

## Baker Valley Quaternary-Late Tertiary Sediment Aquifers



Median hydraulic parameters indicate these gravel, sand and clay aquifers have 20% of ideal conditions for artificial recharge. They are not likely targets for underground storage. The rating table is included below, and interested parties may insert site-specific data to produce results that reflect localized aquifer conditions.

Positive characteristics for artificial recharge:

- Gravel, sand and clay greater than 160 ft thick may compensate for moderate hydraulic conductivity.
- This aquifer lies at the surface, allowing recharge through spreading basins.

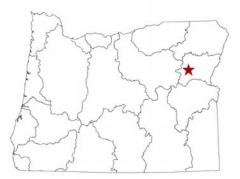
### Negatives:

- Low hydraulic conductivity limits storage potential in many areas.
- Recharged water may escape to surface water before it can be recovered for other uses.
- Depth to water will not allow a large rise in water level during injection.

Surface water availability will strongly affect underground storage potential. This requires site-specific knowledge of water rights quantity and timing.

#### Sources:

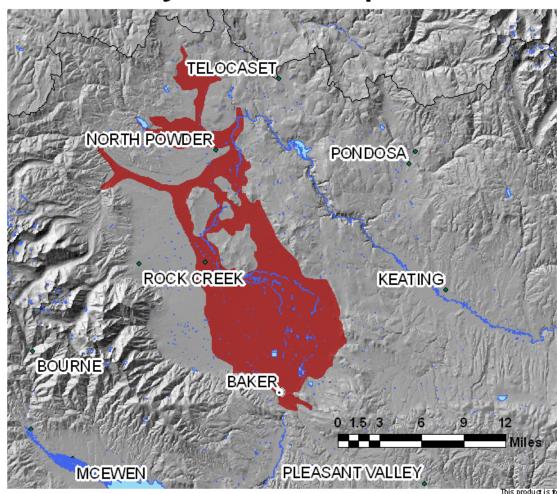
OWRD well log and pump test database





# Extent of Baker Valley Quaternary-Late Tertiary Sediment Aquifers





Less Storage



More Storage

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

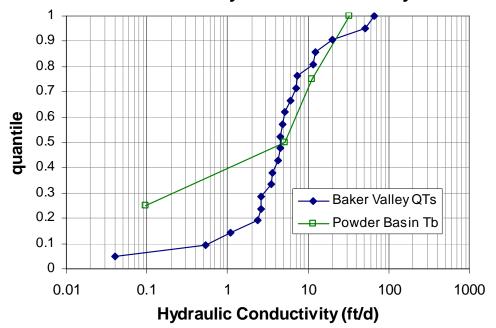
### **Unconsolidated Unit: Baker Valley Quaternary-Late Tertiary Sediment Aquifers**

				Find the "value range" where the "value for calculation" falls, and select the corresponding rating										
Physical Parameter	Range of Reported Values	Value for Calc- ulation	Value Range	Rating	Value Range	Rating	Value Range	Rating	Value Range	Rating	Value Range	Rating	Selected Rating	Data Quality
Depth to Formation (ft)	6-54	27	0-4	20	5-9	15	10-24	10	25-49	3	>50	1	3	3
Saturated Thickness (ft)	25-660	175	0-19	1	20-39	2	40-79	4	80-159	8	>160	10	10	3
Head Freeboard (ft)	4-60	25	0-4	1	5-9	2	10-19	4	20-29	8	>30	50	8	3
Storage Coefficient	0.001- 0.2	0.1	0- 0.09	1	0.1- 0.14	5	0.15- 0.19	10	0.2-0.24	25	>0.25	50	5	1
Hydraulic Conductivity (ft/d)	0.1-33	11	0-0.9	1	1-9	5	10-99	10	100-999	25	>1000	50	10	2
											T	otals:	36	12

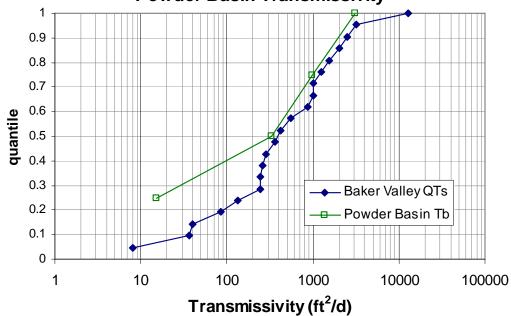
Sum of Selected Ratings/Perfect Rating = 36/180 = 20%

**Data Quality:** 1=based on general values for this aquifer lithology 2=based on 8 or less well logs 3=based on more than 8 well logs 4=based on published information and/or data specific to this aquifer

### **Powder Basin Hydraulic Conductivity**



### **Powder Basin Transmissivity**



Abbreviations: QTs = Quaternary-Late Tertiary Sediment AquifersTb = Late Tertiary Basalt Aquifers