

630.73

W 27c

no. 3148

Q. 1.

E.M. 3148  
July 1969

● BEVERLY

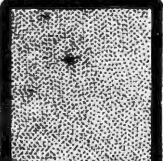
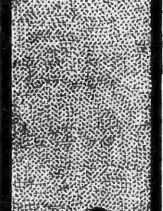
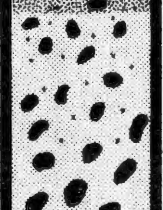
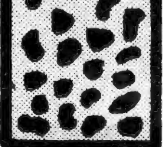
# SOIL GUIDE SHEET

LIBRARY  
SEP 16 1969  
WASHINGTON STATE UNIVERSITY

These are excessively drained, coarse and moderately coarse textured soils that formed in recent alluvium. They are on low bars and bottom lands along the main streams and, in places, on low terraces. The parent material is a mixture of basaltic, granitic and quartzitic rocks. These soils are found in Chelan, Douglas, Kittitas, Walla Walla and Yakima Counties.

<u>Representative Description:</u>	<u>Water<sup>1/</sup> Holding Capacity In/in</u>	<u>Permea- bility In/hr</u>	<u>Shrink- Swell Potential</u>	<u>Engineering Classification</u> Unified AASHO	
------------------------------------	--	-------------------------------------	--	--	--

BEVERLY sandy loam

1'-		<u>Surface layer:</u> 0-6", dark grayish-brown sandy loam, loose; pH 7.9-8.4	.13	6.3-20.0	low	SM	A-2
2'-		<u>Upper subsoil:</u> 6-17", dark grayish-brown sandy loam, massive; pH 7.4-7.8	.13	6.3-20.0	low	SM	A-2
3'-		<u>Lower Subsoil:</u> 17-35", grayish-brown fine sandy loam or sandy loam; pH 7.9-8.4	.15	6.3-20.0	low	SM	A-2
4'-		<u>Substratum:</u> 35"+, pebbles and cobbles of basalt and granite	0.00	6.3-20.0	low	GP	A-1

**Caution:** All Beverly soils are not exactly like the one shown above. Differences in characteristics will affect suitability and limitations for uses. See Capability Classification table.

**ABOUT THE SOIL GUIDE SHEETS:** Soil Guide Sheets are written primarily to indicate suitability for irrigation farming. In addition, some engineering properties are shown. These will serve as a preliminary guide but on-site investigation will be needed before making final decisions on non-agricultural uses. Certain terms and soil ratings may not be self explanatory. Refer to "Guide to the Use of Soil Guide Sheets".

Capability Classification

Beverly soils	(percent slope)		
	0-2	2-5'	5-15
1. Loamy fine sand <sup>3/</sup> .....	IVs	IVe	IVe
2. Sandy loam <sup>3/</sup> .....	IVs	IVe	
3. Fine sandy loam, deep <sup>2/</sup> .....	IIs	IIE	IIIe
4. Gravelly sandy loam <sup>3/</sup> .....	IIIs	IIIe	IIIe
5. Loamy fine sand, deep <sup>2/</sup> .....	IVe	IVe	
6. Gravelly fine sandy loam <sup>3/</sup> .....	IIIs	IIIe	
7. Loamy sand <sup>3/</sup> .....	IVe	IVe	
8. Fine sandy loam <sup>3/</sup> .....	IIs	IIE	
9. Very gravelly loamy fine sand <sup>3/</sup> .....	VIe	VIe	
10. Gravelly loamy sand <sup>3/</sup> .....	IVs	IVe	
11. Silt loam <sup>3/</sup> .....	IVw	IVw	

Determine the depth of your soil. Depth affects use and management. Total water holding capacity is less on shallower soil.

Suitability as a source of:

- Topsoil - Fair
- Sand - Fair
- Gravel - Fair
- Road Fill - Good

Soil features affecting engineering uses:

- Highway location - Compaction is good, low susceptibility to frost action
- Dikes, Levees, Embankments - Susceptible to piping
- Reservoir - Rapidly permeable
- Septic disposal systems - Rapid permeability, excessively drained, may be subject to overflow during high runoff

Suitability for irrigation farming:

- Water holding capacity - Low
- Infiltration - Moderate
- Permeability - Rapid
- Drainage - Excessively drained
- Salinity and alkali hazard - Low
- Erosion hazard - Wind erosion, moderate; water erosion, slight

General Evaluation: Beverly soils are productive under irrigation but special management is required, especially for coarser-textured and shallower soils. Suitable for sprinkler irrigation only. Leveling may expose areas of gravel and cobbles. Have your soil tested to determine fertilizer needs. Suitable for grain, forage and row crops.

---

<sup>1/</sup> Adapted from "Water Holding Capacities of Columbia Basin Soils", Mel A. Hagood, D. E. Miller, and Eugene Larson, Ext. Circ. \_\_\_\_ (In Press), Cooperative Extension Service, Washington State University

<sup>2/</sup> Deep and very deep soils (40"+) with no inhibiting layers in the profile

<sup>3/</sup> Moderately deep or moderately shallow soils (20-40") over sands, gravels, etc.