

# Family Sanders - Waterfront House in King County

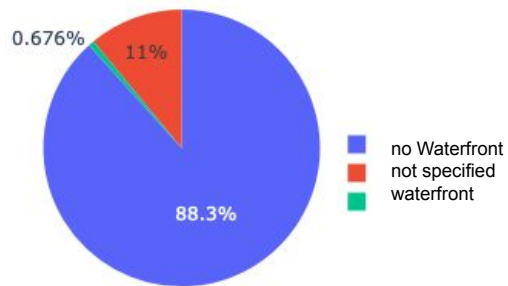


## Your Requirements/Wishes

- Waterfront
- limited Budget
- nice & isolated but central neighbourhood
- no children in the neighborhood

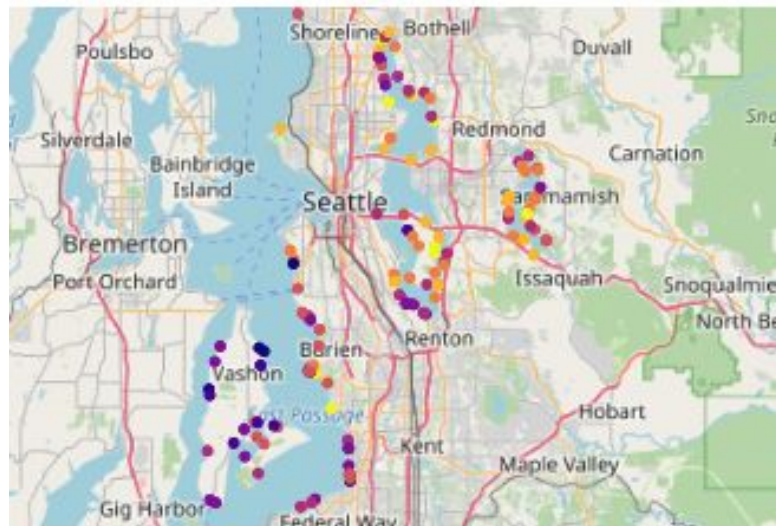
# Are there Waterfront houses for sale?

Percentage of waterfront classification



	waterfront	id
0	0.0	19075
1	1.0	146
2	2.0	2376

Houses with view over waterfront



# General House Prices in King County

House prices in King County 2014/2015



House prices in King County 2014/2015 for houses < 1 Mio



With a budget up to 0.5 million you generally have a good choice

# House Prices in King County with Waterfront view



Your limit (900.000)

The distribution of house prices overlooking waterfront differs significantly from the general real estate market!

⇒ Due to your price limit, the amount of houses will decrease significantly.

But we will try to find your Waterfront House!

At this point we have 40 waterfront houses left for you

# Your house should fit your family size - bedrooms

## Our Assumptions:

You need more than 2 bedrooms (each child should have it's own room)



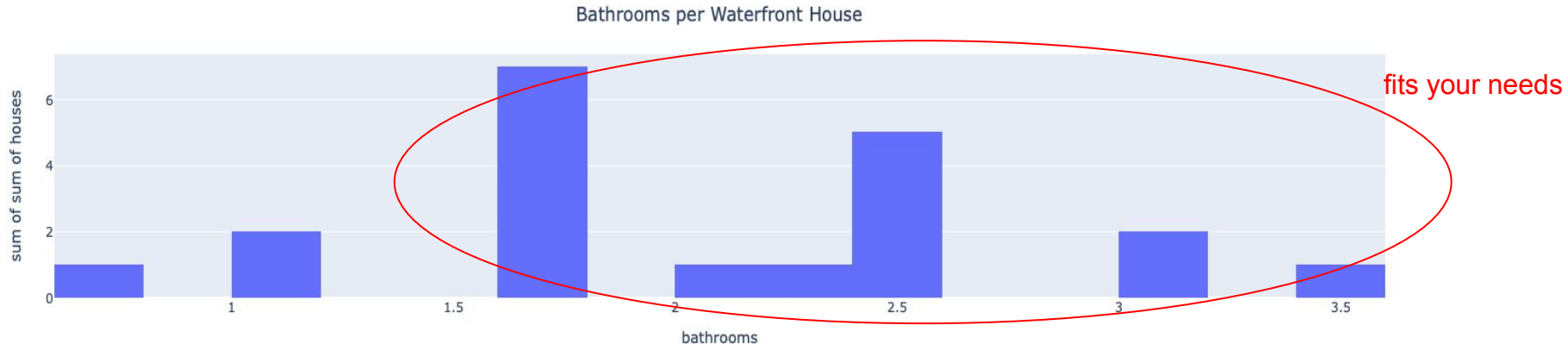
A large proportion of our 40 houses have less than 3 bedrooms. This will also decrease our amount of houses.

At this point we have 20 waterfront houses left for you

# Your house should fit your family size - bathrooms

## Our Assumptions:

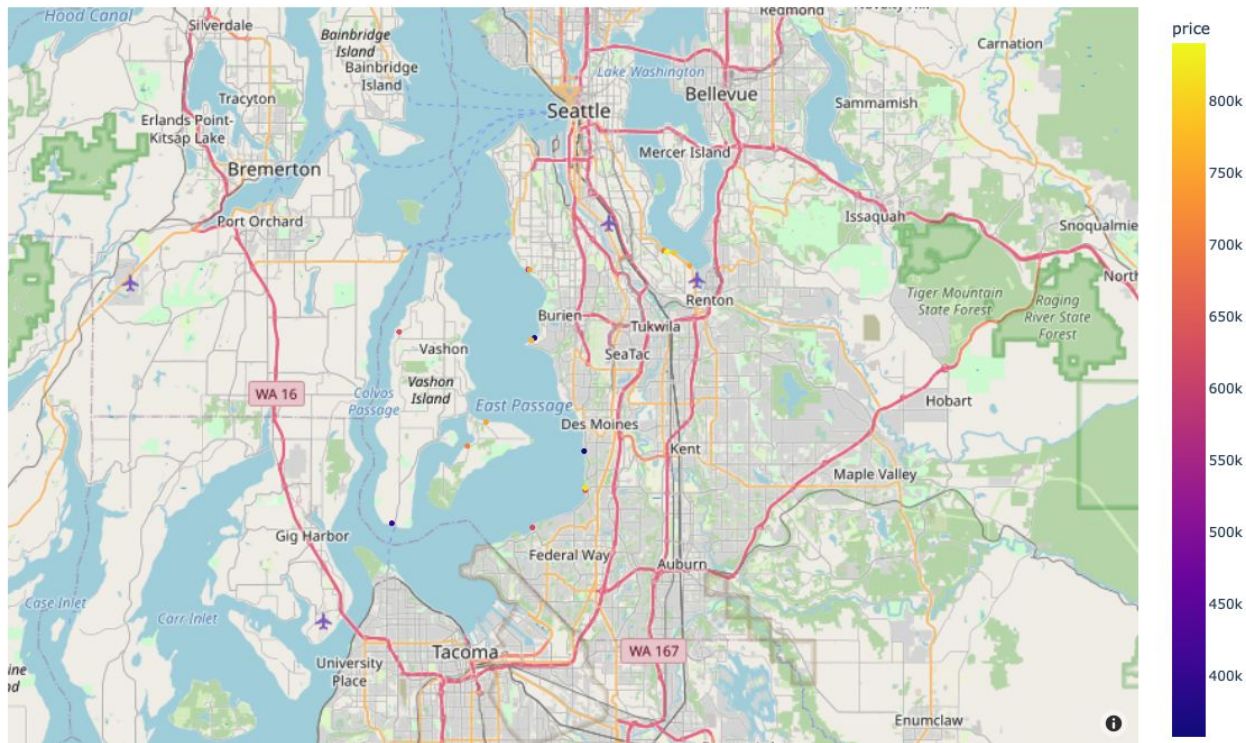
You need more than 1 bathrooms (your children are getting older...)



Most of our remaining houses have more than 1 Bathroom. That's great and our amount of houses won't decrease so much.

At this point we have 17 waterfront houses left for you

# Location of our remaining houses at this point



All of these houses have a living space **greater than 1290 sqft.**  
We've checked that for you!

You and your kids should have enough space for your family life!

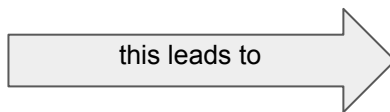
At this point we have 17 waterfront houses left for you

# Neighborhood without children?

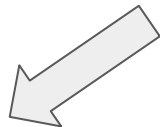
As you can imagine...there are no available data regarding the amount of children in the neighborhood.

We needed to be a bit creative....

We assume that in a region with less children, there will be more houses with amount of bedrooms less than 2.



A list of TOP 10 zipcodes with the highest frequency of houses with less than 2 bedrooms.



Now we take that zipcodes and eliminated all of our remaining houses that are not located in one of these areas!

We found for you the “needle in the haystack” - a big house with a neighborhood of mostly small houses (and therefore less children)

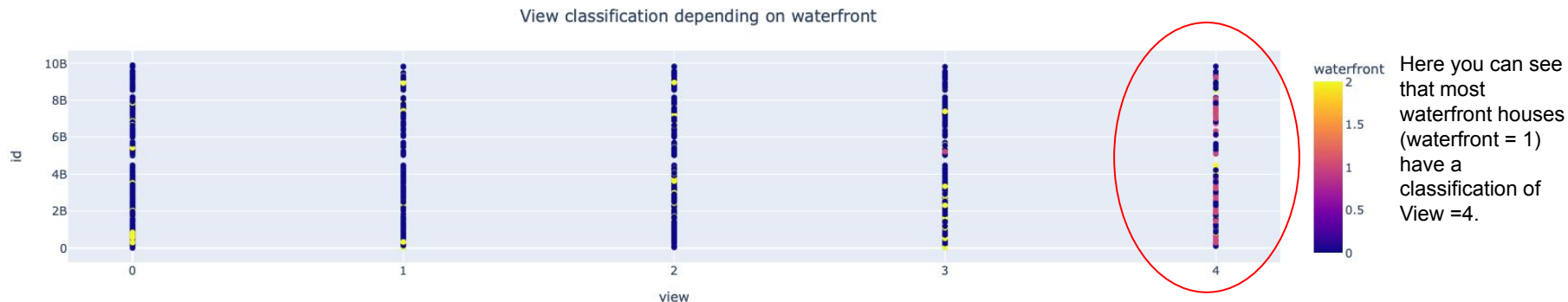
At this point we have 2 waterfront houses left for you



# Only Waterfront?

At this point, after considering all of your wishes at first glance, we have only 2 houses left for you.

But...by searching for your house we found out that the classification of view is highly correlated to “view over waterfront”.



Maybe some of the houses that are located near to the waterfront will also have a nice view?

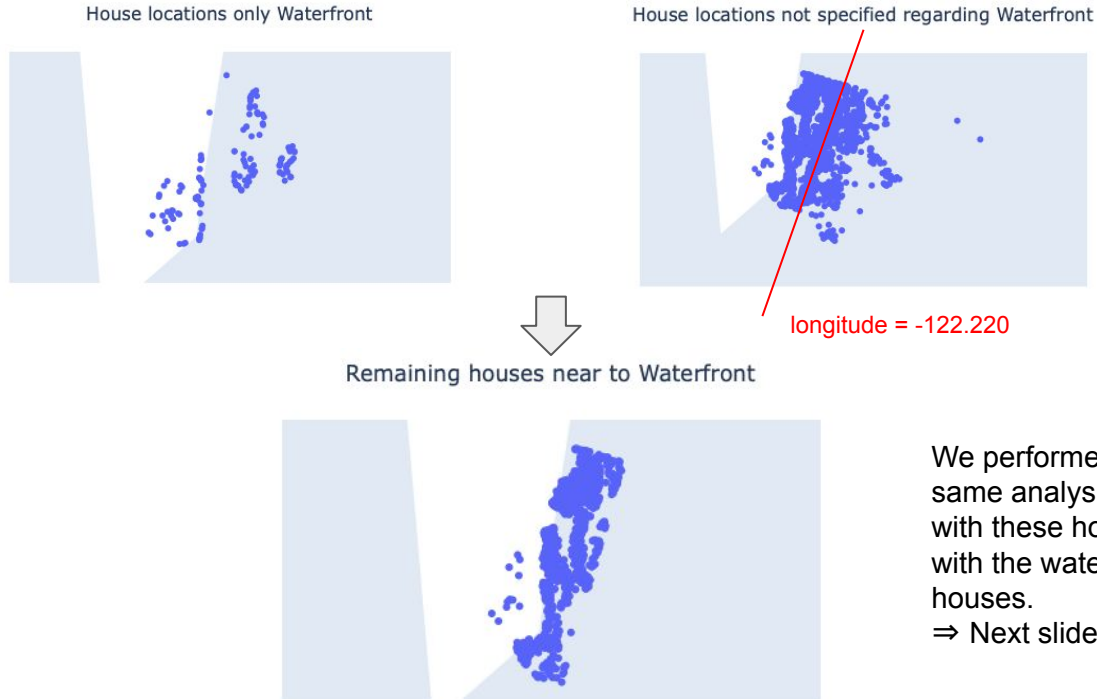
## First Recommendation:

We should have a look at the houses that are only near to the waterfront (with a nice view)

At this point we have 2 waterfront houses left for you

# Also near to waterfront

First we decided to choose the houses with “no specification” regarding the waterfront classification. Then we had a look at the mapping of these houses and decided to cut the amount of houses by longitude = -122.220.



We performed the same analysis steps with these houses as with the waterfront houses.  
⇒ Next slides

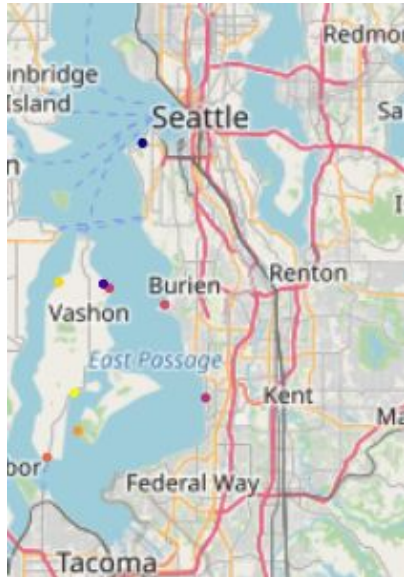
# Extended Waterfront - Potential?

1. First we choose the houses with a view >3 (equal to most of the waterfront houses) and price lower than 900.000.

⇒ 9 Houses fits these criteria



Location of these houses



2. After that we did the same analyse steps (bedrooms >2, bathrooms > 1, zipcodes with less children

⇒ We have no houses left!

## Second Recommendation:

We shouldn't integrate the zipcodes with supposedly low number of children in our Analyse.

It would be better to get an impression of the neighborhood directly on site!

At this point we have 2 waterfront houses left for you.  
None of the houses that are only near to the waterfront meets your criteria.

# Building grades

We took a step back and took our lists of houses with direct view over waterfront and houses near the waterfront and neglected the analyse regarding the zipcodes.

Now we had **20 houses** left for you!

But you also want a “nice” house. In our opinion this can be related to the “Building Grade” of a house.

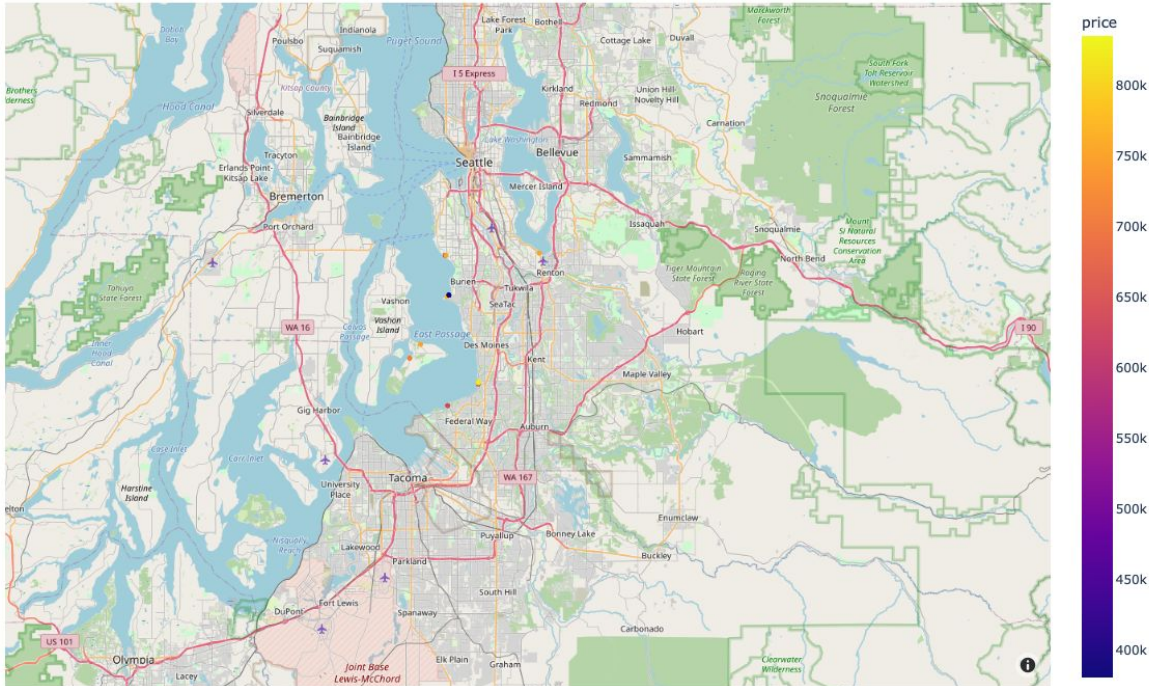
We decided to choose a **Building grade higher than 7** for you. Thats means:

**Just above average in construction and design. Usually better materials in both the exterior and interior finish work.**

After filtering with this requirement we had **12 houses** left for you!

At this point we have 12 houses left for you.

# Remaining Houses



At this point we have 12 houses left for you.

# Remaining Houses

id	price	bedrooms	bathrooms	sqft_living	sqft_lot	floors	waterfront	view	price_per_sqft_living	yr_built	yr_renovated	zipcode
7631800110	380000.0	3	2.50	1980	17342	2.0	1.0	4.0	191.919192	1984	0.0	98166
7631800110	380000.0	3	2.50	1980	17342	2.0	1.0	4.0	191.919192	1984	0.0	98166
6329000185	540000.0	3	2.50	2600	23361	1.5	1.0	4.0	207.692308	1912	0.0	98146
121039083	629000.0	3	1.75	1460	12367	2.0	1.0	4.0	430.821918	1970	0.0	98023
3222049055	650000.0	3	1.75	2800	19386	1.0	1.0	4.0	232.142857	1965	0.0	98198
2122039094	705000.0	3	3.00	1970	20978	2.0	1.0	3.0	357.868020	1980	0.0	98070
7567600030	750000.0	5	1.75	2640	13290	1.0	1.0	4.0	284.090909	1954	0.0	98178
6329000190	750000.0	4	1.75	2520	21834	1.0	1.0	4.0	297.619048	1960	0.0	98146
5215200050	750000.0	3	2.50	2960	69351	2.0	1.0	3.0	253.378378	1990	0.0	98070
2623039082	770000.0	3	3.50	2050	21744	2.0	1.0	4.0	375.609756	1930	0.0	98166
3222049151	820000.0	3	2.50	2990	10711	1.0	1.0	4.0	274.247492	1976	1991.0	98198
3222049044	835000.0	3	3.00	2790	12523	2.0	1.0	4.0	299.283154	1977	NaN	98198

As you can see here is the price of your house dependend from your living space, and the grade and condition of the house

