CD28 Floodplain modeling web map Instructions

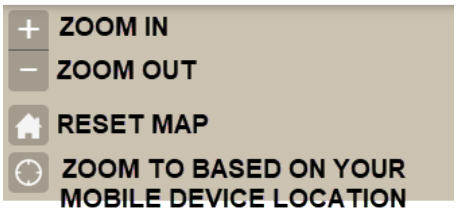
The Engineer's Inspection report for CD28 examined where water would go under certain scenario's. The map is interactive and allows you to turn different map layers on and off to visualize the data and results. The dataset is very large, so you should expect some delay in refreshing the map when turning a map layer on or off.

The application can be opened by clicking the link below:

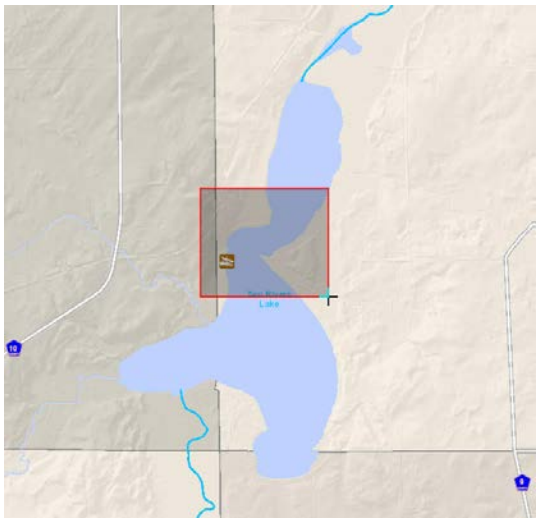
https://gis.co.stearns.mn.us/CD28Floodplain

NAVIGATION

There four buttons and some keyboard short cuts to help you move around the map.



By holding down the SHIFT key on your key board and using your mouse to left click and hold, you can draw a box on the map to zoom to that area.



To pan around the map, click and hold the left mouse button and move the mouse around. Release the left mouse button to stop panning the map.

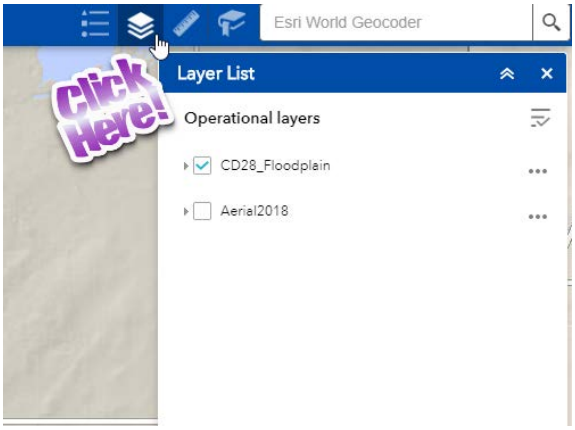
VIEWING THE MAP DATA

Step 1

Because the data is large, this results in slow draw time of the map. Zoom into an area to limit how much data has to be pulled across the internet.

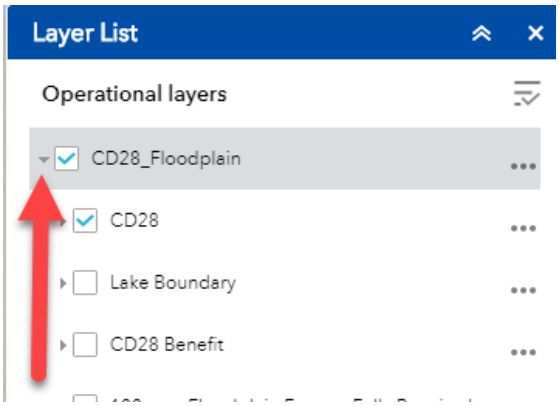
Step 2

Open the Map Layer List by clicking the Layer List button from the top right menu bar



Step 3

Expand the Layer List by clicking the small arrow to the left of the CD28_Floodplan text



Step 4

Turn on the LAKE BOUNDARY map layer by clicking the checkbox

This yellow line represents where the lake water might normally be

Optionally, you may turn on an aerial photo at any time by clicking the AERIAL2018 check box

VIEWING DIFFERENT SCENARIOS

There are three different scenarios that were computer modeled.

1. Floodplain Extent – Barrier Clogged

   Represents current conditions (no repair and fish trap as it exists)

2. Barrier_Removed

   Represents water after fish barrier is removed

3. Floodplain Extent – Fully Repaired

   Represents water after fish barrier and a full repair is complete

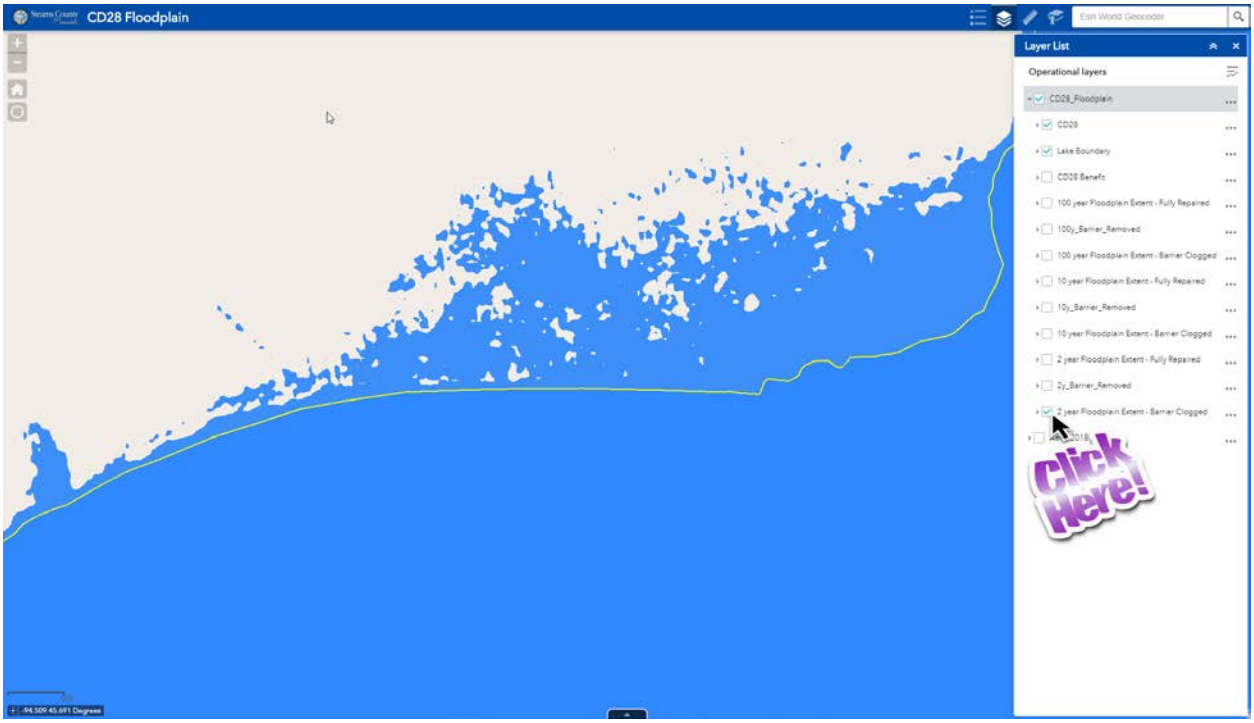
For each of these scenarios, the computer model simulation is based on three different rain events.

2 year, 10 year, and 100 year rain event

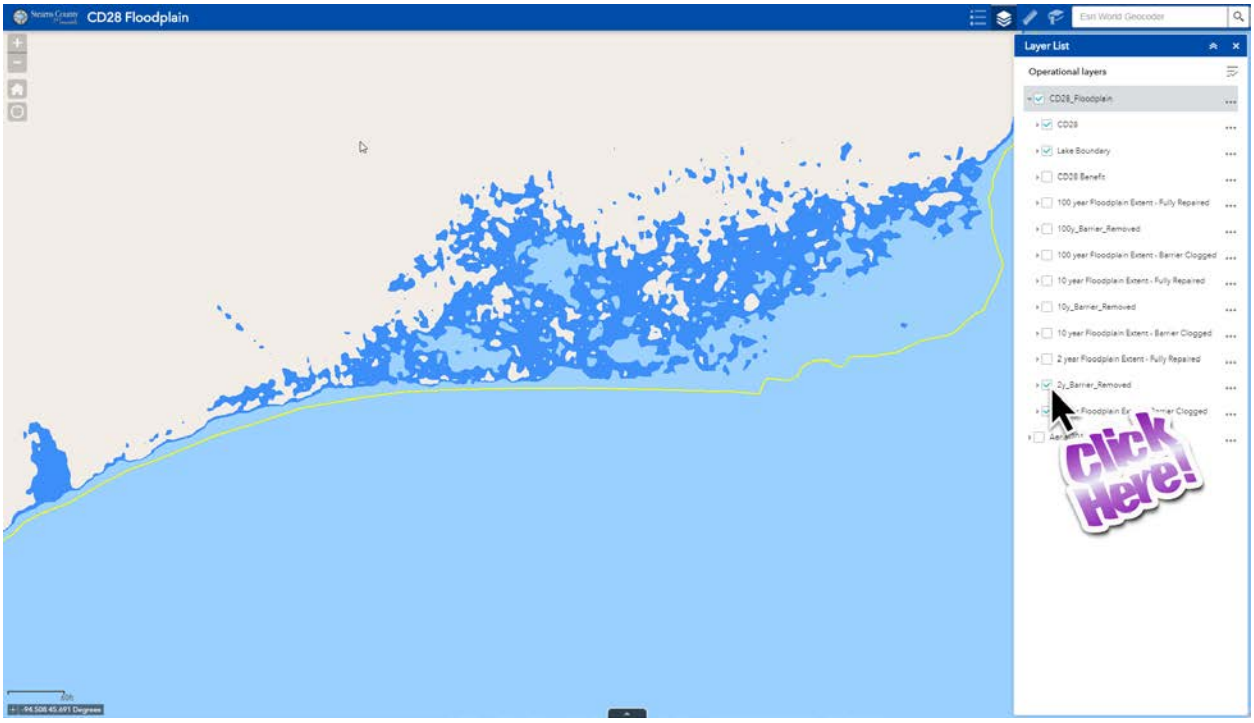
To view the results of what the computer engineers models shows, start with the 2 year rain event.

Step 5

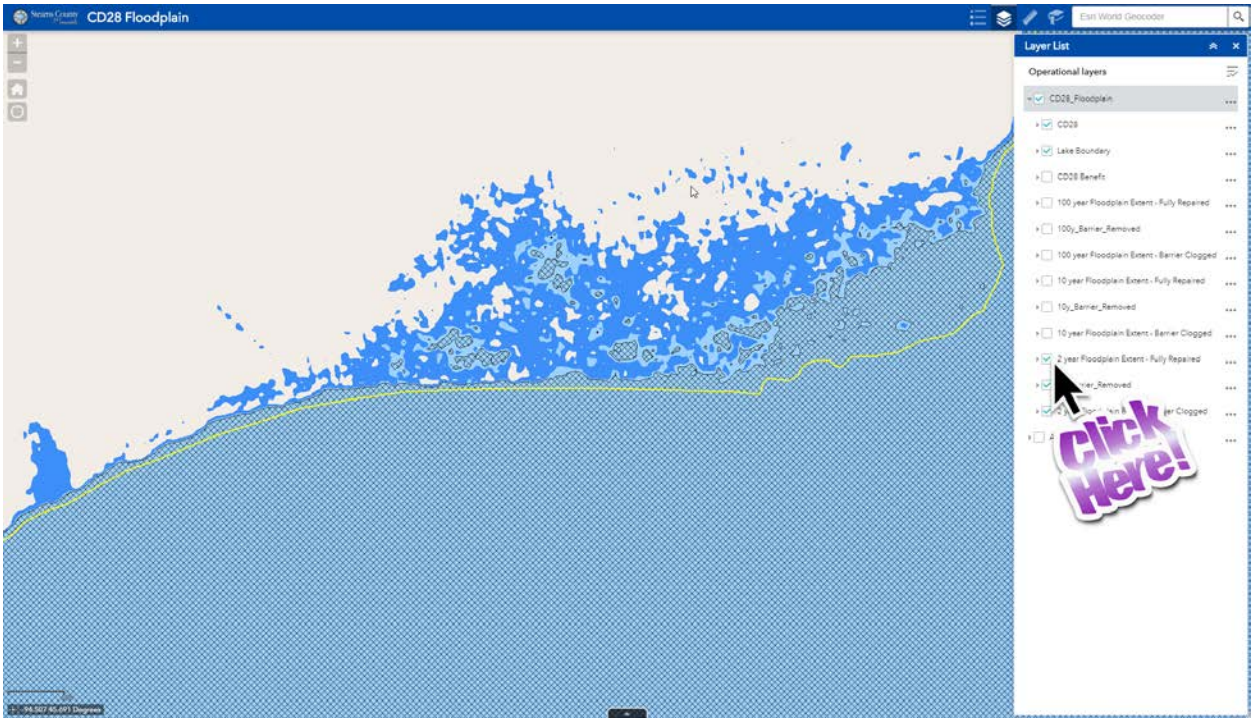
From the Layer List, click the 2 year Floodplain Extent – Barrier Clogged check box to display water during this event. The blue shape depicts where water goes.



To view water extent if the fish barrier were removed, click the 2y_Barrier_Removed check box. The light blue depicts the extent of water with the barrier removed. Any dark blue still visible would be areas where water would no longer be if the barrier were removed.



To view water extent if the fish barrier were removed and a repair from lake outlet to Co Rd 17 were completed, click the 2 year Floodplain Extent – Fully Repaired check box. The black cross hatch depicts the extent of water with the barrier removed and a repair completed. Any dark blue and light blue still visible would be areas where water would no longer be if the barrier were removed and repair completed.



To view the 10 or 100 year rain event scenarios, uncheck the map layers associated with the 2 year rain event. Repeat the steps above substituting the 10 or 100 year rain event maps layers for the 2 year map layers.