1246 STATE OF COLORADO
DEPARTMENT OF LAW

# AGRICULTURAL ENGINEERING STUDY
# SOUTHERN UTE & UTE MOUNTAIN
# UTE INDIAN RESERVATIONS

## PIEDRA WATERSHED

## FINAL REPORT

## DESIGN & COST ESTIMATE FOR
## OFF-FARM IRRIGATION FACILITIES &
## PIA DETERMINATION

JUNE 1987

BK-C22-100-04/05

8064.100

Boyle Engineering Corporation
consulting engineers / architects
Suite 176
1300 East Shaw Avenue
Fresno, California 93710
209 / 222-8436

1247



TABLE OF CONTENTS

FINAL REPORT
PIEDRA WATERSHED

## LIST OF TABLES



## LIST OF FIGURES

FINAL REPORT

PIEDRA WATERSHED

## D.1 GENERAL

The purpose of this task report is to present the methodology for determining practicably irrigable acreage (PIA) for the Piedra Watershed. The test for PIA requires that the revenues exceed the cost. The land under consideration when cropped and irrigated must return sufficient net positive income to pay for the costs of providing irrigation water to the farm headgate. In order to determine PIA it is necessary to conceptually design an irrigation transmission system to deliver water to the farm headgate for each arable parcel. The annualized cost of the off-farm irrigation water transmission system is compared to the net positive income (payment capacity) of the parcel.

Arable lands were identified by Stoneman and Landers. Potential crops, irrigation water requirements, on-farm irrigation systems cost, and other related agronomic information were prepared by Boyle and presented in Task A and B reports. Economic methodology and net agricultural returns were prepared by Western Research Corporation.

This preliminary PIA analysis compares the preliminary net agricultural return with the cost of water delivery from the primary water source to the parcel headgate. For this preliminary analysis, the highest net agricultural return for each climatic zone is used.

Off-farm irrigation transmission facilities were conceptually designed for those parcels with preliminary payment capacities greater than the off-farm water pumping costs. The pumping cost was re-evaluated, added to the facilities cost, and compared to the preliminary payment capacity.

To complete the PIA analysis, the cropping pattern and payment capacities were reviewed by the economist taking into account the practicality of the cropping pattern for the particular parcel and any agronomic costs that might be particular to the parcel. Several iterations of this process between the economist and the engineer were sometimes necessary in order to develop the most economical parcel and facilities layout. Those parcels that still exhibited positive residual payment capacity after these further analyses were then determined to be practicably irrigable.

## D.2 SELECTION OF PARCELS FOR OFF-FARM DESIGN

Parcels to be considered for PIA analysis were identified in the Task B Report along with on-farm irrigation costs. The Task B report identified irrigation costs for handmove sprinkler, sideroll sprinkler, gravity (furrow or basin), center pivot, and center pivot with sprinkler in the corners. Computer tabulation compared on-farm irrigation costs to the crop payment capacity for an alfalfa/barley crop rotation.

The first step in making this task analysis was determination of the

presently irrigated lands on Southern Ute Indian lands. W. W. Wheeler & Associates, Inc., hydrology consultant, identified from aerial photographs and other information available to them the lands presently irrigated and provided to Boyle a marked print of the base map. The amount of irrigated acreage was then planimetered from the base map and tabulated. It should be noted that presently irrigated land covers some land not classified and Class 6 (non-irrigable) soils as determined by Stoneman-Landers, soil consultants.

For the remaining irrigable parcels, an analysis was made to determine the residual water payment capacity when only the off-farm static pumping lift costs where added to the on-farm costs identified in Task B. Based on the elevation of the nearest water supply and the elevation of the highest point in each parcel, the static lift to serve the parcel was calculated using the computer program developed for the Task B report. The power cost to lift the annual water requirement to each field was then calculated assuming a 75 percent pumping plant efficiency which is a conservatively high assumption; and a field delivery pressure of 60 psi for all but gravity irrigated fields.

It should be noted that the parcel water payment capacity residual analysis (Appendix D) was slightly modified from the analysis presented in the Task B draft report. Land leveling costs for gravity irrigated fields were not included in the Task B on-farm costs. The Task B report, however, estimated land leveling

quantities in the range of one foot average cuts at a cost of $0.50 to $1.00 per cubic yard. As a conservatively low estimate, an average 6-inch cut at $0.50 per cubic yard for a total cost of $403 per acre was assumed for this Task D analysis. Amortizing this cost at 8-3/8 percent interest over 50 years gives a cost of $34.40, or in round numbers, $35 per acre. This cost was then included in the on-farm costs for gravity irrigation.

## D.3 OFF-FARM IRRIGATION TRANSMISSION SYSTEM COST

### D.3.1 General

The off-farm irrigation transmission facilities will generally consists of transmission pipelines, pumping stations, and diversion facilities. Roads for access to pump stations; rights-of-way; and the extension of electrical power services to pumping stations were not included in the cost analysis. Costs for those items included are based on experience with similar facilities. All costs are then amortized using a discount rate of 8-3/8 percent over a 50 year project life.

### D.3.2 Pumping Stations

Pump station costs were estimated using an equation which considers flow and horsepower as variables. The equation is based on Boyle's experience with various size agricultural pump stations which include pump motor, pump structure, valves, surge control, and power panel. The equation is:

$$\text{Cost } (\$) = 2441(\text{GPM})^{0.41} + 150(\text{HP})^{1.05}$$

where GPM is the system flow rate in gallons per minute and HP is the gross horsepower.

D.3.3 Pipelines

The cost of pipelines is estimated based on experience in water transmission pipeline work. The least cost type of pipe material for the various diameters is reflected in the estimate. Pipeline costs have been compared with pipeline cost estimates from the United States Bureau of Reclamation (USBR) Dolores Project as well as the Animas-La Plata Definite Plan Report. Installed estimated pipeline costs are shown in Table D.1.

D.3.4 River Diversion Structures

River diversion structures were included for parcels over 30 acres. The diversion structure would be constructed across the river to form a pool of water with sufficient depth for the pump to draw from. A weir type diversion structure consists of a 4 foot high wall with a footing and riprap on each side for stability and protection from ice damage. The estimated cost of the structure is $210 per foot. The diversion structures were estimated to be 50 feet long for the Piedra River.

It may not be practical to build a massive diversion to serve a small parcel. A farmer farming a small parcel with low flow requirements would probably have a simple temporary diversion which could be nothing more than a berm graded across the river with a backhoe or

PIEDRA WATERSHED

TABLE D.1
PIPELINE COSTS

| Pipe Diamet. (inch) | Installed Cost - $/ft 1/ | | | | | |
|---|---|---|---|---|---|---|
| | 100 psi | 150 psi | 200 psi | 250 psi | 300 psi | 350 psi |
| 4 | 10.50 | 11.00 | 11.50 | 12.00 | 12.50 | 13.00 |
| 6 | 12.00 | 12.50 | 13.00 | 14.00 | 14.50 | 15.00 |
| 8 | 15.50 | 16.00 | 17.00 | 17.50 | 18.50 | 20.00 |
| 10 | 20.00 | 21.00 | 22.50 | 23.50 | 25.00 | 26.50 |
| 12 | 24.00 | 26.50 | 28.50 | 31.00 | 33.00 | 35.00 |
| 14 | 28.50 | 32.00 | 35.00 | 38.00 | 41.00 | 44.00 |
| 15 | 31.00 | 34.50 | 38.50 | 42.50 | 45.50 | 49.00 |
| 16 | 34.00 | 37.50 | 42.00 | 46.00 | 50.00 | 54.00 |
| 18 | 41.00 | 45.00 | 50.00 | 54.00 | 59.50 | 65.00 |
| 20 | 48.50 | 53.00 | 58.00 | 63.50 | 69.00 | 75.00 |
| 21 | 50.50 | 55.50 | 60.50 | 66.00 | 71.50 | 77.00 |
| 24 | 62.00 | 69.00 | 75.50 | 82.00 | 88.50 | 95.50 |
| 27 | 75.50 | 82.00 | 88.50 | 96.50 | 104.00 | 112.00 |
| 30 | 89.50 | 96.50 | 103.00 | 111.00 | 120.00 | 128.50 |
| 33 | 104.50 | 111.00 | 116.50 | 126.50 | 137.50 | 148.50 |
| 36 | 115.50 | 122.00 | 130.50 | 142.00 | 155.00 | 166.00 |

1/ Unit construction cost including 10% allowance for appurtenances.

dozer to form a shallow pool for his pump to take suction from if flows in the stream are low. If stream flows were too large to allow installation of a temporary diversion, a low flow could most likely be pumped without a diversion.

The berm may require regrading several times during the irrigation season. However, the overall cost of such diversions is minimal. The decision on the type and size of diversion will vary with each parcel and would require extensive review in the field. Therefore, in order to simplify the analysis it is assumed that no special diversion structure will be required for parcels of 30 acres or less.

In cases where several parcels can be served from one diversion and the combined acreage is over 30 acres, the cost of the diversion is divided between the parcels in proportion to parcel acreage. This approach is believed to be conservative (in favor of generating PIA) and realistic for this type of analysis.

D.3.5 Other Costs

Annual maintenance of major facilities including pipelines, pump stations, and river diversions is estimated at 0.5 percent of the initial construction cost.

The cost of electrical energy is assumed to be $0.068605/KWhr for the Southern Ute area and $0.065039/KWhr for the Mountain Ute area. These are commercial user rates being charged during the first half

of 1985. A detailed discussion of the power costs was previously provided.

D.3.6 Other Costs Not Included

Other known costs which could be considered are costs for access roads to the pump stations, right-of-way costs where pipelines or pump stations may be on non-Indian land, and costs to provide electric power service to the pump station. These costs are either minor and/or difficult to estimate with available information. Therefore, for these preliminary analyses, they have not been considered at this time.

The cost of power line extensions to serve pumping facilities could be quite high, especially if three phase power is required. Three phase power will be required for pump stations over 25 horsepower.

## D.4 PRELIMINARY PRACTICABLE IRRIGABLE ACREAGE

D.4.1 Existing Irrigated Lands

Lands currently irrigated are assumed to be PIA requiring no further evaluation. No currently irrigated acreage was found in the Piedra watershed.

D.4.2 Water Supply

An examination of the hydrology data for the Piedra River shows that there is sufficient virgin flow during the summer irrigation periods to serve the potential arable lands directly from the river.

Therefore, it was not necessary to perform any operational studies involving storage reservoirs.

D.4.3 Cropping Pattern

For the preliminary analysis of PIA, a cropping pattern with the highest net agricultural returns was used. Table D.2 identifies this cropping pattern as well as the net agricultural return. The parcels in the Piedra watershed are located in climatic zones D, E, and F.

D.4.4 Preliminary PIA Analysis

A preliminary PIA analysis was performed comparing a parcel's payment capacity with a preliminary estimate of the cost to pump water from the river to the parcel. This preliminary water cost was based on the static pumping lift (the difference in elevation from the water surface in the river to the elevation of the parcel) for gravity irrigated fields or plus a field delivery pressure of 60 psi for sprinkler irrigation. Detailed tabulations of the analysis are shown in Appendix D.1. Table D.3 identifies only those parcels with an initial positive residual payment capacity requiring further consideration. A total of 24 parcels covering 819 acres showed a positive residual payment capacity.

An off-farm irrigation transmission system was designed for those parcels near the Piedra River showing an initial positive residual payment capacity. Those calculations are shown in Appendix D.2 and

1258

TABLE D.2
PRELIMINARY CROPPING PATTERN

| Climatic Zone | Elevation Range, ft. | Crop Mix 1/ | Maximum Net Agricultural Return 2/ $/ac/yr |
|---|---|---|---|
| A | <5,000 | Corn, Soybeans | 375 |
| B | 5,000-5,400 | Corn, Soybeans | 330 |
| C | 5,400-5,800 | Corn, Soybeans | 285 |
| D | 5,800-6,200 | Alfalfa, Malt Barley | 270 |
| E | 6,200-6,600 | Alfalfa, Malt Barley | 240 |
| F | 6,600-7,000 | Alfalfa, Malt Barley | 210 |
| G | 7,000-7,400 | Alfalfa, Malt Barley | 185 |
| H | 7,400-7,800 | Alfalfa, Malt Barley | 160 |
| I | 7,800-8,200 | Grass Hay, Pasture | 85 |
| J | >8,200 | Grass Hay, Pasture | 70 |

1/ Cropping mix and maximum net agricultural return provided by Western Research Corporation, April 11, 1986.

2/ Maximum net agricultural returns do not include on-farm irrigation costs.

PIEDRA WATERSHED

TABLE D.3
PARCELS WITH PRELIMINARY RESIDUAL PAYMENT CAPACITY
(Considering pumping only)

| Parcel No. | Gross Acres | Prelim. Residual Payment Capacity ($/ac/yr) | | | | |
|---|---|---|---|---|---|---|
| | | Hndmve.1/ | Sdroll.2/ | Grav.3/ | Cntrpvt.4/ | Cpvt/Hmv.5/ |
| P001 | 26 | 96 | 65 | 58 | | |
| P002 | 7 | 42 | -88 | 14 | | |
| P003 | 33 | 129 | 102 | 88 | | |
| P004 | 24 | 89 | 56 | 51 | | |
| P005 | 29 | 123 | 94 | 85 | | |
| P006 | 14 | 114 | 54 | 82 | | |
| P007 | 103 | 131 | 118 | 80 | 57 | 62 |
| P008 | 6 | 62 | -85 | 38 | | |
| P009 | 74 | 119 | 102 | 66 | 7 | 16 |
| P010 | 9 | 81 | -14 | 54 | | |
| P011 | 9 | 90 | -4 | 64 | | |
| P012 | 17 | 22 | -24 | -17 | | |
| P017 | 23 | 12 | -21 | -32 | | |
| P018 | 35 | 33 | 5 | -18 | | |
| P020 | 13 | 22 | -43 | -18 | | |
| P021 | 11 | 17 | -56 | -24 | | |
| P023 | 115 | 50 | 36 | -8 | -5 | -1 |
| P024 | 14 | 18 | -42 | -22 | | |
| P025 | 65 | 19 | 0 | -41 | -99 | -90 |
| P026 | 48 | 11 | -7 | -47 | -127 | -118 |
| P028 | 58 | 67 | 50 | 13 | -61 | -52 |
| P029 | 37 | 50 | 24 | -1 | | |
| P030 | 43 | 67 | 50 | 15 | | |
| P032 | 6 | 85 | -62 | 64 | | |

1/ Hndmve - Handmove sprinkler, on-farm irrigation system.

2/ Sdroll - Sideroll sprinkler, on-farm irrigation system.

3/ Grav - Gravity on-farm irrigation systems.

4/ Cntrpvt - Center pivot sprinkler, on-farm irrigation system.

5/ Cpvt/hmv - Center pivot sprinkler, on-farm irrigation system with hand move in the corners.

summarized in Table D.4. Parcels with an initial positive payment capacity after comparing the residual payment capacity to the cost of water are initially identified as practicably irrigable.

D.4.5 Preliminary Practicably Irrigable Acreage Determination

Table D.5 and Figures D.1 through D.3 identify the preliminary practicably irrigable acreage for the Piedra watershed. Three parcels totaling 206 acres were identified as initially PIA in the Piedra Watershed. The estimated annual water diversions would be 513 acre-feet from the Piedra River.

D.4.6 Final Practicably Irrigable Acreage Determination

Each of the three parcels which make up the 204 acres of preliminary PIA land was individually evaluated by the economist and adjusted to reflect individual parcel characteristics. These characteristics include soil suitability, land clearing and preparation, and farm efficiency adjustments for parcel size. After analysis none of the three parcels were found to qualify as potentially PIA. The details of the analysis are contained in "Economic Analysis of Potentially Irrigable Parcels in the Piedra Watershed" dated December, 1986, prepared by Western Research Corporation.

TABLE D.4
SUMMARY OF OFF-FARM IRRIGATION WATER COST

| Parcel No. | Gross Acres | Net Acres 1/ | Pay.Cap. $/ac/yr 2/ | Water Cost $/ac/yr | Residual Pay.Cap. $/ac/yr |
|---|---|---|---|---|---|
| P001 | 26 | 26 | 163 | 450 | -287 |
| P002 | 7 | 7 | 112 | 1241 | -1129 |
| P003 | 33 | 33 | 167 | 172 | -5 |
| P004 | 24 | 24 | 164 | 218 | -54 |
| P005 | 29 | 29 | 165 | 150 | 15 3/ |
| P006 | 14 | 14 | 147 | 189 | -42 |
| P007 | 103 | 101.9 | 169 | 107 | 62 3/ |
| P008 | 6 | 6 | 105 | 370 | -265 |
| P009 | 74 | 73.2 | 170 | 153 | 17 3/ |
| P010 | 9 | 9 | 126 | 435 | -309 |
| P011 | 9 | 9 | 126 | 237 | -111 |
| P012 | 17 | 17 | 154 | 1258 | -1104 |
| P017 | 23 | 23 | 137 | 1019 | -882 |
| P018 | 35 | 35 | 141 | 889 | -748 |
| P020 | 13 | 13 | 118 | 882 | -764 |
| P021 | 11 | 11 | 113 | 882 | -769 |
| P023 | 115 | 113.8 | 142 | 564 | -422 |
| P024 | 14 | 14 | 120 | 795 | -675 |
| P025 | 65 | 64.3 | 144 | 791 | -647 |
| P026 | 48 | 47.5 | 144 | 768 | -624 |
| P028 | 58 | 57.4 | 170 | 545 | -375 |
| P029 | 37 | 37 | 142 | 550 | -408 |
| P030 | 43 | 42.5 | 171 | 490 | -319 |
| P032 | 6 | 6 | 131 | 326 | -195 |

1/ Net acres for parcel, irrigation system, combination resulting in the highest payment capacity. See Appendix D.1.

2/ Highest preliminary payment capacity from Appendix D.1.

3/ Parcel with positive residual payment capacity.

PIEDRA WATERSHED

TABLE D.5
SUMMARY OF PRELIMINARY PIA LANDS

| Parcel No. | Gross Acres | Net Acres | Pay.Cap. $/ac/yr | Water Cost $/ac/yr | Residual Pay.Cap. $/ac/yr | Diversion Required ac-ft/yr. |
|---|---|---|---|---|---|---|
| P005 | 29 | 29 | 165 | 150 | 15 | 73 |
| P007 | 103 | 101.9 | 169 | 107 | 62 | 256 |
| P009 | 74 | 73.2 | 170 | 153 | 17 | 184 |
| TOTAL | 206 | 204.1 | | | | 513 |

# APPENDIX D.1

# PRELIMINARY PIA ANALYSIS

# APPENDIX D.1
## LEGEND

Parcel I.D.: S11-P-01, "S11" = Southern Ute Sheet 11; "P" = Piedra Watershed; "01" = parcel number.

Field Size: Gross size of parcel in acres.

Reduction Factor: Acreage reduction factor discussed in Task A Report.

Net Acreage: The product of field size times reduction factor.

Elevation High and Low: The maximum and minimum elevation within the parcel.

Climatic Zone: Discussed in Task A Report and determined by the parcel's elevation.

Irrigation System Type: Type of on-farm irrigation system.

- HNDMVE - Handmove sprinkler
- SDROLL - Side roll sprinkler
- GRAV - Gravity
- CNTRPVT- Center pivot sprinkler
- CPVT/HMV- Center pivot with handmove

Net Feet: The unit net average irrigation water requirement for the parcel in acre-feet per acre.

Irrigation Efficiency: Irrigation efficiency discussed in Task A Report.

Applied: The unit gross on-farm average irrigation water requirement in acre-feet per acre.

Preliminary Net Ag Return: The preliminary net agricultural return not including the on-farm irrigation system or off-farm irrigation water transmission/distribution system.

Capital: The amortized capital cost per acre per year for the on-farm irrigation system (at 8 3/8% for 50 years) from Task B Report.

Maintenance: The per acre per year maintenance cost of the on-farm irrigation system from the Task B Report.

Labor: The per acre per year labor cost for operation of the on-farm irrigation system from the Task B Report.

Pumping: The per acre per year cost of providing additional on-farm pumping to meet the higher pressure requirements of the center pivot irrigation system.

Preliminary Payment Capacity: The preliminary net ag. returns minus the on-farm irrigation capital, maintenance, labor, and pumping cost in dollars per acre.

Water Source Elevation: The water source diversion point nominal elevation.

Static Lift: The difference in elevation of the parcel's high elevation and and water source elevation in feet.

Annual Power Cost/Acre: The cost of electrical energy per acre per year to serve the parcel considering only the static lift in the case of gravity irrigation or the static lift plus 139 ft. (60 psi) for all types of sprinkler irrigation.

Residual Preliminary Payment Capacity: The result of the preliminary payment capacity minus the annual power cost for pumping at the water supply source in dollars per acre.

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
Piedra Watershed

1210

| PARCEL I.D. | ACREAGE: FIELD SIZE (ACRES) | ACREAGE: REDUCTION FACTOR | ACREAGE: NET ACREAGE | ELEVATION: HIGH | ELEVATION: LOW | CLIMATIC ZONE | WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE | WATER REQUIREMENTS PER ACRE: NET FEET | WATER REQUIREMENTS PER ACRE: IRRIG. EFF | WATER REQUIREMENTS PER ACRE: APPLIED | PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG RETURN | ON-FARM IRRIG. COSTS: CAPITAL | ON-FARM IRRIG. COSTS: MAINT. | ON-FARM IRRIG. COSTS: LABOR | ON-FARM IRRIG. COSTS: PUMPING | PRELIM. PAYMENT CAPACITY | PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV. | PRELIM. OFF-FARM WATER COST: STATIC LIFT | PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE | RESIDUAL PRELIM. PAYMENT CAPACITY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU6-P-001 | 26 | 1 | 26 | 6590 | 6490 | E | HNDMYE | 1.76 | .7 | 2.51 | $ 240 | $ 38 | $ 5 | $ 31 | $ 0 | $ 163 | 6440 | 150 | $ 67 | $ 98 |
| SU6-P-001 | 26 | 1 | 26 | 6590 | 6490 | E | SDROLL | 1.76 | .7 | 2.51 | $ 240 | $ 65 | $ 10 | $ 22 | $ 0 | $ 133 | 6440 | 150 | $ 67 | $ 65 |
| SU6-P-001 | 26 | 1 | 26 | 6590 | 6490 | E | GRAV | 1.76 | .65 | 2.7 | $ 240 | $ 106 | $ 5 | $ 31 | $ 0 | $ 96 | 6440 | 150 | $ 38 | $ 58 |
| SU6-P-002 | 7 | 1 | 7 | 6600 | 6540 | E | HNDMYE | 1.76 | .7 | 2.51 | $ 240 | $ 80 | $ 12 | $ 34 | $ 0 | $ 112 | 6440 | 160 | $ 70 | $ 42 |
| SU6-P-002 | 7 | 1 | 7 | 6600 | 6540 | E | SDROLL | 1.76 | .7 | 2.51 | $ 240 | $ 172 | $ 60 | $ 25 | $ 0 | $-18 | 6440 | 160 | $ 70 | $-88 |
| SU6-P-002 | 7 | 1 | 7 | 6600 | 6540 | E | GRAV | 1.76 | .65 | 2.7 | $ 240 | $ 144 | $ 12 | $ 27 | $ 0 | $ 55 | 6440 | 160 | $ 40 | $ 14 |
| SU6-P-003 | 33 | 1 | 33 | 6360 | 6330 | E | HNDMYE | 1.76 | .7 | 2.51 | $ 240 | $ 36 | $ 6 | $ 33 | $ 0 | $ 167 | 6340 | 20 | $ 37 | $ 129 |
| SU6-P-003 | 33 | 1 | 33 | 6360 | 6330 | E | SDROLL | 1.76 | .7 | 2.51 | $ 240 | $ 69 | $ 17 | $ 22 | $ 0 | $ 133 | 6340 | 20 | $ 37 | $ 102 |
| SU6-P-003 | 33 | 1 | 33 | 6360 | 6330 | E | GRAV | 1.76 | .65 | 2.7 | $ 240 | $ 108 | $ 5 | $ 31 | $ 0 | $ 93 | 6340 | 20 | $ 5 | $ 88 |
| SU6-P-004 | 24 | 1 | 24 | 6520 | 6480 | E | HNDMYE | 1.76 | .7 | 2.51 | $ 240 | $ 39 | $ 5 | $ 31 | $ 0 | $ 164 | 6340 | 180 | $ 75 | $ 89 |
| SU6-P-004 | 24 | 1 | 24 | 6520 | 6480 | E | SDROLL | 1.76 | .7 | 2.51 | $ 240 | $ 66 | $ 10 | $ 22 | $ 0 | $ 132 | 6340 | 180 | $ 75 | $ 56 |
| SU6-P-004 | 24 | 1 | 24 | 6520 | 6480 | E | GRAV | 1.76 | .65 | 2.7 | $ 240 | $ 105 | $ 5 | $ 31 | $ 0 | $ 96 | 6340 | 180 | $ 45 | $ 51 |
| SU6-P-005 | 29 | 1 | 29 | 6360 | 6320 | E | HNDMYE | 1.76 | .7 | 2.51 | $ 240 | $ 37 | $ 6 | $ 31 | $ 0 | $ 165 | 6320 | 40 | $ 42 | $ 123 |
| SU6-P-005 | 29 | 1 | 29 | 6360 | 6320 | E | SDROLL | 1.76 | .7 | 2.51 | $ 240 | $ 63 | $ 10 | $ 22 | $ 0 | $ 136 | 6320 | 40 | $ 42 | $ 94 |
| SU6-P-005 | 29 | 1 | 29 | 6360 | 6320 | E | GRAV | 1.76 | .65 | 2.7 | $ 240 | $ 107 | $ 5 | $ 31 | $ 0 | $ 95 | 6320 | 40 | $ 10 | $ 85 |

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
Piedra Watershed

1271

| PARCEL I.D. | ACREAGE: FIELD SIZE (ACRES) | ACREAGE: REDUCTION FACTOR | ACREAGE: NET ACREAGE | ELEVATION: HIGH | ELEVATION: LOW | CLIMATIC ZONE | WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE | NET FEET | IRRIG. EFF. | APPLIED | PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN | ON-FARM IRRIG. COSTS: CAPITAL | MAINT. | LABOR | PUMPING | PRELIM. PAYMENT CAPACITY | PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV. | STATIC LIFT | ANNUAL POWER COST/ACRE | RESIDUAL PRELIM. PAYMENT CAPACITY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S06-P-006 | 14 | 1 | 14 | 6320 | 6315 | E | HNDMVE | 1.78 | .7 | 2.51 | $ 240 | $ 53 | $ 7 | $ 31 | $ 0 | $ 147 | 6320 | 0 | $ 32 | $ 114 |
| S06-P-006 | 14 | 1 | 14 | 6320 | 6315 | E | SDROLL | 1.78 | .7 | 2.51 | $ 240 | $ 99 | $ 31 | $ 22 | $ 0 | $ 87 | 6320 | 0 | $ 32 | $ 54 |
| S06-P-006 | 14 | 1 | 14 | 6320 | 6315 | E | GRAV | 1.78 | .65 | 2.7 | $ 240 | $ 118 | $ 7 | $ 31 | $ 0 | $ 82 | 6320 | 0 | $ 0 | $ 82 |
| S06-P-007 | 103 | .99 | 101.9 | 6320 | 6300 | E | HNDMVE | 1.78 | .7 | 2.51 | $ 240 | $ 36 | $ 4 | $ 30 | $ 0 | $ 169 | 6300 | 20 | $ 37 | $ 131 |
| S06-P-007 | 103 | .99 | 101.9 | 6320 | 6300 | E | SDROLL | 1.78 | .7 | 2.51 | $ 240 | $ 53 | $ 16 | $ 16 | $ 0 | $ 155 | 6300 | 20 | $ 37 | $ 118 |
| S06-P-007 | 103 | .99 | 101.9 | 6320 | 6300 | E | GRAV | 1.78 | .65 | 2.7 | $ 240 | $ 117 | $ 6 | $ 30 | $ 0 | $ 85 | 6300 | 20 | $ 5 | $ 80 |
| S06-P-007 | 103 | .83 | 85.7 | 6320 | 6300 | E | CNTRPVT | 1.78 | .75 | 2.34 | $ 240 | $ 89 | $ 34 | $ 4 | $ 19 | $ 92 | 6300 | 20 | $ 34 | $ 57 |
| S06-P-007 | 103 | .98 | 101.2 | 6320 | 6300 | E | CPVT/HNV | 1.78 | .74 | 2.37 | $ 240 | $ 83 | $ 30 | $ 4 | $ 19 | $ 98 | 6300 | 20 | $ 35 | $ 62 |
| S06-P-008 | 6 | 1 | 6 | 6260 | 6260 | E | HNDMVE | 1.78 | .7 | 2.51 | $ 240 | $ 88 | $ 14 | $ 30 | $ 0 | $ 105 | 6240 | 40 | $ 42 | $ 62 |
| S06-P-008 | 6 | 1 | 6 | 6260 | 6260 | E | SDROLL | 1.78 | .7 | 2.51 | $ 240 | $ 190 | $ 87 | $ 25 | $ 0 | $-43 | 6240 | 40 | $ 42 | $-85 |
| S06-P-008 | 6 | 1 | 6 | 6260 | 6260 | E | GRAV | 1.78 | .65 | 2.7 | $ 240 | $ 150 | $ 13 | $ 27 | $ 0 | $ 48 | 6240 | 40 | $ 10 | $ 38 |
| S06-P-009 | 74 | .99 | 73.2 | 6360 | 6300 | E | HNDMVE | 1.78 | .7 | 2.51 | $ 240 | $ 34 | $ 4 | $ 30 | $ 0 | $ 170 | 6280 | 80 | $ 51 | $ 119 |
| S06-P-009 | 74 | .99 | 73.2 | 6360 | 6300 | E | SDROLL | 1.78 | .7 | 2.51 | $ 240 | $ 55 | $ 16 | $ 16 | $ 0 | $ 153 | 6280 | 80 | $ 51 | $ 102 |
| S06-P-009 | 74 | .99 | 73.2 | 6360 | 6300 | E | GRAV | 1.78 | .65 | 2.7 | $ 240 | $ 115 | $ 7 | $ 30 | $ 0 | $ 86 | 6280 | 80 | $ 20 | $ 66 |
| S06-P-009 | 74 | .83 | 61.6 | 6360 | 6300 | E | CNTRPVT | 1.78 | .75 | 2.34 | $ 240 | $ 111 | $ 34 | $ 6 | $ 23 | $ 55 | 6280 | 80 | $ 48 | $ 7 |
| S06-P-009 | 74 | .98 | 72.7 | 6360 | 6300 | E | CPVT/HNV | 1.78 | .74 | 2.37 | $ 240 | $ 103 | $ 38 | $ 9 | $ 23 | $ 84 | 6280 | 80 | $ 48 | $ 16 |
| S06-P-010 | 9 | 1 | 9 | 6295 | 6275 | E | HNDMVE | 1.78 | .7 | 2.51 | $ 240 | $ 88 | $ 10 | $ 30 | $ 0 | $ 126 | 6240 | 55 | $ 45 | $ 81 |
| S06-P-010 | 9 | 1 | 9 | 6295 | 6275 | E | SDROLL | 1.78 | .7 | 2.51 | $ 240 | $ 137 | $ 85 | $ 25 | $ 0 | $ 31 | 6240 | 55 | $ 45 | $-14 |
| S06-P-010 | 9 | 1 | 9 | 6295 | 6275 | E | GRAV | 1.78 | .65 | 2.7 | $ 240 | $ 133 | $ 10 | $ 27 | $ 0 | $ 68 | 6240 | 55 | $ 13 | $ 54 |

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
Piedra Watershed

1272

| PARCEL I.D. | ACREAGE: FIELD SIZE (ACRES) | ACREAGE: REDUCTION FACTOR | ACREAGE: NET ACREAGE | ELEVATION: HIGH | ELEVATION: LOW | CLIMATIC ZONE | WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE | WATER REQUIREMENTS PER ACRE: NET FEET | WATER REQUIREMENTS PER ACRE: IRRIG. EFF. | WATER REQUIREMENTS PER ACRE: APPLIED | PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN | ON-FARM IRRIG. COSTS: CAPITAL | ON-FARM IRRIG. COSTS: MAINT. | ON-FARM IRRIG. COSTS: LABOR | ON-FARM IRRIG. COSTS: PUMPING | PRELIM. PAYMENT CAPACITY | PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV. | PRELIM. OFF-FARM WATER COST: STATIC LIFT | PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE | RESIDUAL PRELIM. PAYMENT CAPACITY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S06-P-011 | 9 | 1 | 9 | 6220 | 6215 | E | HNDMVE | 1.76 | .7 | 2.51 | $ 240 | $ 68 | $ 10 | $ 34 | $ 0 | $ 126 | 6205 | 15 | $ 36 | $ 90 |
| S06-P-011 | 9 | 1 | 9 | 6220 | 6215 | E | SDROLL | 1.76 | .7 | 2.51 | $ 240 | $ 137 | $ 45 | $ 25 | $ 0 | $ 31 | 6205 | 15 | $ 36 | $-4 |
| S06-P-011 | 9 | 1 | 9 | 6220 | 6215 | E | GRAV | 1.76 | .65 | 2.7 | $ 240 | $ 133 | $ 10 | $ 27 | $ 0 | $ 68 | 6205 | 15 | $ 3 | $ 64 |
| S06-P-012 | 17 | 1 | 17 | 6630 | 6520 | E | HNDMVE | 1.76 | .7 | 2.51 | $ 240 | $ 46 | $ 6 | $ 31 | $ 0 | $ 154 | 6205 | 425 | $ 132 | $ 22 |
| S06-P-012 | 17 | 1 | 17 | 6630 | 6520 | E | SDROLL | 1.76 | .7 | 2.51 | $ 240 | $ 84 | $ 25 | $ 22 | $ 0 | $ 107 | 6205 | 425 | $ 132 | $-24 |
| S06-P-012 | 17 | 1 | 17 | 6630 | 6520 | E | GRAV | 1.76 | .65 | 2.7 | $ 240 | $ 111 | $ 6 | $ 31 | $ 0 | $ 90 | 6205 | 425 | $ 107 | $-17 |
| S06-P-013 | 5 | 1 | 5 | 6640 | 6600 | F | HNDMVE | 1.56 | .7 | 2.22 | $ 210 | $ 92 | $ 15 | $ 30 | $ 0 | $ 71 | 6205 | 435 | $ 119 | $-48 |
| S06-P-013 | 5 | 1 | 5 | 6640 | 6600 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 208 | $ 74 | $ 22 | $ 0 | $-95 | 6205 | 435 | $ 119 | $-215 |
| S06-P-013 | 5 | 1 | 5 | 6640 | 6600 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 155 | $ 14 | $ 24 | $ 0 | $ 15 | 6205 | 435 | $ 97 | $-82 |
| S06-P-014 | 13 | 1 | 13 | 6780 | 6640 | F | HNDMVE | 1.56 | .7 | 2.22 | $ 210 | $ 55 | $ 8 | $ 28 | $ 0 | $ 118 | 6205 | 575 | $ 148 | $-30 |
| S06-P-014 | 13 | 1 | 13 | 6780 | 6640 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 104 | $ 33 | $ 19 | $ 0 | $ 52 | 6205 | 575 | $ 148 | $-96 |
| S06-P-014 | 13 | 1 | 13 | 6780 | 6640 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 120 | $ 8 | $ 27 | $ 0 | $ 53 | 6205 | 575 | $ 129 | $-76 |
| S06-P-015 | 26 | 1 | 26 | 6880 | 6760 | F | HNDMVE | 1.56 | .7 | 2.22 | $ 210 | $ 38 | $ 5 | $ 28 | $ 0 | $ 138 | 6205 | 675 | $ 169 | $-31 |
| S06-P-015 | 26 | 1 | 26 | 6880 | 6760 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 65 | $ 18 | $ 19 | $ 0 | $ 106 | 6205 | 675 | $ 169 | $-63 |
| S06-P-015 | 26 | 1 | 26 | 6880 | 6760 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 106 | $ 5 | $ 27 | $ 0 | $ 69 | 6205 | 675 | $ 151 | $-81 |

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
Piedra Watershed

1273

| PARCEL I.D. | ACREAGE: FIELD SIZE (ACRES) | ACREAGE: REDUCTION FACTOR | ACREAGE: NET ACREAGE | ELEVATION: HIGH | ELEVATION: LOW | CLIMATIC ZONE | WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE | WATER REQUIREMENTS PER ACRE: NET FEET | WATER REQUIREMENTS PER ACRE: IRRIG. EFF. | WATER REQUIREMENTS PER ACRE: APPLIED | PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN | ON-FARM IRRIG. COSTS: CAPITAL | ON-FARM IRRIG. COSTS: MAINT. | ON-FARM IRRIG. COSTS: LABOR | ON-FARM IRRIG. COSTS: PUMPING | PRELIM. PAYMENT CAPACITY | PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV | PRELIM. OFF-FARM WATER COST: STATIC LIFT | PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE | RESIDUAL PRELIM. PAYMENT CAPACITY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S07-P-010 | 10 | 1 | 10 | 6730 | 6690 | F | HNDWVE | 1.56 | .7 | 2.22 | $ 210 | $ 62 | $ 9 | $ 28 | $ 0 | $ 119 | 6340 | 390 | $ 110 | $ 0 |
| S07-P-010 | 10 | 1 | 10 | 6730 | 6690 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 119 | $ 35 | $ 18 | $ 0 | $ 31 | 6340 | 390 | $ 110 | $-78 |
| S07-P-010 | 10 | 1 | 10 | 6730 | 6690 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 122 | $ 8 | $ 27 | $ 0 | $ 45 | 6340 | 390 | $ 87 | $-42 |
| S07-P-017 | 23 | 1 | 23 | 6800 | 6760 | F | HNDWVE | 1.56 | .7 | 2.22 | $ 210 | $ 36 | $ 5 | $ 28 | $ 0 | $ 137 | 6340 | 460 | $ 124 | $ 12 |
| S07-P-017 | 23 | 1 | 23 | 6800 | 6760 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 67 | $ 59 | $ 19 | $ 0 | $ 103 | 6340 | 460 | $ 124 | $-21 |
| S07-P-017 | 23 | 1 | 23 | 6800 | 6760 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 105 | $ 5 | $ 27 | $ 0 | $ 70 | 6340 | 460 | $ 103 | $-32 |
| S07-P-018 | 35 | 1 | 35 | 6720 | 6630 | F | HNDWVE | 1.56 | .7 | 2.22 | $ 210 | $ 35 | $ 4 | $ 28 | $ 0 | $ 141 | 6340 | 380 | $ 106 | $ 33 |
| S07-P-018 | 35 | 1 | 35 | 6720 | 6630 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 59 | $ 17 | $ 18 | $ 0 | $ 113 | 6340 | 380 | $ 108 | $ 5 |
| S07-P-018 | 35 | 1 | 35 | 6720 | 6630 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 103 | $ 5 | $ 27 | $ 0 | $ 66 | 6340 | 380 | $ 85 | $-18 |
| S07-P-019 | 6 | 1 | 6 | 6660 | 6600 | F | HNDWVE | 1.56 | .7 | 2.22 | $ 210 | $ 86 | $ 14 | $ 30 | $ 0 | $ 74 | 6340 | 320 | $ 95 | $-16 |
| S07-P-019 | 6 | 1 | 6 | 6660 | 6600 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 190 | $ 67 | $ 22 | $ 0 | $-70 | 6340 | 320 | $ 95 | $-166 |
| S07-P-019 | 6 | 1 | 6 | 6660 | 6600 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 150 | $ 13 | $ 24 | $ 0 | $ 21 | 6340 | 320 | $ 71 | $-50 |
| S07-P-020 | 13 | 1 | 13 | 6660 | 6620 | F | HNDWVE | 1.56 | .7 | 2.22 | $ 210 | $ 55 | $ 8 | $ 28 | $ 0 | $ 118 | 6340 | 320 | $ 95 | $ 22 |
| S07-P-020 | 13 | 1 | 13 | 6660 | 6620 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 104 | $ 33 | $ 18 | $ 0 | $ 52 | 6340 | 320 | $ 95 | $-43 |
| S07-P-020 | 13 | 1 | 13 | 6660 | 6620 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 120 | $ 8 | $ 27 | $ 0 | $ 53 | 6340 | 320 | $ 71 | $-18 |

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
Piedra Watershed

| PARCEL I.D. | ACREAGE: FIELD SIZE (ACRES) | ACREAGE: REDUCTION FACTOR | ACREAGE: NET ACREAGE | ELEVATION: HIGH | ELEVATION: LOW | CLIMATIC ZONE | IRRIG. SYSTEM TYPE | WATER REQUIREMENTS PER ACRE: NET FEET | WATER REQUIREMENTS PER ACRE: IRRIG. EFF | WATER REQUIREMENTS PER ACRE: APPLIED | PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN | ON-FARM IRRIG. COSTS: CAPITAL | ON-FARM IRRIG. COSTS: MAINT. | ON-FARM IRRIG. COSTS: LABOR | ON-FARM IRRIG. COSTS: PUMPING | PRELIM. PAYMENT CAPACITY | PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV. | PRELIM. OFF-FARM WATER COST: STATIC LIFT | PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE | RESIDUAL PRELIM. PAYMENT CAPACITY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S07-P-021 | 11 | 1 | 11 | 6660 | 6620 | F | HNDMVE | 1.56 | .7 | 2.22 | $ 210 | $ 59 | $ 9 | $ 28 | $ 0 | $ 113 | 6340 | 320 | $ 95 | $ 17 |
| S07-P-021 | 11 | 1 | 11 | 6660 | 6620 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 114 | $ 16 | $ 19 | $ 0 | $ 36 | 6340 | 320 | $ 95 | $-56 |
| S07-P-021 | 11 | 1 | 11 | 6660 | 6620 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 125 | $ 9 | $ 27 | $ 0 | $ 47 | 6340 | 320 | $ 71 | $-24 |
| S07-P-022 | 9 | 1 | 9 | 6700 | 6650 | F | HNDMVE | 1.56 | .7 | 2.22 | $ 210 | $ 68 | $ 10 | $ 30 | $ 0 | $ 100 | 6340 | 360 | $ 104 | $-3 |
| S07-P-022 | 9 | 1 | 9 | 6700 | 6650 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 127 | $ 15 | $ 22 | $ 0 | $ 4 | 6340 | 360 | $ 104 | $-99 |
| S07-P-022 | 9 | 1 | 9 | 6700 | 6650 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 133 | $ 10 | $ 24 | $ 0 | $ 41 | 6340 | 360 | $ 86 | $-39 |
| S07-P-023 | 115 | .99 | 113.8 | 6640 | 6590 | F | HNDMVE | 1.56 | .7 | 2.22 | $ 210 | $ 36 | $ 4 | $ 26 | $ 0 | $ 142 | 6340 | 300 | $ 91 | $ 50 |
| S07-P-023 | 115 | .99 | 113.8 | 6640 | 6590 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 53 | $ 16 | $ 12 | $ 0 | $ 127 | 6340 | 300 | $ 91 | $ 36 |
| S07-P-023 | 115 | .99 | 113.8 | 6640 | 6590 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 117 | $ 6 | $ 27 | $ 0 | $ 58 | 6340 | 300 | $ 67 | $-8 |
| S07-P-023 | 115 | .83 | 95.7 | 6640 | 6590 | F | CNTRPVT | 1.56 | .75 | 2.08 | $ 210 | $ 80 | $ 31 | $ 3 | $ 15 | $ 79 | 6340 | 300 | $ 85 | $-5 |
| S07-P-023 | 115 | .98 | 113 | 6640 | 6590 | F | CPVT/HNV | 1.56 | .74 | 2.1 | $ 210 | $ 75 | $ 27 | $ 7 | $ 15 | $ 84 | 6340 | 300 | $ 86 | $-1 |
| S07-P-024 | 14 | 1 | 14 | 6690 | 6620 | F | HNDMVE | 1.56 | .7 | 2.22 | $ 210 | $ 53 | $ 1 | $ 28 | $ 9 | $ 120 | 6340 | 350 | $ 101 | $ 10 |
| S07-P-024 | 14 | 1 | 14 | 6690 | 6620 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 99 | $ 31 | $ 19 | $ 9 | $ 59 | 6340 | 350 | $ 101 | $-42 |
| S07-P-024 | 14 | 1 | 14 | 6690 | 6620 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 115 | $ 7 | $ 27 | $ 9 | $ 55 | 6340 | 350 | $ 75 | $-22 |
| S07-P-025 | 65 | .99 | 64.3 | 6800 | 6760 | F | HNDMVE | 1.56 | .7 | 2.22 | $ 210 | $ 34 | $ 4 | $ 26 | $ 0 | $ 144 | 6340 | 460 | $ 124 | $ 10 |
| S07-P-025 | 65 | .99 | 64.3 | 6800 | 6760 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 55 | $ 16 | $ 12 | $ 0 | $ 125 | 6340 | 460 | $ 124 | $ 0 |
| S07-P-025 | 65 | .99 | 64.3 | 6800 | 6760 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 124 | $ 6 | $ 27 | $ 0 | $ 61 | 6340 | 460 | $ 103 | $-41 |
| S07-P-025 | 65 | .83 | 54.1 | 6800 | 6760 | F | CNTRPVT | 1.56 | .75 | 2.08 | $ 210 | $ 117 | $ 47 | $ 5 | $ 23 | $ 17 | 6340 | 460 | $ 116 | $-99 |
| S07-P-025 | 65 | .98 | 63.8 | 6800 | 6760 | F | CPVT/HNV | 1.56 | .74 | 2.1 | $ 210 | $ 109 | $ 41 | $ 8 | $ 23 | $ 27 | 6340 | 460 | $ 117 | $-90 |

127A

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
Piedra Watershed

1275

| PARCEL I.D. | ACREAGE: FIELD SIZE (ACRES) | ACREAGE: REDUCTION FACTOR | ACREAGE: NET ACREAGE | ELEVATION: HIGH | ELEVATION: LOW | CLIMATIC ZONE | WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE | WATER REQUIREMENTS PER ACRE: NET FEET | WATER REQUIREMENTS PER ACRE: IRRIG. EFF. | WATER REQUIREMENTS PER ACRE: APPLIED | PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG. RETURN | ON-FARM IRRIG. COSTS: CAPITAL | ON-FARM IRRIG. COSTS: MAINT. | ON-FARM IRRIG. COSTS: LABOR | ON-FARM IRRIG. COSTS: PUMPING | PRELIM. PAYMENT CAPACITY | PRELIM OFF-FARM WATER COST: WATER SOURCE ELEV | PRELIM OFF-FARM WATER COST: STATIC LIFT | PRELIM OFF-FARM WATER COST: ANNUAL POWER COST/ACRE | RESIDUAL PRELIM. PAYMENT CAPACITY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S07-P-025 | 48 | .99 | 47.5 | 6640 | 6720 | F | HNDMVE | 1.56 | .7 | 2.22 | $ 210 | $ 34 | $ 4 | $ 26 | $ 0 | $ 144 | 6340 | 500 | $ 133 | $ 11 |
| S07-P-026 | 48 | .99 | 47.5 | 6640 | 6720 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 55 | $ 16 | $ 12 | $ 0 | $ 125 | 6340 | 500 | $ 133 | $-7 |
| S07-P-026 | 48 | .99 | 47.5 | 6640 | 6720 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 111 | $ 6 | $ 27 | $ 0 | $ 66 | 6340 | 500 | $ 112 | $-47 |
| S07-P-026 | 48 | .83 | 39.9 | 6640 | 6720 | F | CNTRPVT | 1.56 | .75 | 2.08 | $ 210 | $ 136 | $ 52 | $ 6 | $ 23 | $-3 | 6340 | 500 | $ 124 | $-127 |
| S07-P-026 | 48 | .98 | 47.1 | 6640 | 6720 | F | CPVT/HMV | 1.56 | .74 | 2.1 | $ 210 | $ 122 | $ 46 | $ 10 | $ 23 | $ 6 | 6340 | 500 | $ 125 | $-118 |
| S07-P-027 | 8 | 1 | 8 | 6680 | 6640 | F | HNDMVE | 1.56 | .7 | 2.22 | $ 210 | $ 74 | $ 11 | $ 30 | $ 0 | $ 93 | 6340 | 340 | $ 99 | $-6 |
| S07-P-027 | 8 | 1 | 8 | 6680 | 6640 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 154 | $ 53 | $ 22 | $ 0 | $-20 | 6340 | 340 | $ 99 | $-120 |
| S07-P-027 | 8 | 1 | 8 | 6680 | 6640 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 138 | $ 11 | $ 24 | $ 0 | $ 35 | 6340 | 340 | $ 75 | $-41 |
| S07-P-028 | 58 | .99 | 57.4 | 6640 | 6550 | E | HNDMVE | 1.76 | .7 | 2.51 | $ 240 | $ 34 | $ 4 | $ 30 | $ 0 | $ 170 | 6340 | 300 | $ 103 | $ 67 |
| S07-P-028 | 58 | .99 | 57.4 | 6640 | 6550 | E | SDROLL | 1.76 | .7 | 2.51 | $ 240 | $ 55 | $ 16 | $ 14 | $ 0 | $ 153 | 6340 | 300 | $ 103 | $ 50 |
| S07-P-028 | 58 | .99 | 57.4 | 6640 | 6550 | E | GRAV | 1.76 | .65 | 2.7 | $ 240 | $ 113 | $ 6 | $ 30 | $ 0 | $ 88 | 6340 | 300 | $ 76 | $ 13 |
| S07-P-028 | 58 | .83 | 48.3 | 6640 | 6550 | E | CNTRPVT | 1.76 | .75 | 2.34 | $ 240 | $ 123 | $ 49 | $ 6 | $ 25 | $ 35 | 6340 | 300 | $ 96 | $-61 |
| S07-P-028 | 58 | .98 | 57 | 6640 | 6550 | E | CPVT/HMV | 1.76 | .74 | 2.37 | $ 240 | $ 124 | $ 43 | $ 11 | $ 25 | $ 45 | 6340 | 300 | $ 97 | $-52 |
| S07-P-029 | 37 | 1 | 37 | 6640 | 6570 | F | HNDMVE | 1.56 | .7 | 2.22 | $ 210 | $ 34 | $ 4 | $ 26 | $ 0 | $ 142 | 6340 | 300 | $ 91 | $ 50 |
| S07-P-029 | 37 | 1 | 37 | 6640 | 6570 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 53 | $ 16 | $ 15 | $ 0 | $ 115 | 6340 | 300 | $ 91 | $ 24 |
| S07-P-029 | 37 | 1 | 37 | 6640 | 6570 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 109 | $ 6 | $ 27 | $ 0 | $ 66 | 6340 | 300 | $ 67 | $-1 |
| S07-P-030 | 43 | .99 | 42.5 | 6640 | 6550 | E | HNDMVE | 1.76 | .7 | 2.51 | $ 240 | $ 33 | $ 4 | $ 30 | $ 0 | $ 171 | 6340 | 300 | $ 103 | $ 67 |
| S07-P-030 | 43 | .99 | 42.5 | 6640 | 6550 | E | SDROLL | 1.76 | .7 | 2.51 | $ 240 | $ 55 | $ 16 | $ 14 | $ 0 | $ 153 | 6340 | 300 | $ 103 | $ 50 |
| S07-P-030 | 43 | .99 | 42.5 | 6640 | 6550 | E | GRAV | 1.76 | .65 | 2.7 | $ 240 | $ 111 | $ 6 | $ 30 | $ 0 | $ 91 | 6340 | 300 | $ 76 | $ 15 |

COLORADO UTE AGRICULTURAL ENGINEERING STUDY
PRELIMINARY PIA ANALYSIS
Piedra Watershed

1276

| PARCEL I.D. | ACREAGE: FIELD SIZE (ACRES) | ACREAGE: REDUCTION FACTOR | ACREAGE: NET ACREAGE | ELEVATION: HIGH | ELEVATION: LOW | CLIMATIC ZONE | WATER REQUIREMENTS PER ACRE: IRRIG. SYSTEM TYPE | WATER REQUIREMENTS PER ACRE: NET FEET | WATER REQUIREMENTS PER ACRE: IRRIG. EFF. | WATER REQUIREMENTS PER ACRE: APPLIED | PRELIMINARY ANNUAL PAYMENT CAPACITY PER ACRE: PRELIMINARY NET AG RETURN | ON-FARM IRRIG. COSTS: CAPITAL | ON-FARM IRRIG. COSTS: MAINT | ON-FARM IRRIG. COSTS: LABOR | ON-FARM IRRIG. COSTS: PUMPING | PRELIM. PAYMENT CAPACITY | PRELIM. OFF-FARM WATER COST: WATER SOURCE ELEV | PRELIM. OFF-FARM WATER COST: STATIC LIFT | PRELIM. OFF-FARM WATER COST: ANNUAL POWER COST/ACRE | RESIDUAL PRELIM. PAYMENT CAPACITY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S6T-P-031 | 7 | 1 | 7 | 6800 | 6720 | F | HHDMVE | 1.56 | .7 | 2.22 | $ 210 | $ 60 | $ 12 | $ 10 | $ 4 | $ 86 | 6340 | 460 | $ 124 | $-38 |
| S07-P-031 | 7 | 1 | 7 | 6800 | 6720 | F | SDROLL | 1.56 | .7 | 2.22 | $ 210 | $ 172 | $ 40 | $ 22 | $ 0 | $-45 | 6340 | 460 | $ 124 | $-170 |
| S07-P-031 | 7 | 1 | 7 | 6800 | 6720 | F | GRAV | 1.56 | .65 | 2.4 | $ 210 | $ 141 | $ 12 | $ 24 | $ 0 | $ 28 | 6340 | 460 | $ 103 | $-76 |
| S13-P-032 | 6 | 1 | 6 | 6170 | 6140 | D | HHDMVE | 1.94 | .7 | 2.77 | $ 270 | $ 86 | $ 14 | $ 37 | $ 0 | $ 131 | 6130 | 40 | $ 46 | $ 85 |
| S13-P-032 | 6 | 1 | 6 | 6170 | 6140 | D | SDROLL | 1.94 | .7 | 2.77 | $ 270 | $ 190 | $ 47 | $ 28 | $ 0 | $-16 | 6130 | 40 | $ 46 | $-82 |
| S11-P-032 | 6 | 1 | 6 | 6170 | 6140 | D | GRAV | 1.94 | .65 | 2.98 | $ 270 | $ 150 | $ 13 | $ 30 | $ 0 | $ 75 | 6130 | 40 | $ 11 | $ 64 |

1277

# APPENDIX D.2

# OFF-FARM WATER COST

1278

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P001
Parcel No. ---- 506-P-001
Net Acres ----- 26
Crop ---------- ALF/BAR
Water Pay Cap - 163
System Type --- HANDMOVE
Water System -- P001,P002
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(diam,Lf,$/ft) ---------- | | | | | | | | | |
| 200 | 6 | 3939 | 13.00 | | | 51,207 | 256 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 39 | 210 | | | | 8,190 | 41 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 234 | 329 | 65.3 | | | 27,430 | 137 | 2,010 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 86,827 | 434 | 2,010 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 21,707 | | | |
| Total ---------- | | | | | | 108,534 | 434 | 2,010 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 9,256 | 434 | 2,010 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 9,256 | 434 | 2,010 | 11,700 |
| Annual Cost Per Acre ---------- | | | | | | 356 | 17 | 77 | 450 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 163 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -287 |

UTE/OFFPIED

1279

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P002
Parcel No. ---- 506-P-002
Net Acres ----- 7
Crop ---------- ALF/BAR
Water Pay Cap - 112
System Type --- HANDMOVE
Water System -- P001,P002
Date ---------- 7/25/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(diam,Lf,$/ft) ---------- | | | | | | | | | |
| 100 | 4 | 4000 | 10.50 | | | 42,000 | 210 | | |
| 200 | 6 | 1061 | 13.00 | | | 13,793 | 69 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 11 | 210 | | | | 2,310 | 12 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 63 | 349 | 17.6 | | | 14,573 | 73 | 575 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 72,676 | 363 | 575 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 18,169 | | | |
| Total ---------- | | | | | | 90,845 | 363 | 575 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 7,747 | 363 | 575 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 7,747 | 363 | 575 | 8,685 |
| Annual Cost Per Acre ---------- | | | | | | 1,107 | 52 | 82 | 1,241 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 112 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -1,129 |

UTE/OFFPIED

1280

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P003
Parcel No. ---- 506-P-003
Net Acres ----- 33
Crop ---------- ALF/BAR
Water Pay Cap - 167
System Type --- HANDMOVE
Water System -- P003
Date ---------- 7/25/86

Power rate $/kwh --- .069605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(diam,Lf,$/ft) ---------- | | | | | | | | | |
| 100 | 6 | 50 | 12.00 | | | 600 | 3 | | |
| | | | .00 | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 50 | 210 | | | | 10,500 | 53 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 297 | 169 | 82.8 | | | 28,121 | 141 | 1,309 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 39,221 | 196 | 1,309 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 9,805 | | | |
| Total ---------- | | | | | | 49,027 | 196 | 1,309 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 4,181 | 196 | 1,309 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 4,181 | 196 | 1,309 | 5,687 |
| Annual Cost Per Acre ---------- | | | | | | 127 | 6 | 40 | 172 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 167 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -5 |

UTE/OFFPIED 1281

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P004
Parcel No. ---- 506-P-004
Net Acres ----- 24
Crop ---------- ALF/BAR
Water Pay Cap - 164
System Type --- HANDMOVE
Water System -- P004
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $ $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE. | | | | | | | | | |
| Class f(dia,LF,$/ft) ---------- | | | | | | | | | |
| 200 | 6 | 300 | 13.00 | | | 3,900 | 20 | | |
| | | | .00 | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 0 | 210 | | | | 0 | 0 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 216 | 330 | 60.2 | | | 26,337 | 132 | 1,859 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 30,237 | 151 | 1,859 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 7,559 | | | |
| Total ---------- | | | | | | 37,796 | 151 | 1,859 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 3,223 | 151 | 1,859 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 3,223 | 151 | 1,859 | 5,233 |
| Annual Cost Per Acre ---------- | | | | | | 134 | 6 | 77 | 218 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 164 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -54 |

UTE/OFFPIED

1282

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P005
Parcel No. ---- 506-P-005
Net Acres ----- 29
Crop ---------- ALF/BAR
Water Pay Cap - 165
System Type --- HANDMOVE
Water System -- P005
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $ $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(dia,Lf,$/ft) ---------- | | | | | | | | | |
| 150 | 6 | 50 | 12.50 | | | 625 | 3 | | |
| | | | .00 | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 0 | 210 | | | | 0 | 0 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 261 | 189 | 72.8 | | | 26,768 | 134 | 1,288 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS. f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |

| | | | | |
|---|---|---|---|---|
| Subtotal ---------- | 27,393 | 137 | 1,288 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | 6,848 | | | |
| Total ---------- | 34,242 | 137 | 1,288 | |
| Annualized Cost (50 yr @ 8.375%)---------- | 2,920 | 137 | 1,288 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | |
| Parcel Total Annual Cost ---------- | 2,920 | 137 | 1,288 | 4,345 |
| Annual Cost Per Acre ---------- | 101 | 5 | 44 | 150 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | -------- | -------- | -------- | 165 |
| Net Parcel Residual Water Payment Capacity ---------- | -------- | -------- | -------- | 15 |

UTE/OFFPIED

1283

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P006
Parcel No. ---- 506-P-006
Net Acres ----- 14
Crop ---------- ALF/BAR
Water Pay Cap - 147
System Type --- HANDMOVE
Water System -- P006
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(diam,LF,$/ft) ---------- | | | | | | | | | |
| 100 | 4 | 50 | 10.50 | | | 525 | 3 | | |
| | | | .00 | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 0 | 210 | | | | 0 | 0 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 126 | 149 | 35 | | | 18,771 | 94 | 488 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |

| | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|
| Subtotal | 19,296 | 96 | 488 | |
| Engineering, Administration, Legal, Contingencies 25% | 4,824 | | | |
| Total | 24,120 | 96 | 488 | |
| Annualized Cost (50 yr @ 8.375%) | 2,057 | 96 | 488 | |
| Less Incremental Water System Cost, Parcel(s) _____ | | | | |
| Parcel Total Annual Cost | 2,057 | 96 | 488 | 2,641 |
| Annual Cost Per Acre | 147 | 7 | 35 | 189 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) | -------- | -------- | -------- | 147 |
| Net Parcel Residual Water Payment Capacity | -------- | -------- | -------- | -42 |

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P007
Parcel No. ---- 506-P-007
Net Acres ----- 101.9
Crop ---------- ALF/BAR
Water Pay Cap - 169
System Type --- HANDMOVE
Water System -- P007
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(diam,LF,$/Ft) ---------- | | | | | | | | | |
| 100 | 10 | 50 | 20.00 | | | 1,000 | 5 | | |
| | | | .00 | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 50 | 210 | | | | 10,500 | 53 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 917 | 169 | 255.8 | | | 49,548 | 248 | 4,045 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 61,048 | 305 | 4,045 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 15,262 | | | |
| Total ---------- | | | | | | 76,310 | 305 | 4,045 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 6,508 | 305 | 4,045 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 6,508 | 305 | 4,045 | 10,858 |
| Annual Cost Per Acre ---------- | | | | | | 64 | 3 | 40 | 107 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 169 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | 62 |

UTE/OFFPIED

1285

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P008
Parcel No. ---- 506-P-008
Net Acres ----- 6
Crop ---------- ALF/BAR
Water Pay Cap - 105
System Type --- HANDMOVE
Water System -- P008
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(diam,LF,$/ft) ---------- | | | | | | | | | |
| 150 | 4 | 400 | 11.00 | | | 4,400 | 22 | | |
| | | | .00 | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 0 | 210 | | | | 0 | 0 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 54 | 190 | 15.1 | | | 13,079 | 65 | 268 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |

| | | | | |
|---|---|---|---|---|
| Subtotal ---------- | 17,479 | 87 | 268 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | 4,370 | | | |
| Total ---------- | 21,849 | 87 | 268 | |
| Annualized Cost (50 yr @ 8.375%)---------- | 1,863 | 87 | 268 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | |
| Parcel Total Annual Cost ---------- | 1,863 | 87 | 268 | 2,219 |
| Annual Cost Per Acre ---------- | 311 | 15 | 45 | 370 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | -------- | -------- | -------- | 105 |
| Net Parcel Residual Water Payment Capacity ---------- | -------- | -------- | -------- | -265 |

1286

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P009
Parcel No. ---- 506-P-009
Net Acres ----- 73.2
Crop ---------- ALF/BAR
Water Pay Cap - 170
System Type --- HANDMOVE
Water System -- P009
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $ $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(diam,LF,$/ft) ---------- | | | | | | | | | |
| 150 | 8 | 600 | 16.00 | | | 9,600 | 48 | | |
| | | | .00 | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 50 | 210 | | | | 10,500 | 53 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 659 | 233 | 183.7 | | | 44,387 | 222 | 4,005 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 64,487 | 322 | 4,005 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 16,122 | | | |
| Total ---------- | | | | | | 80,609 | 322 | 4,005 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 6,874 | 322 | 4,005 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 6,874 | 322 | 4,005 | 11,202 |
| Annual Cost Per Acre ---------- | | | | | | 94 | 4 | 55 | 153 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 170 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | 17 |

UTE/OFFPIED

1287

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P010
Parcel No. ---- 506-P-010
Net Acres ----- 9
Crop ---------- ALF/BAR
Water Pay Cap - 126
System Type --- HANDMOVE
Water System -- P010
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(dia,LF,$/ft) ---------- | | | | | | | | | |
| 150 | 4 | 1400 | 11.00 | | | 15,400 | 77 | | |
| | | | .00 | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 0 | 210 | | | | 0 | 0 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 81 | 209 | 22.6 | | | 15,726 | 79 | 442 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |

| | | | | |
|---|---|---|---|---|
| Subtotal ---------- | 31,126 | 156 | 442 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | 7,782 | | | |
| Total ---------- | 38,908 | 156 | 442 | |
| Annualized Cost (50 yr @ 8.375%)---------- | 3,318 | 156 | 442 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | |
| Parcel Total Annual Cost ---------- | 3,318 | 156 | 442 | 3,916 |
| Annual Cost Per Acre ---------- | 369 | 17 | 49 | 435 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | -------- | -------- | -------- | 126 |
| Net Parcel Residual Water Payment Capacity ---------- | -------- | -------- | -------- | -309 |

UTE/OFFPIED

1288

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P011
Parcel No. ---- 506-P-011
Net Acres ----- 9
Crop ---------- ALF/BAR
Water Pay Cap - 126
System Type --- HANDMOVE
Water System -- P011
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(dia,LF,$/ft) ---------- | | | | | | | | | |
| 100 | 4 | 50 | 10.50 | | | 525 | 3 | | |
| | | | .00 | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 0 | 210 | | | | 0 | 0 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 81 | 164 | 22.6 | | | 15,517 | 78 | 347 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |

| | | | | |
|---|---|---|---|---|
| Subtotal ---------- | 16,042 | 80 | 347 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | 4,010 | | | |
| Total ---------- | 20,052 | 80 | 347 | |
| Annualized Cost (50 yr @ 8.375%)---------- | 1,710 | 80 | 347 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | |
| Parcel Total Annual Cost ---------- | 1,710 | 80 | 347 | 2,137 |
| Annual Cost Per Acre ---------- | 190 | 9 | 39 | 237 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | -------- | -------- | -------- | 126 |
| Net Parcel Residual Water Payment Capacity ---------- | -------- | -------- | -------- | -111 |

UTE/OFFPIED

1289

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P012
Parcel No. ---- 506-P-012
Net Acres ----- 17
Crop ---------- ALF/BAR
Water Pay Cap - 154
System Type --- HANDMOVE
Water System -- P012
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE. | | | | | | | | | |
| Class f(diam,Lf,$/ft) ---------- | | | | | | | | | |
| 350 | 4 | 10000 | 13.00 | | | 140,400 | 702 | | |
| | | | .00 | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 0 | 210 | | | | 0 | 0 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 153 | 711 | 42.7 | | | 25,779 | 129 | 2,841 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 166,179 | 831 | 2,841 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 41,545 | | | |
| Total ---------- | | | | | | 207,723 | 831 | 2,841 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 17,714 | 831 | 2,841 | |
| Less Incremental Water System Cost, Parcel(s) ____-____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 17,714 | 831 | 2,841 | 21,386 |
| Annual Cost Per Acre ---------- | | | | | | 1,042 | 49 | 167 | 1,258 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 154 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -1,104 |

UTE/OFFPIED

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

1290

File Name ----- P017
Parcel No. ---- S07-P-017
Net Acres ----- 23
Crop ---------- ALF/BAR
Water Pay Cap - 137
System Type --- HANDMOVE
Water System -- P017-P030
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(dia,Lf,$/ft) ---------- | | | | | | | | | |
| 150 | 6 | 1400 | 12.50 | | | 17,500 | 88 | | |
| 200 | 8 | 1638 | 17.00 | | | 27,846 | 139 | | |
| 200 | 10 | 1054 | 22.50 | | | 23,715 | 119 | | |
| 200 | 14 | 658 | 35.00 | | | 23,030 | 115 | | |
| 350 | 20 | 742 | 75.00 | | | 55,650 | 278 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 3 | 210 | | | | 630 | 3 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 207 | 720 | 51.1 | | | 30,889 | 154 | 3,443 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 179,260 | 896 | 3,443 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 44,815 | | | |
| Total ---------- | | | | | | 224,075 | 896 | 3,443 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 19,109 | 896 | 3,443 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 19,109 | 896 | 3,443 | 23,448 |
| Annual Cost Per Acre ---------- | | | | | | 831 | 39 | 150 | 1,019 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 137 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -882 |

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P018
Parcel No. ---- 507-P-018
Net Acres ----- 35
Crop ---------- ALF/BAR
Water Pay Cap - 141
System Type --- HANDMOVE
Water System -- P017-P030
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(dia,LF,$/ft) ---------- | | | | | | | | | |
| 200 | 8 | 2492 | 17.00 | | | 42,364 | 212 | | |
| 200 | 10 | 1604 | 22.50 | | | 36,090 | 180 | | |
| 200 | 14 | 1001 | 35.00 | | | 35,035 | 175 | | |
| 350 | 20 | 1130 | 75.00 | | | 84,750 | 424 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 4 | 210 | | | | 840 | 4 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 315 | 635 | 77.7 | | | 38,286 | 191 | 4,617 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 237,365 | 1,187 | 4,617 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 59,341 | | | |
| Total ---------- | | | | | | 296,706 | 1,187 | 4,617 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 25,303 | 1,187 | 4,617 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 25,303 | 1,187 | 4,617 | 31,107 |
| Annual Cost Per Acre ---------- | | | | | | 723 | 34 | 132 | 889 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 141 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -748 |

UTE/OFFPIED

1292

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P020
Parcel No. ---- 507-P-020
Net Acres ----- 13
Crop ---------- ALF/BAR
Water Pay Cap - 118
System Type --- HANDMOVE
Water System -- P017-P030
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .09375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(diaa,LF,$/ft) ---------- | | | | | | | | | |
| 200 | 8 | 567 | 17.00 | | | 9,639 | 48 | | |
| 200 | 10 | 596 | 22.50 | | | 13,410 | 67 | | |
| 200 | 14 | 372 | 35.00 | | | 13,020 | 65 | | |
| 350 | 20 | 420 | 75.00 | | | 31,500 | 158 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 1 | 210 | | | | 210 | 1 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 117 | 569 | 28.9 | | | 21,129 | 106 | 1,539 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 88,903 | 445 | 1,539 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 22,227 | | | |
| Total ---------- | | | | | | 111,135 | 445 | 1,539 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 9,477 | 445 | 1,539 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 9,477 | 445 | 1,539 | 11,461 |
| Annual Cost Per Acre ---------- | | | | | | 729 | 34 | 118 | 882 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 118 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -764 |

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P021
Parcel No. ---- 507-P-021
Net Acres ----- 11
Crop ---------- ALF/BAR
Water Pay Cap - 113
System Type --- HANDMOVE
Water System -- P017-P030
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(dia,LF,$/ft) ---------- | | | | | | | | | |
| 200 | 8 | 402 | 17.00 | | | 6,834 | 34 | | |
| 200 | 10 | 504 | 22.50 | | | 11,340 | 57 | | |
| 200 | 14 | 315 | 35.00 | | | 11,025 | 55 | | |
| 350 | 20 | 355 | 75.00 | | | 26,625 | 133 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 1 | 210 | | | | 210 | 1 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 99 | 566 | 24.4 | | | 19,340 | 97 | 1,292 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 75,374 | 377 | 1,292 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 18,843 | | | |
| Total ---------- | | | | | | 94,217 | 377 | 1,292 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 8,035 | 377 | 1,292 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 8,035 | 377 | 1,292 | 9,704 |
| Annual Cost Per Acre ---------- | | | | | | 730 | 34 | 117 | 882 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 113 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -769 |

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P023
Parcel No. ---- 507-P-023
Net Acres ----- 113.8
Crop ---------- ALF/BAR
Water Pay Cap - 142
System Type --- HANDMOVE
Water System -- P017-P030
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(dia,Lf,$/ft) ---------- | | | | | | | | | |
| 200 | 14 | 3255 | 35.00 | | | 113,925 | 570 | | |
| 350 | 20 | 3673 | 75.00 | | | 275,475 | 1,377 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 12 | 210 | | | | 2,520 | 13 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 1024 | 506 | 252.6 | | | 75,736 | 379 | 11,961 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 467,656 | 2,338 | 11,961 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 116,914 | | | |
| Total ---------- | | | | | | 584,570 | 2,338 | 11,961 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 49,852 | 2,338 | 11,961 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 49,852 | 2,338 | 11,961 | 64,150 |
| Annual Cost Per Acre ---------- | | | | | | 438 | 21 | 105 | 564 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 142 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -422 |

UTE/OFFPIED

1295

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P024
Parcel No. ---- 507-P-024
Net Acres ----- 14
Crop ---------- ALF/BAR
Water Pay Cap - 120
System Type --- HANDMOVE
Water System -- P017-P030
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(diam,Lf,$/ft) ---------- | | | | | | | | | |
| 200 | 10 | 642 | 22.50 | | | 14,445 | 72 | | |
| 200 | 14 | 400 | 35 00 | | | 14,000 | 70 | | |
| 350 | 20 | 452 | 75.00 | | | 33,900 | 170 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 2 | 210 | | | | 420 | 2 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 126 | 572 | 31.1 | | | 22,001 | 110 | 1,665 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 84,766 | 424 | 1,665 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 21,191 | | | |
| Total ---------- | | | | | | 105,957 | 424 | 1,665 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 9,036 | 424 | 1,665 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 9,036 | 424 | 1,665 | 11,124 |
| Annual Cost Per Acre ---------- | | | | | | 645 | 30 | 119 | 795 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 120 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -675 |

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

1296

File Name ----- P025
Parcel No. ---- 507-P-025
Net Acres ----- 64.3
Crop ---------- ALF/BAR
Water Pay Cap - 144
System Type --- HANDMOVE
Water System -- P017-P030
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $ $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(dia,Lf,$/ft) ---------- | | | | | | | | | |
| 150 | 8 | 1600 | 15.50 | | | 24,800 | 124 | | |
| 150 | 10 | 4486 | 21.00 | | | 94,206 | 471 | | |
| 150 | 12 | 1368 | 26.50 | | | 36,252 | 181 | | |
| 350 | 20 | 2076 | 75.00 | | | 155,700 | 779 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 7 | 210 | | | | 1,470 | 7 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 579 | 702 | 142.8 | | | 59,388 | 297 | 9,381 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 371,816 | 1,859 | 9,381 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 92,954 | | | |
| Total ---------- | | | | | | 464,770 | 1,859 | 9,381 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 39,635 | 1,859 | 9,381 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 39,635 | 1,859 | 9,381 | 50,875 |
| Annual Cost Per Acre ---------- | | | | | | 616 | 29 | 146 | 791 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 144 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -647 |

UTE/OFFPIED

1297

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P026
Parcel No. ---- 507-P-026
Net Acres ----- 47.5
Crop ---------- ALF/BAR
Water Pay Cap - 144
System Type --- HANDMOVE
Water System -- P017-P030
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(dia,Lf,$/ft) ---------- | | | | | | | | | |
| 150 | 10 | 3314 | 21.00 | | | 69,594 | 348 | | |
| 150 | 12 | 1011 | 26.50 | | | 26,792 | 134 | | |
| 350 | 20 | 1534 | 75.00 | | | 115,050 | 575 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 5 | 210 | | | | 1,050 | 5 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 428 | 735 | 105.5 | | | 49,334 | 247 | 7,256 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |

| | | | | |
|---|---|---|---|---|
| Subtotal ---------- | 241,819 | 1,309 | 7,256 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | 65,455 | | | |
| Total ---------- | 327,274 | 1,309 | 7,256 | |
| Annualized Cost (50 yr @ 8.375%)---------- | 27,910 | 1,309 | 7,256 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | |
| Parcel Total Annual Cost ---------- | 27,910 | 1,309 | 7,256 | 36,475 |
| Annual Cost Per Acre ---------- | 588 | 28 | 153 | 768 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | -------- | -------- | -------- | 144 |
| Net Parcel Residual Water Payment Capacity ---------- | -------- | -------- | -------- | -624 |

1298

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P028
Parcel No. ---- 507-P-028
Net Acres ----- 57.4
Crop ---------- ALF/BAR
Water Pay Cap - 170
System Type --- HANDMOVE
Water System -- P017-P030
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(dia,Lf,$/ft) ---------- | | | | | | | | | |
| 150 | 12 | 1221 | 26.50 | | | 32,357 | 162 | | |
| 350 | 20 | 1853 | 75.00 | | | 138,975 | 695 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 6 | 210 | | | | 1,260 | 6 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 517 | 497 | 144.1 | | | 47,852 | 239 | 6,702 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 220,443 | 1,102 | 6,702 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 55,111 | | | |
| Total ---------- | | | | | | 275,554 | 1,102 | 6,702 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 23,499 | 1,102 | 6,702 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 23,499 | 1,102 | 6,702 | 31,303 |
| Annual Cost Per Acre ---------- | | | | | | 409 | 19 | 117 | 545 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 170 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -375 |

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P029
Parcel No. ---- 507-P-029
Net Acres ----- 37
Crop ---------- ALF/BAR
Water Pay Cap - 142
System Type --- HANDMOVE
Water System -- P017-P030
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(dia,Lf,$/ft) ---------- | | | | | | | | | |
| 200 | 14 | 600 | 35.00 | | | 21,000 | 105 | | |
| 350 | 20 | 1194 | 75.00 | | | 89,550 | 448 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 4 | 210 | | | | 840 | 4 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 333 | 498 | 82.1 | | | 36,653 | 183 | 3,826 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 148,043 | 740 | 3,826 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 37,011 | | | |
| Total ---------- | | | | | | 185,054 | 740 | 3,826 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 15,781 | 740 | 3,826 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 15,781 | 740 | 3,826 | 20,347 |
| Annual Cost Per Acre ---------- | | | | | | 427 | 20 | 103 | 550 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 142 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -408 |

UTE/OFFPIED

1300

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P030
Parcel No. ---- 507-P-030
Net Acres ----- 42.5
Crop ---------- ALF/BAR
Water Pay Cap - 171
System Type --- HANDMOVE
Water System -- P017-P030
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(dia,LF,$/ft) ---------- | | | | | | | | | |
| 350 | 20 | 1372 | 75.00 | | | 102,900 | 515 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 5 | 210 | | | | 1,050 | 5 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 383 | 482 | 106.7 | | | 39,433 | 197 | 4,813 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |
| Subtotal ---------- | | | | | | 143,383 | 717 | 4,813 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | | | | | | 35,846 | | | |
| Total ---------- | | | | | | 179,229 | 717 | 4,813 | |
| Annualized Cost (50 yr @ 8.375%)---------- | | | | | | 15,284 | 717 | 4,813 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | | | | | | |
| Parcel Total Annual Cost ---------- | | | | | | 15,284 | 717 | 4,813 | 20,814 |
| Annual Cost Per Acre ---------- | | | | | | 360 | 17 | 113 | 490 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | | | | | | -------- | -------- | -------- | 171 |
| Net Parcel Residual Water Payment Capacity ---------- | | | | | | -------- | -------- | -------- | -319 |

1301

COST SUMMARY
OFF FARM IRRIGATION FACILITIES
SOUTHERN UTE INDIAN RESERVATION

File Name ----- P032
Parcel No. ---- 507-P-032
Net Acres ----- 6
Crop ---------- ALF/BAR
Water Pay Cap - 131
System Type --- HANDMOVE
Water System -- P032
Date ---------- 7/24/86

Power rate $/kwh --- .068605
Interest rate ------ .08375
Project Life ------- 50

| Facilities | Column A | Column B | Column C | Column D | Column E | Capital Cost $ | O & M Cost $/yr | Power Cost $/yr | Total Cost $ |
|---|---|---|---|---|---|---|---|---|---|
| PIPELINE: | | | | | | | | | |
| Class f(diam,Lf,$/ft) ---------- | | | | | | | | | |
| 150 | 4 | 100 | 11.00 | | | 1,100 | 6 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| | | | | | | 0 | 0 | | |
| PUMP STATION: | | | | | | | | | |
| Diversion f(ft,$/ft) ---------- | 0 | 210 | | | | 0 | 0 | | |
| River Pump f(gpm,TDH,ac ft/yr) ---- | 61 | 189 | 16.6 | | | 13,793 | 69 | 294 | |
| Booster f(gpm,TDH,ac ft/yr) ------- | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| ACCESS ROADS: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| POWER LINE EXT: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PIPELINE R/W: f(LF,$/LF) | 0 | .00 | | | | 0 | 0 | | |
| PUMP STA R/W: f(acres,$/ac) | 0 | 0 | | | | 0 | 0 | | |

| | | | | |
|---|---|---|---|---|
| Subtotal ---------- | 14,893 | 74 | 294 | |
| Engineering, Administration, Legal, Contingencies 25% ---------- | 3,723 | | | |
| Total ---------- | 18,616 | 74 | 294 | |
| Annualized Cost (50 yr @ 8.375%)---------- | 1,588 | 74 | 294 | |
| Less Incremental Water System Cost, Parcel(s) _____---------- | | | | |
| Parcel Total Annual Cost ---------- | 1,588 | 74 | 294 | 1,956 |
| Annual Cost Per Acre ---------- | 265 | 12 | 49 | 326 |
| Parcel Crop Payment Capacity (Input negitive numbers with a - ) ---------- | -------- | -------- | -------- | 131 |
| Net Parcel Residual Water Payment Capacity ---------- | -------- | -------- | -------- | -195 |