2048.6	2.34	932.7	5.14	.	518.9	3.9	1.8
2009.3	2.65	914.8	5.82	.	518.9	3.9	1.8
1546.0	3.81	703.9	8.36	.	403.9	3.8	1.7
1472.5	4.78	670.4	10.49	.	403.9	3.6	1.7
1472.4	4.87	670.4	10.70	.	403.9	3.6	1.7

Appendix VIII. Gi. Demand for irrigation water on presently irrigated land (Region 7 - Uintah Basin).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
1104.8	.24	410.1	.64	217.8	.	5.1	1.9
1088.5	.29	404.0	.79	213.9	.	5.1	1.9
1082.0	.82	401.7	2.21	212.2	.	5.1	1.9
999.1	1.18	370.9	3.17	196.0	.	5.1	1.9
947.2	1.73	351.6	4.65	185.3	.	5.1	1.9
780.9	1.96	289.9	5.29	154.2	.	5.1	1.9
703.6	2.47	261.2	6.67	139.1	.	5.1	1.9
703.6	3.20	261.1	8.63	139.1	.	5.1	1.9
687.4	3.68	255.2	9.92	139.1	.	4.9	1.8
670.7	4.13	249.0	11.12	135.1	.	5.0	1.8
424.9	4.22	157.7	11.36	87.7	.	4.8	1.8
405.9	5.11	150.7	13.76	87.7	.	4.6	1.7
268.4	5.59	99.6	15.06	56.1	.	4.8	1.8
251.3	6.82	93.3	18.36	56.1	.	4.5	1.7
117.0	7.54	43.4	20.30	26.9	.	4.4	1.6
88.2	8.40	32.7	22.64	26.9	.	3.3	1.2

Appendix VIII. Gii. Demand for irrigation water on new land where development is not constrained to develop poor land with good land (Region 7 - Uintah Basin).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
1349.8	.11	501.1	.29	.	268.2	5.0	1.9
1168.1	1.73	433.6	4.65	.	232.7	5.0	1.9
1141.3	2.54	423.6	6.86	.	226.3	5.0	1.9
866.4	3.20	321.6	8.63	.	173.3	5.0	1.9
828.7	3.34	307.6	9.00	.	173.3	4.8	1.8
462.4	5.27	171.6	14.19	.	99.3	4.7	1.7
273.6	6.51	101.6	17.54	.	62.9	4.4	1.6

Appendix VIII. Giii. Demand for irrigation water on new land where development is constrained to develop poor land with good land (Region 7 - Uintah Basin).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
1561.3	2.40	579.6	6.46	.	306.3	5.1	1.9
859.3	3.20	319.0	8.63	.	172.4	5.0	1.9
821.5	3.68	304.9	9.92	.	172.4	4.8	1.8

Appendix VIII. Hi. Demand for irrigation water on presently irrigated land (Region 8 - West Colorado).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
434.6	1.20	163.0	3.20	80.5	.	5.4	.
423.4	1.28	158.8	3.41	80.5	.	5.3	.
415.7	1.65	155.9	4.40	79.1	.	5.3	.
385.0	1.74	144.4	4.65	72.8	.	5.3	.
330.6	2.12	124.4	5.65	72.8	.	4.5	.
328.9	2.27	123.3	6.07	72.4	.	4.5	.
326.8	2.37	122.6	6.31	71.8	.	4.6	.
325.8	2.66	122.2	7.10	71.8	.	4.5	.
325.7	3.19	122.1	8.50	71.8	.	4.5	.
303.4	3.62	113.8	9.66	71.8	.	4.2	.
303.2	3.90	113.7	10.40	71.8	.	4.2	.
269.7	4.13	101.1	11.00	71.8	.	3.8	.
263.0	4.36	98.6	11.64	71.8	.	3.7	.
261.9	4.55	98.2	12.14	71.6	.	3.7	.
239.9	4.80	90.0	12.79	71.6	.	3.4	.
234.3	5.11	87.8	13.61	71.6	.	3.3	.
234.0	5.32	87.7	14.20	71.6	.	3.3	.
233.5	5.45	87.5	14.54	71.6	.	3.3	.
192.1	5.52	72.0	14.72	62.6	.	3.1	.
179.9	5.57	67.5	14.86	59.6	.	3.0	.
179.5	6.58	67.3	17.56	59.6	.	3.0	.
179.1	6.59	67.2	17.57	59.6	.	3.0	.
179.0	6.59	67.1	17.57	59.6	.	3.0	.
178.5	7.16	66.9	19.09	59.6	.	3.0	.
178.0	7.55	66.8	20.13	59.5	.	3.0	.
137.4	7.61	51.5	20.29	46.1	.	3.0	.
137.3	8.16	51.5	21.75	46.1	.	3.0	.
135.2	8.63	50.7	23.00	45.5	.	3.0	.
130.4	8.72	48.9	23.24	45.5	.	2.9	.
100.3	8.92	37.6	23.79	37.9	.	2.6	.
64.5	10.00	24.2	26.66	21.4	.	3.0	.
64.0	10.96	24.0	29.22	21.3	.	3.0	.
3.0	12.94	1.1	34.51	1.2	.	2.5	.
2.4	14.51	.9	38.69	.9	.	2.7	.
.9	17.59	.3	46.89	.4	.	2.2	.

Appendix VIII. Hii. Demand for irrigation water on new land where development is not constrained to develop poor land with good land (Region 8 - West Colorado).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
1509.7	1.76	566.1	4.70	.	304.3	5.0	.
1476.5	2.37	553.7	6.33	.	304.3	4.9	.
1462.6	2.52	548.5	6.71	.	304.3	4.8	.
1450.5	2.52	544.0	6.71	.	304.3	4.8	.
1437.4	2.66	539.0	7.10	.	304.3	4.7	.
1433.1	2.67	537.4	7.12	.	304.3	4.7	.
1419.7	3.19	532.4	8.50	.	304.3	4.7	.
1360.9	3.21	510.3	8.56	.	304.3	4.5	.
1208.9	3.58	453.3	9.54	.	267.0	4.5	.
812.4	3.68	304.7	9.80	.	199.0	4.1	.
510.3	3.90	191.4	10.40	.	140.4	3.6	.
432.1	4.55	162.0	12.14	.	140.4	3.1	.
409.6	5.02	153.6	13.39	.	140.4	2.9	.
305.7	5.11	114.6	13.61	.	100.6	3.0	.
305.1	5.32	114.4	14.20	.	100.6	3.0	.
304.1	5.56	114.0	14.81	.	100.6	3.0	.

Appendix VIII. Hiii. Demand for irrigation water on new land where development is constrained to develop poor land with good land (Region 8 - West Colorado).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
1177.2	2.66	441.4	7.10	.	238.6	4.9	.
1172.9	2.95	439.8	7.86	.	238.6	4.9	.
1028.3	3.19	385.6	8.50	.	215.4	4.8	.
969.4	3.51	363.5	9.36	.	215.4	4.5	.
883.8	3.73	331.4	9.95	.	194.4	4.5	.
764.4	3.90	286.6	10.40	.	172.0	4.4	.
686.2	4.20	257.3	11.20	.	172.0	4.0	.
664.2	4.55	249.1	12.14	.	172.0	3.9	.
641.6	4.80	240.6	12.79	.	172.0	3.7	.
626.6	4.85	235.0	12.92	.	172.0	3.6	.
519.5	5.11	194.8	13.61	.	136.7	3.8	.
519.0	5.14	194.6	13.72	.	136.7	3.8	.
482.3	5.32	180.8	14.20	.	119.8	4.0	.
481.2	5.57	180.4	14.86	.	119.8	4.0	.
465.1	5.72	174.4	15.26	.	119.8	3.9	.
327.5	6.13	122.8	16.35	.	94.2	3.5	.
295.7	6.59	110.9	17.57	.	86.4	3.4	.
294.4	6.94	110.4	18.50	.	86.4	3.4	.
294.3	7.11	110.4	18.97	.	86.4	3.4	.
200.6	7.61	75.2	20.29	.	66.0	3.0	.
196.9	8.55	73.8	22.80	.	66.0	3.0	.
54.6	8.68	20.5	23.15	.	19.1	2.9	.
31.5	9.58	11.8	25.54	.	14.1	2.2	.
5.2	12.50	2.0	33.33	.	2.0	2.6	.
2.2	14.78	.8	39.40	.	1.0	2.2	.

Appendix VIII. ii. Demand for irrigation water on presently irrigated land (Region 9 - South and East Colorado).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
207.7	.42	41.5	2.12	18.5	.	11.2	2.2
206.5	.49	41.3	2.45	18.5	.	11.2	2.2
200.3	.54	40.1	2.70	18.0	.	11.1	2.2
196.3	.55	39.3	2.74	18.0	.	10.9	2.2
191.6	.86	38.3	4.32	17.6	.	10.9	2.2
187.7	1.06	37.5	5.29	17.6	.	10.7	2.1
171.7	1.19	34.3	5.95	15.8	.	10.9	2.2
170.0	1.31	34.0	6.55	15.8	.	10.8	2.2
167.8	1.36	33.6	6.80	15.8	.	10.6	2.1
165.4	1.66	33.1	8.31	15.8	.	10.5	2.1
161.2	1.73	32.2	8.65	15.8	.	10.2	2.0
123.7	1.95	24.7	9.73	12.6	.	9.8	2.0
121.1	2.09	24.2	10.44	12.6	.	9.6	1.9
99.1	2.29	19.8	11.46	10.5	.	9.4	1.9
97.7	2.61	19.5	13.06	10.5	.	9.3	1.9
89.7	2.78	17.9	13.88	9.7	.	9.2	1.8
24.1	3.38	4.8	16.91	2.3	.	10.5	2.1
10.5	4.49	2.1	22.43	1.0	.	10.5	2.1
8.9	4.77	1.8	23.87	1.0	.	8.9	1.8

Appendix VIII. iii. Demand for irrigation water on new land where development is not constrained to develop poor land with good land (Region 9 - South and East Colorado).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
5167.6	.81	1033.5	4.06	.	533.3	9.7	1.9
4861.9	.86	972.4	4.32	.	507.3	9.6	1.9
4816.2	1.05	963.2	5.24	.	507.3	9.5	1.9
4786.2	1.19	957.2	5.95	.	507.3	9.4	1.9
4776.7	1.31	955.3	6.55	.	507.3	9.4	1.9
4765.3	1.35	953.1	6.75	.	507.3	9.4	1.9
4611.9	1.36	922.4	6.80	.	489.9	9.4	1.9
4560.9	1.46	912.2	7.29	.	489.9	9.3	1.9
4558.3	1.66	911.7	8.31	.	489.6	9.3	1.9
4509.5	1.68	901.9	8.40	.	489.6	9.2	1.8
3699.1	1.73	739.8	8.66	.	417.6	8.9	1.8
3698.6	1.82	739.7	9.11	.	417.6	8.9	1.8

Appendix VIII. Iii. Demand for irrigation water on new land where development is constrained to develop poor land with good land (Region 9 - South and East Colorado).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
1338.6	1.94	267.7	9.36	.	137.4	9.7	1.9
1282.4	1.95	256.5	9.73	.	132.6	9.7	1.9
1228.0	2.69	245.6	13.43	.	132.6	9.3	1.9
942.4	2.81	188.5	14.03	.	105.4	8.9	1.8
907.0	3.28	181.4	16.39	.	101.4	8.9	1.8
56.7	3.60	11.3	18.00	.	5.4	10.5	2.1
56.7	4.15	11.3	20.74	.	5.4	10.5	2.1

Appendix VIII. Ji. Demand for irrigation water on presently irrigated land (Region 10 - Lower Colorado).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
131.2	.70	65.6	1.40	20.9	.	6.3	3.1
128.0	.94	64.0	1.87	20.4	.	6.3	3.1
127.4	1.33	63.7	3.24	20.4	.	6.2	3.1
126.9	3.44	63.5	6.87	20.3	.	6.3	3.1
126.1	3.82	63.0	7.64	20.3	.	6.2	3.1
120.7	4.51	60.4	9.02	20.3	.	5.9	3.0
119.9	5.15	60.0	10.31	20.3	.	5.9	3.0
116.6	5.36	58.3	10.71	19.4	.	6.0	3.0
115.3	5.72	57.7	11.44	19.4	.	5.9	3.0
93.1	5.82	46.5	11.63	15.1	.	6.2	3.1
79.5	7.42	39.7	14.83	15.1	.	5.3	2.6
75.5	9.40	37.7	18.79	15.1	.	5.0	2.5
19.0	9.60	9.5	19.19	4.2	.	4.5	2.3
16.6	12.91	8.3	25.81	3.2	.	5.2	2.6

Appendix VIII. Jii. Demand for irrigation water on new land where development is not constrained to develop poor land with good land (Region 10 - Lower Colorado).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
807.6	.08	403.8	.16	.	148.8	5.4	2.7
807.6	.94	403.8	1.87	.	148.8	5.4	2.7
807.6	3.23	403.8	6.46	.	148.8	5.4	2.7
537.8	3.44	268.9	6.87	.	89.4	6.0	3.0
521.1	3.54	260.5	7.07	.	89.4	5.8	2.9
514.6	3.82	257.3	7.64	.	88.4	5.8	2.9
461.0	4.14	230.5	8.27	.	88.4	5.2	2.6
238.2	5.36	119.1	10.71	.	45.4	5.2	2.6
213.3	5.82	106.6	11.63	.	45.4	4.7	2.3
190.8	6.58	95.4	13.15	.	45.4	4.2	2.1
143.4	7.32	71.7	14.64	.	25.8	5.6	2.8
141.3	7.42	70.7	14.83	.	25.4	5.6	2.8
131.6	7.99	65.8	15.98	.	25.4	5.2	2.6
40.4	11.06	20.2	22.12	.	7.8	5.2	2.6
39.4	11.73	19.7	23.46	.	7.6	5.2	2.6

Appendix VIII. Jiii. Demand for irrigation water on new land where development is constrained to develop poor land with good land (Region 10 - Lower Colorado).

Water Diverted		Water Consumed		Acres Irrigated		Acre Feet Per Acre	
Amount	Price	Amount	Price	Old Land	New Land	Diverted	Consumed
Thousand Acre-Feet	Dollars	Thousand Acre-Feet	Dollars	Thousand Acres	Thousand Acres	Acre Feet	Acre Feet
1318.6	.92	659.3	1.84	.	244.1	5.4	2.7
1266.8	2.09	633.4	4.17	.	244.1	5.2	2.6
663.6	2.29	331.8	4.58	.	111.3	6.0	3.0
640.9	2.93	320.5	5.87	.	111.3	5.8	2.9
627.2	3.16	313.6	6.32	.	108.9	5.8	2.9
627.0	3.26	313.5	6.51	.	108.8	5.8	2.9
626.6	3.49	313.3	6.99	.	108.8	5.8	2.9
624.5	3.54	312.3	7.07	.	108.4	5.8	2.9