



NICS

Next-generation Incident Command System

Previously known as LDDRS: Lincoln Distributed Disaster Response System

A collaborative project of [MIT Lincoln Laboratory](#) (technical development), [CAL FIRE](#) (representing the operational first responder agencies), and the [Department of Homeland Security's Science & Technology Directorate](#) (funding).

The objective of the NICS Program is to develop a web-based Command and Control Environment for *large-scale* and *extreme-scale* incidents that enables and enhances collaboration of emergency responders, managers, and elected officials. The goal is to fully integrate federal, state, county, local and tribal levels of preparedness, planning, response and recovery for all-risk/all-hazard events.

- Web-based (if you can surf the web, you can use this technology)
- Open standards = any computer, any operating system, any browser
- Non-proprietary = no vendor owns this technology; this will be a “community development”
- Carefully designed for the responder under extreme stress: The Tired-Dirty-Hungry
- Apps Store model = apps can be developed by anyone, with easy plug & play functionality
- Like the web, this will never be done....it will always be under improvement
- It will be free to emergency responders (all funding provided by the government)

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NICS Video Links

Five minute video describing the NICS program: http://web.me.com/jthorpe/NICS_Program_Overview [addresses are case sensitive]

Nine minute video showing NICS functionality in action: http://web.me.com/jthorpe/NICS_Master_Video

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Tool Box Overview

Google Map tools to manipulate map



Main Toolbar

Draws a selection box

Erasure

Zoom

“Hand”
Acts as the pointer; moves the map

Polygon

Rotates some symbols

Text

Line

Click here to pick a color

Ink widths or Ink fade

Fade

Measure length

Measure area

Select Google Map

Available Data Layers

Base Layers

- Google Satellite
- Google Hybrid
- Google Streets
- Google Physical

Data Layers

- Geographical Boundaries
- History & Statistics
- Facilities
- Utilities
- Weather
- Mobile Data Feeds
- Imagery
- Uploads
- LA Marathon
- Big Sur Marathon
- Sensors
- NLE-11

Draw

Select a Marker

Marker icons: X, triangle, circle, square, C, S, W, E, I, P, DP, H, R, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z.

Draw

Draw

Tool Box Overview (cont)

Lincoln Distributed Disaster Response System

Incident: None Incidents signed in as: jthorpe Logout

Rooms My Map Share My Map **RAWS** **CARRU AVL** Tools

The interface consists of three main sections: a top header with navigation links, a central map area with two maps, and a right-side panel.

Map 1 (Left): Remote Automated Weather Stations

Shows a map of the Beaumont-Banning-Cabazon area. A callout box for station BNTC1 displays the following data:

- Station: BNTC1
- Updated: 2011-06-23 17:15:01
- Wind dir: 215
- Wind vel: 13
- Temp: 91
- RH um: 17

Map 2 (Right): CARRU AVL

Shows a map of the Hemet area. A callout box for vehicle E54 displays the following data:

- Vehicle: E54
- Group: RVCFire
- SubGroup: Engine
- UnitID: E54
- Course: 88
- Updated: 2011-06-23 17:17:42

Side Panel (Right): Click for Side Panel

The side panel contains the following information:

- Incident: CAKRUAntelope
- Resources
- Active Users
- Settings
- Log
- System Control

Report on Conditions

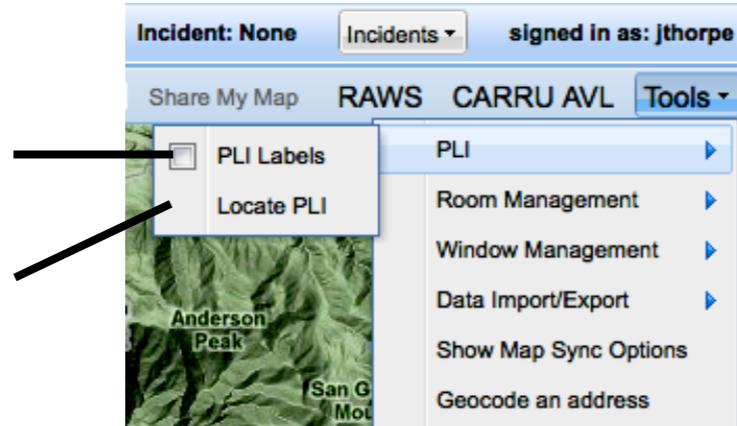
Report Type: final
 Incident Name/Number: CAKRUAntelope 017988
 County: Kern
 Start Time/Date: 6/19/2011
 Location: Southeast of Lost Hills
 Jurisdiction: SRA (Contract County)

Users logged into NICS

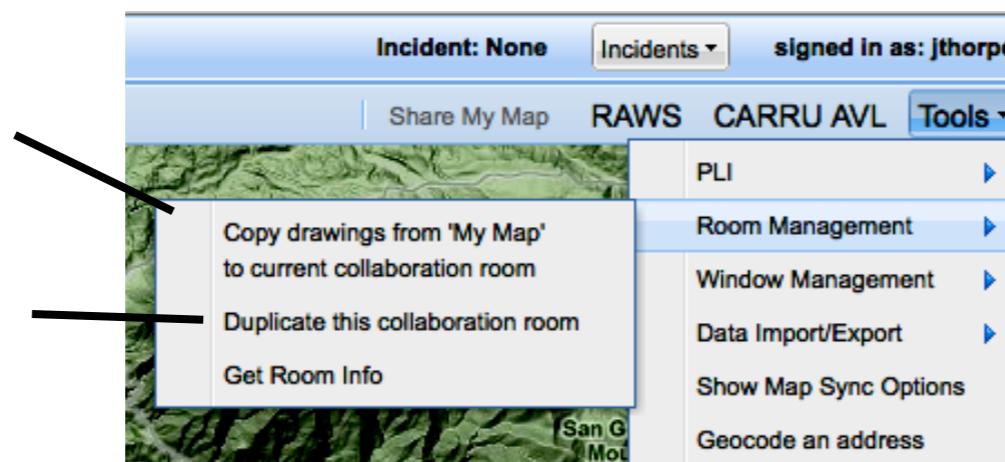
signed in as: jthorpe Logout

Tool Box Overview (cont)

Shows vehicle ID for all vehicles with AVL



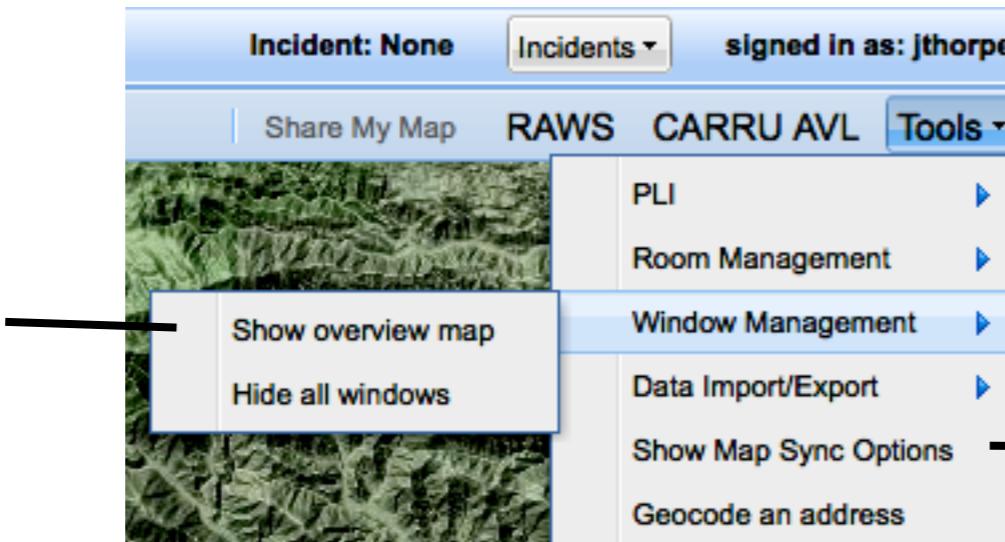
Will find a given vehicle



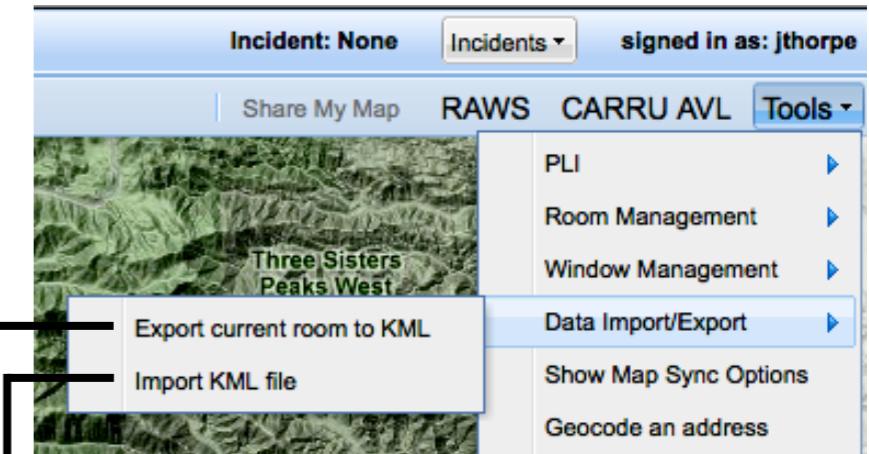
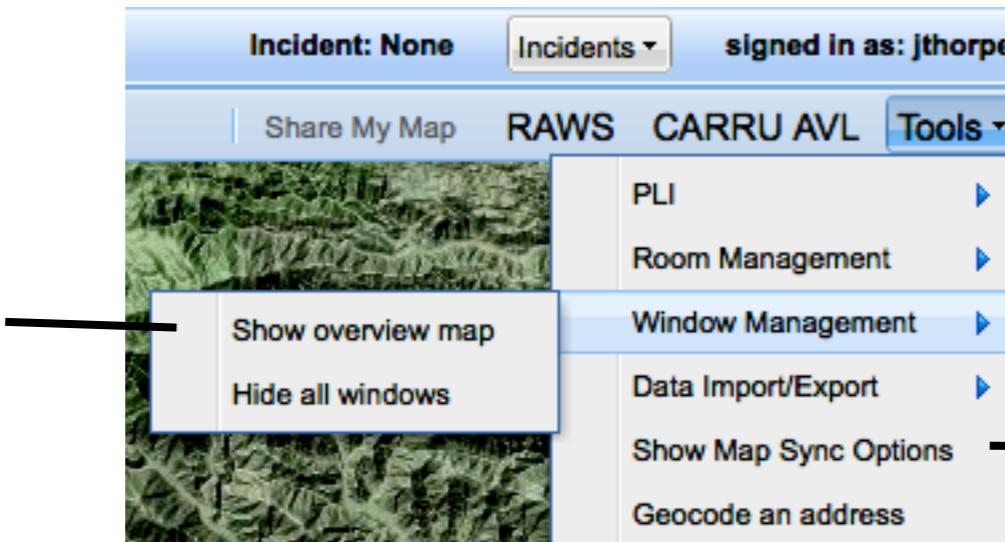
Will copy everything on MyMap to the currently open room



Makes a copy of a room; you pick the new name

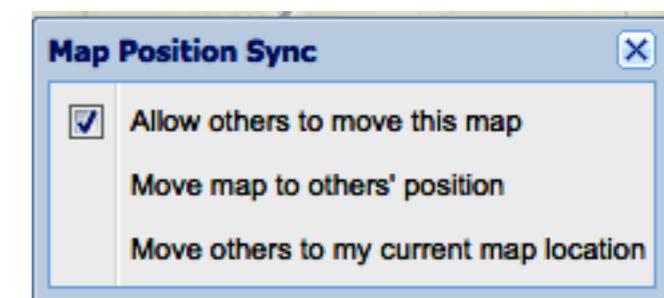


Shows active window within larger map area



Imports KML data from other app (like Google Earth) & shows in NICS

Exports your work from a room and stores it in .kml format on your computer



Login

Web Site Address: <http://LDDRS.LL/MIT.EDU>

As of June 22, 2011, the only browser that works with NICS is FireFox. To get the free download of this browser, go to www.mozilla.com.

The Internet Explorer, Safari, and Chrome browsers are in final test and planned to run NICS later in the summer

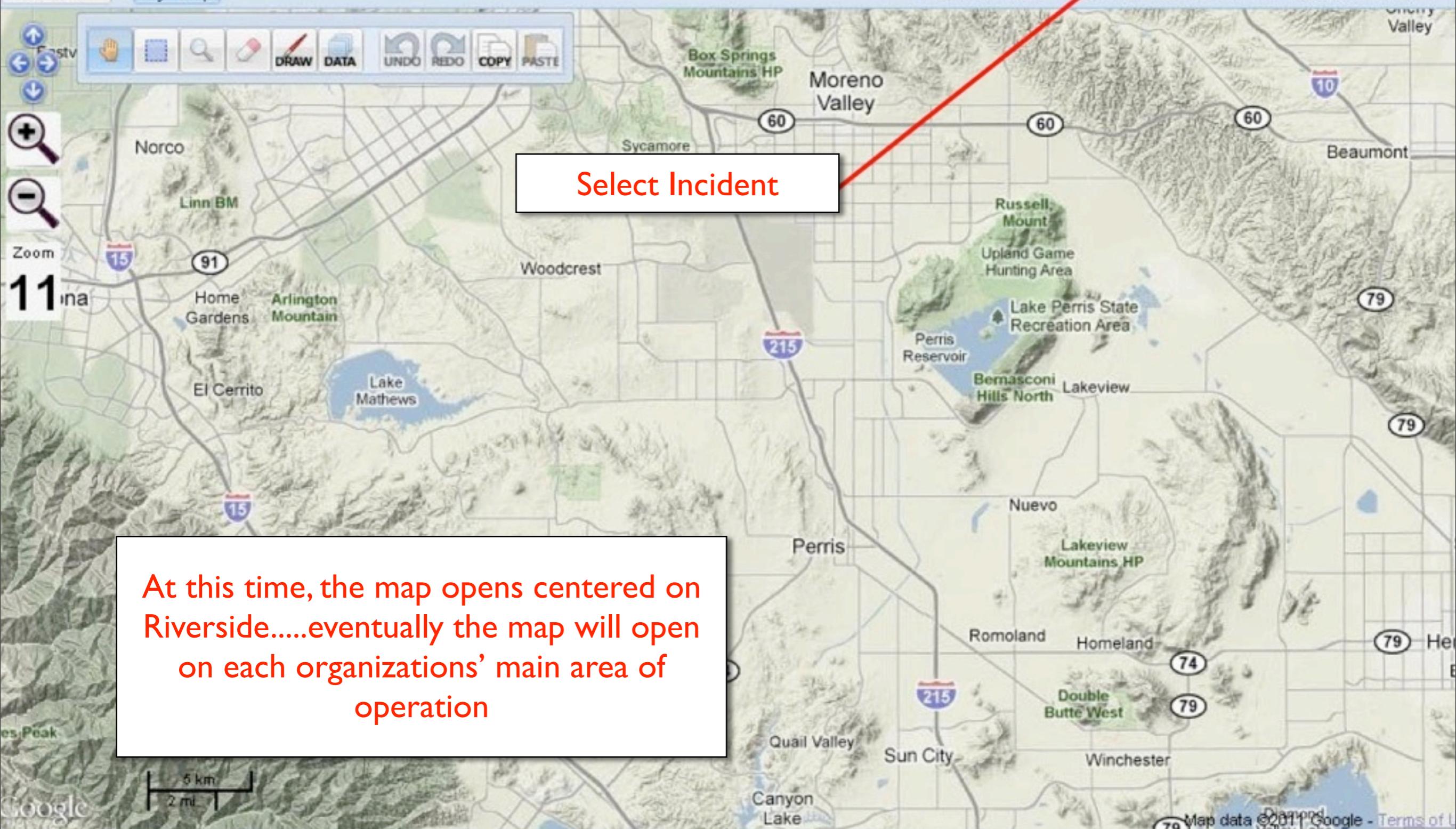
When this login window appears,
enter your Username & Password

The screenshot shows a login interface with the following elements:

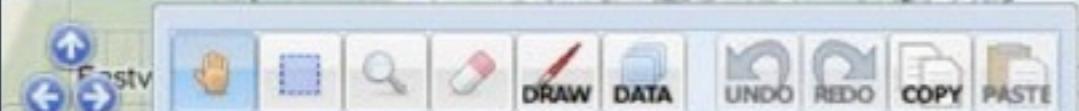
- A title bar labeled "Login".
- A message: "Please login below (Not [registered?](#)):".
- A "Username" label next to an input field.
- A "Password" label next to an input field.
- A "Login" button at the bottom.

v. 2.4.2.6
build 201105170424

If you do not have a login name/password (i.e., have not registered yet), click this phrase and a registration form will appear. Complete the form and submit. Approval of names can take up to 24 hours. If you need login access immediately, call Chief Bob Toups at (951) 453-6513 or email Bob.Toups@fire.ca.gov



Rooms ▾ My Map



Zoom

11 ina

“MyMap” Room

The “MyMap” room is your private work area. When NICS opens, it opens in your “MyMap” room.

No one can see this room except you

Any work you do in this room can be transferred to other rooms (explained later).

Other Rooms

Select an existing room or create a new room. Rooms are your public work areas. Anything you do in these rooms can be seen by anyone else in the room (as you can see what they are doing) or by anyone who visits the room later.

The current incident
(the one you just
selected) is shown here.

LDDRS + http://lddrs.ll.mit.edu/sadisplay/lddrsUI.seam?cid=1298029 Google Bookmarks

LDDRS OSCC SD Radio Northcom/MVU LDDRS-Dev Derailment Apple Google Me.Com AA Southwest JetBlue Weather Amazon Bookmarks

Lincoln Distributed Disaster Response System Incident: CABEU000TRAINING Incidents signed in as: jthorpe Logout

Rooms My Map MasterMap # Close Room Share My Map RAWs CARRU AVL Tools

Create New Room

MasterMap

IncidentCommander

InformationOfficer

SafetyOfficer

OperationsSectionChief

Branch1

Branch2

DivisionA

DivisionB

DivisionC

DivisionD

DivisionX

DivisionY

DivisionZ

StagingArea

Worksheet

Evacuation

LAWBranch

Rescue

Corona

Sierra Peak

Beeks Place

Modjeska Canyon

Modjeska Peak

Limestone Canyon regional Park

Foothill Ranch

Fontana

Bloomington

Decleville

Jurupa Mount

Glen Avon

Sunnyslope

Mira Loma

Pedley

Norco

Linn BM

Home Gardens

Arlington Mountain

El Cerrito

Lake Mathews

Estelle Mountain

Terra Cotta

Quail Valley

Canyon Lake

Sun City

Double Butte West

Homeland

Egan

Winchester

Diamond Valley Lake

Highland

San Bernardino National Forest

Anderson Peak

San Gorgo Mountain

Forest Falls

Roan BM

Banning BM

Banning

Claremont

San Jacinto

East Hemet

Valle Vista

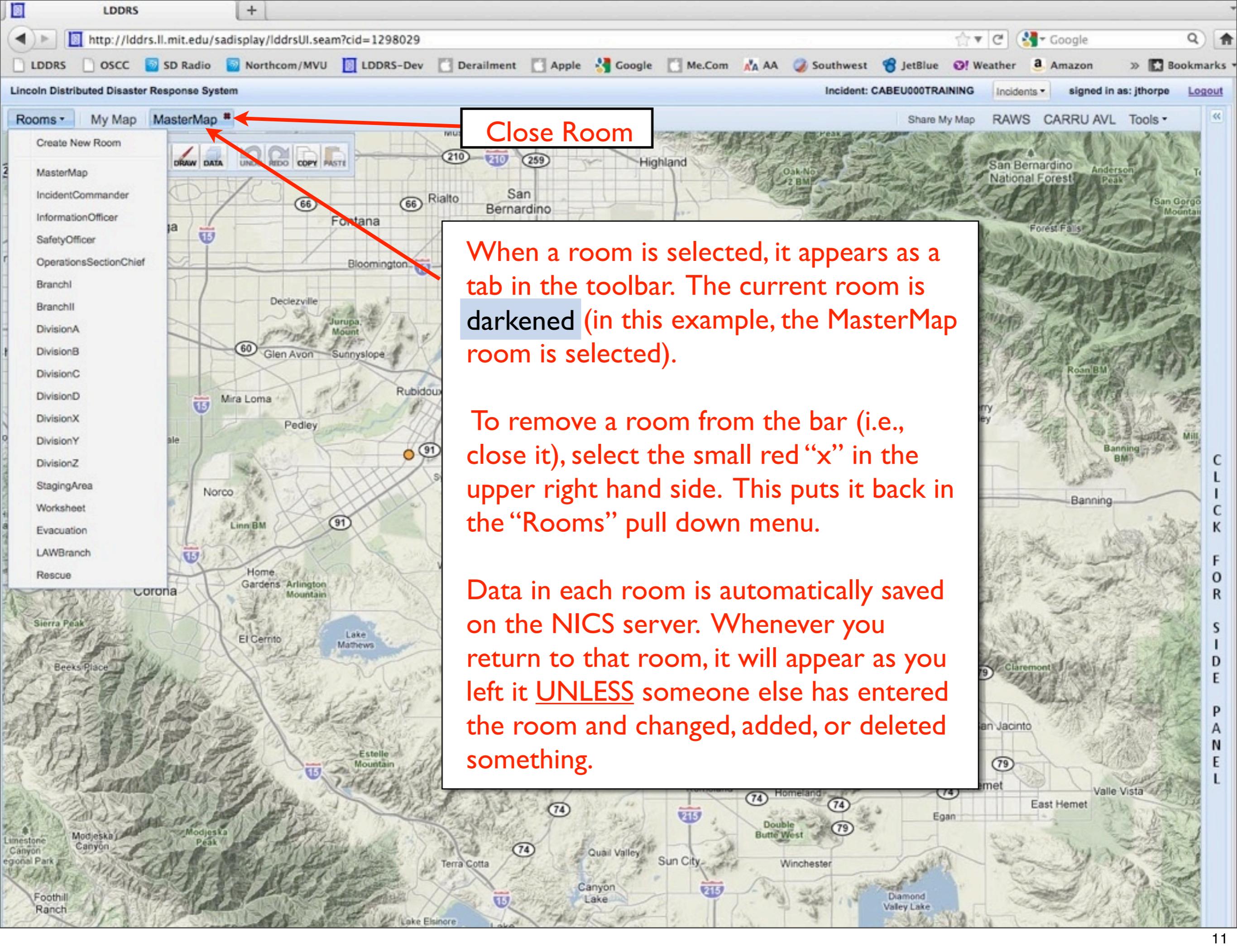
CLICK FOR SIDE PANEL

Close Room

When a room is selected, it appears as a tab in the toolbar. The current room is darkened (in this example, the MasterMap room is selected).

To remove a room from the bar (i.e., close it), select the small red “x” in the upper right hand side. This puts it back in the “Rooms” pull down menu.

Data in each room is automatically saved on the NICS server. Whenever you return to that room, it will appear as you left it UNLESS someone else has entered the room and changed, added, or deleted something.



When a room opens, the “Whiteboard Chat” space typically opens, too. Chat is covered later.

This section shows everyone who is currently logged into this room.

- A Green dot means that the person has done something recently (last couple of minutes).
 - The Yellow dot means that no activity has been seen from this person in the last few minutes.

If you move your pointer over a name, more info on this person is shown

You can open and close the Whiteboard Chat area by pressing this button.

Drawing

Incident: CABEU000TRAINING

Incidents

signed in as: bbloxham

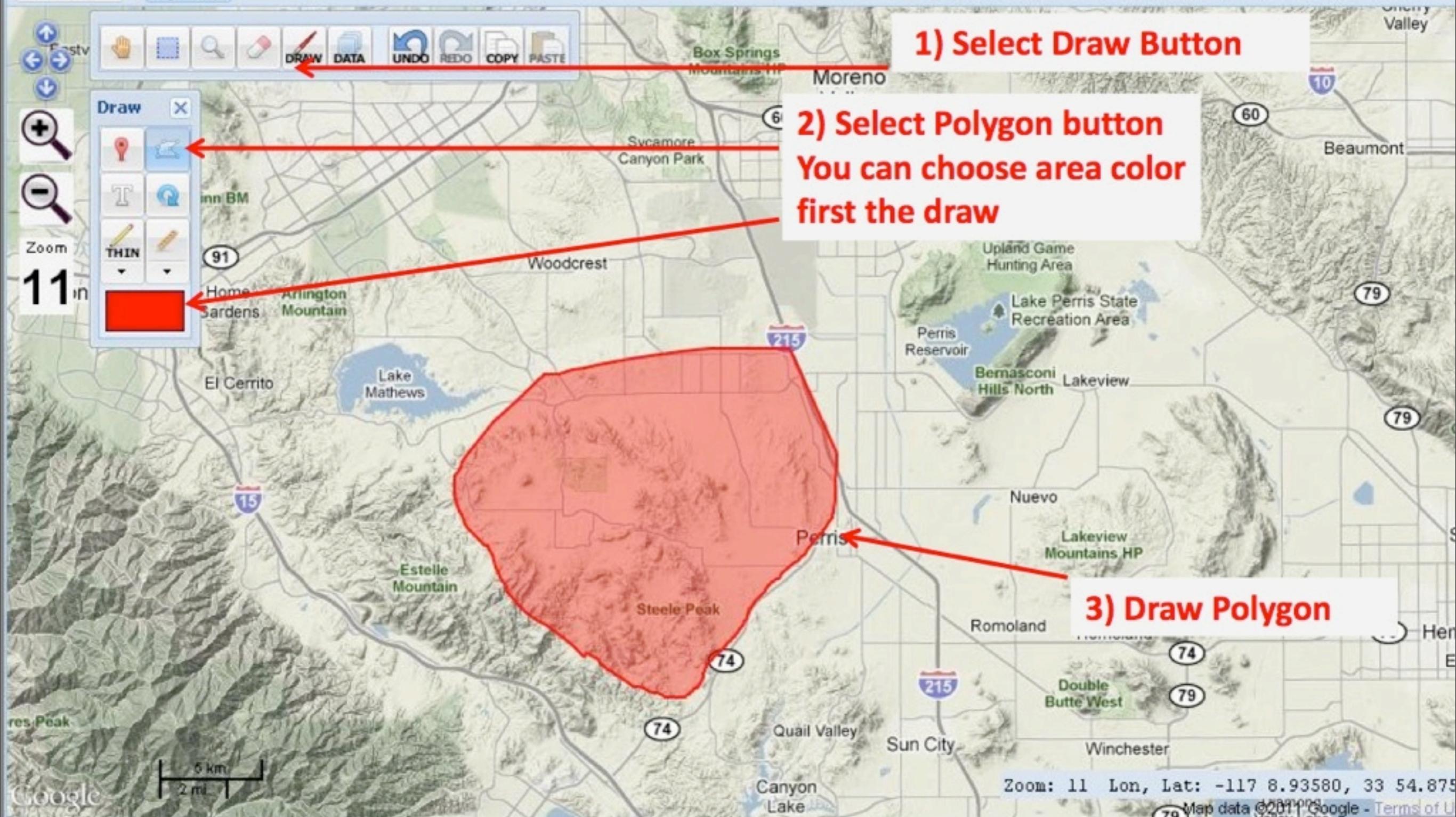
Rooms My Map

Share My Map

RAWS

CARRU AVL

Other Tools



Zoom: 11 Lon, Lat: -117 8.93580, 33 54.875

Map data ©2011 Google - Terms of Use



Drawing (cont)

1. To draw a line, select the “Pencil” and then the line width from the pull down menu.

2. Use the color pallet to select the desired color

3. Draw the line.

To draw a line that fades away after a few seconds, select “Fade”

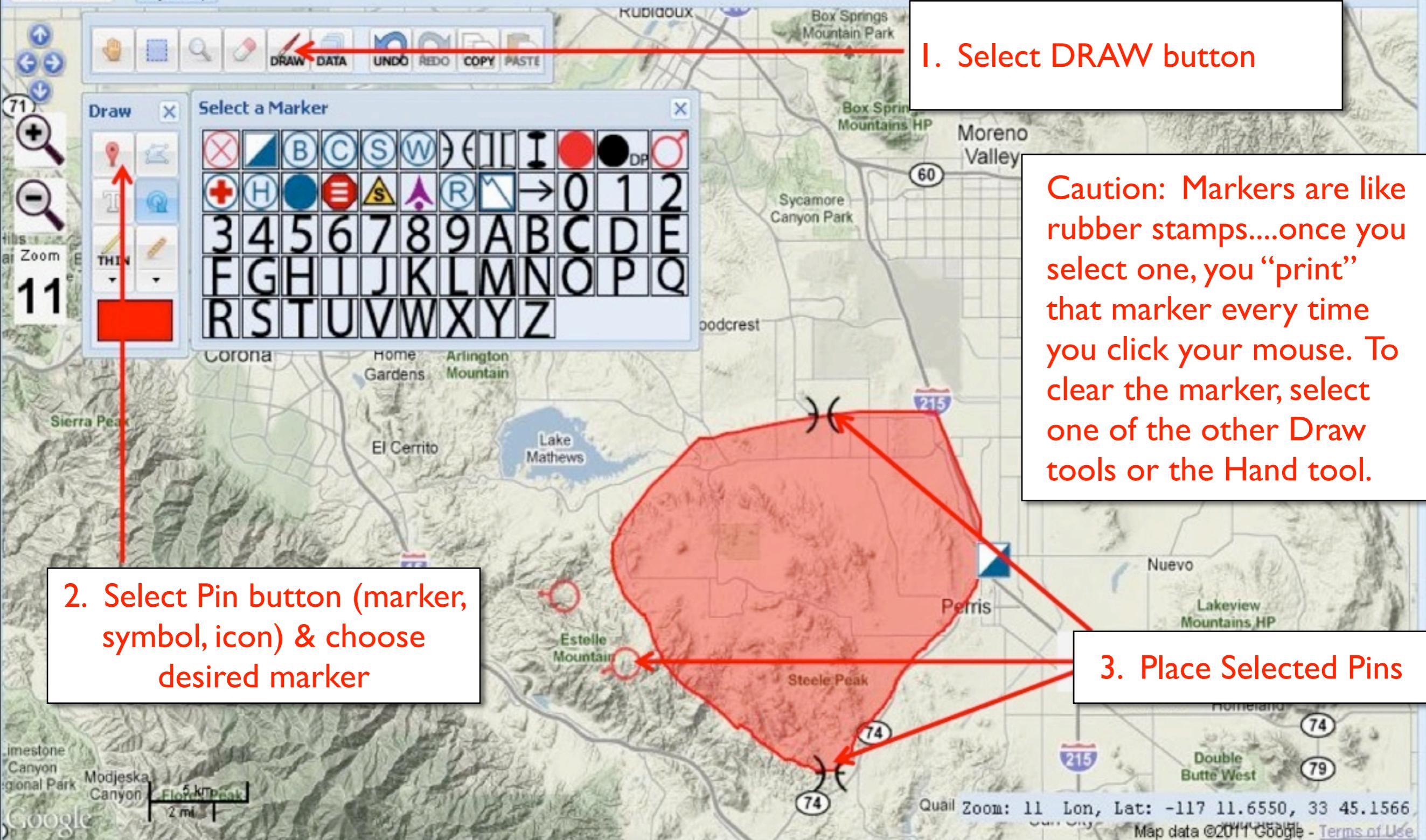
Div A

Markers, Symbols, and Icons

LDD
Lincoln

Rooms ▾ My Map

Share My Map RAWS CARRU AVL Other Tools ▾



Rooms

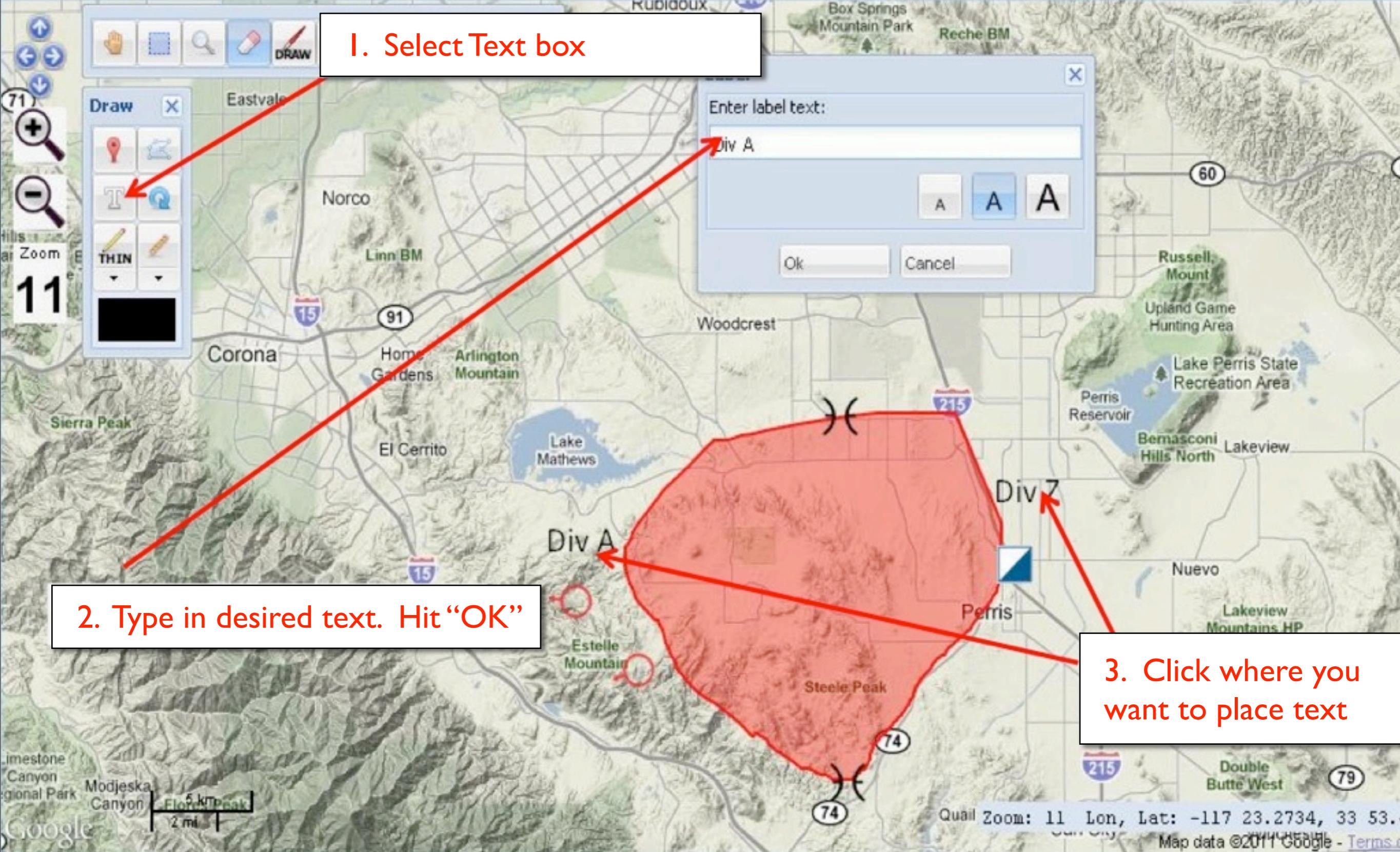
My Map

Share My Map

RAWS

CARRU AVL

Other Tools



You can “Undo” something you just did by pressing the “Undo” button. You can also Erase an item.

Erasing & Undoing

Incident: CABEU000TRAINING

Incidents ▾

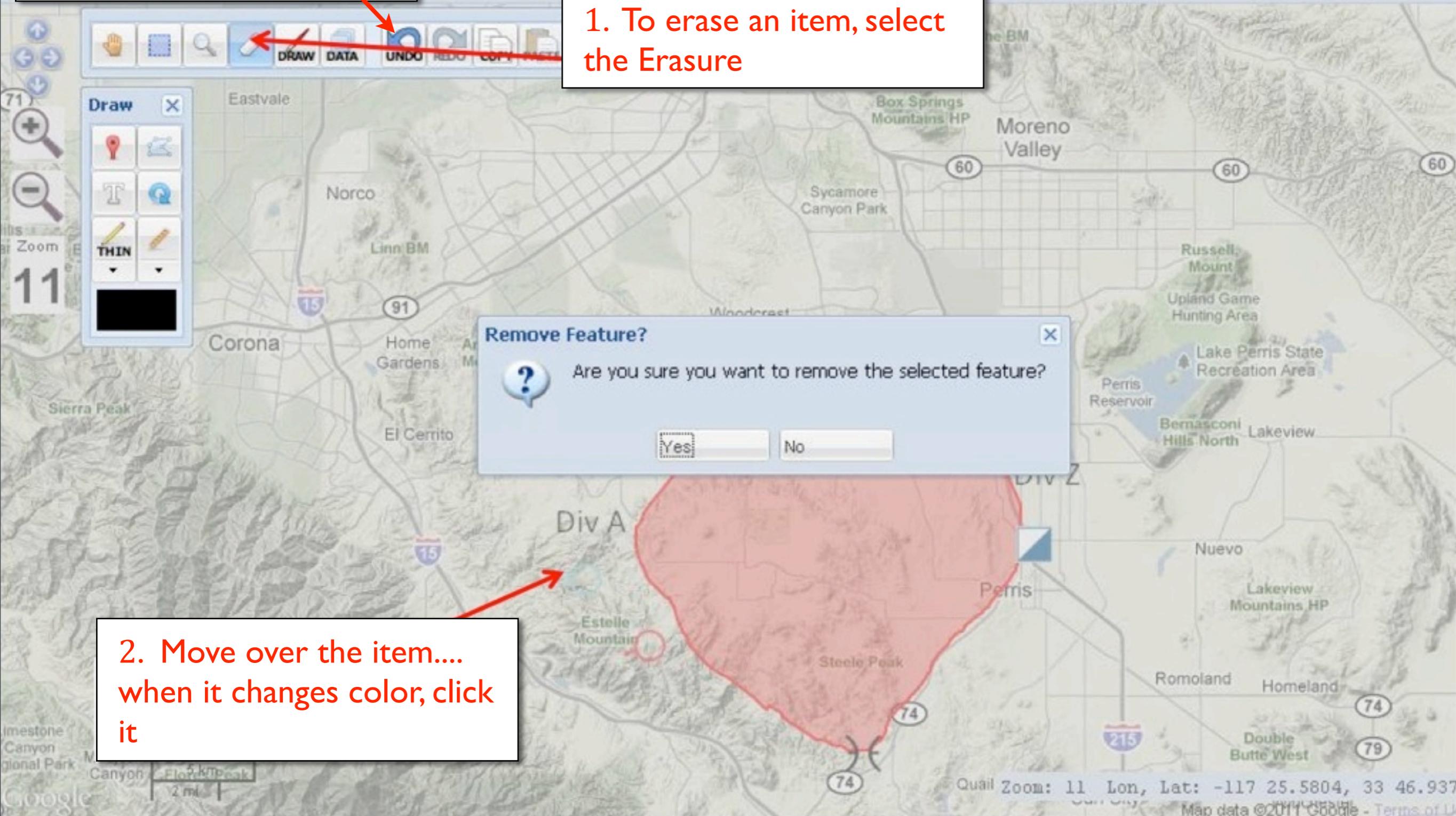
signed in as: bbloxham

Share My Map

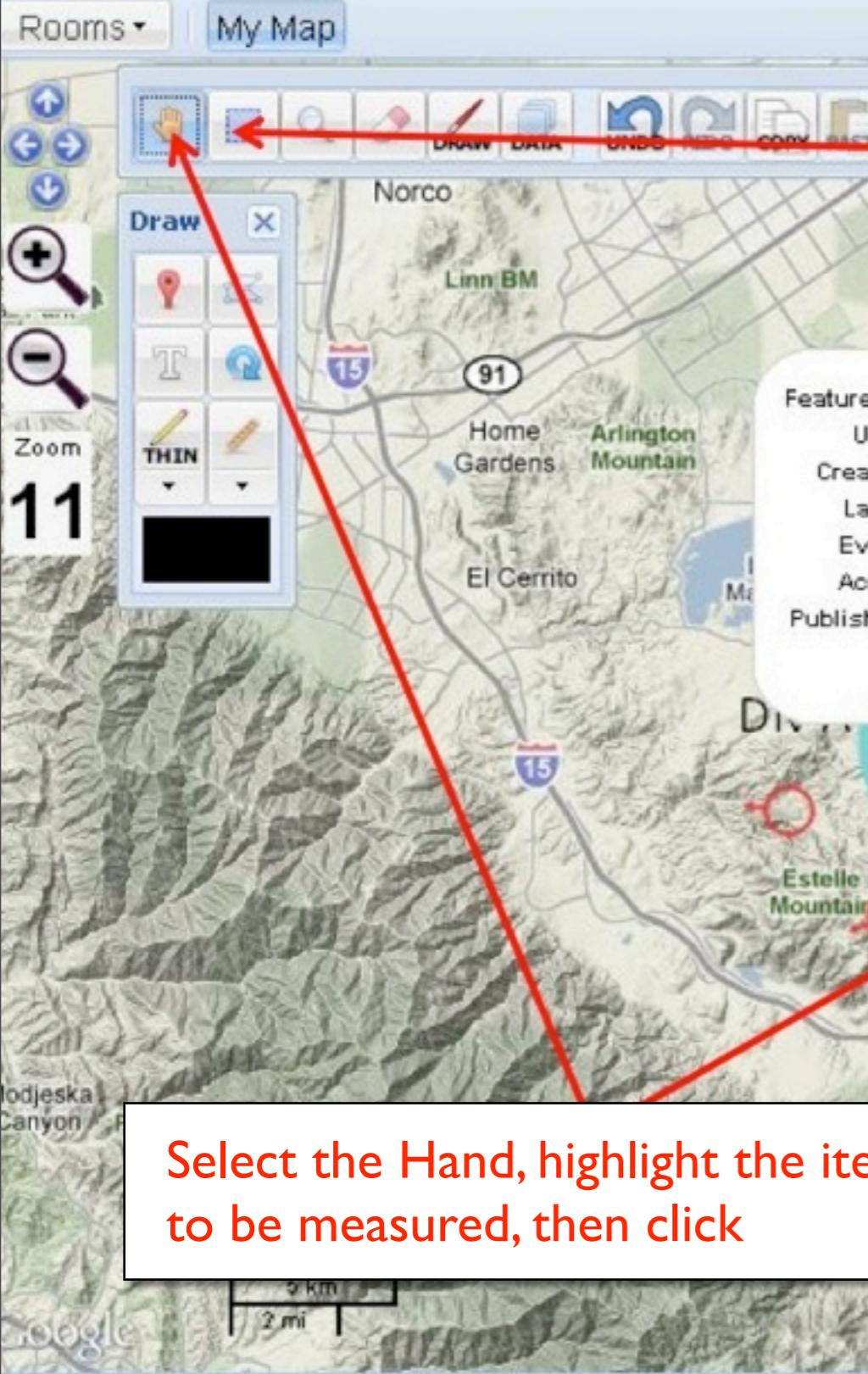
RAWS

CARRU AVL

Other Tools ▾



Determining Area and Length



There are 2 ways to determine Area and Length.

1. For a polygon or a line you have drawn, select the Hand Icon & move your mouse over the item you want to measure (it will change color) and click. The area (for a polygon) or length (for a line) appears in the callout box.



2. The second way is to use the measurement tool....this is covered next.

Determining Area and Length (cont)

Area and length can also be measured using the “Measurement Tools.” The pulldown menu lets you select length = or area =

Map Position Sync

- Allow others to move this map
- Move map to others' position
- Move others to my current map location

CLICK FOR SIDE PANEL

Div A

Zoom: 11 Lon, Lat: -117 25.1292, 34 11.2950

Map data ©2011 Google

Determining Area and Length (cont)

Length: Select the ruler, then draw the line you want to measure which is shown as a line of red dots. When you let up on your mouse, the distance is shown above.

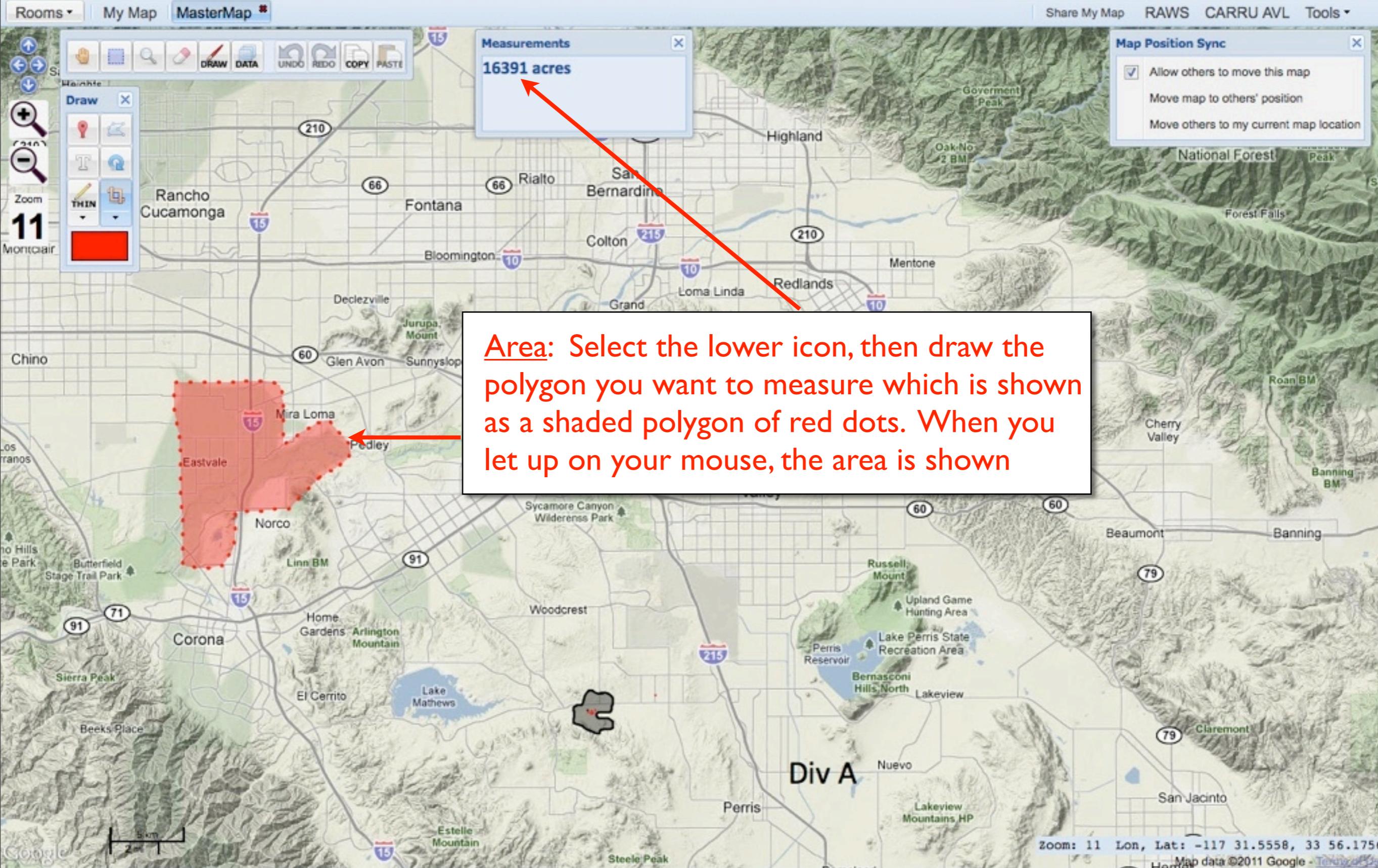
Measurements
22.6 mi

Map Position Sync
 Allow others to move this map
Move map to others' position
Move others to my current map location

Div A

Zoom: 11 Lon, Lat: -117 25.0464, 33 45.3972
Map data ©2011 Google - Terms of Use

Determining Area and Length (cont)



Moving/Copying Work From One Room To Another

Use this action to move everything on your “MyMap” to whichever other Room that is selected

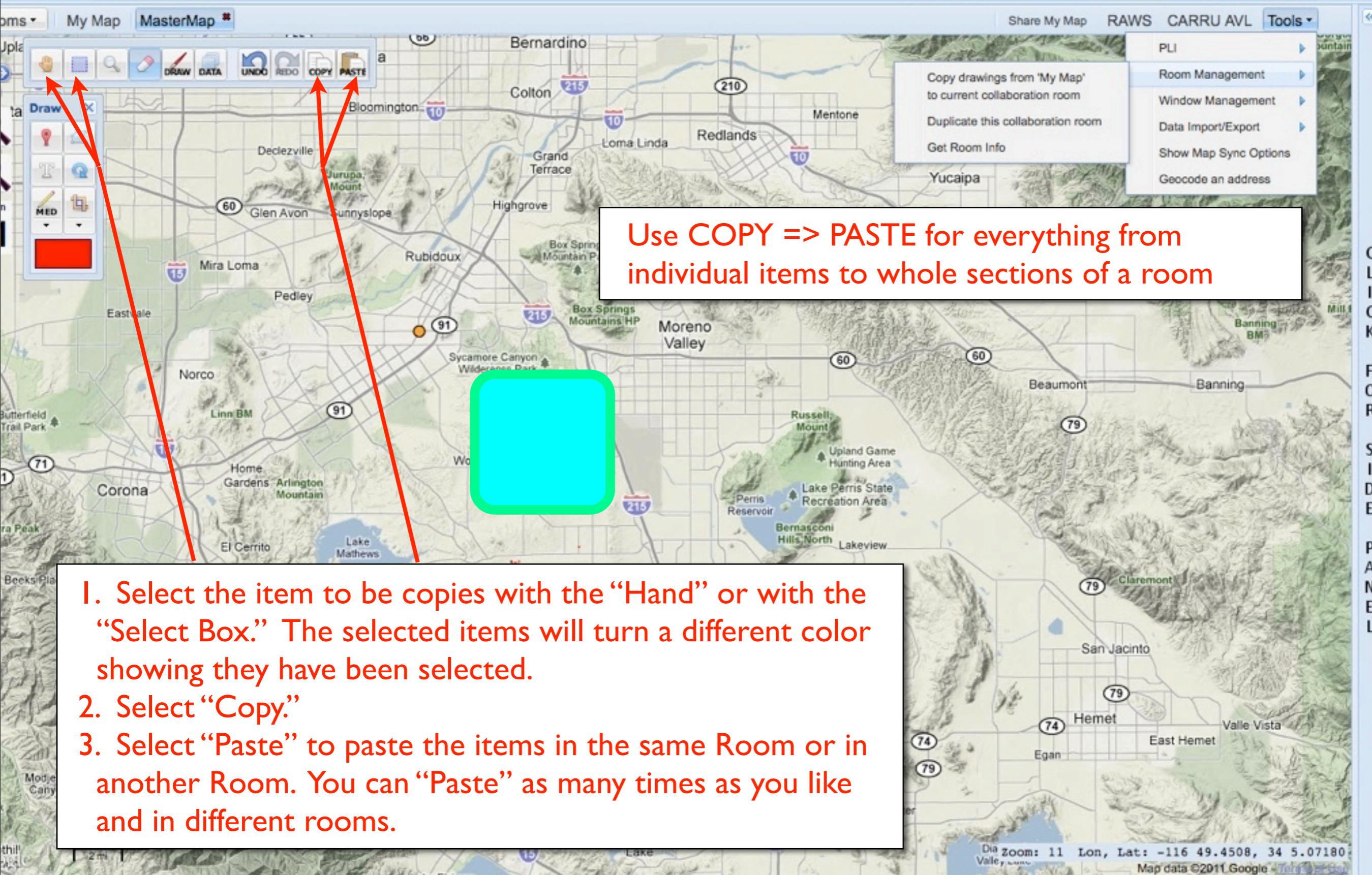
Copy drawings from 'My Map' to current collaboration room
Duplicate this collaboration room
Get Room Info

Use this action to make a duplicate of the Room you are in. You will be able to pick the name of the new Room

CLICK FOR SIDE PANEL

Dia zoom: 11 Lon, Lat: -116 49.4508, 34 5.07180
Map data ©2011 Google

Moving/Copying Work From One Room To Another (cont)



Public Whiteboard Chat

The screenshot shows the LDDRS interface with a map of the San Fernando Valley and surrounding areas. A whiteboard chat window is open at the bottom.

- I. Expand or collapse the whiteboard chat area
2. Type text in the bottom space
3. Everyone will see it here. This text is permanently recorded.

Whiteboard Chat

jthorpe, MIT LL - SME(3:55:56 PM): what do you mean "sample text" with the text tool????
bbloxham(3:56:56 PM): that will work thanks I will send Power Point later
jthorpe, MIT LL - SME(3:57:42 PM): Are you near a phone....let me call to make sure I know what you need
bbloxham(3:58:04 PM): i am good
bbloxham(3:58:56 PM): also are they ever going to change upper left corner to NICS for will it stay LDDRS
jthorpe, MIT LL - SME(3:58:48 PM): OK....if you need anything, call my cell....best
jthorpe, MIT LL - SME(3:59:49 PM): Will change to nics...also the login will change to NICS.LL/MIT.EDU someting this summer

Type message here (Everyone in the room will see message)

bbloxham - (active)
jthorpe MIT LL - SME (active)

Private Chat

To initiate a private chat (person-to-person or small group) click on the person's Chat icon to the right of their name in the Active Users list. A Chat window will open on your desktop, and those you have invited will see an invitation on their desktops. If they "Accept," the private chat can commence.

To include others, drag their "Chat" icon into your Chat window.

The screenshot shows a map of Perris, California, with various landmarks labeled: Woodcrest, Hunting Area, Perris Reservoir, Bernasconi Hills, North, Lakeview, Nuevo, Steele Peak, Estelle Mountain, Terra Cotta, Canyon Lake, Quail Valley, Sun City, Romoland, and Lake Mountain. A red arrow points from the text "To include others, drag their 'Chat' icon into your Chat window." to a "Private Chat" window overlaid on the map. The "Private Chat" window has a blue header and two empty text input fields. Below the map, there is a zoom control and a status bar showing "Zoom: 11 Lon, Lat: -117.0615600, 33.41.2338" and "Map data ©2011 Google".

Tools

Report On Conditions Resources Active Users Settings Log System Control

Refresh

User	Logged In	Last Seen
mhafner	2011-06-23 15:37:56	2011-06-23 16:34:08
ke23268	2011-06-23 16:20:02	2011-06-23 16:30:32
danderson	2011-06-23 15:21:36	2011-06-23 16:32:58
test12	2011-06-23 14:03:34	2011-06-23 16:29:51
rueccfc	2011-06-23 13:07:52	2011-06-23 16:31:32
rayd	2011-06-23 14:09:57	2011-06-23 16:31:40
jthorpe	2011-06-23 13:23:15	2011-06-23 16:30:49

A red arrow points from the text "To initiate a private chat (person-to-person or small group) click on the person's Chat icon to the right of their name in the Active Users list." to the "CHAT" icon next to the user "jthorpe".