

Natural Hazards and Environmental Issues in Latvia

Natural Hazards:

1. Flooding:

- **River Floods:** Latvia is prone to river flooding, especially along the Daugava, Gauja, and Lielupe rivers(Latvia - the World Factbook, n.d.). Spring floods are common due to snowmelt and ice jams(Latvia - the World Factbook, n.d.).
- **Coastal Flooding:** Storm surges and high winds can cause coastal flooding, particularly in low-lying areas along the Baltic Sea and Gulf of Riga(Latvia - the World Factbook, n.d.).



2. Storms and High Winds:

- Severe storms, including strong winds and heavy rainfall, can occur, particularly in autumn and winter(Latvia - the World Factbook, n.d.). These storms can cause property damage and disrupt transportation and power supplies(Sākumlapa En | Ministru Kabinets, n.d.).

3. Snowstorms and Cold Waves:

- Harsh winter conditions, including heavy snowfall and cold waves, can affect transportation, infrastructure, and daily life(Sākumlapa En | Ministru Kabinets, n.d.). Snowstorms can lead to road closures and power outages(Latvia - the World Factbook, n.d.).

4. Forest Fires:

- During dry periods in the summer, forest fires can occur, particularly in the extensive forested areas(Latvia - the World Factbook, n.d.). These fires can threaten wildlife, property, and human safety(Sākumlapa En | Ministru Kabinets, n.d.).



5. Seismic Activity:

- Latvia is located in a seismically stable region with low earthquake risk(Sākumlapa En | Ministru Kabinets, n.d.). However, minor tremors can occasionally be felt, but they rarely cause significant damage(Sākumlapa En | Ministru Kabinets, n.d.).

Environmental Issues:

1. Air Pollution:

- Major sources of air pollution include industrial emissions, transportation, and residential heating(Sākumlapa En | Ministru Kabinets, n.d.). Urban areas,

especially Riga, can experience elevated levels of particulate levels of particulate matter and other pollutants(*Latvia - the World Factbook*, n.d.).

2. **Water Pollution:**

- Agricultural runoff, industrial discharges, and insufficient wastewater treatment contribute to water pollution in rivers, lakes, and the Baltic Sea(*Sākumlapa En | Ministru Kabinets*, n.d.). This can affect water quality and aquatic ecosystems(*Sākumlapa En | Ministru Kabinets*, n.d.).



3. **Waste Management:**

- Latvia faces challenges in waste management, including management, including inadequate recycling infrastructure and illegal dumping(*Latvia - the World Factbook*, n.d.). Efforts are being made to improve waste sorting, recycling rates, and landfill management(*Sākumlapa En | Ministru Kabinets*, n.d.).

4. **Deforestation and Habitat Loss:**

- While Latvia has extensive forests, deforestation for agriculture, logging, and urban development can threaten biodiversity and lead to habitat loss for various plant and animal species(*Latvia - the World Factbook*, n.d.).

5. **Climate Change:**

- Latvia is experiencing the impacts of climate change, including more frequent and severe weather events, rising temperatures, and changes in precipitation patterns. These changes affect agriculture, forestry, water resources, and coastal areas(*Sākumlapa En | Ministru Kabinets*, n.d.).

6. **Biodiversity Loss:**

- Pollution, habitat destruction, and climate change contribute to the decline of biodiversity(*Sākumlapa En | Ministru Kabinets*, n.d.). Conservation efforts are underway to protect endangered species and preserve natural habitats(*Latvia - the World Factbook*, n.d.).

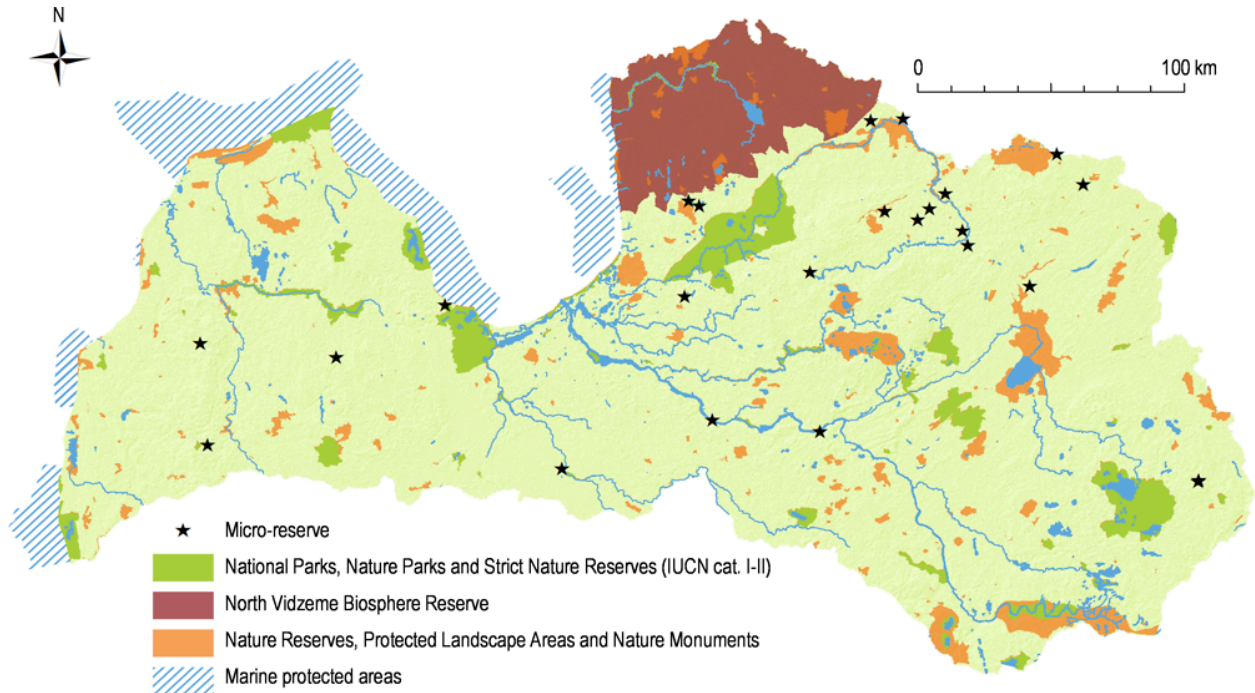
Government and Environmental Protection:

1. **Environmental Policies:**

- Latvia has implemented various policies and regulations to address environmental issues, including the National Environmental Policy Plan and specific laws on air and water quality, waste management, and nature protection(*Sākumlapa En | Ministru Kabinets*, n.d.).

2. **Protected Areas:**

- Approximately 12% of Latvia's territory is designated as protected areas, including national parks, nature reserves, and Natura 2000 sites, these areas aim to preserve biodiversity and natural landscapes(*Sākumlapa En | Ministru Kabinets*, n.d.).



3. Sustainable Practices:

- Efforts to promote sustainable practices include initiatives in renewable energy, organic farming, and sustainable forestry (*Sākumlapa En* | *Ministru Kabinets*, n.d.). Latvia is increasing its use of wind, solar, and biomass energy sources (*Sākumlapa En* | *Ministru Kabinets*, n.d.).

4. International Cooperation:

- Latvia collaborates with neighboring countries and international organizations to address transboundary environmental issues, such as pollution of the Baltic Sea and climate change mitigation (European Environment Agency, 2024).

General Climate Characteristics

- **Type:** Temperate maritime climate, influenced by the Baltic Sea and the Atlantic Ocean.

Seasons

Spring (March to May):

- **Temperature:** Mild, with temperatures gradually rising from around 0°C (32°F) in March to 15°C (59°F) in May.
- **Weather:** Often variable, with a mix of sunny and rainy days. Snow can still occur in early spring.

Summer (June to August):

- **Temperature:** Warm, with average highs ranging from 20°C to 25°C (68°F to 77°F), occasionally reaching up to 30°C (86°F).
- **Weather:** Generally pleasant, with long daylight hours and moderate rainfall. This is the peak tourist season.

Autumn (September to November):

- **Temperature:** Cool, with temperatures dropping from around 15°C (59°F) in September to near freezing by November.
- **Weather:** Characterized by increasingly shorter days, more frequent rainfall, and the onset of the first frosts by late autumn.



Winter (December to February):

- **Temperature:** Cold, with average temperatures ranging from -5°C to 0°C (23°F to 32°F), though it can drop lower during cold spells.
- **Weather:** Snow is common, and the weather can be quite harsh, especially inland. Coastal areas have milder winters due to the moderating influence of the Baltic Sea.

Precipitation

- **Annual Precipitation:** Varies from 600 to 800 mm (24 to 31 inches), fairly evenly distributed throughout the year.
- **Seasonal Variation:** Summer tends to be the wettest season, while winter sees more snow.

Notable Climate Features

- **Daylight Variation:** Significant differences in daylight between summer and winter due to Latvia's northern latitude. Long summer days (up to 18 hours of daylight) contrast with short winter days (as few as 6 hours of daylight).
- **Baltic Sea Influence:** Coastal areas experience milder winters and cooler summers compared to inland regions.