## Water Sources: Waterer Comparison Chart

Source	Primary Advantages	Primary Limitations	Initial Cost	Maintenance Cost
Stream	Naturally occurring, no direct installation cost.	<ul> <li>Water may become stagnant and of poor quality during periods of low flow.</li> <li>Can have high levels of bacteria.</li> <li>Floods can cause maintenance issues (repair of fences and crossings).</li> </ul>	\$	\$-\$\$
Pond	<ul> <li>Does not involve mechanical or electrical parts that can fail.</li> <li>Can be used for recreational purposes too.</li> </ul>	<ul> <li>Direct livestock access can cause poor water quality and damage structural integrity.</li> <li>High initial cost.</li> <li>Periodic restoration (silt removal).</li> <li>Variable supply depending upon precipitation.</li> </ul>	\$\$\$\$	\$
Spring	<ul> <li>Relatively inexpensive.</li> <li>Small flows can be developed into a water supply.</li> </ul>	Not present in all locations.	\$-\$\$	\$
Water Intake Structure	<ul> <li>Simple and inexpensive.</li> <li>Reduces sediment and nutrients entering streams and ponds.</li> </ul>	<ul> <li>Stream or pond access required.</li> <li>May require rental equipment or contractor to install.</li> <li>Not a common installation in Kansas.</li> </ul>	\$-\$\$	\$
Well	<ul> <li>Consistent water quality.</li> <li>Long useful life.</li> <li>Reduces chances of surface water contamination.</li> </ul>	<ul> <li>Groundwater may be deep, increasing installation costs.</li> <li>Aquifer not present in all locations.</li> <li>Power source needed to pump water.</li> </ul>	\$\$\$-\$\$\$\$	\$
Rural Water District	<ul> <li>Reliable supply.</li> <li>High water quality.</li> </ul>	<ul> <li>Not available in all locations.</li> <li>Pipeline from waterer to district line may be long and expensive to install.</li> <li>Minimum water use charges apply year-round.</li> <li>Membership and meter fees.</li> </ul>	\$-\$\$\$	\$
Hauled Water	<ul> <li>Very mobile.</li> <li>Adapted to short-term grazing.</li> </ul>	<ul> <li>Labor intensive.</li> <li>Muddy/snowy conditions may complicate water delivery.</li> <li>Water may be wasted when valve not turned off.</li> </ul>	\$	\$\$-\$\$\$