### Costs and Returns per acre from establishing irrigated alfalfa after oats, 2006

#### San Juan County

<table>
<thead>
<tr>
<th>Receipts</th>
<th>Quantity per acre</th>
<th>Unit</th>
<th>Price/cost per unit</th>
<th>Value/cost per acre</th>
<th>Base Value</th>
<th>Your Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oats</td>
<td>69.0</td>
<td>bushels</td>
<td>$2.13</td>
<td>$147.20</td>
<td>$147.20</td>
<td></td>
</tr>
<tr>
<td>Straw</td>
<td>0.60</td>
<td>tons</td>
<td>$43.00</td>
<td>$25.80</td>
<td>$25.80</td>
<td></td>
</tr>
</tbody>
</table>

**Subtotal**

$173.00 $173.00

#### Operating costs

**Land preparation**

- Plowing: 1 acre $22.78 $22.78 $22.78
- Discing: 1 acre $11.56 $11.56 $11.56
- Land plane: 2 acre $11.50 $23.00 $23.00

**Planting**

- Oat: 1 acre $12.21 $12.21 $12.21
- Alfalfa: 70 pounds $0.17 $11.90 $11.90

**Fertilization**

- Nitrogen (34-0-0): 205 pounds $0.18 $36.59 $36.59
- Phosphate (11-52-0): 48 pounds $0.18 $8.57 $8.57

**Custom application**

- 1 acre $7.82 $7.82 $7.82

**Pesticides/herbicides**

- 2-4-D: - pint $2.75 $0.00 $0.00
- Custom application: - acre $7.82 $0.00 $0.00

**Irrigation (wheel line)**

- 4 irrigations: 1.33 hours $10.00 $13.33 $13.33

**Labor**

- 1 share $10.00 $10.00 $10.00

**Reparis/maintenance**

- 1 acre $2.30 $2.30 $2.30

**Pumping**

- 27 acre inch $0.00 $0.00 $0.00

**Harvesting**

- Combining: 1 acre $26.00 $26.00 $26.00
- Haul grain (custom): 69.0 bushel $0.06 $4.14 $4.14
- Baling: 0.60 tons $4.79 $2.87 $2.87

**Haul/stack straw**

- 0.60 tons $3.63 $2.18 $2.18

**Interest on operating capital**

- 7.61% $8.58 $8.58 $8.58

**Subtotal**

$234.07 $242.85

#### Ownership costs (excludes cost of land)

- Farm insurance: 1 acre $2.00 $2.00 $2.00
- Machinery ownership costs: 1 acre $33.78 $33.78 $33.78
- Irrigation equipment costs: 1 acre $8.25 $8.25 $8.25

**Total costs**

$278.11 $286.88

Net returns to owner for unpaid labor, management, equity and risk

- Above operating costs: $61.07 $69.85
- Above total listed costs: $105.11 $113.88

#### Breakeven Table - Oats

<table>
<thead>
<tr>
<th>Yield (Bu/Ac)</th>
<th>$1.13</th>
<th>$1.63</th>
<th>$2.13</th>
<th>$2.63</th>
<th>$3.13</th>
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</thead>
<tbody>
<tr>
<td>54.00</td>
<td>-$146.17</td>
<td>-$119.17</td>
<td>-$82.17</td>
<td>-$55.17</td>
<td>-$3.17</td>
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<tr>
<td>59.00</td>
<td>-$140.81</td>
<td>-$111.31</td>
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<tr>
<td>64.00</td>
<td>-$135.44</td>
<td>-$103.44</td>
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<tr>
<td>69.00</td>
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<td>74.00</td>
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<td>79.00</td>
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<td>-$79.84</td>
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<tr>
<td>84.00</td>
<td>-$113.97</td>
<td>-$71.97</td>
<td>-$29.97</td>
<td>$12.03</td>
<td>$54.03</td>
</tr>
</tbody>
</table>

**Assumptions**

1. Grain and alfalfa planted in March and harvested in July.
2. Interest computed on land preparation and planting costs for 10 months and fertilization/herbicide/irrigation costs for 3 months.
3. Custom rates for all field operations.
4. Only owned machinery are a loader and truck.

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