

# Protecting Washington County's Remaining Class 1 Soils



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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

## 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

- 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.

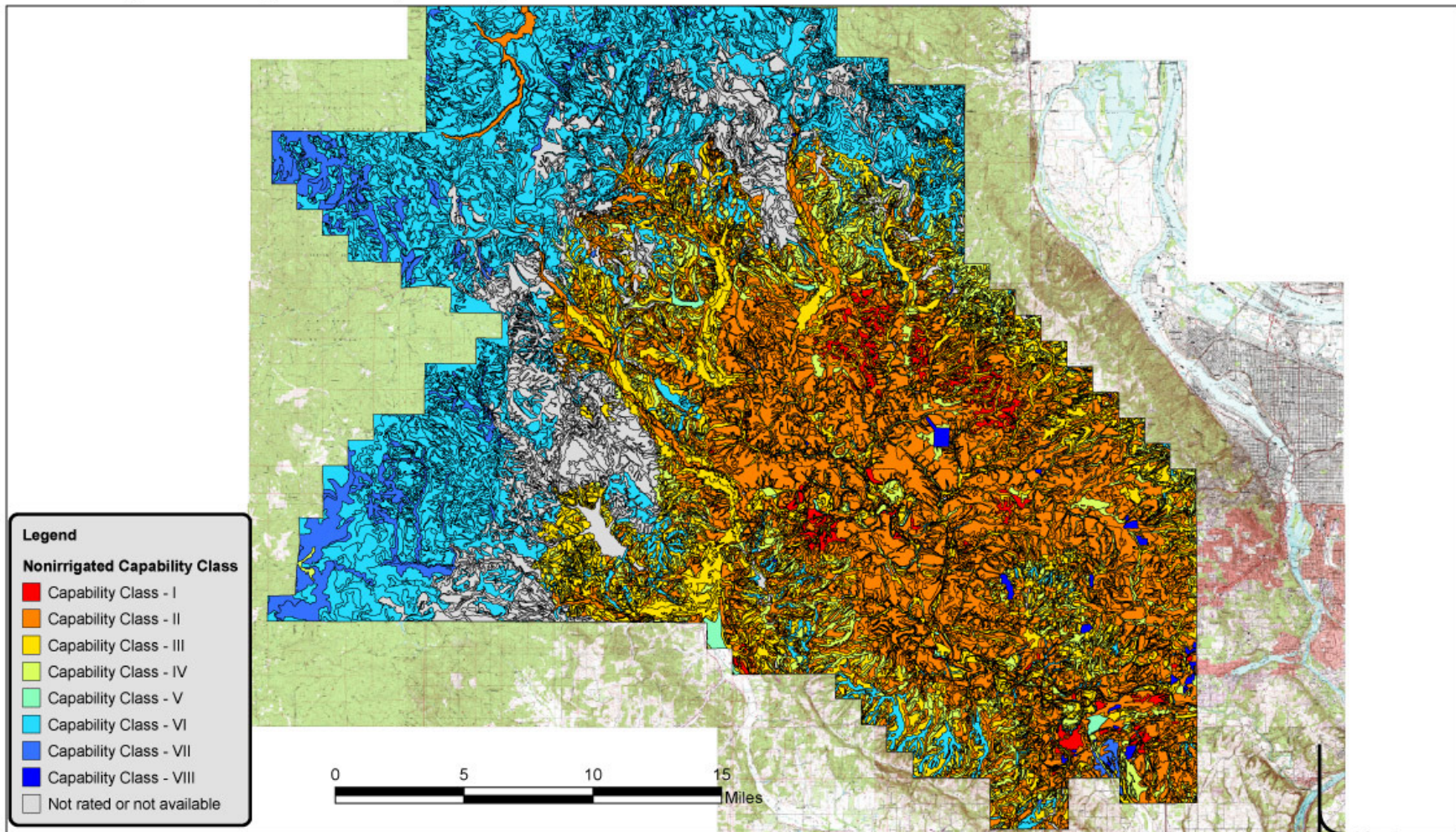
- Essential to protect Class I soils – few limitations on productivity
- Class II-IV have moderate to severe limitations on productivity
- Class V-VIII have serious productivity problems – not useful for ag



# WaCo soils overview

## Washington County Soils by nonirrigated capability class

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USDA-NRCS  
08 March 2011



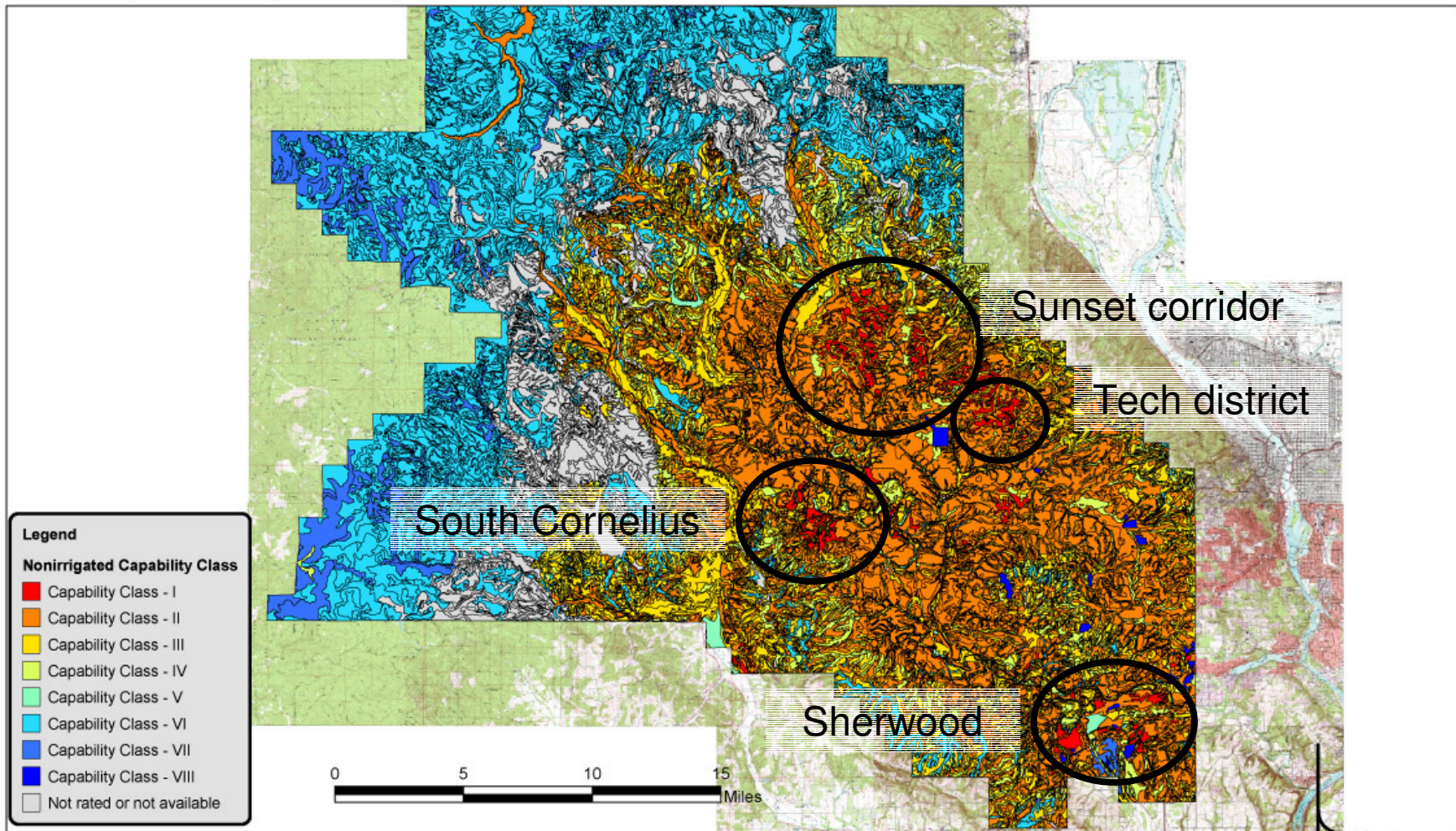
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# 4 areas of concentrated Class I soils

**Washington County**  
**Soils by nonirrigated capability class**

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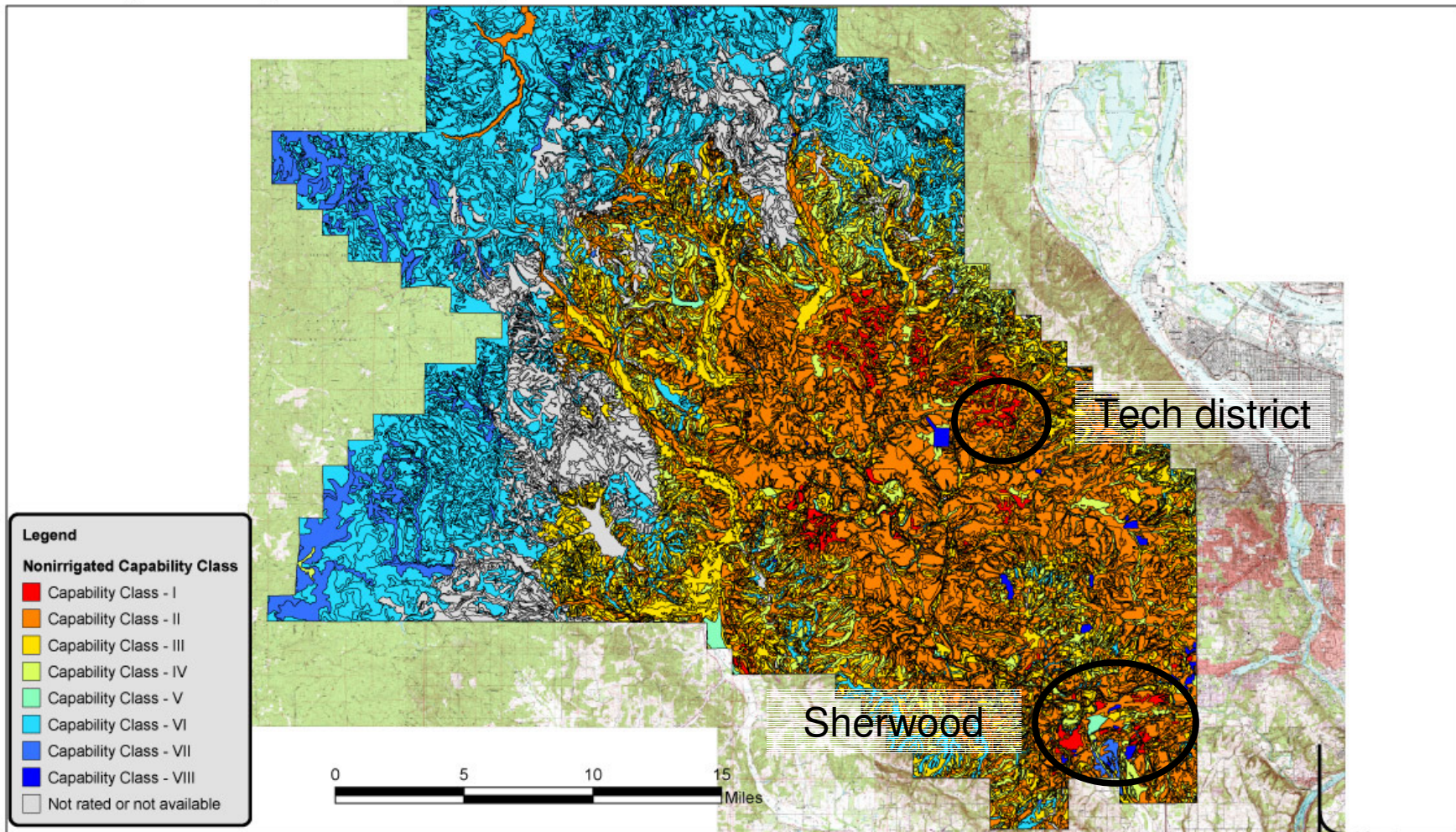
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# Class I areas already paved over

## Washington County Soils by nonirrigated capability class

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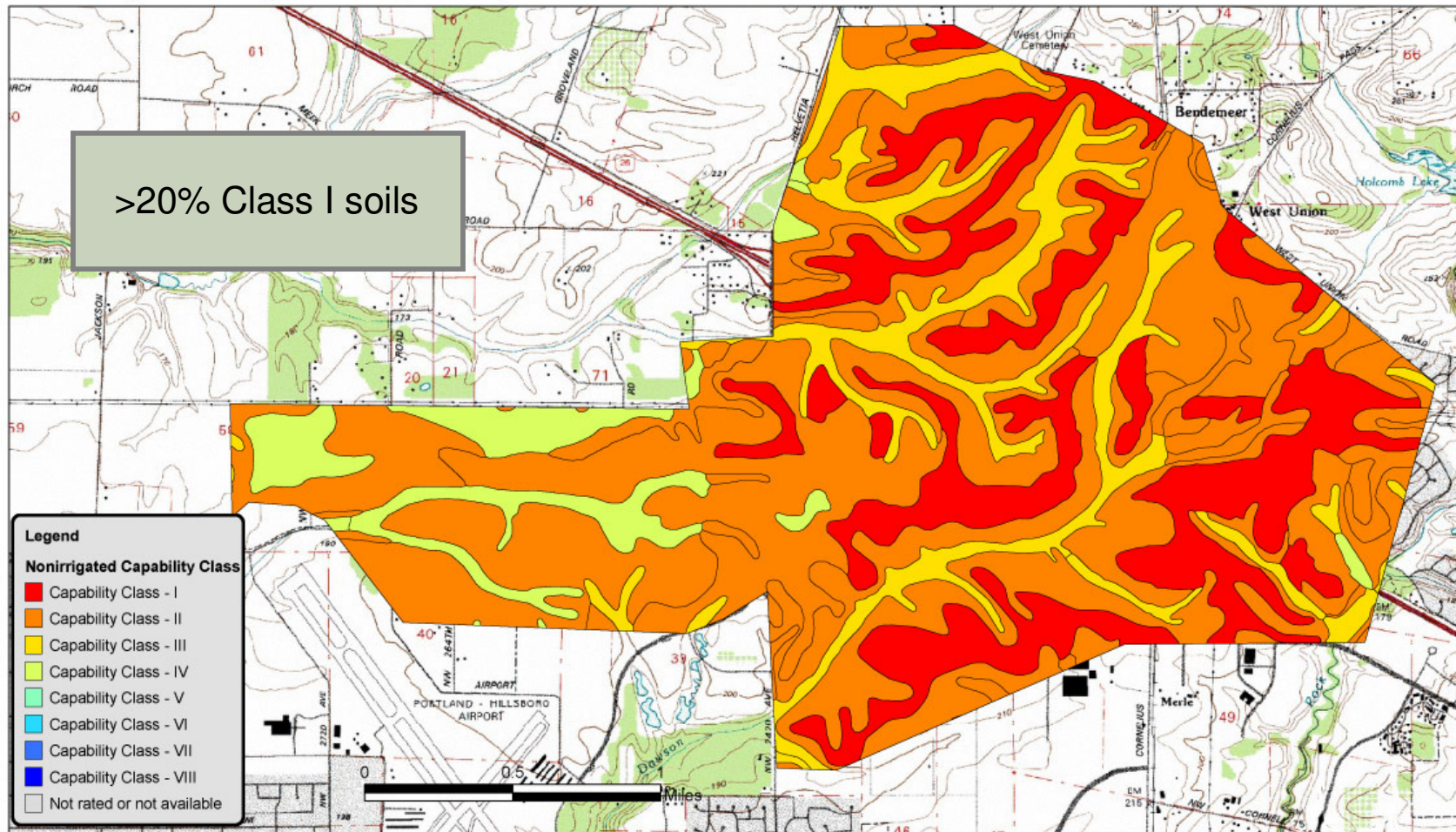
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# Tech district

## Already urbanized North Hillsboro Soils by nonirrigated capability class

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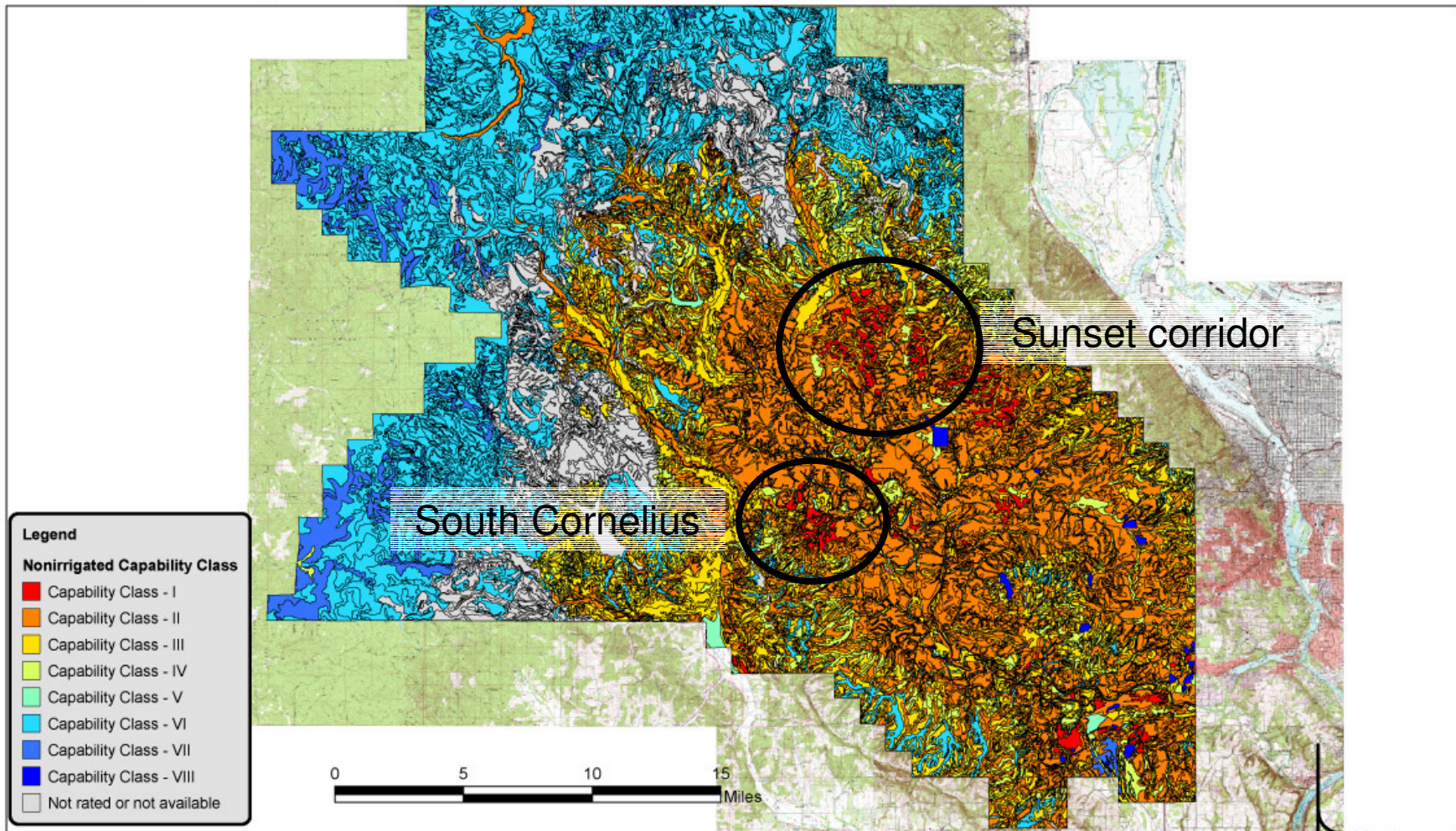
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# Class I areas remaining

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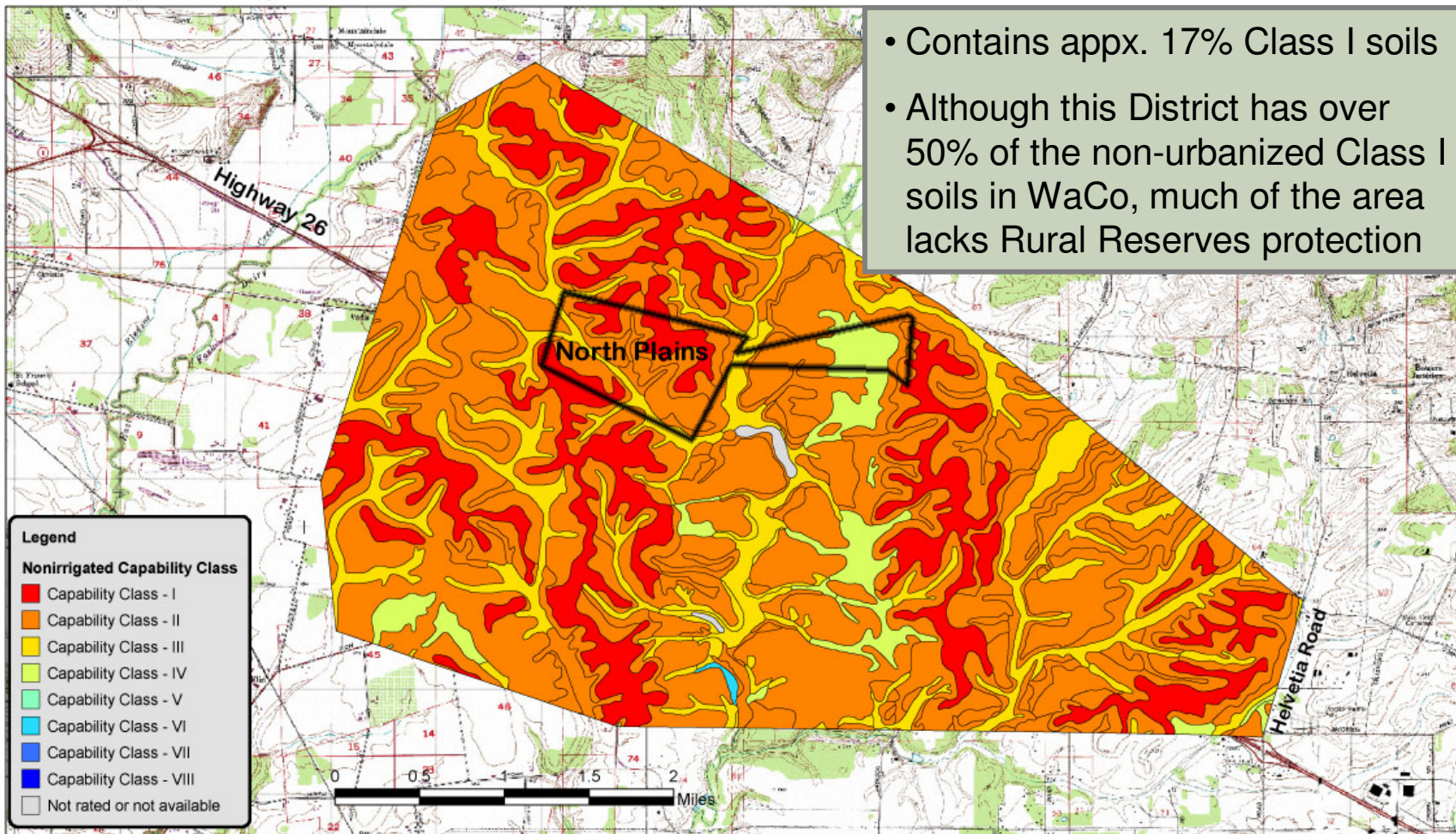
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# Helvetia - Sunset Class I Soil District

## Sunset Class I Soil District Soils by nonirrigated capability class

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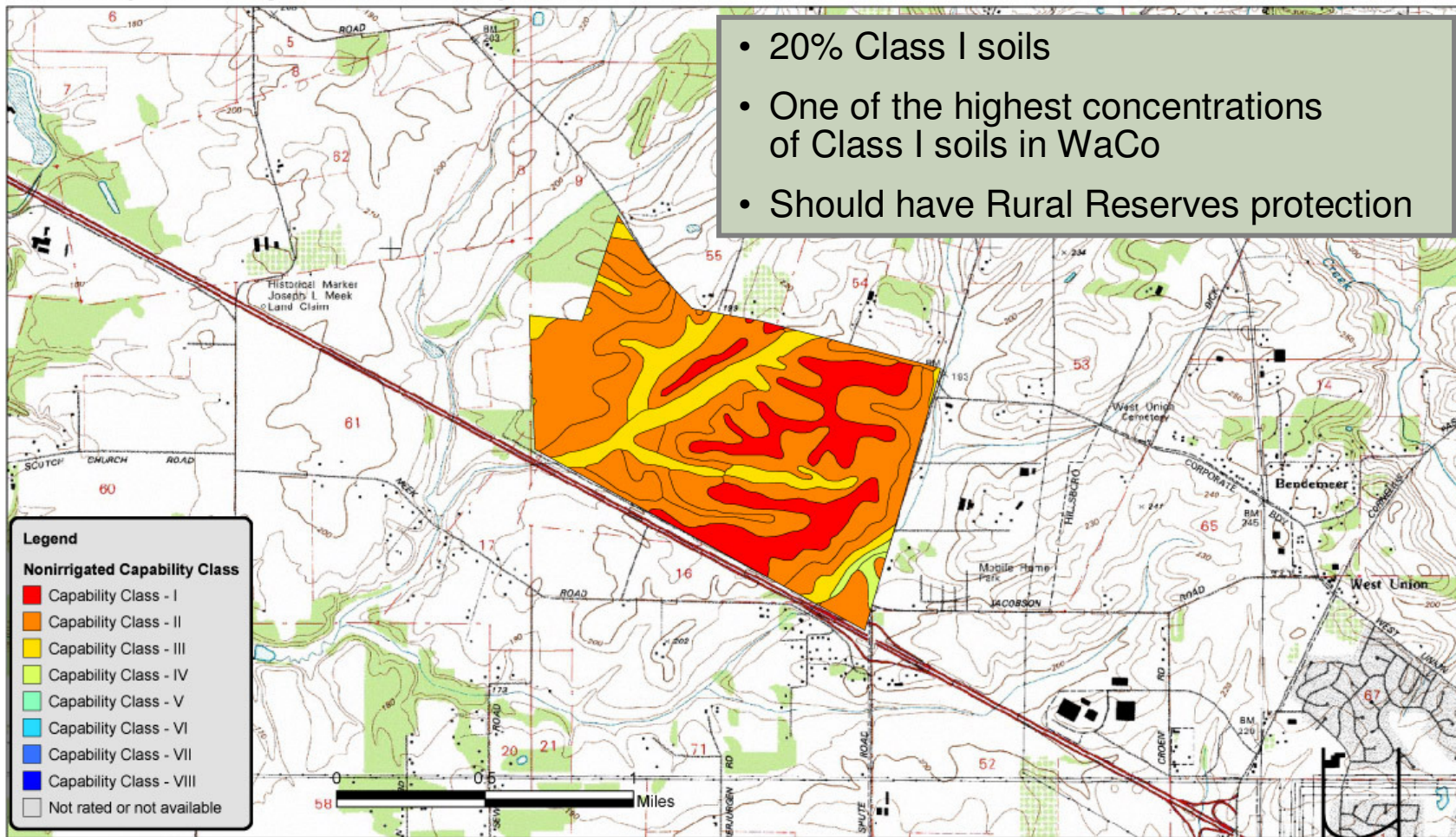
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# Proposed Urban Reserves – Area D

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

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# Rural Reserves

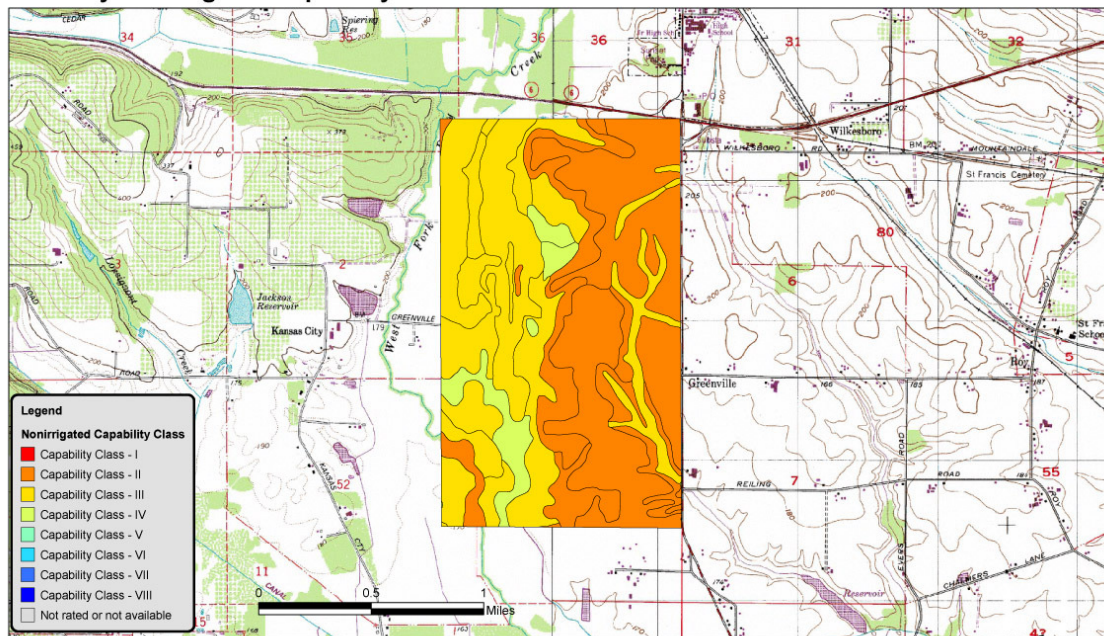
## South of Banks

- 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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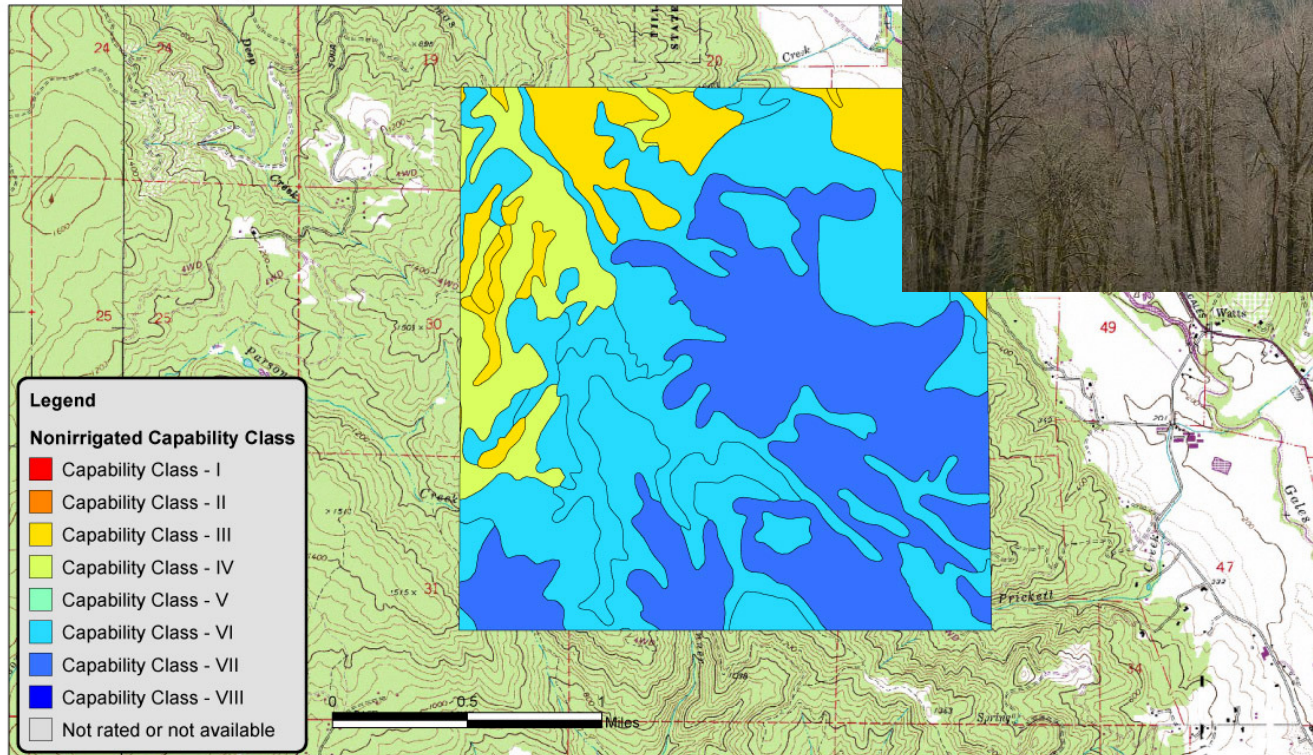
# Rural Reserves

## Gales Peak

- 30-70% slopes
- Over 90% Class VI and VII soils
- No threat of urbanization
- Protected under Rural Reserves!



### Gales Peak Rural Reserve Soils by nonirrigated capability class



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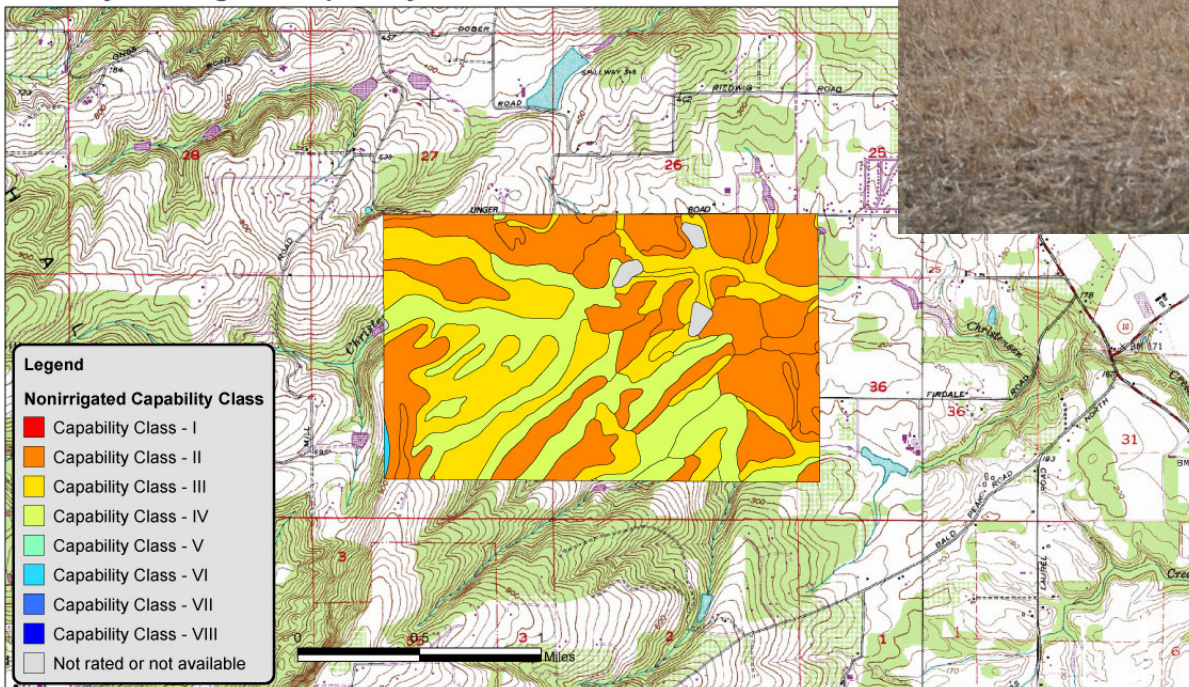
# Rural Reserves

## 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



Class I Willamette Silt Loam soil  
(Area D)

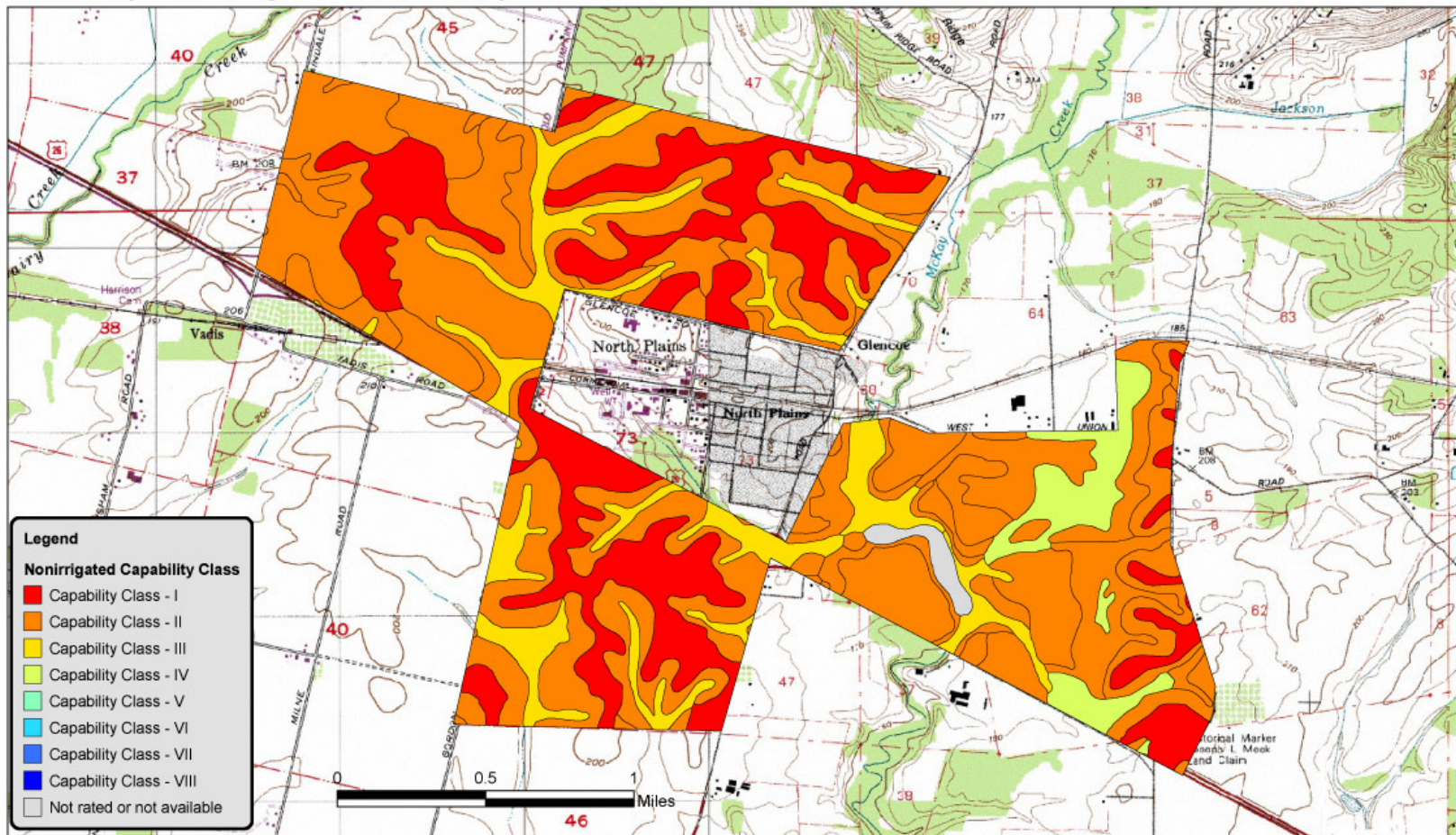
- The Helvetia Sunset Class I soil district contains over 50% of the remaining Class I soils in WaCo.
- Much of it is slated for development under Urban Reserves or remains unprotected.
- It needs to be protected as Rural Reserves.



# Undesignated areas around North Plains

## North Plains Undesignated Soils by nonirrigated capability class

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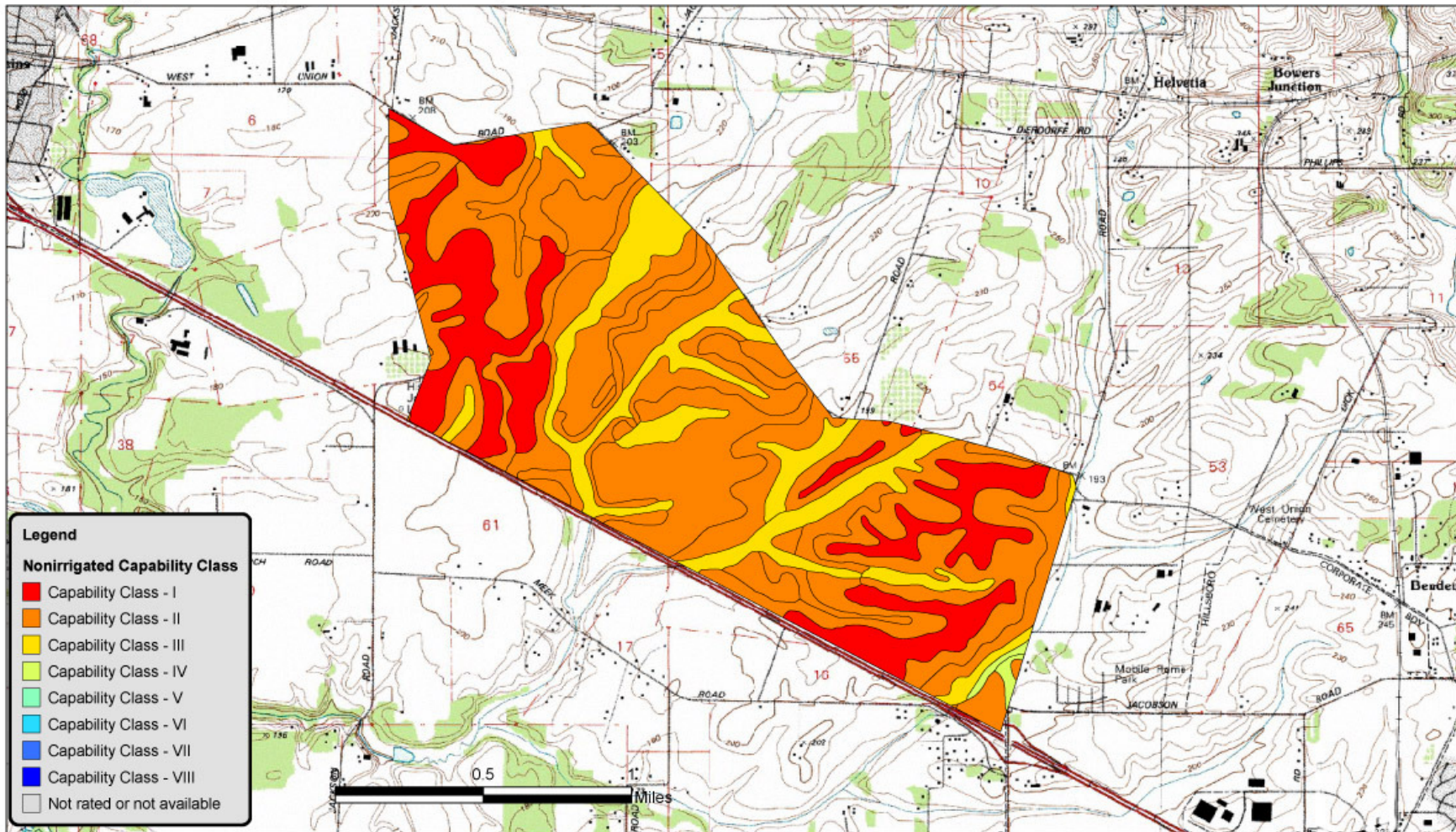
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# Helvetia area - north of Highway 26

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

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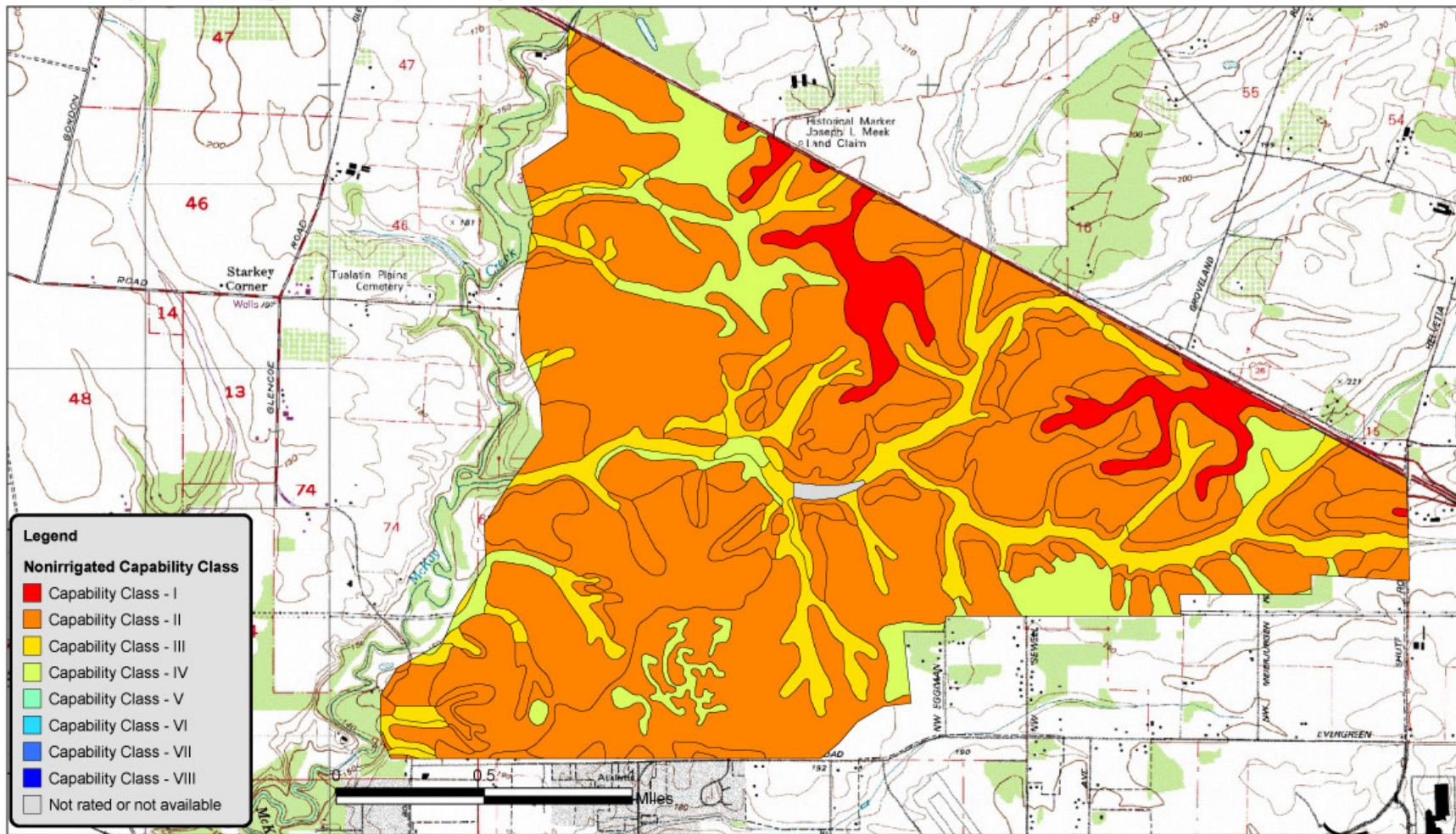
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# South of Highway 26

## North Hillsboro proposed UR Soils by nonirrigated capability class

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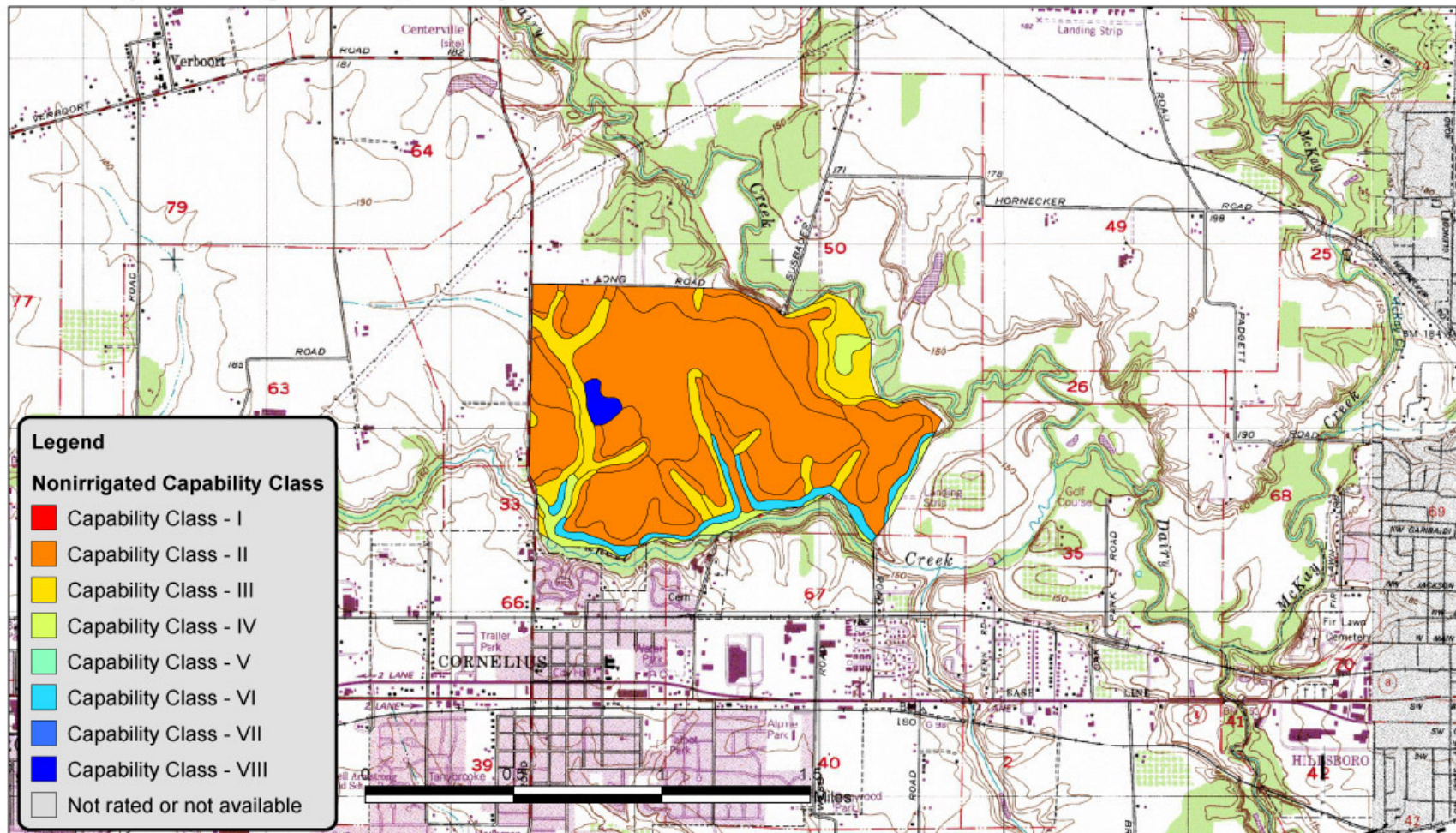
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# Cornelius north of Council Creek

## Cornelius N. of Council Creek Soils by nonirrigated capability class

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