Protecting Washington County’s Remaining Class 1 Soils

Greg Mecklem
12995 NW Bishop Rd.
Hillsboro, OR 97124
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Not all soils are created equal

- NRCS* has developed soil capability classes
- Indicate productivity of soil
- Highest Class I soils remain productive irrespective of whether irrigation is used
- Important to protect these soils in an era of water shortages
- Soil preservation / local food production is important
  - Food security
  - Advent of peak oil

*Natural Resource Conservation Service, an agency of USDA
Soil capability classes

- Class I soils have few limitations that restrict their use.
- Class II soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.
- Class III soils have severe limitations that reduce the choice of plants, or that require special conservation practices, or both.
- Class IV soils have very severe limitations that reduce the choice of plants, or that require very careful management, or both.
- Class V soils are not likely to erode but have other limitations, impractical to remove, that limit their use.
- Class VI soils have severe limitations that make them generally unsuitable for cultivation.
- Class VII soils have very severe limitations that make them unsuitable for cultivation.
- Class VIII soils and landforms have limitations that nearly preclude their use for commercial crop production.

- Essential to protect Class I soils – few limitations on productivity
- Class II-IV have moderate to severe limitations on productivity
- Class V-VIII have serious productivity problems – not useful for ag
WaCo soils overview

WaCo County
Soils by nonirrigated capability class

Legend
Nonirrigated Capability Class
- Capability Class - I
- Capability Class - II
- Capability Class - III
- Capability Class - IV
- Capability Class - V
- Capability Class - VI
- Capability Class - VII
- Capability Class - VIII
- Not rated or not available

This map is for general planning purposes only.
4 areas of concentrated Class I soils

Washington County
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Sunset corridor
Tech district
South Cornelius
Sherwood

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Assisted By: Nathan P. Adelman
USDA-NRCS
08 March 2011
Class I areas already paved over

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Tech district

Already urbanized North Hillsboro Soils by nonirrigated capability class

>20% Class I soils
Class I areas remaining

Washington County
Soils by nonirrigated capability class

Sunset corridor

South Cornelius

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Helvetia - Sunset Class I Soil District

Sunset Class I Soil District
Soils by nonirrigated capability class

- Contains appx. 17% Class I soils
- Although this District has over 50% of the non-urbanized Class I soils in WaCo, much of the area lacks Rural Reserves protection

This map is for general planning purposes only.
Proposed Urban Reserves – Area D

Helvetia N of 26 proposed Urban Reserve
Soils by nonirrigated capability class

- 20% Class I soils
- One of the highest concentrations of Class I soils in WaCo
- Should have Rural Reserves protection

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Rural Reserves
South of Banks

- Currently in ag production
- Class II to IV soils
- No Class I soils
- Protected under Rural Reserves

Proposed Rural Reserve West
Soils by nonirrigated capability class

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08 March 2011

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Rural Reserves
Gales Peak

- 30-70% slopes
- Over 90% Class VI and VII soils
- No threat of urbanization
- Protected under Rural Reserves!
Rural Reserves
Unger Road (south of Cornelius)

- Mixed forest and farmland
- No Class I soils
- Mostly Class II to IV soils
- Protected under Rural Reserves

South Proposed Rural Reserves
Soils by nonirrigated capability class

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Summary

- The Helvetia Sunset Class I soil district contains over 50% of the remaining Class I soils in WaCo.

- Much of it is slated for development under Urban Reserves or remains unprotected.

- It needs to be protected as Rural Reserves.

Class I Willamette Silt Loam soil
(Area D)
Undesignated areas around North Plains

North Plains Undesignated Soils by nonirrigated capability class

Legend
- Nonirrigated Capability Class
  - Capability Class - I
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Helvetia area - north of Highway 26

Helvetia N of Sunset, S of West Union, W of Helvetia Rd.
Soils by nonirrigated capability class

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South of Highway 26

North Hillsboro proposed UR
Soils by nonirrigated capability class

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Cornelius N. of Council Creek
Soils by nonirrigated capability class

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