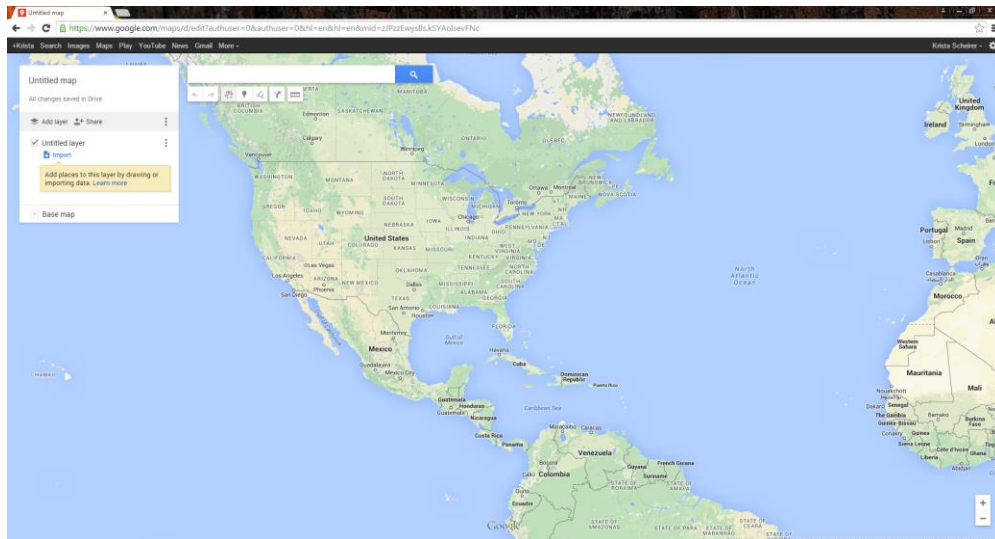


How to Create and Use a Google Map for your TreeVitalize Watersheds Project

First, create a Google account. It's free, and you can also use it for email, sharing files on Google Drive, and all kinds of things!

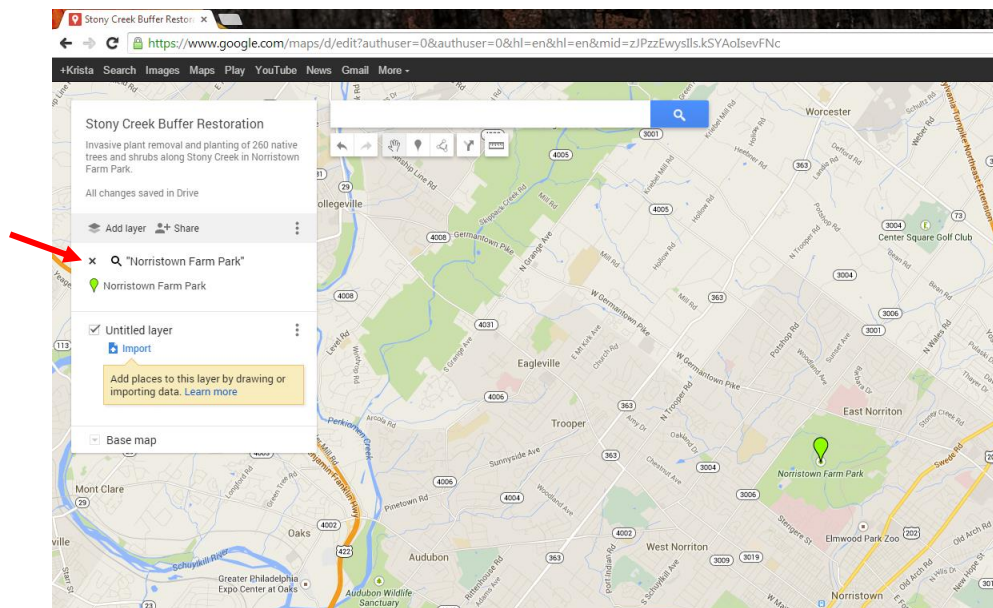
Go to [Googlemaps.com](https://www.google.com/maps/). Click on the search bar. Then click on "My maps." A box should pop open which lists any maps you made in the past.

Click on "Create." Your screen should look like this:

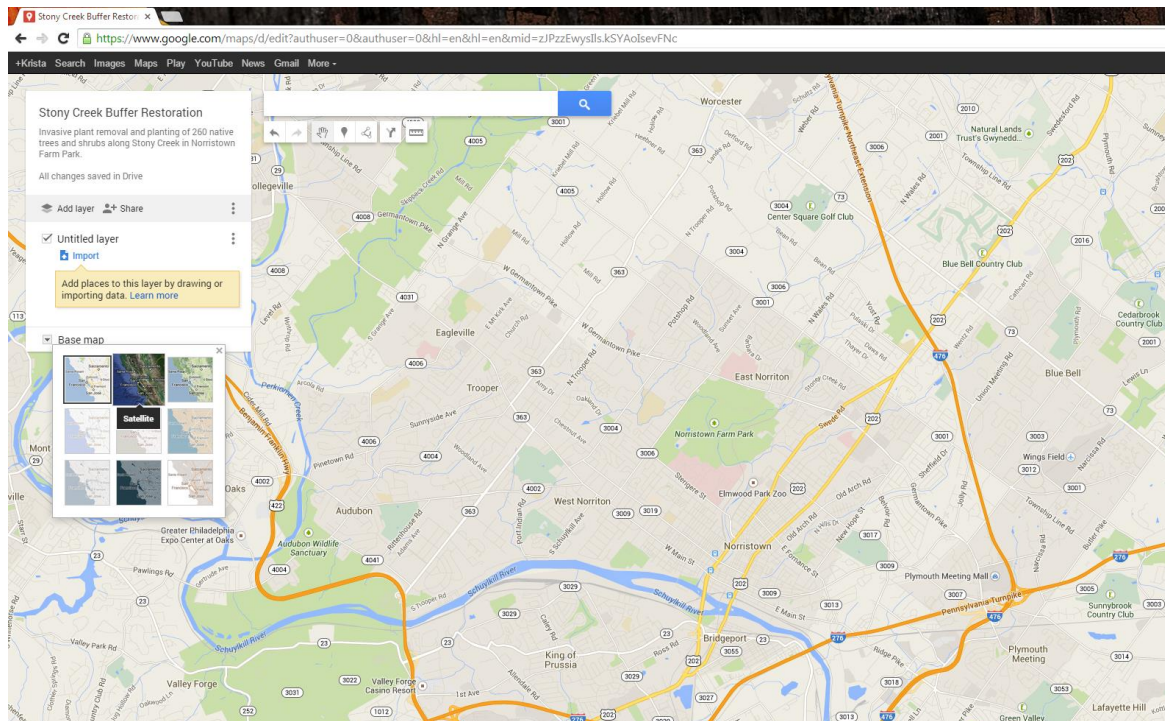


Give your map a title by clicking on "Untitled Map" and entering the name of your TV project. You can also add a description of the work you'll be completing.

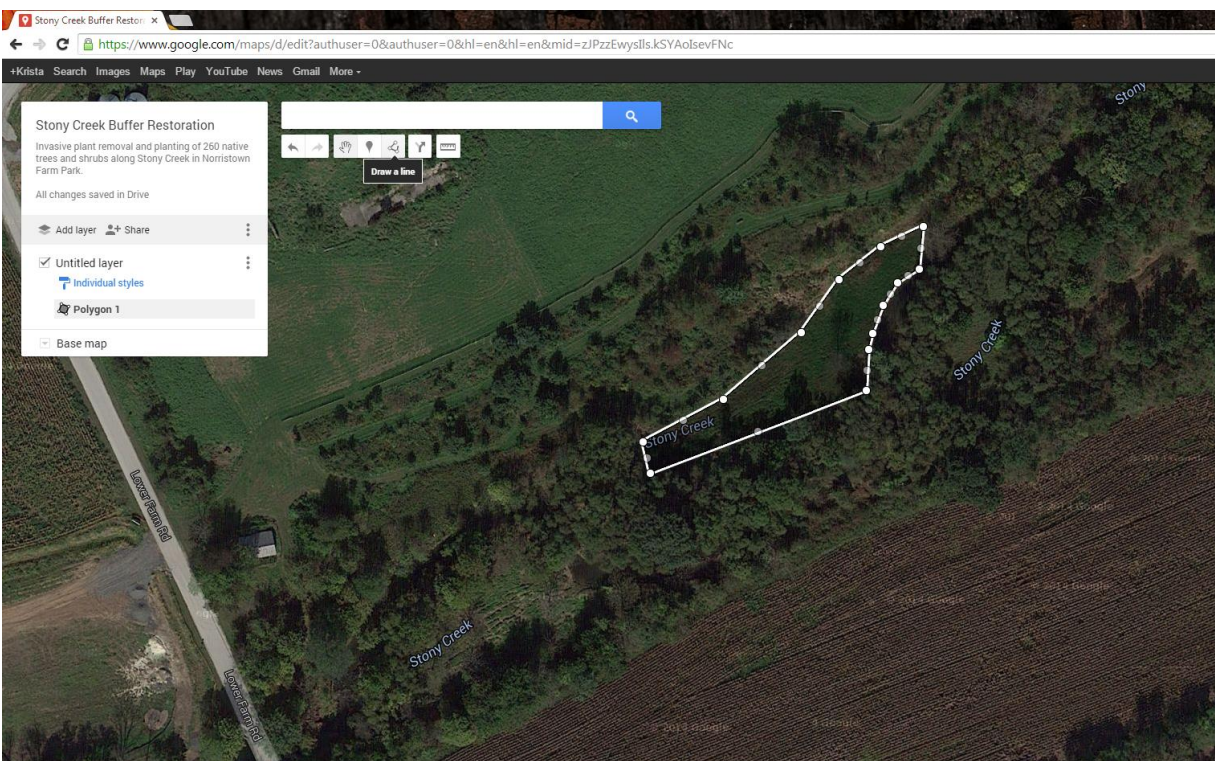
Next, find your site on the map. You can either zoom in by scrolling on your mouse and clicking and dragging the map, or you can type an address/coordinates/place name in the search box. If you use the search box, after you find your site, you can delete the balloon that pops up by clicking on the 'x' in the box to the left of the screen.



If you would like your map to be in satellite image, go to “Base Map” and select “Satellite.”



Under the search bar, you will find tools to create your map. Select the “Draw a line” tool, and use it to create a shape around your planting area. Each time you click on the map, you will make an edge to your shape. To close the shape, click on the first point again.

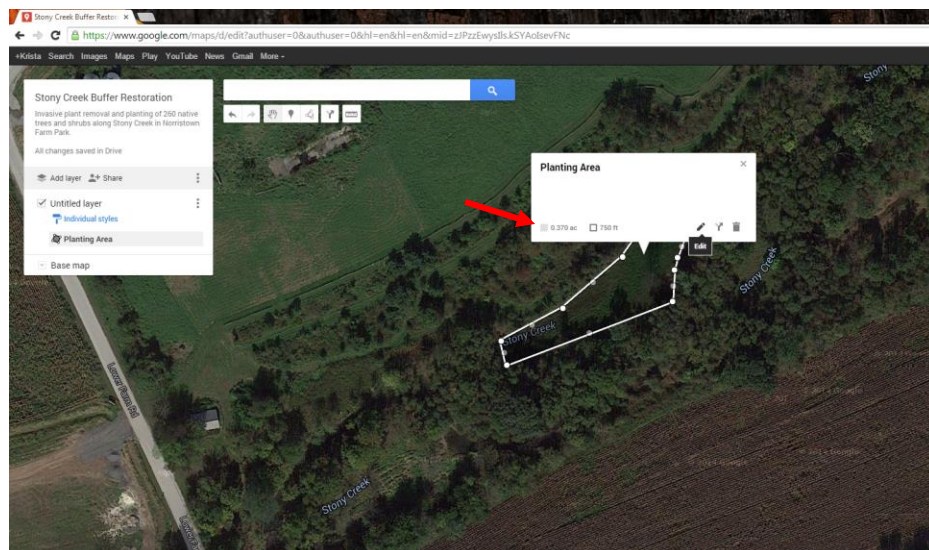


A box will pop open for you to name your shape. You can use the same title as your map, or call it something like “Planting Area” or “Invasive Treatment Area.” **This box will give you the area of your shape (in acres or square feet), which you can use to fill out the top of the bid sheet.** Just make sure your shape only covers the area you intend to plant. The box also tells you the length of the line you made around the outside of the planting area (in feet), so don’t get confused. You may be able to use this perimeter measurement to estimate the length of deer fencing you need, though!

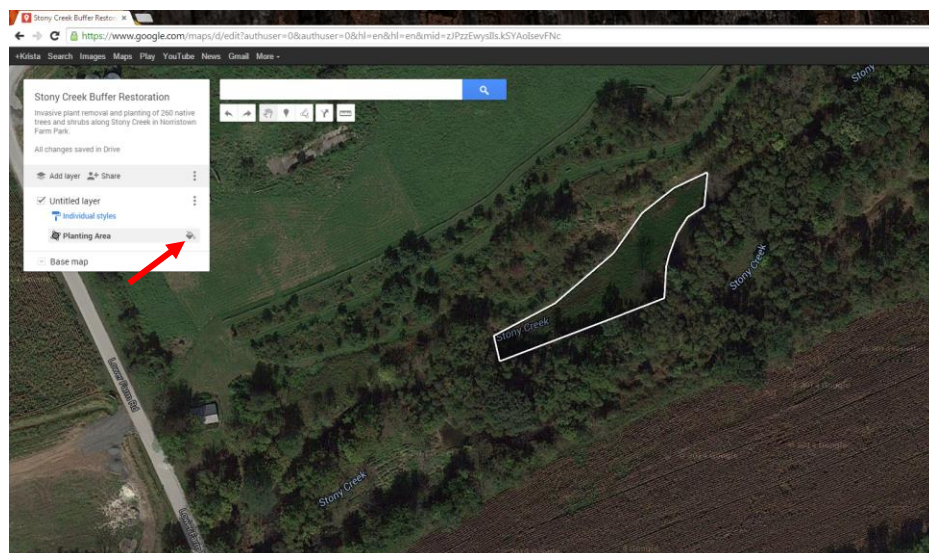
If you need to edit your shape, simply click on it to bring up the box, and click on the pencil icon, or “Edit.” In edit mode, you can drag the individual points you made to re-shape your planting area. (Tip: if the box is in your way, exit out of it, and you will still be able to edit your shape.)

If you click in the middle of your shape, rather than on a particular point, you can drag the entire shape.

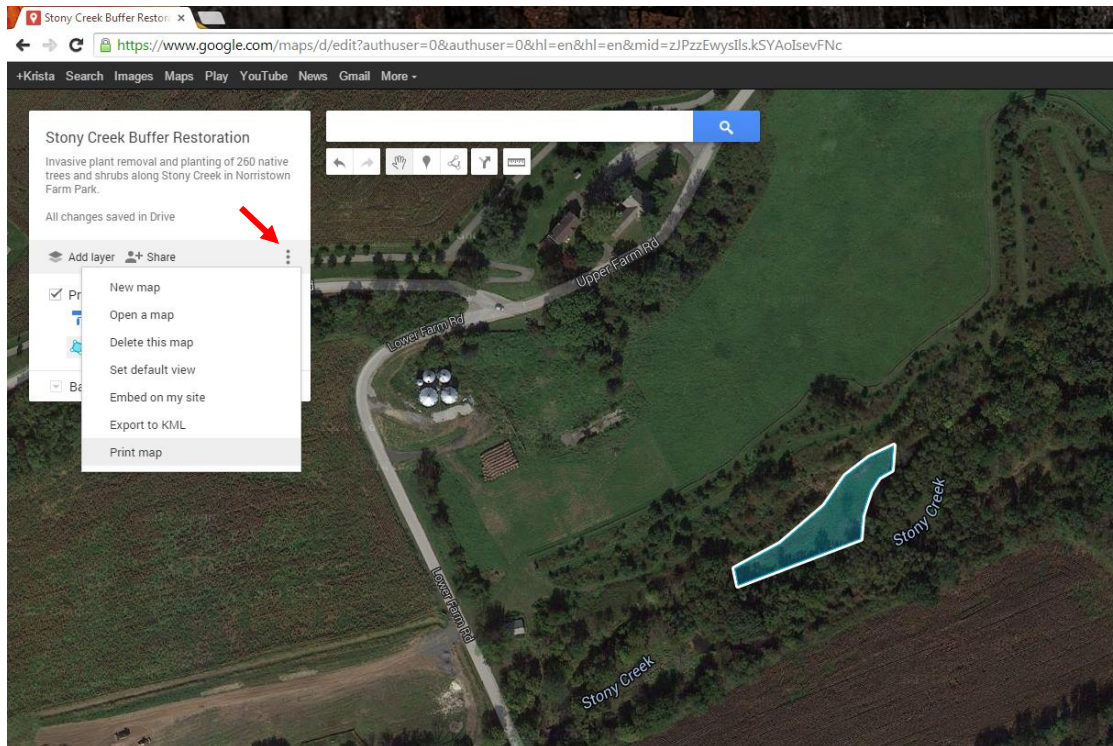
If you make a mistake while working in Google Maps, you can simply press Ctrl-Z on your keyboard to “undo.”



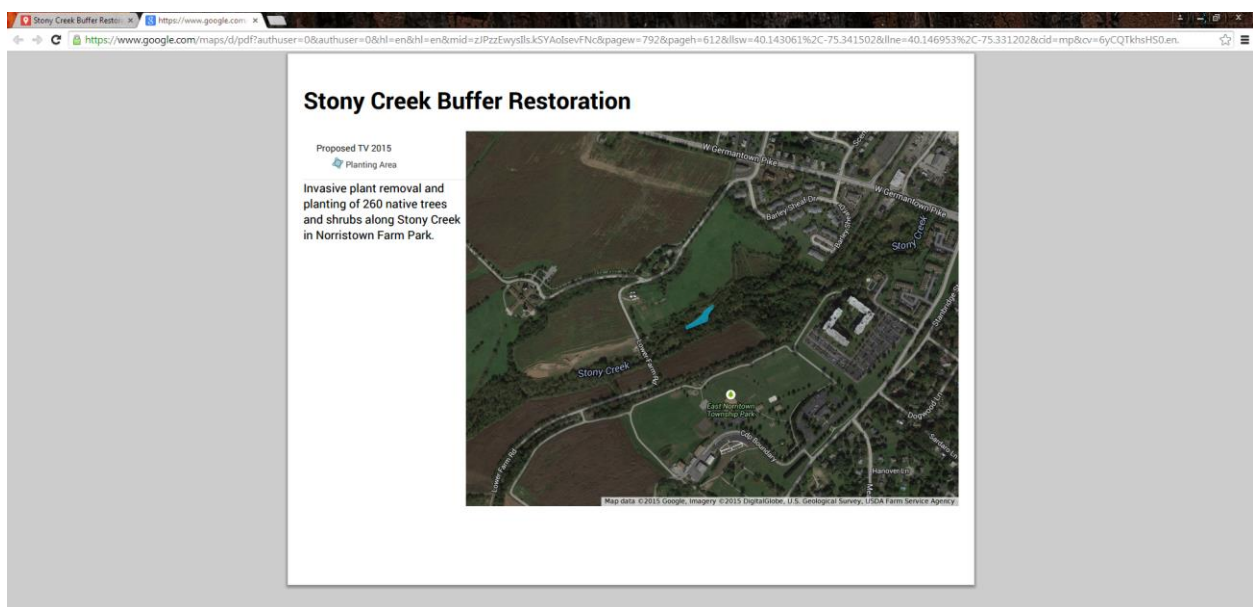
To distinguish between shapes, you can change color, transparency, and border width by hovering over the name of your shape in the box to the left and clicking on the paint icon that appears.



When you are finished adjusting your map, you can print it by clicking on the icon at the top of the box that looks like three dots.



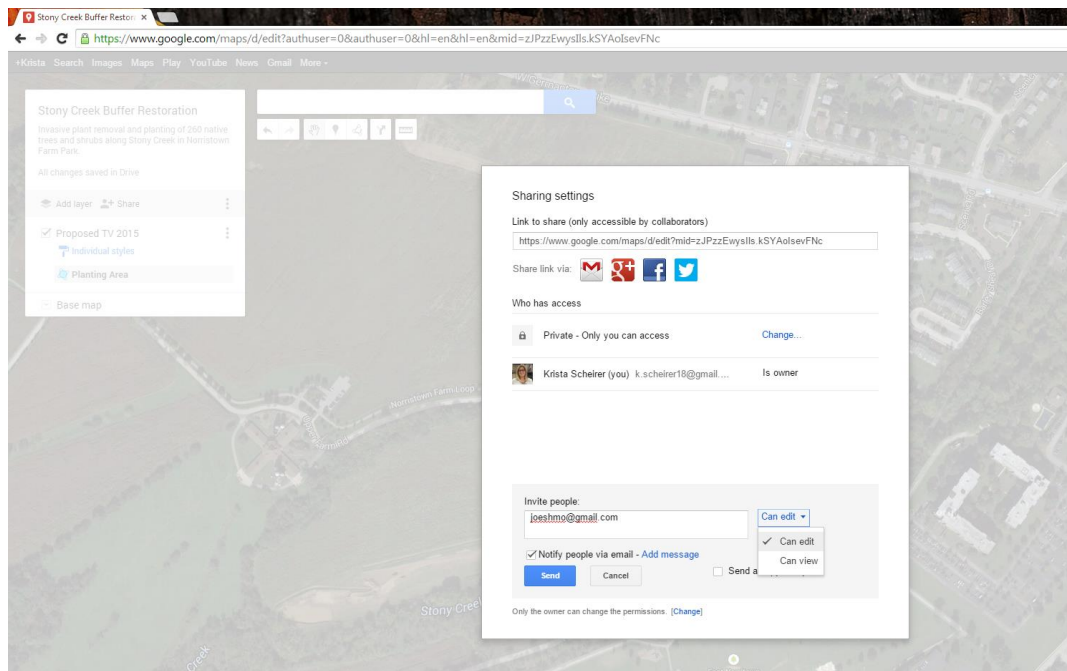
You can use this option to print, or save your map as a pdf. You can create a landscape or portrait version. You may have to play around by zooming in or out or re-centering your map before clicking print. You will get to a screen that looks like this:



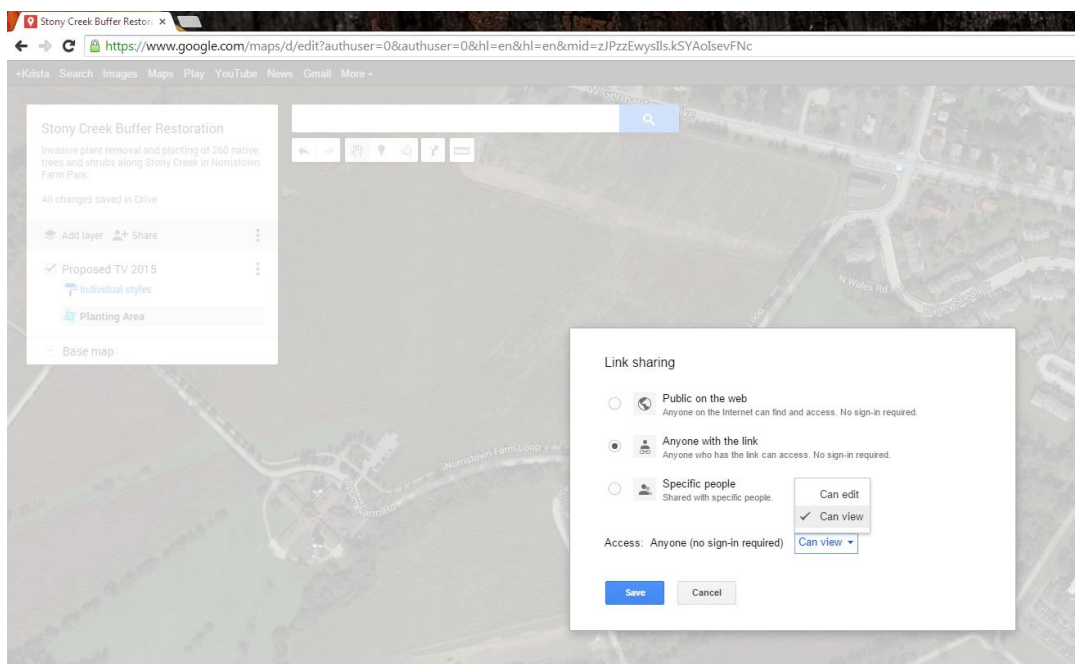
If a print dialog box does not open, simply right-click on the page and select "print" from the drop-down menu. Submit this with your TreeVitalize application. Submit an updated map with your final report (if your planting area changes at all).

To share the map with a project partner, or to send an electronic version with your application, click on the “share” icon.

To allow a partner to edit the map, type in the person’s Google email address (they must have a Google account to edit), change the capabilities to “Can edit,” and click “Send.” They will be emailed a link to the map.



To share with people who do not have a Google account (or to share using the map’s URL), click on the “Change” link under “Who has access.”

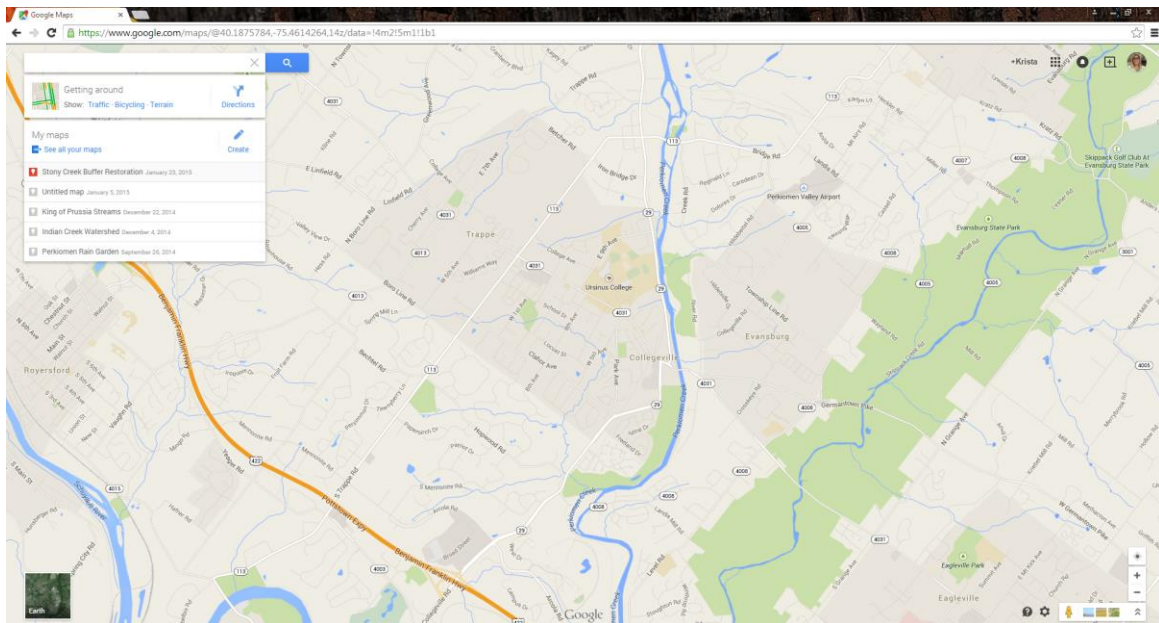


Change the setting so that anyone with the link can access the map. You probably want to select the “Can view” setting, rather than “Can edit.” Save your settings. Then, you can copy the link to share.

Using your Google map to obtain site coordinates (for the top of the bid sheet):

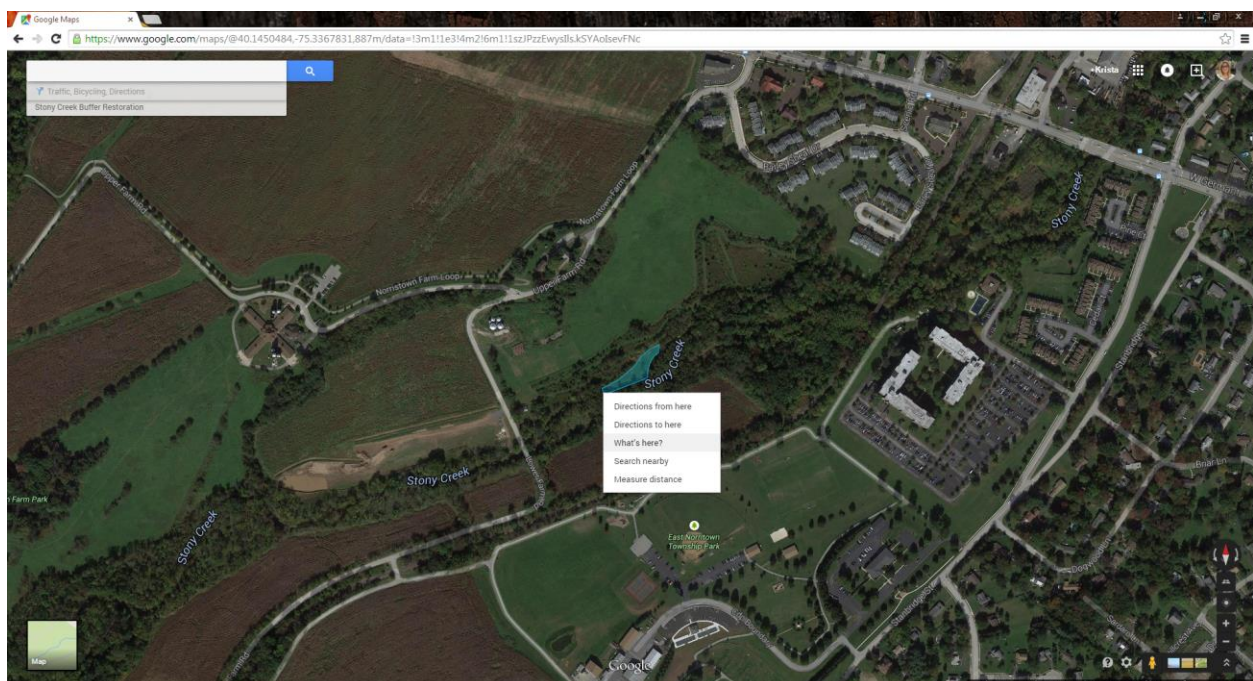
First, exit out of your map and go back to the home page of Googlemaps.com (you can also just click on the “Maps” link at the very top of the screen on the left).

Click in the search bar, and select “My maps” from the drop down menu. Unless you’ve made a ton of maps, your project map should be listed there, and you can click on it to see a preview (a mode in which you cannot edit the map).

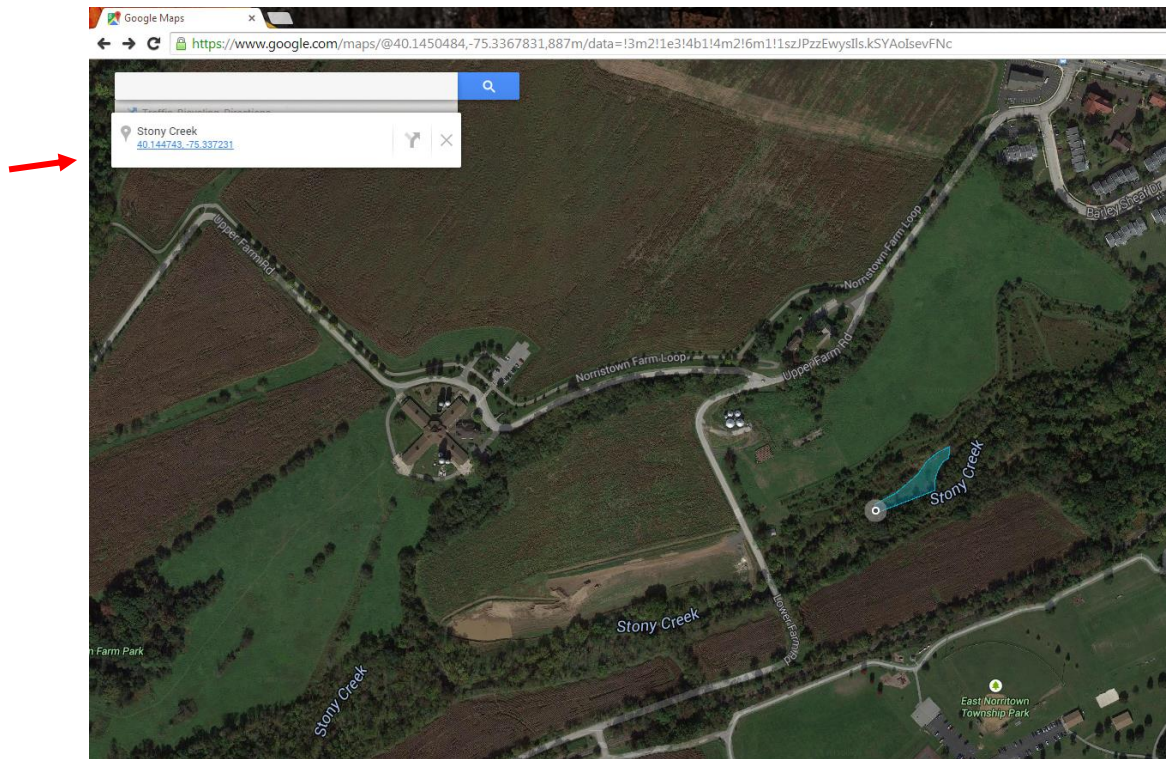


Click the “Earth” icon in the bottom left to change to satellite view.

At the downstream end of your planting area, right-click and select “What’s here?” from the drop-down menu.



The coordinates for that point will be listed in the upper left corner of the screen.



Using your Google map to measure buffer length and width (for Stream ReLeaf form):

Open your original map for editing. Use the “Draw a line” tool again to create a line along the length of your planting area where you created or improved the buffer. Double-click to end the line. The box will tell you the length. To delete the line, click on the trash can icon. Repeat this step for the width of your planting area. If the width varies, measure at multiple points and report the average.

