Soil Information Resources to Enhance Productivity and Natural Resource Sustainability

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http://casoilresource.lawr.ucdavis.edu/soilweb/

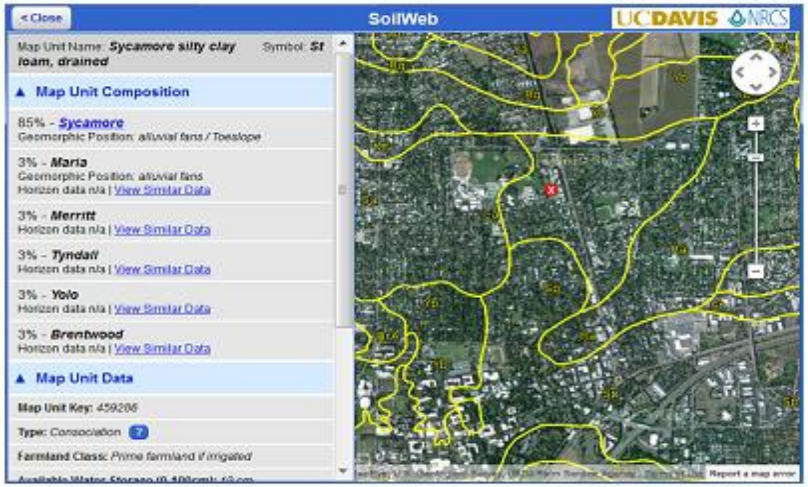
California Soil Resource Lab

SoilWeb: An Online Soil Survey Browser

Our online soil survey can be used to access USDA-NCSS detailed soil survey data (SSURGO) for most of the United States. Please choose an interface to SoilWeb:

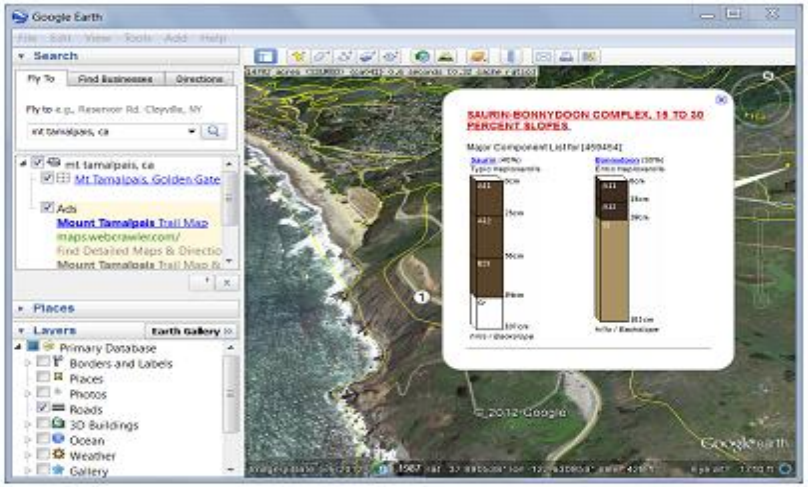
SoilWeb

Explore mapped soil survey areas using an interactive Google map and view detailed information about map units and their components. This app runs in your web browser and is compatible with desktop computers, tablets, and smartphones.



SoilWeb Earth

Soil survey data are delivered dynamically in a KML file, allowing you to view mapped areas in a 3-D display. You must have Google Earth or some other means of viewing KML files installed on your desktop computer, tablet, or smartphone.

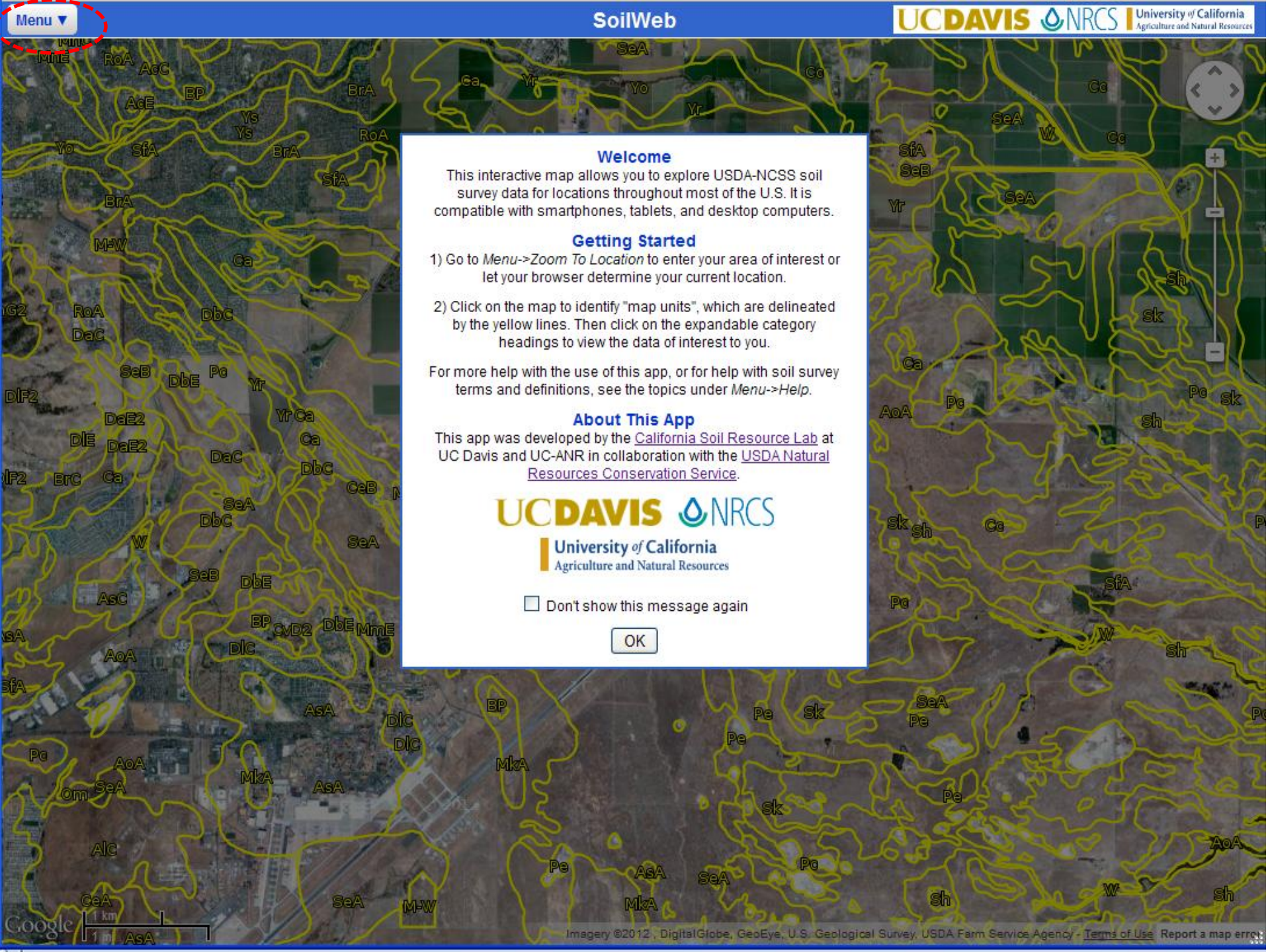


iPhone and Android apps

These are native smartphone apps that use your device's GPS to give soil information for your current location.

Text Interface

Choose from a list of available survey areas and map units to view the soil information of interest to you.


Menu ▼
SoilWeb
UCDAVIS NRCS University of California Agriculture and Natural Resources
Welcome
This interactive map allows you to explore USDA-NCSS soil survey data for locations throughout most of the U.S. It is compatible with smartphones, tablets, and desktop computers.
Getting Started
1) Go to Menu->Zoom To Location to enter your area of interest or let your browser determine your current location.
2) Click on the map to identify "map units", which are delineated by the yellow lines. Then click on the expandable category headings to view the data of interest to you.
For more help with the use of this app, or for help with soil survey terms and definitions, see the topics under Menu->Help.
About This App
This app was developed by the California Soil Resource Lab at UC Davis and UC-ANR in collaboration with the USDA Natural Resources Conservation Service.
UCDAVIS NRCS
University of California
Agriculture and Natural Resources
Don't show this message again
OK
Google
Imagery ©2012 , DigitalGlobe, GeoEye, U.S. Geological Survey, USDA Farm Service Agency - Terms of Use Report a map error

Zoom To Location

Use My Current Location ? About this...

- OR -

Enter a location:

Corning, CA Go

Locations may be entered as:

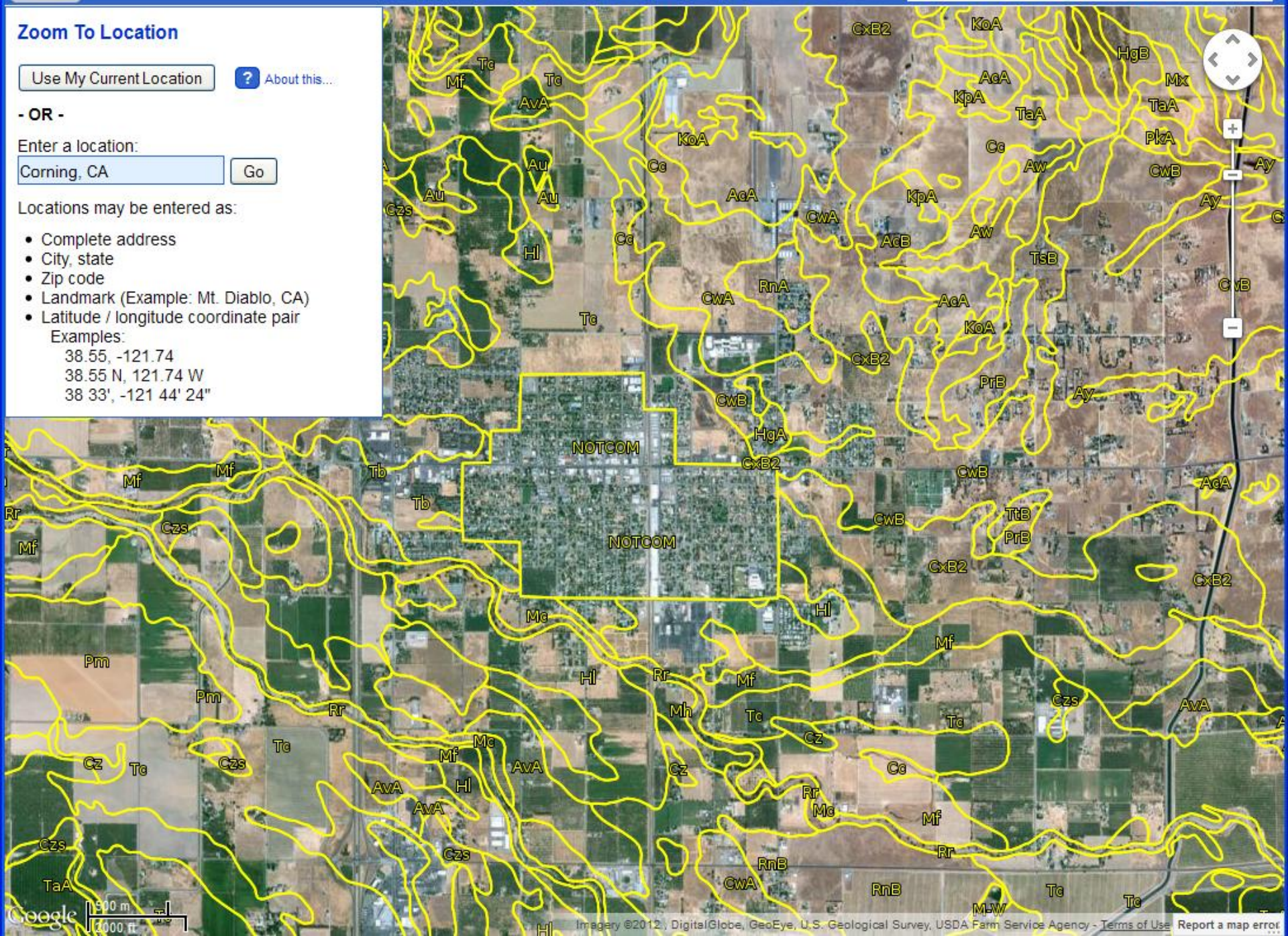
- Complete address
- City, state
- Zip code
- Landmark (Example: Mt. Diablo, CA)
- Latitude / longitude coordinate pair

  Examples:

  38.55, -121.74

  38.55 N, 121.74 W

  38 33', -121 44' 24"



< Close

SoilWeb

UCDAVIS NRCS University of California Agriculture and Natural Resources

Map Unit Name: ***Corning-Redding gravelly loams, 0 to 5 percent slopes*** Symbol: ***CyB***

▲ Map Unit Composition

40% - ***Corning***
Geomorphic Position: *terraces / Backslope*
terraces / Shoulder
terraces / Summit

40% - ***Redding***
Geomorphic Position: *terraces*

8% - ***Newville***
Horizon data n/a | View Similar Data

5% - ***Unnamed***
Geomorphic Position: *depressions*
Horizon data n/a

2% - ***Unnamed***
Geomorphic Position: *depressions*
Horizon data n/a

▲ Map Unit Data

Map Unit Key: *460724*

Type: *Complex* ?

Farmland Class: *Not prime farmland*

Available Water Storage (0-100cm): *5.79 cm*

Max Flood Freq: *None*

Drainage Class (Dominant Condition): *Moderately well drained* ?

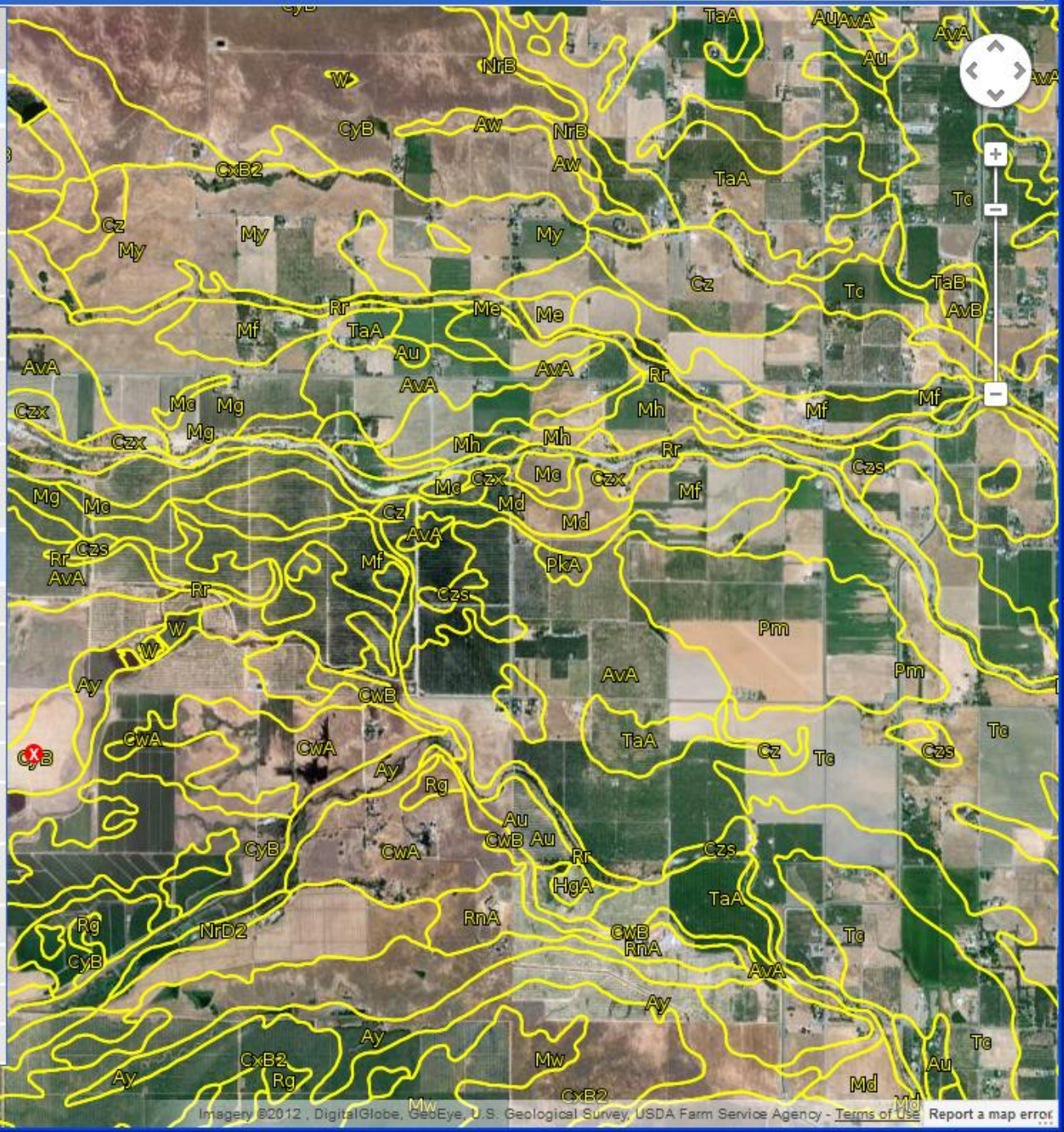
Drainage Class (Wettest Component): *Moderately well drained* ?

Hydric Conditions: *Partially hydric*

Min. Water Table Depth (Annual): *n/a*

Min. Water Table Depth (April-June): *n/a*

Min. Bedrock Depth: *n/a*



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SoilWeb

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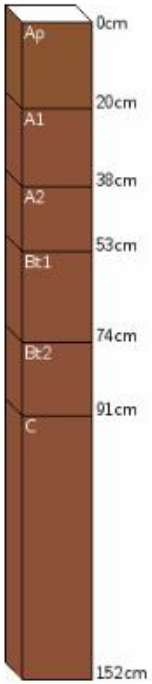
Map Unit Name: ***Corning-Redding gravelly loams, 0 to 5 percent slopes*** Symbol: ***CyB***
Component Name: ***Corning***

▲ Soil Profiles

Typical Profile ▶

Org. Matter | Clay
Sand | Ksat
pH | Kr Factor
EC | SAR
$CaCO_3$ | Gypsum
CEC @ pH7
Linear Ext.



▼ Soil Taxonomy

▼ Land Classification

▼ Hydraulic and Erosion Ratings

▼ Soil Suitability Ratings

< Close

SoilWeb

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Org. Matter
Clay ? ▶
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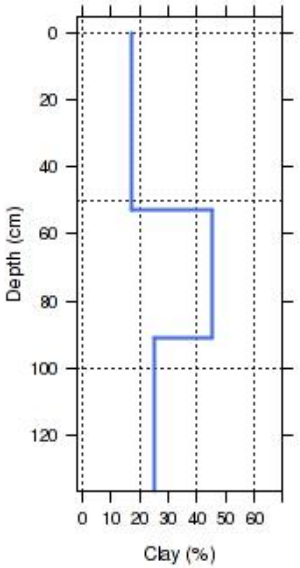


View Source Data

▼ Soil Taxonomy

▼ Land Classification

▼ Hydraulic and Erosion Ratings

▼ Soil Suitability Ratings

Map Unit Name: ***Corning-Redding gravelly loams, 0 to 5 percent slopes*** Symbol: ***CyB***
Component Name: ***Corning***

▼ **Soil Profiles**

▼ **Soil Taxonomy**

▼ **Land Classification**

CA Storie Index: *22*

Land Capability Class (non-irrigated): *4-e* ?

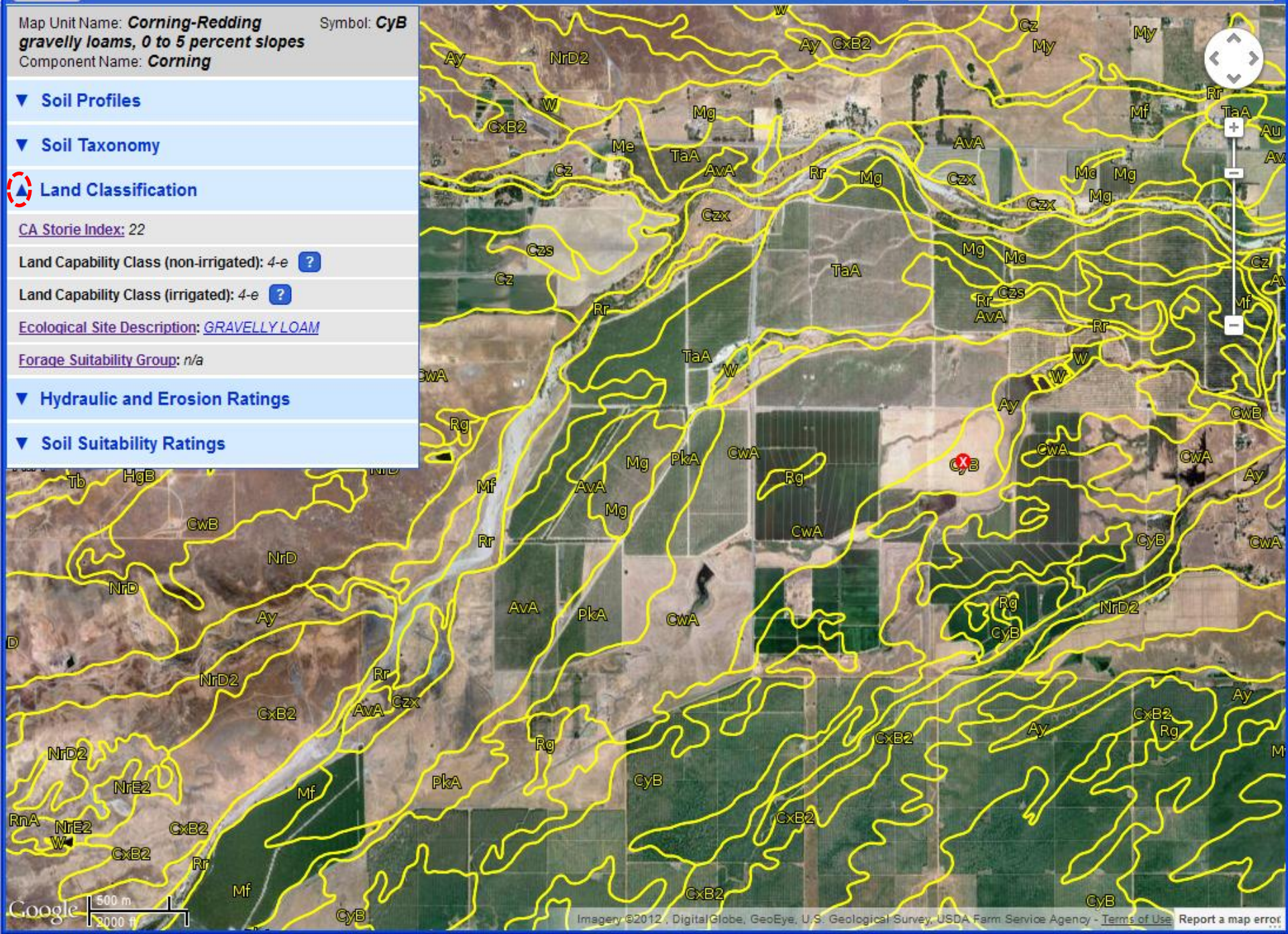
Land Capability Class (irrigated): *4-e* ?

Ecological Site Description: *GRAVELLY LOAM*

Forage Suitability Group: *n/a*

▼ **Hydraulic and Erosion Ratings**

▼ **Soil Suitability Ratings**



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Component Name: ***Corning***

▼ Soil Profiles

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▼ Land Classification

▲ Hydraulic and Erosion Ratings

Wind Erodibility Group: *6* ?

Wind Erodibility Index: *48* ?

T Erosion Factor: *4* ?

Runoff: *High*

Drainage: *Well drained*

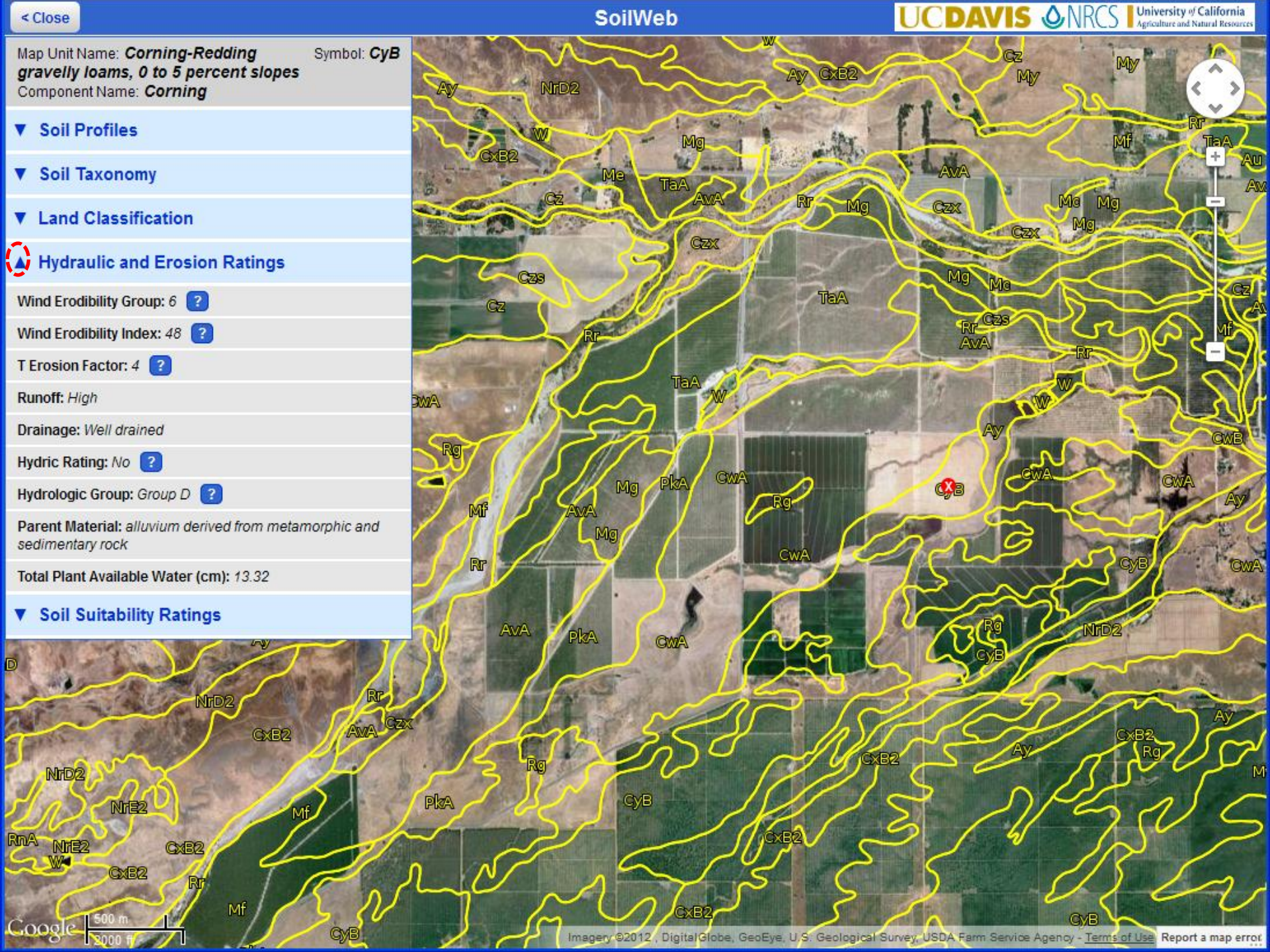
Hydric Rating: *No* ?

Hydrologic Group: *Group D* ?

Parent Material: *alluvium derived from metamorphic and sedimentary rock*

Total Plant Available Water (cm): *13.32*

▼ Soil Suitability Ratings

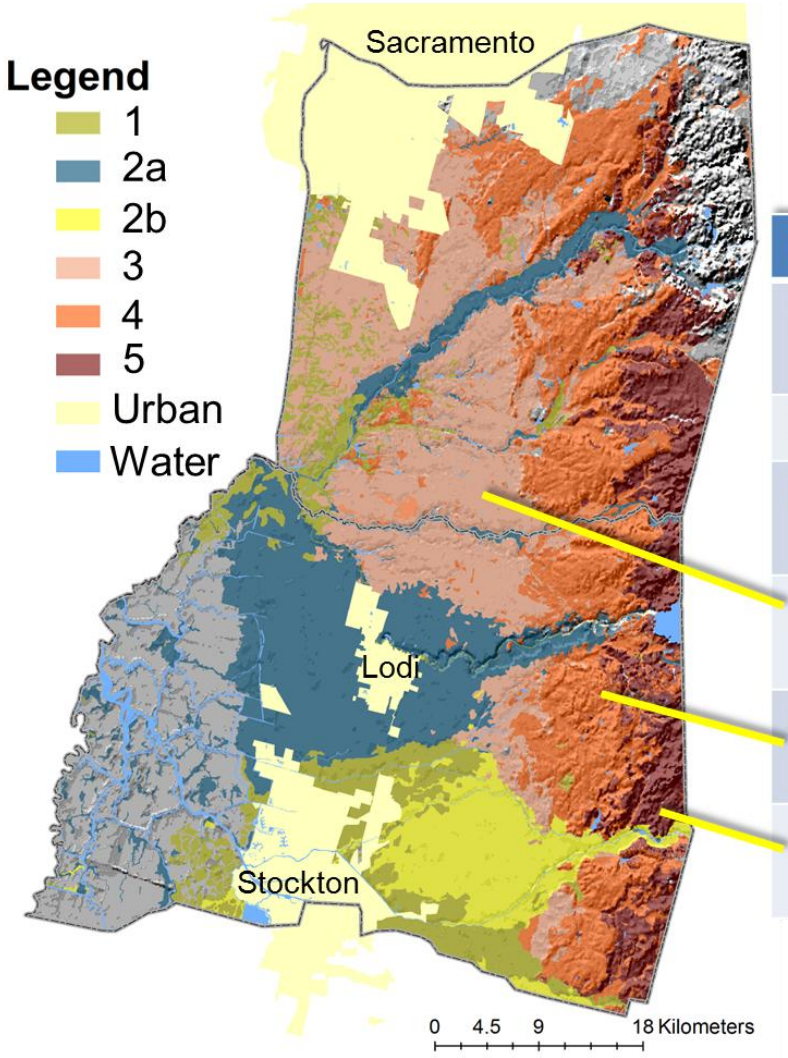


How can we make soil survey more relevant?

Interactive, map-based tools (apps) that are more directly related to the user decision process e.g. nutrient management, BMP's, and water management.

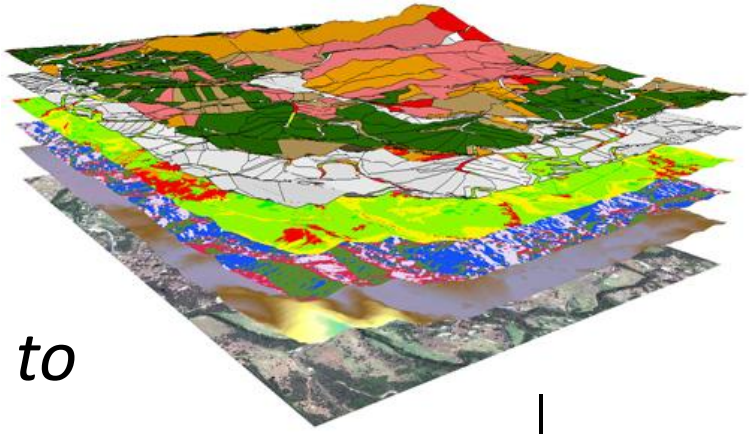
Nutrient Management Zones

Geographic templates to fine-tune nutrient management strategies based on soil properties

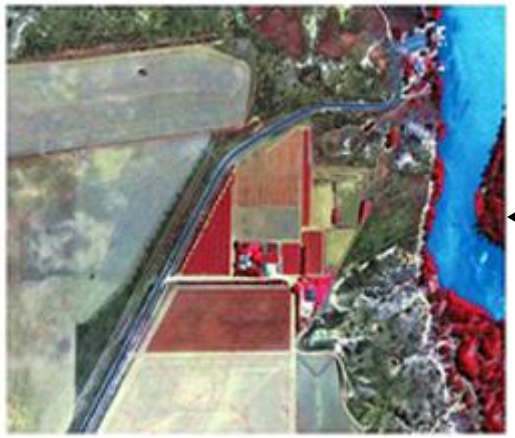


Description		K Supply	K fixing?
1	Clayey, basin alluvium	High	No
2a	Coarse, fans	Low	Yes
2b	Clayey, Calaveras R. fan	Moderate	No
3	Moderately old, low terraces	Low	Yes
4	Weathered old, high terraces	Moderate	No +/-
5	Volcanic, eastern part of district	High	No

Selecting BMP's for Irrigated Agriculture



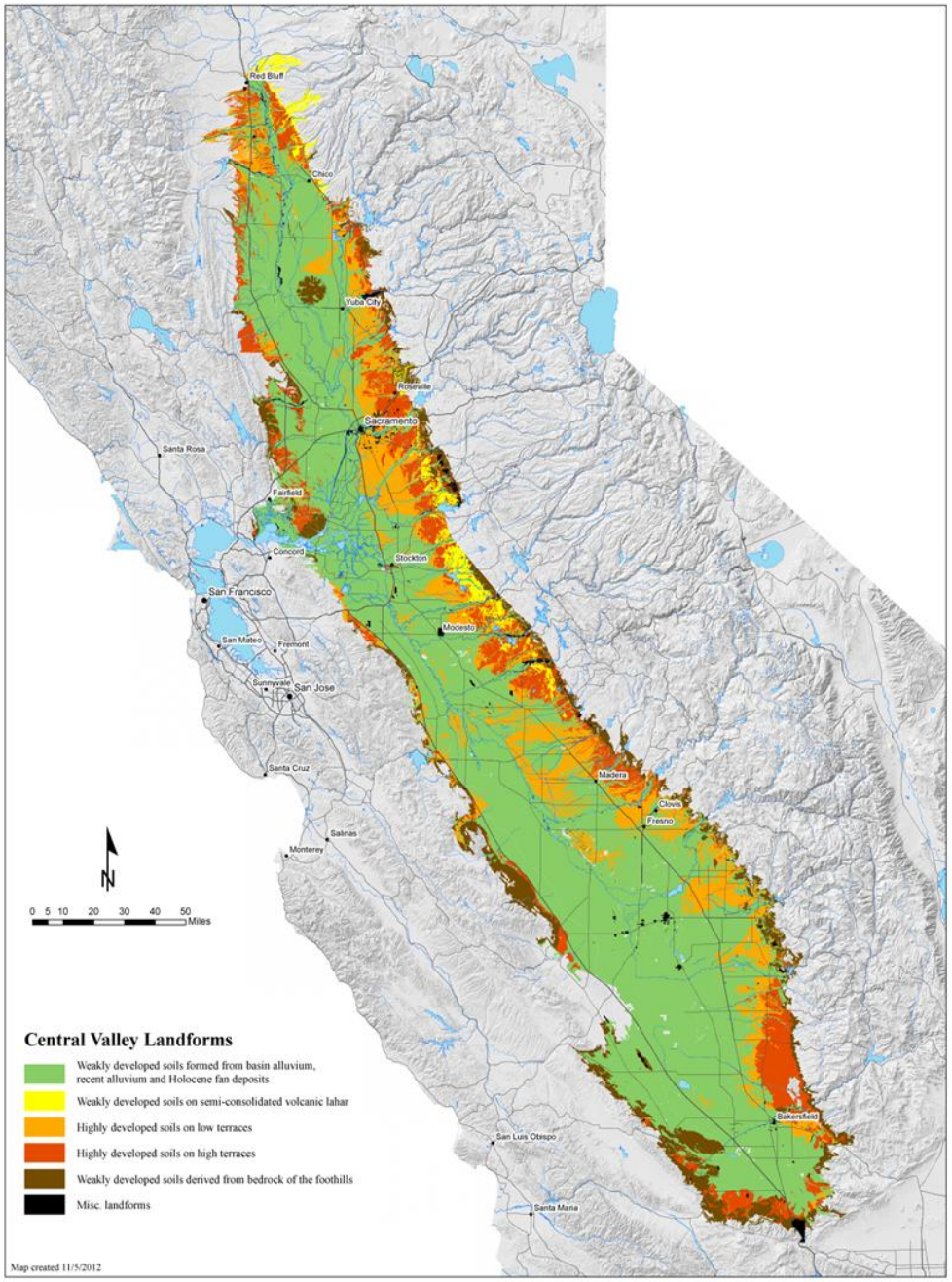
What are the regional considerations to select appropriate best management practices to control runoff?



- Wetlands
- Cover crops
- Tailwater return pond
- Infiltration basins
- Filter strips
- Nutrient management plans

Suitability Index for Agricultural Groundwater Banking

Which soil landscapes and cropping systems are best suited to receive large applications of water during times when excess water is available (e.g. flood events) to recharge groundwater.



What other management decisions could be supported by this information?

e.g.

- Deep tillage index-rip or plow
- Crowd sourcing opportunities?

THANK YOU

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