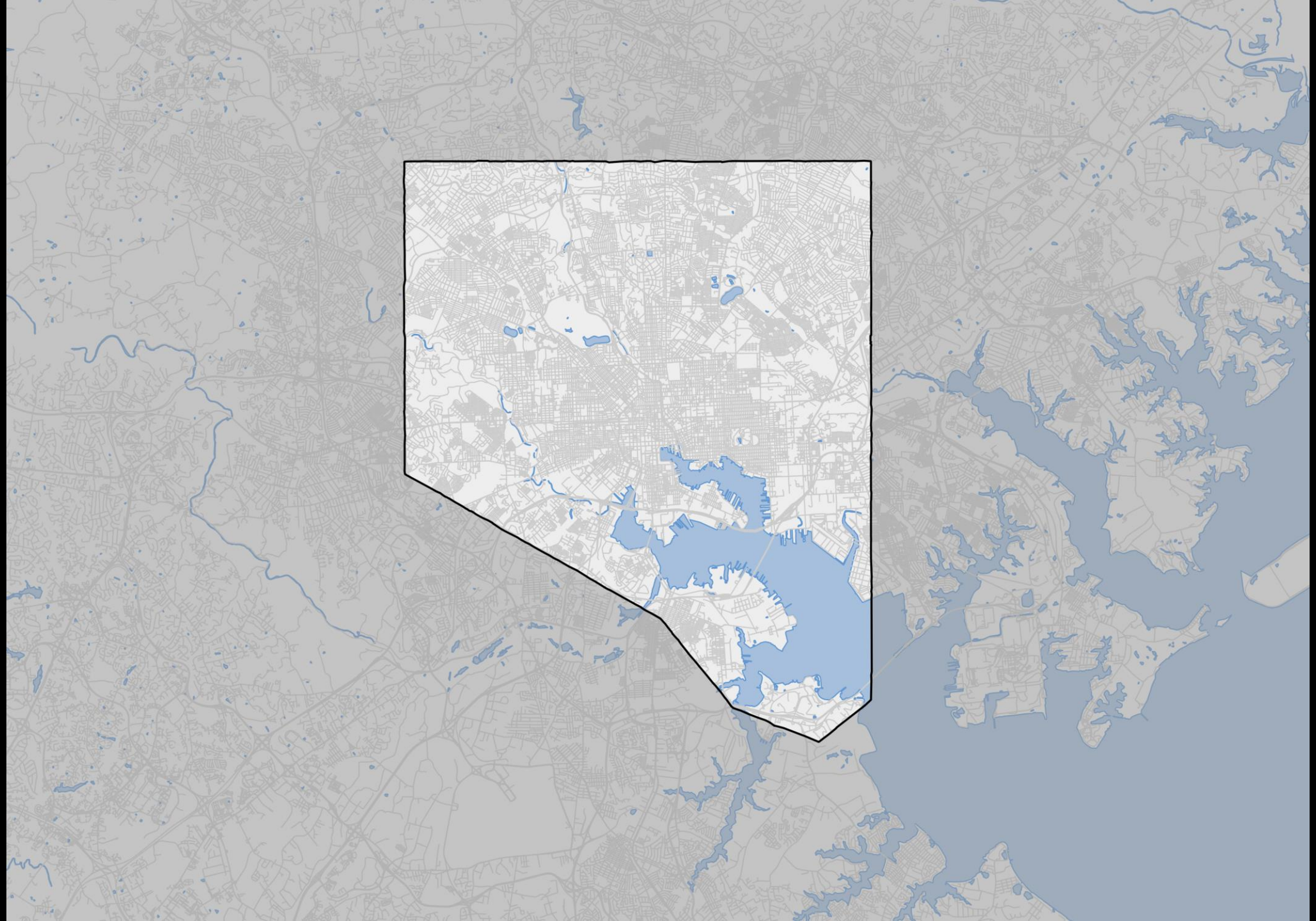
QGIS Cartography Part 1



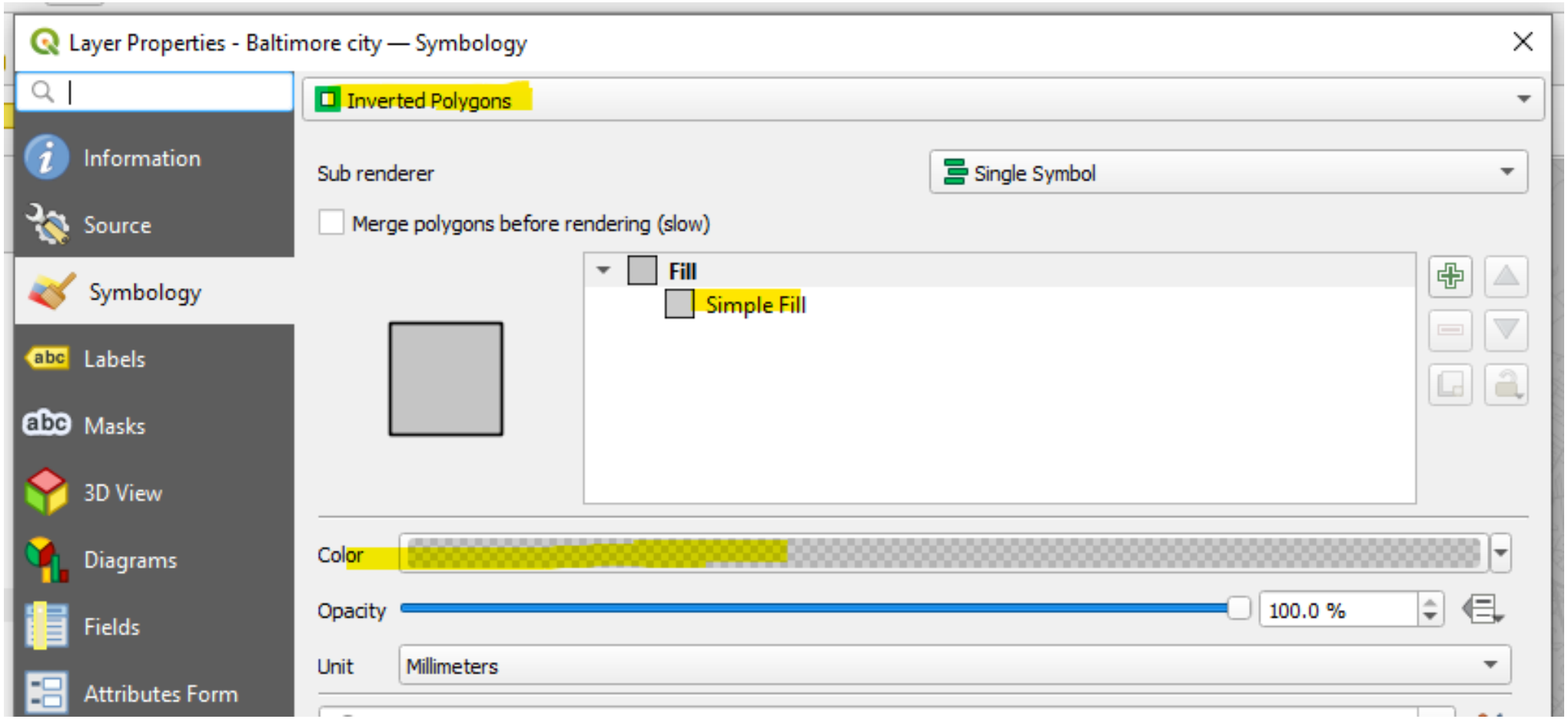
Components

- No basemap?
- State
- Water
- Roads
- Counties?

Expanded “Backdrop” Chunk

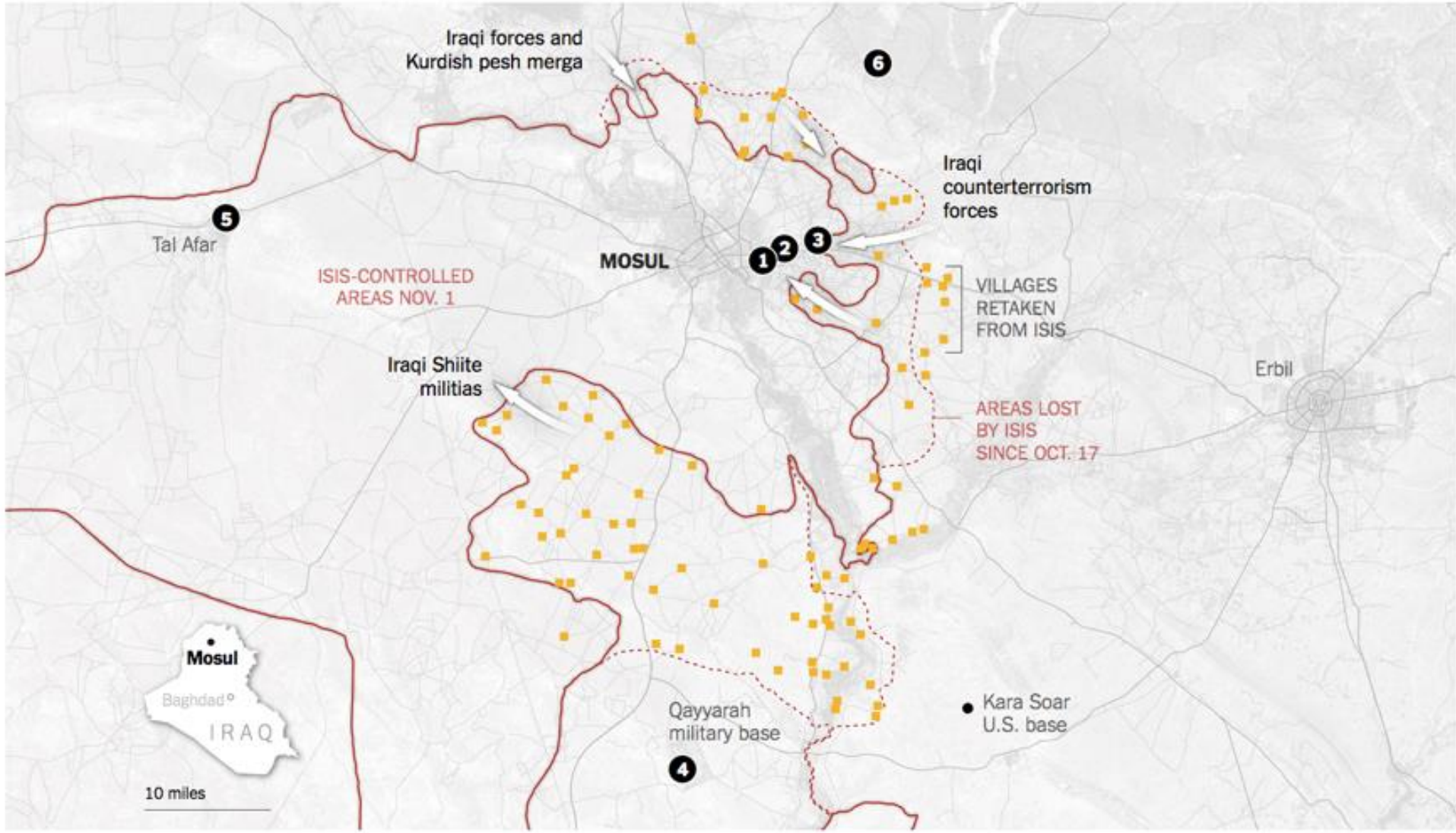
```
{r backdrop}
md_counties ← counties(state = 'MD') %>% st_transform(crs=3857)

md_state ← md_counties %>%
  st_buffer(0.5) %>% # make a buffer of half a meter around all parts (to avoid
slivers)
  st_union() %>% # unite to a geometry object
  st_sf() # make the geometry a data frame object

# Get water: https://rdrr.io/cran/tigris/man/area_water.html
md_water ← area_water(24, c(510,5,3,27)) %>%
  st_union() %>% # unite to a geometry object
  st_sf() %>%
  st_transform(crs=3857)

# Get roads: https://rdrr.io/cran/tigris/man/roads.html
md_roads ← roads(24, c(510,5,3,27)) %>% st_transform(crs=3857)
```

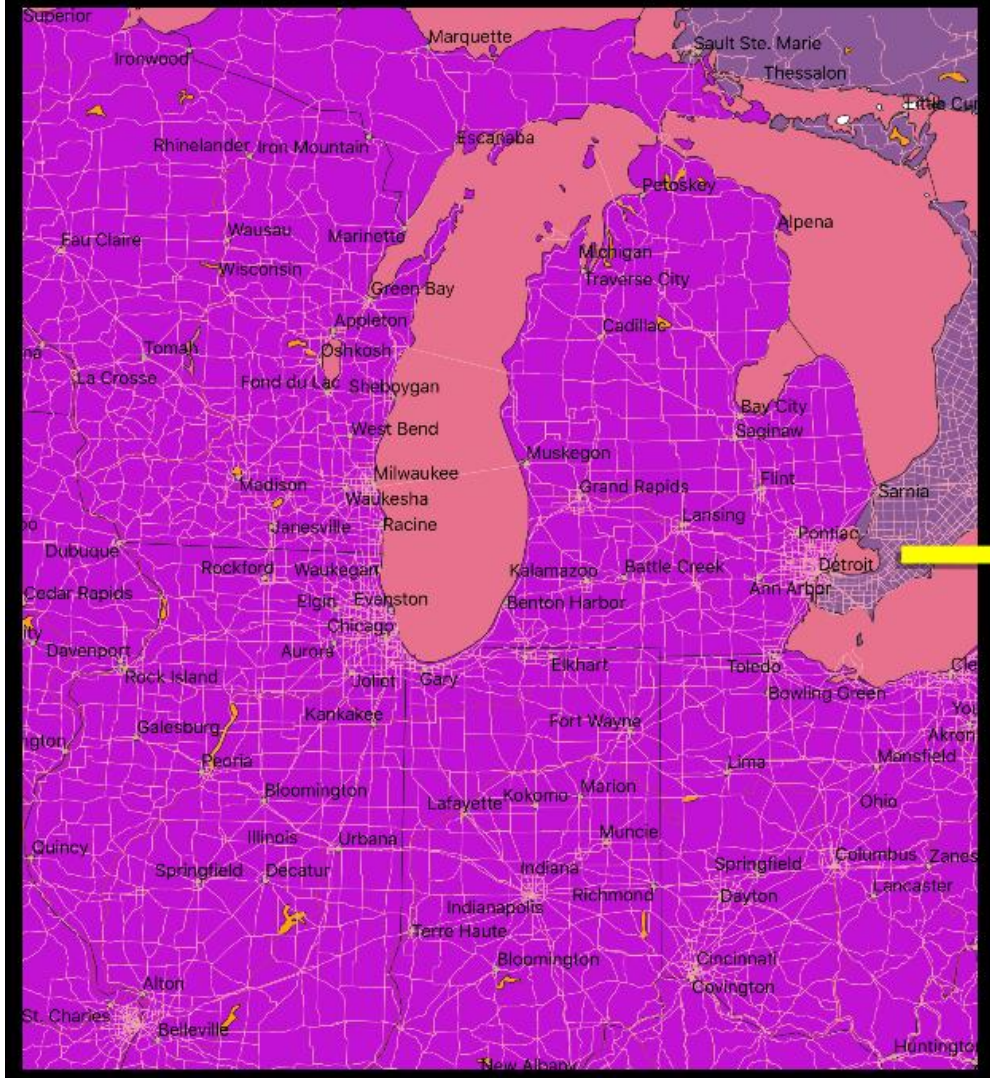
Inverted Polygon Styling



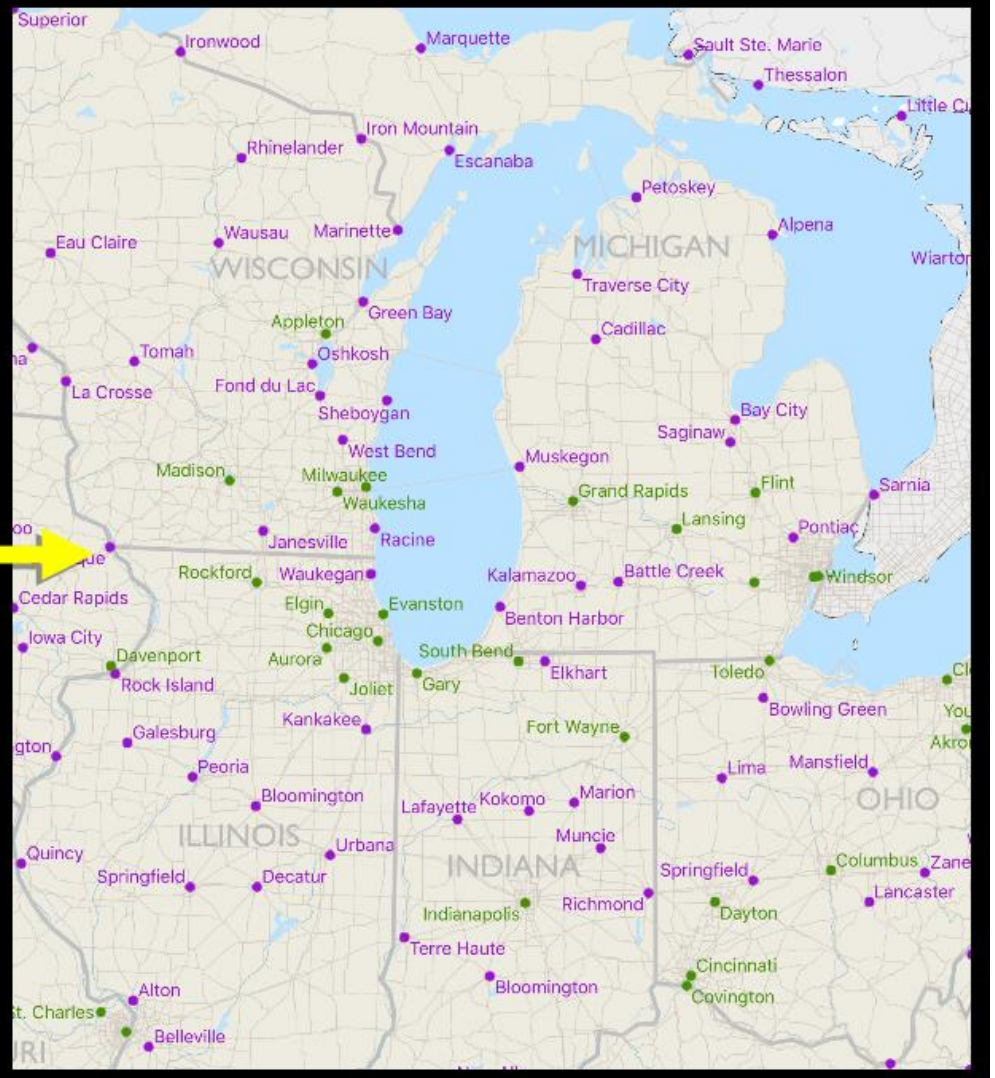
Develop a Visual Hierarchy

- It would be very easy to have a point layer stand out on my map (although, it doesn’t have to be so gray)
- Preview in grayscale (View > Preview Mode) to make sure things still look good!


Iraqi forces and
Kurdish pesh merga
6
Iraqi
counterterrorism
forces
5
Tal Afar
MOSUL
1
2
3
ISIS-CONTROLLED
AREAS NOV. 1
VILLAGES
RETAKEN
FROM ISIS
Iraqi Shiite
militias
Erbil
AREAS LOST
BY ISIS
SINCE OCT. 17
Mosul
Baghdad
IRAQ
Qayyarah
military base
Kara Soar
U.S. base
4
10 miles



Default colors in QGIS



Developing a visual hierarchy through colors

Visual Hierarchy Cheatsheet

1. Start with a color for land that has very low saturation (‘S’) and very high value (‘V’), which makes it very light/faded
2. Put roads on top, decreasing (or increasing) the value slightly. Also, make them very thin.
3. Add water features and other base layers. Change the hue (color), but maintain low saturation and high value levels. Remove all strokes around polygons.
4. Now you will have plenty of color space to make the most important things on the map highest in the visual hierarchy—high saturation and/or darker values will put them in high contrast against your subtle background
5. For representing data, ColorBrewer is always a good guide for colors: http://colorbrewer2.org

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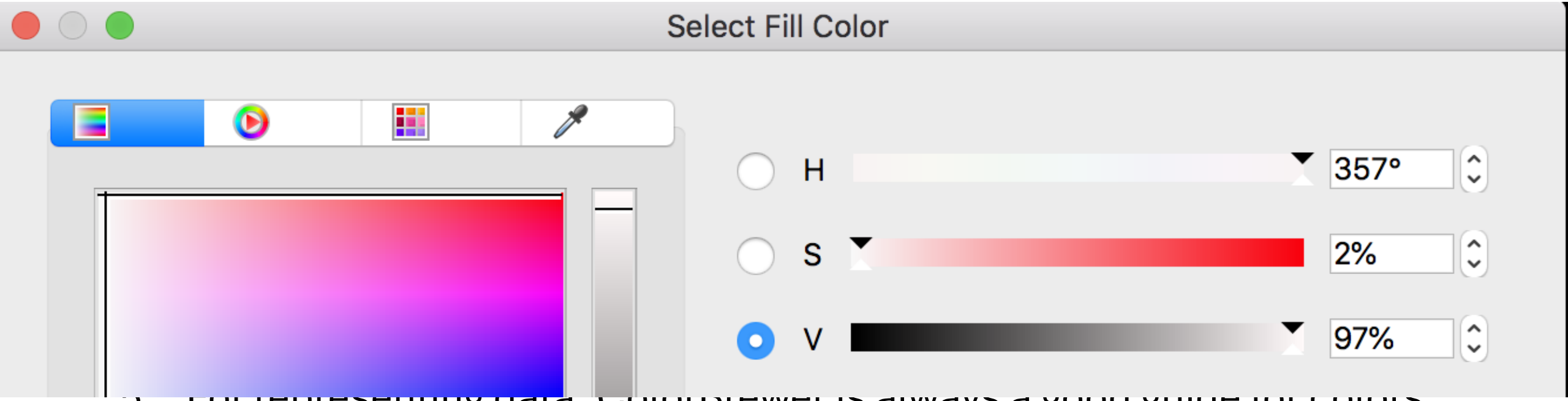
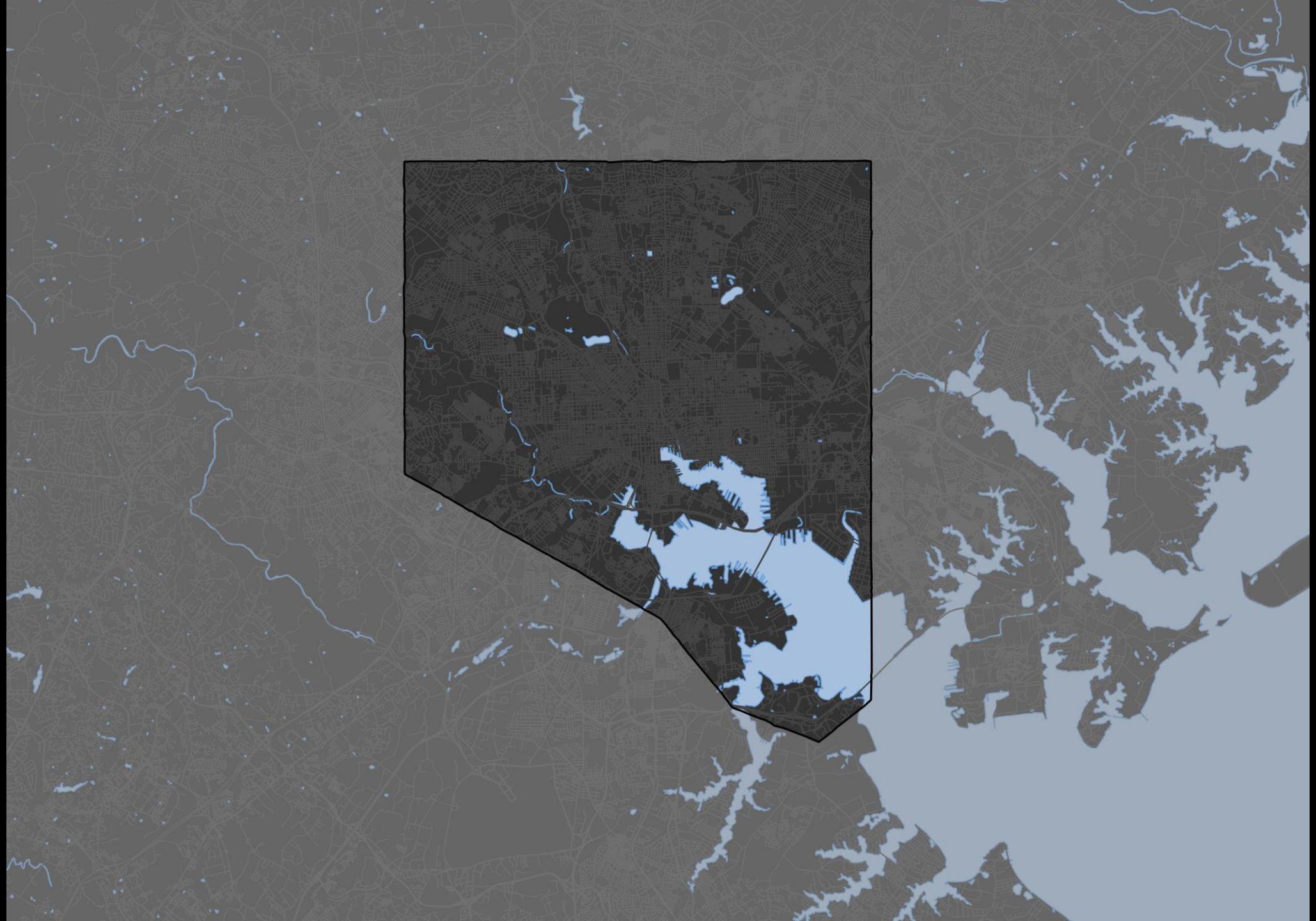
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