



EXPLORING CLIMATE IMPACTS

Social Vulnerability

When climate hazards occur now and worsen in the future, the most vulnerable populations are dealt the most severe consequences. Identifying who in the community are most vulnerable is key, to assure policy doesn't disproportionality address hazards and miss helping underserved community members. Based on census tracts, the area –including the City of George– has a high social vulnerability index of 10 out of 10.

City of George Assets

Agriculture & Food Systems

- Grant County contributes to roughly 20% of the state's agricultural market value. A wide variety of crops are grown, processed, and/or stored in the area, which include potatoes, onions, alfalfa and hay, corn, seeds, serrano chiles, mint, and marijuana.

Buildings & Energy

- The City has a healthy mix of uses, and ample open land left for growth. The growth that is needed to accommodate the housing needs over the next 20 years will put higher demand on the City's infrastructure and power needs.

Cultural Resources & Practices

- The City is in an area with high archeological risk and very high risk, so major development is required to have a cultural resource survey taken prior to development to ensure significant history isn't lost.

Economic Development

- The City's economy is greatly influenced by the agriculture industry, and its proximity to the Gorge Amphitheater. The data centers in Quincy make tourism and tech industry support facilities promising economic drivers of the community.

Ecosystems

- Mixed between crop circles, roads and highways, and City development, Shrub-steppe habitat has been presumptively identified by the Dept. of Fish and Wildlife.

Emergency Management

- Grant County Fire District #3 provides fire protection and EMT-B services to the City. Composed mostly of volunteers, Station 35 is home to 1 structure fire engine, 1 water tender, 1 brush truck, 1 grass truck, and 1 quick response/support vehicle.

Health & Well-being

- There are no pharmacies, clinics or hospitals within the City of George. The nearest clinics and pharmacies are 12 miles to the north in Quincy, and the Quincy Valley Medical Center there is the nearest hospital, while the Columbia Basin Hospital is in Ephrata 23 miles away.

Transportation

- The City is served by the Grant Transit Authority, with one bus route, and by People for People, and Greyhound. The community also has multi-modal transportation options, with a robust trail and sidewalk system in place for a community of its size.

Waste Management

- The City sends about 800 tons of waste to the landfill. To reduce waste outflow, there is also a 40-ton container used for collecting yard waste that is recycled at a compost facility.

Water Resources

- The municipal water system is composed of 2 active wells, 2 reservoirs, and distribution piping. The City is also surrounded by the USBR irrigation canals, providing irrigation water for agriculture.

Zoning & Development

- The City amended its Comprehensive Plan in 2025, now will add a climate planning element through the 2027 periodic update required by the Growth Management Act. These documents help set City priorities and goals for the next 20 years.

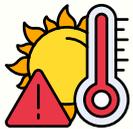
Climate Hazards

Drought



- The data shows that George is going to see an increase in precipitation by the end of the century, however, when and how the rain falls is projected to be more concentrated with an increase in extreme rainstorm events and erratic decreases in summer precipitation. Overall, a 25% chance of summer drought is expected.
- Reduced snowpack in the greater region can contribute to reduced aquifer levels and water supply, while water demand is expected to grow.

Extreme Heat



- George is going to see an increase in extreme heat days through the rest of the century. More days of the year will require cooling and fewer days of the year will require heating.
- Currently on average from 1990–2020, the area experiences only 3.3 days of the summer that reach 100° F or above. With the increase projected, that can become between 14.8 and 33.2 days of the year by the end of the century.
- While this increasing temperature lowers the energy consumption for heating demand in the winter months and shoulder seasons, the cooling energy demand is increased. This is significant to the built environment as it relates to energy consumption, as more heating or cooling means running a building heating or air conditioning system more.

Extreme Precipitation



- George is going to see an increase in extreme precipitation events through the rest of the century.
- Max daily precipitation in 2 years- an average of each 2 yr period over 30 years is .8"/day with a range from .32"–1.74". The average increased by 8–26% could see storms with 1" of rain falling in a day. Spread over a 24 hour period, rain intensity would only be .04"/hr, but if in a 2hr storm the intensity would be .5"/hr

Wildfire- Smoke and Air Quality



- While George and most of Grant County is protected from an increased wildfire risk, it is surrounded by environments that will be at more risk. With the increased risk and wildfire events on all sides, the winds are likely to blow smoke and poor air quality into the City.
 - Locally, the undeveloped areas of towns have been generally mowed and maintained, reducing the amount of combustible fuels within the City. However, the process has encouraged weed growth, and the concern from tumbleweed is high. These dry weeds accumulate through wind storms and need to be collected and disposed of at an increasing labor cost to the community. Higher average temperatures could increase fire risk from this specific source.
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