

Climate Risk Data for NSB zip code 32168 (based on 2019 Data)*

There are 9,062 properties in 32168 that have a greater than a 26% chance of being severely affected by flooding over the next 30 years. This represents 62% of all properties in 32168.

In addition to damage on properties, flooding can also cut off access to utilities, emergency services, transportation, and may impact the overall economic wellbeing of an area. Overall, 32168 has a moderate risk of flooding over the next 30 years, which means flooding is likely to impact day-to-day life within the community. This is based on the level of risk the properties face rather than the proportion of properties with risk.

32168 Flood Risk

Residential **Moderate** Risk: 7,818 out of 12,705 homes

Road **Minor** Risk: 295 out of 540 miles of roads

Commercial **Major** Risk: 553 out of 632 commercial properties

Critical Infrastructure **Minor** Risk: 12 out of 14 infrastructure facilities

Social Facilities **Major** Risk: 24 out of 28 social facilities

How can communities begin to protect themselves?

Lowering flood risk starts with higher standards. Some places plan to a higher standard (a “500 year” standard) that lowers the number of properties at severe risk. Protecting homes to higher construction standards would reduce the risk to the 9,062 severely affected properties.

Deeper floods from major events, like hurricanes, are less likely to occur, but affect more properties than shallower flood events, like heavy rains. As 32168 feels the effects of a changing environment, however, events of all kinds will affect more properties within the community.

If a low-likelihood storm resulting in severe flooding (a 1-in-100 year flood event), occurred today, it could affect 6,903 properties in 32168. This type of event has a 26% chance of occurring at least once over the life of a 30-year mortgage. 30 years from now, an event of this same likelihood would affect 9,193 properties due to a changing environment.

ENVIRONMENTAL CHANGES

Why is risk changing?

A changing environment means higher seas, new weather patterns, and stronger storms. As the atmosphere warms, there is more evaporation and more water available when it rains. A warmer atmosphere also means warmer oceans, which can intensify flooding from hurricanes and offshore storms. Sea level rise also increases coastal flood risks, as higher seas mean there is more water available when high tides and coastal storms cause flooding.

https://riskfactor.com/zip/32168-fl/32168_fsid/flood

32168 Fire Risk

22,124 properties in 32168 have some risk of being in a wildfire within the next 30 years. This represents 100% of all properties in 32168.

In addition to damaging properties, wildfire can also cut off access to utilities, emergency services, impact evacuation routes, and may impact the overall economy. 32168 has a major risk of wildfire over the next 30 years. This is based on the level of risk the properties face rather than the proportion of properties with risk.

<https://riskfactor.com/zip/32168-fl/32168 fsid/fire>

32168 Heat Risk

A hot day in 32168 is considered to be any day above a “feels like” temperature of 106°F. 32168 is expected to experience 7 hot days this year. Due to a changing climate, 32168 will experience 19 days above 106°F in 30 years. 32168 is expected to see 171.4% increase in the number of days over 106°F over the next 30 years. 32168 has extreme risk from heat. This is due to “feels like” temperatures increasing, and because 93% of homes in 32168 have an Extreme Heat Factor™.

32168 Health Risk

Any day above 105°F can be dangerous. Due to changing climate, 32168 will experience 19 days above 105°F in 30 years.

What makes an area vulnerable to heat?

While an area’s heat trends are primarily determined by its latitude, exposure to sunlight, elevation, humidity, and climate, there are a number of factors that can exacerbate the effects of heat across an area, creating what are known as heat islands. Daytime maximum temperatures within a heat island can vary by as much as 7 degrees from the surrounding neighborhood or city, and more importantly these areas have a notable ability to retain heat through the nighttime, greatly exacerbating the cost of cooling for homes and businesses located in a heat island. Common causes of the heat island effect include, but are not limited to:

1. Neighborhood construction materials

Manmade materials such as asphalt, concrete, and glass trap and reflect heat, causing heat to radiate in areas that are densely built up with these materials even after sunset.

2. City planning and layout
The way buildings are arranged and spaced across an area can create pockets of insulation that trap heat and prevent airflow that would release it, exacerbating heat in the process.

3. Distance to water and vegetation

Unlike manmade materials, trees, plants, and bodies of water absorb heat from sunlight and even reduce the surrounding air temperature. Areas that are far from both water and vegetation are more likely to experience heat island effects.

4. Human activities

Operating vehicles, use of air-conditioning, and industrial activities all release heat as a by-product, which means that areas where these activities are abundant will experience more severe heat island effects.

Energy Usage

How does heat affect 32168's energy consumption?

One of the resulting effects of heat is the increase in energy usage for cooling. This risk may become even more pronounced in 30 years, as the number of air conditioning cooling days is expected to increase to 319 days per year. An increase of 7.80%.

Health:

Heat can pose threats to health and human safety such as fatigue, heat stroke, heat exhaustion, and heat cramps, hospitalization and even death for certain individuals.

Environmental Changes:

Heat risks are changing because of the environment. A changing environment means higher average temperatures and increased humidity, which has a compounding effect on heat indexes that make risky heat events possible.

Community Solutions:

There are things communities can do before, during, and after a heat wave to protect residents, families, homes, businesses, and the community.

Before

Prepare your community for the next heat wave by creating new urban green spaces, replacing asphalt with less absorbent materials, and funding cool roof initiatives.

During

Help community members stay cool when the temperature rises by setting up cooling centers, protecting energy systems, and checking on vulnerable residents.

https://riskfactor.com/zip/32168-fl/32168_fsid/heat

Wind

22,124 properties in 32168 have some risk of being in a severe wind event within the next 30 years. 32168 has an Extreme Wind Factor® risk based on the projected likelihood and speed of hurricane, tornado, or severe storm winds impacting it. It is most at risk from hurricanes. Average maximum wind speeds in 32168 are higher now than they were 30 years ago, and 93% of homes in 32168 have at least some risk.

In addition to damaging properties, severe wind events can knock down trees or scatter debris that can cause harm to anyone outside during an event, or cut off access to utilities, emergency services, transportation, and may impact the overall economic well-being.

There have been 255 recorded wind events in Volusia County. The most severe event was Dorian which occurred in 2019. Dorian was recorded as a Category 5 hurricane with 1-min sustained wind speeds up to 184 mph and 3-second wind gusts up to 236 mph. 22,124 properties were impacted in Volusia County.

https://riskfactor.com/zip/32168-fl/32168_fsid/wind

Climate Change Data for 32169 (2019 Data)*

32169 has a **severe** risk from elevated heat days, flooding, wildfires, and an **extreme** risk from severe winds.

4,173 beachside properties have a greater than a 26% chance of being severely affected by flooding over the next 30 years. This represents 80% of all properties in 32169. In addition to damage to property, flooding can also cut off access to utilities, emergency services, transportation, and may impact overall economic wellbeing. Overall, 32169 has a **severe** risk of flooding over the next 30 years, which means flooding is likely to impact day-to-day life within the community. This is based on the level of risk the properties face rather than the proportion of properties with risk.

32169 Flood Risk

Severe 4,580 out of 5,680 homes

Moderate 83 out of 91 miles of roads

Major 256 out of 327 commercial properties

Major 3 out of 4 infrastructure facilities

Severe 14 out of 14 social facilities

How can communities begin to protect themselves?

Lowering flood risk starts with higher standards. Some places plan to a higher standard (a “500 year” standard) that lowers the number of properties at severe risk. Protecting homes at the 500-year standard (and perhaps even higher) would reduce the risk to the 4,580 severely affected properties.

Environmental Changes Why is risk changing?

A changing environment means higher seas, new weather patterns, and stronger storms. As the atmosphere warms, there is more evaporation and more water available when it rains. A warmer atmosphere also means warmer oceans, which can intensify flooding from hurricanes and offshore storms. Sea level rise also increases coastal flood risks, as higher seas mean there is more water available when high tides and coastal storms cause flooding.

Heat

100% of the 6,852 homes in 32169 have an **extreme** risk from heat. A heat wave consisting of 3 or more consecutive days where the temperature meets or exceeds the local definition of a “hot day” is an increasing possibility as temperatures rise. The “hot day” temperature for 32169 is a thermometer reading of 105°F. **32169** is expected to see **171.4%** increase in the number of days over **105°F** over the next 30 years. 32169 has major risk from wildfires and extreme risk from heat. **6,852** properties in **32169** have **some risk** of being in a wildfire within the next 30 years.

Health Caution

Any day above 105°F can be dangerous. Due to changing climate, 32169 will experience 19 days above 105°F in 30 years.

What makes an area vulnerable to heat?

While an area's heat trends are primarily determined by its latitude, exposure to sunlight, elevation, humidity, and climate, there are a number of factors that can exacerbate the effects of heat across an area, creating what are known as heat islands. Daytime maximum temperatures within a heat island can vary by as much as 7 degrees from the surrounding neighborhood or city, and more importantly these areas have a notable ability to retain heat through the nighttime, greatly exacerbating the cost of cooling for homes and businesses located in a heat island. Common causes of the heat island effect include, but are not limited to:

1. Neighborhood construction materials

Manmade materials such as asphalt, concrete, and glass trap and reflect heat, causing heat to radiate in areas that are densely built up with these materials even after sunset. **2. City planning and layout**

The way buildings are arranged and spaced across an area can create pockets of insulation that trap heat and prevent airflow that would release it, exacerbating heat in the process.

3. Distance to water and vegetation

Unlike manmade materials, trees, plants, and bodies of water absorb heat from sunlight and even reduce the surrounding air temperature. Areas that are far from both water and vegetation are more likely to experience heat island effects.

4. Human activities

Operating vehicles, use of air-conditioning, and industrial activities all release heat as a by-product, which means that areas where these activities are abundant will experience more severe heat island effects.

Energy Usage:

How does heat affect 32169's energy consumption?

One of the resulting effects of heat is the increase in energy used for cooling. This risk may become even more pronounced in 30 years, as the number of air conditioning cooling days is expected to increase to 319 days per year, and increase 32169's electricity usage for cooling purposes by 7.80%.

Health:

Heat can pose threats to health and human safety such as fatigue, heat stroke, heat exhaustion, and heat cramps, hospitalization and even death for certain individuals.

Environmental Changes:

Heat risks are changing because of the environment. A changing environment means higher average temperatures and increased humidity, which has a compounding effect on heat indexes that make risky heat events possible. As the global temperature rises, it can be important to understand what factors contribute to heat risk.

Community Solutions:

There are things communities can do before, during, and after a heat wave to protect residents, families, homes, businesses, and the community.

Before

Prepare your community for the next heat wave by creating new urban green spaces, replacing asphalt with less absorbent materials, and funding cool roof initiatives.

During

Help community members stay cool when the temperature rises by setting up cooling centers, protecting energy systems, and checking on vulnerable residents.

Calculate your property's Risk:

Risk Factor is a free tool created by the nonprofit First Street Foundation to make it easy to understand risks from a changing environment.

https://riskfactor.com/?utm_source=email&utm_campaign=wind_launch_nonpro&utm_source=Risk+Factor&utm_campaign=0b0b4540c0-EMAIL_CAMPAIGN_2020_06_19_02_04_COPY_01&utm_medium=email&utm_term=0_2e3335b90a-0b0b4540c0-439952249