### Infiltration Assessment (Water Quality)

<table>
<thead>
<tr>
<th>SAR</th>
<th>Degree of Restriction on Use (ECw in dS/m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Slight to Moderate</td>
</tr>
<tr>
<td>0 - 3</td>
<td>&gt; 0.7</td>
</tr>
<tr>
<td>3 - 6</td>
<td>&gt; 1.2</td>
</tr>
<tr>
<td>6 - 12</td>
<td>&gt; 1.9</td>
</tr>
<tr>
<td>12-20</td>
<td>&gt; 2.9</td>
</tr>
<tr>
<td>20-40</td>
<td>&gt; 5.0</td>
</tr>
</tbody>
</table>

SAR = 4, ECw = 1.1 dS/m (restriction on use: slight)

### Soil Structure

- **Downward movement of H2O**
  - Single Grain: Rapid
  - Granular
  - Blocky
  - Prismatic
  - Platy
  - Massive

### Surface Irrigation System - Graded Border Program

**INPUTS:**
- CFS = 7.5
- Net application depth (2")
- % field slope (0.001'/ft.)
- Soil Intake (0.6"
- Manning’s (n = .15)
- Field Width (436")
- Field Length (600")

### Results:
- Appl. Efficiency (81%)
- Runoff = 0.11"

### Example Assessment: Irrigated with Hi-Flow Turn Out

- Soil: Silt Loam
- Soils Intake Family: 0.6
- SAR is 4 & ECw is 1.1
- Runoff is 0.11" (erosion is not observed)
- HSG is B and has a moderate infiltration rate
- Soil Structure: Granular

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1/ Clay is resistant to detachment (low erodibility potential). Sand is easily detached (low erodibility potential due to large dense particles). Silt Loam is moderately detachable (moderate to high erodibility potential). Silt is easily detached (high erodibility potential; is easily transported).