- Building on our exercises in observation journaling last semester, you will make one final observation of the James River watershed. A map will be the centerpiece of this project. What story will you choose to tell with your map? A comparison of superfund sites or environmental justice issues? The relative distributions of parks and green spaces in Portland and Richmond? The annexation history of the cities along their respective rivers? The choice is yours. Include your motivation for making the map, description of mapping process, overall comparison of Portland/Willamette and Richmond/James maps, detailed assessment of spatial pattern for each of the two sites, how the choices you made in creating your map influenced your interpretation of the results, summary of what you learned from the maps, and relevant source material. Maps could and should draw inspiration from Portlandness: A Cultural Atlas, Edited by David Banis and Hunter Shobe (2015). Representative abstracts from the final papers follow.

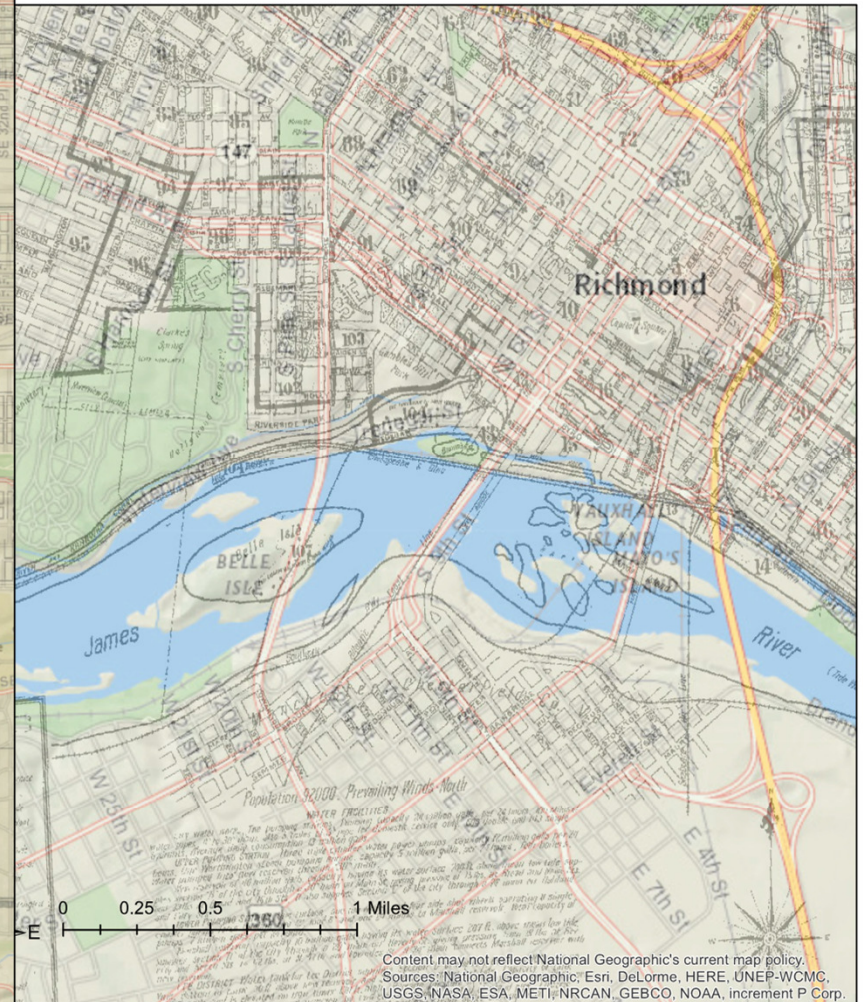# Modern Day Portland with 1909 Map Overlay

Monica Stack

Modern Day Map Attributed to: National Geographic
1909 Map Attributed to: Franklin George Cram & Ellis David Arthur

Portland

Ross Island Brg

R O S S ' I S L A N D

TOE ISLAND

EAST ISLAND

CITY BOUNDARY LINE

Reed College

Eastmoreland Golf Course

Sellwood Brg

Content may not reflect National Geographic's current map policy. Sources:
National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA,
METI, NRCAN, GEBCO, NOAA, increment P Corp.

0   0.4   0.8   1.6 Miles

Modern Day Richmond with 1905 Map Overlay

Monica Stack

Modern Day Map Attributed to: National Geographic
1905 Map Attributed to: Sanborn Map Company, Environmental Data Resources

Richmond

BELLE ISLE

James   River

Content may not reflect National Geographic's current map policy.
Sources: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC,
USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.
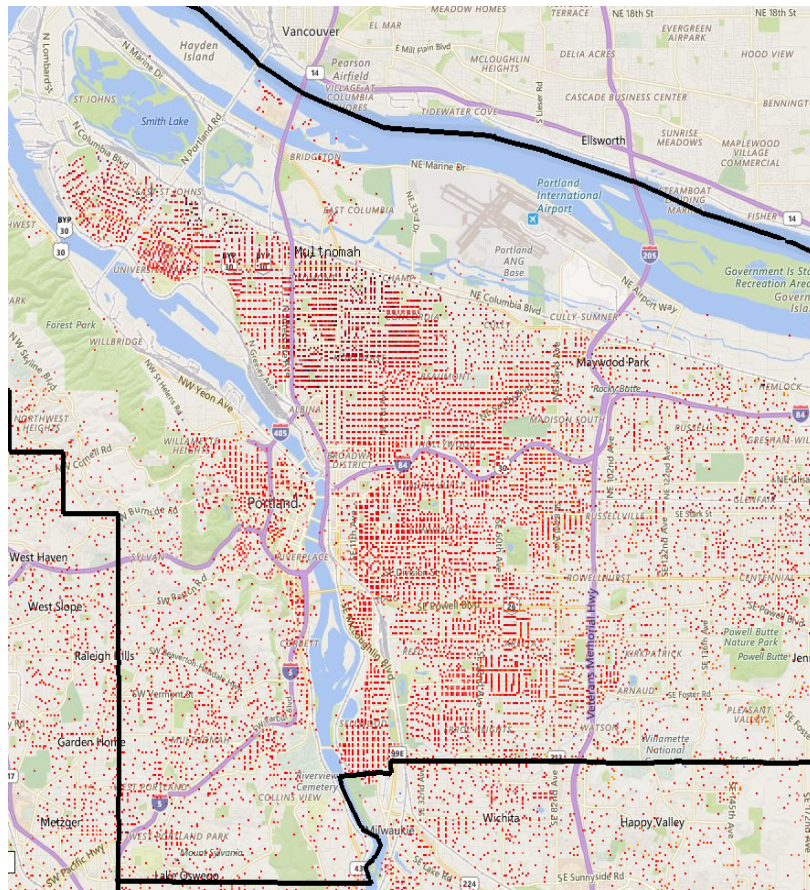
0   0.25   0.5   1 Miles

# Human Manipulation of the Urban Waterfront in Portland and Richmond

Monica Stack

Human interaction with the James and Willamette rivers dates can be traced back to the last ice age. Emblematic of the human manipulation of the respective urban watershed regions are Belle Isle (Richmond, VA) and Ross Island (Portland, OR). Since 1814, Belle Isle has housed many manufacturing companies. Beyond the lasting effects of systematic runoff into the river and gas pollution into the air, Belle Isle is now covered in residual infrastructure from these operations. Whereas humans completely altered the cultural geography of Belle Isle, people substantially altered the physical geography of Ross Island, which sits one mile up-river of the heart of downtown Portland. The Ross Island Sand and Gravel company purchased Ross Island and its three surrounding neighbors, Hardtack, East, and Toe Islands, in 1926. For 80 years, they mined raw gravel aggregate from the side of the island, creating a 120-feet deep lagoon in which we kayaked during our time there. The transformations of these islands are visible on my maps, which show modern day Portland and Richmond overlain with 1909 renderings of the areas. I used georeferencing to compare the modern and historical geographies of Ross Island and Belle Isle and their respective surrounding downtown areas. The cities have noticeable changed. Still, many aspects have persisted. For example, many street names are the same today as they were in the early 1900s. Both in the early 1900s and today, Richmond seems to have more of its waterfront in use as natural areas and park land.

2010 Census Data

Michael Kitimet

🟫	American Indian and Alaska native	
🟨	Asian alone	
⬛	Black or African American	
🟩	Native Hawaiian and Other Pacific Islander	
🟦	Some other race alone	
🟦	Two or more races	
🟥	White only	
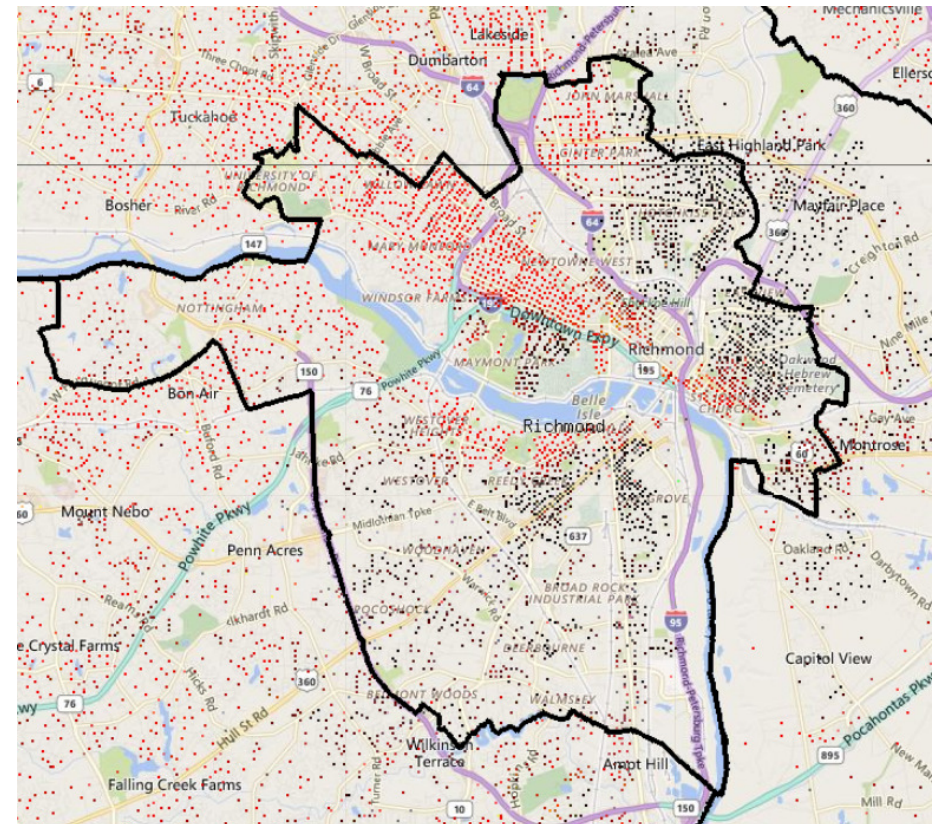
Census April 1st 2010				
Race	Richmond		Portland	
White alone	40.8%	83375	76.1%	445380
Black/African American	50.6%	103402	6.3%	36871
Asian alone	2.3%	4700	7.1%	41553
Hispano or Latino	5.9%	12057	9.0%	52673
Total		**204351**		**585256**

RACIAL POPULATION DISTRIBUTIONS AND HISTORICAL ROOT CAUSES IN THE CITIES OF RICHMOND AND PORTLAND

Michael Kitimet

Mapping population distributions is imperative to facilitating the distribution of resources and understanding interactions between people. Governments use population distribution data to gauge how best to reach its citizens to provide essential services. Businesses use population distribution data to evaluate where to set up shop and sell their goods. In this project, I explore how race has influenced population distribution in the two cities. Maps were derived from the U.S. Census Ethnicity Mapping Tool (data from 2010). Though the two cities are located in two very different geographical regions, they manifest similar historical facets that have influenced their current population trends. These include histories of colonial establishment and the influx of foreigners, redlining, and urban renewal. These shared characteristics have shaped both cities' political and socio-economic development. An overhaul of current structures is necessary to eliminate inequalities and allow every individual in society access to housing and other fundamental services.

Percent Non-White Population by Census Tract (2010)
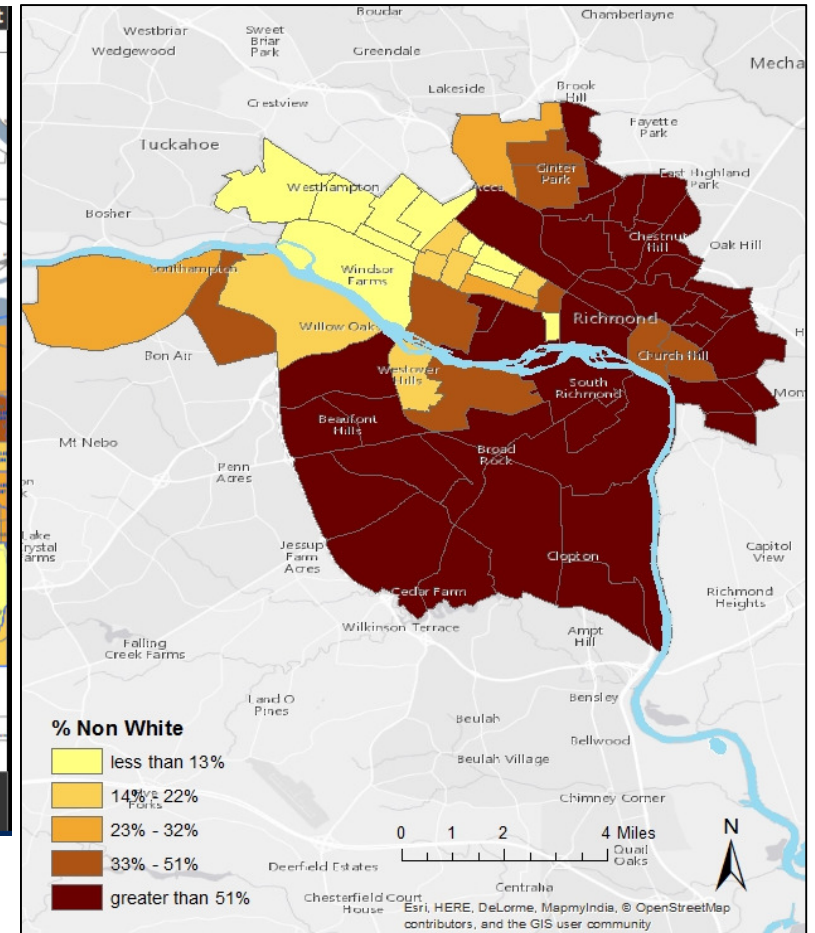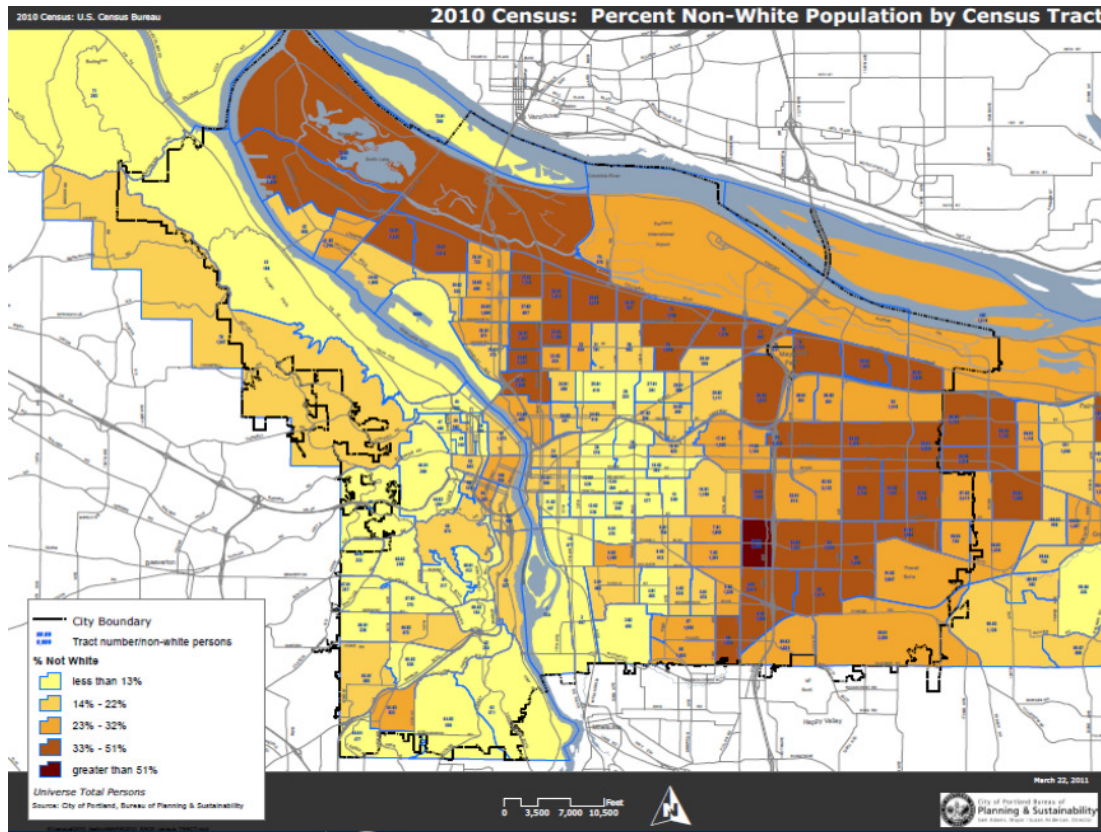

Rachel Lantz

The Race that Began on the Red Line

Rachel Lantz

The cities of Portland, Oregon and Richmond, Virginia have both faced racial struggles throughout their histories. Portland dealt with many years of removing substandard housing to deter African Americans from the city while Richmond encountered political disputes related to racially-motivated annexation. Both cities experienced redlining – the refusal of services based on a consumer's residence in an area considered to be of poor financial risk. I created maps of both cities representing the percent nonwhite population within census tracts for the 2010 census data. There were several assumptions and decisions made when creating the maps including data classifications, color, and scale. These aspects of mapmaking play an essential role in the overall meaning and purpose of the map. The maps indicate that Portland has a significantly larger proportion of white individuals in the city than Richmond. The maps may explain why Portland, characterized as "the whitest city in America," is struggling with racial discrimination more than I anticipated before starting this project.

Watershed land cover (2011)

Land Cover of the Willamette River Watershed
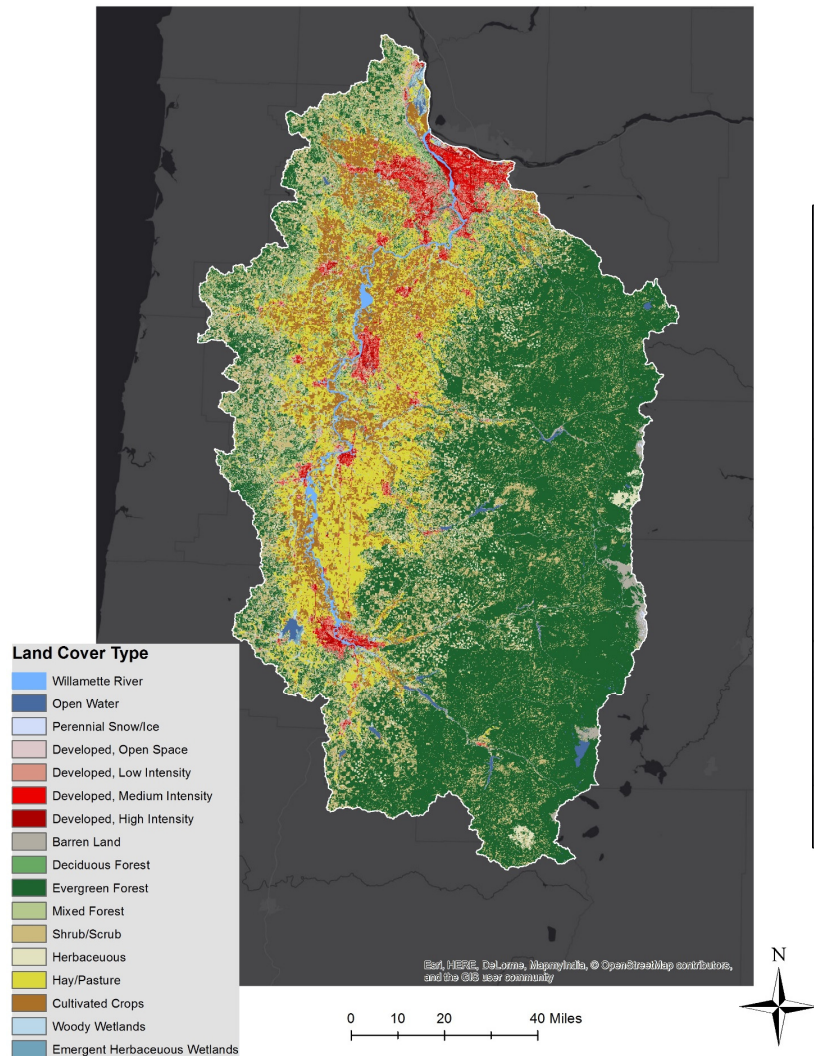
Land Cover of the James River Watershed
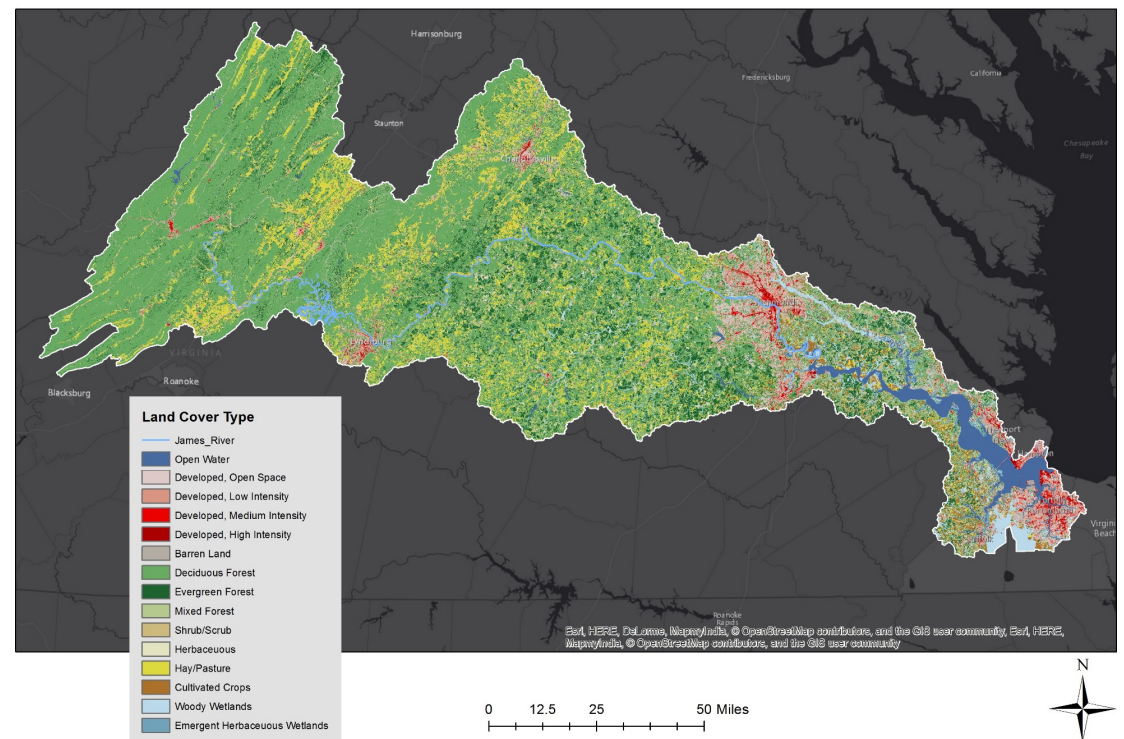
Quinn Egner

Paved Paradise

Quinn Egner

The James and Willamette rivers face impairment in water quality, in their species' prosperity, and in their overall health. There is a wide range of causes for this impairment, but much of the pollution in some way stems from the land cover of their respective watersheds. Looking at areas of high, medium, and low intensity development over the watershed allowed for an exploration as to how development is impacting both the James and the Willamette rivers. Comparing the two watersheds' land cover, the Willamette and the James are both facing the consequences of human activity. The Willamette faces a greater threat of agricultural runoff, with 6% more of its watershed covered in cultivated crops, as well as a higher percentage of impervious surface land cover by 1.5%. Much of the development was taking place adjacent to the rivers themselves. When comparing the two watersheds directly, it is evident that the Willamette, with more high-density development and agricultural land, is facing more hazards in terms of land cover that is potentially harmful to the river.

Richmond, VA
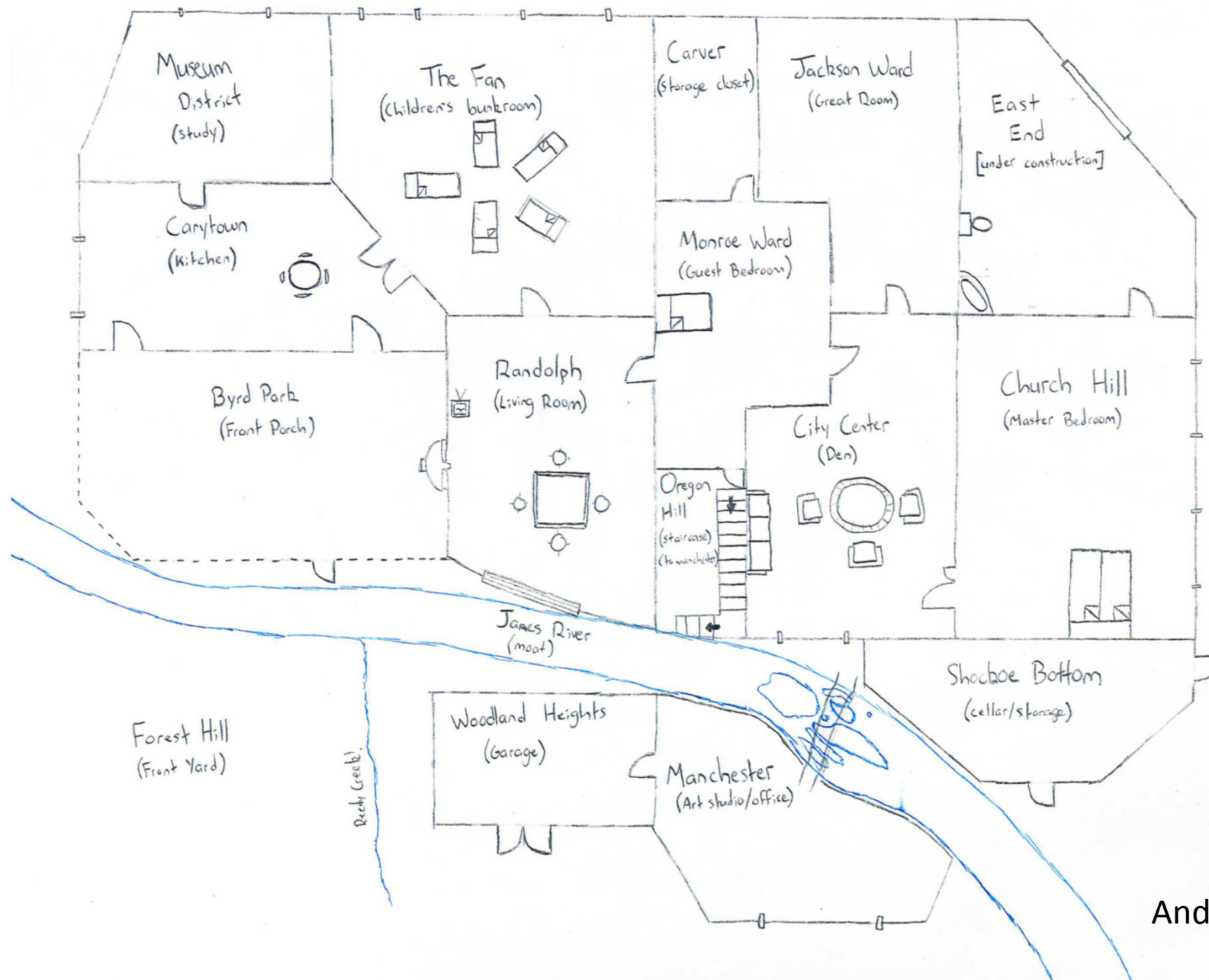
Andrew Reeder

Home on the James

Andrew Reeder

Portland and Richmond are both culturally defined as river cities. I explore how this definition has shaped the development of neighborhoods around the Willamette and James Rivers as well as around the city centers. I modeled my map of Richmond after a map created for Portland by the authors of Portlandness: A Cultural Atlas and researched each neighborhood in Richmond to match it with a room found in a house. Building on a map created by the VCU GIS lab, which has outlines of all the districts in the city overlaid on Google Maps, my map is an artistic representation of the Neighborhoods of Richmond as a house. For example, Shockoe Bottom is the cellar because it is low land near the river that often floods, and because it used to be home to slave jails and auction houses like Lumpkin's jail. Church Hill overlooks the rest of the city and is historic, if no longer wealthy, so I made it the master bedroom. Each neighborhood has its own history that gives its house room name, but each also has the shared history of Richmond. In researching them, I found many more ways in which they are common than ways in which they differ. The map offers a way of viewing the diversity shared under a common roof.