

AFFECTED ENVIRONMENT IN DELAWARE

The Draft Programmatic Environmental Impact Statement assessed natural and cultural resources and socioeconomic conditions in Delaware related to construction of the nationwide public safety broadband network (NPSBN). Specific resources assessed include:

Infrastructure

Roadways, rail, airports, harbors and ports, public safety services, and utilities.

Soils and Geology

Geologic and soil characteristics across eight soil suborders; geologic properties of minerals and paleontological resources; as well as geologic hazards such as seismic activity, land subsidence, and landslides.

Water Resources

Inland surface water, floodplains, estuarine and coastal waters, nearshore marine, and groundwater characteristics.

Wetlands

More than 250,000 acres, and providing ecological, cultural, and socioeconomic benefits.

Biological Resources

Terrestrial vegetation, wildlife, fisheries and aquatic habitats, and threatened and endangered species, including Delaware's 11 federally-listed species of mammals, birds, reptiles, and plants.

Land Use, Airspace, and Recreation

Including agricultural land, which covers almost 41% of the state as well as forest and woodland covering close to 20% and developed land at 8%.

Visual Resources

Includes beaches, forests, natural areas, parks, recreational areas, historic sites, and wildlife refuges.

Socioeconomics and Environmental Justice

Economic activity focused on finance, agriculture, and manufacturing; housing costs and characteristics; as well as the presence of potential environmental justice populations across the state.

Cultural Resources

There are no federally recognized tribes; 692 resources included in the National Register of Historic Places, as well other properties and resources of cultural importance to the state.

Air Quality and Noise

Baseline conditions and air quality regulatory status.

Climate Change

Contribution to climate change via greenhouse gas emissions, as well as consideration of likely climate change scenarios.

Human Health and Safety

Issues relevant to Delaware, including worker or community health concerns related to environmental contamination.



● Delaware

POTENTIAL IMPACTS IN DELAWARE

How Potential Impacts Are Assessed

The Draft Programmatic Environmental Impact Statement assessed impacts to a wide range of physical, cultural, and socioeconomic resources in Delaware. Levels of potential impacts to these resources were defined as follows, and are shown in the matrix below.*†

- 1 Potentially significant:** There is substantial evidence that an effect may be significant.
- 2 Less than significant with best management practices (BMPs) and mitigation measures incorporated** (as defined through the consultation with the relevant resource agency): The use of BMPs and mitigation measures reduces impacts from potentially significant to less than significant.
- 3 Less than significant:** The Proposed Action is expected to result in impacts that are not potentially significant, regardless of whether BMPs and mitigation measures are incorporated.
- 4 No impact:** The Proposed Action is not likely to cause an impact.

Resource	Impact Ratings
Infrastructure	3
Soils	3
Geology	3
Water Resources	3
Wetlands	3
Threatened/Endangered Species, Species of Conservation Concern*	2
Other Biological Resources	3
Land Use, Airspace, and Recreation	3
Visual Resources	3 2
Socioeconomics	3
Environmental Justice	3
Cultural Resources†	3
Air Quality	3
Noise	3
Effects on Climate Change	3
Effects of Climate Change on FirstNet	2
Human Health and Safety	3

Notable Potential Impacts in Delaware

- **Threatened and Endangered Species and Species of Conservation Concern**, particularly mammals, birds, reptiles, and plants; however, these impacts may affect but are not likely to adversely affect these species, with BMPs and mitigation measures incorporated through consultation with the relevant resource agency.
- **Visual Resources**, particularly nighttime lighting in isolated, rural areas; however, these effects are expected to be less than significant with BMPs and mitigation measures incorporated.
- **Climate change** is expected to have impacts on the Proposed Action that could be potentially significant, from natural events such as flooding and storms. BMPs and mitigation measures are expected to reduce these effects. No impacts from the project are expected on climate change.

*Impact ratings for Threatened and Endangered Species and Species of Conservation Concern: **1** = May affect, likely to adversely affect; **2** = May affect, not likely to adversely affect; **3** = No effect. †Impact Ratings for Cultural Resources: **1** = Adverse effect; **2** = Mitigated adverse effect; **3** = Effect, but not adverse; **4** = No effect

BMPs and Mitigation Measures

The following examples reflect FirstNet's general approach to BMPs and mitigation measures associated with potential impacts on resources in Delaware:

- Ensure design of above ground structures and equipment has included allowances for maximum temperature and precipitation changes, as well as flooding (and sea level rise near coastal areas); reinforce structures to include allowances for extreme weather events and flooding.
- To the maximum extent practicable, avoid activity in and disturbance of habitats and spawning sites associated with Threatened and Endangered Species and Species of Conservation Concern. Seasonal and spatial buffer zones may be implemented, among other considerations.
- Select infrastructure locations as far from recreation lands as possible and screened from view by topography or vegetation. Select infrastructure designs that minimize contrast with surrounding landscape and minimize the use of nighttime lighting.

AFFECTED ENVIRONMENT IN NEW JERSEY

The Draft Programmatic Environmental Impact Statement assessed natural and cultural resources and socioeconomic conditions in New Jersey related to construction of the nationwide public safety broadband network (NPSBN). Specific resources assessed include:

Infrastructure

Roadways, rail, airports, harbors and ports, public safety services, and utilities.

Soils and Geology

Geologic and soil characteristics across eight soil suborders; geologic properties of minerals and paleontological resources; as well as geologic hazards such as seismic activity and land subsidence.

Water Resources

Inland surface water, rivers, floodplains, estuarine, coastal waters, nearshore marine, and groundwater characteristics.

Wetlands

More than 900,000 acres, and providing ecological, cultural, and socioeconomic benefits.

Biological Resources

Terrestrial vegetation, wildlife, fisheries and aquatic habitats, and threatened and endangered species, including New Jersey's 17 federally-listed species of mammals, birds, reptiles, plants, and invertebrates.

Land Use, Airspace, and Recreation

Including forested land, which covers almost 42% of the state, as well as developed land covering close to 21% and agricultural land at 17%.

Visual Resources

Includes beaches, forests, trails, natural areas, parks, recreational areas, historic sites, wildlife refuges, and byways.

Socioeconomics and Environmental Justice

Economic activity focused on manufacturing, agriculture, and finance; housing costs and characteristics; as well as the presence of potential environmental justice populations across the state.

Cultural Resources

There are no federally recognized tribes; 1,687 resources included in the National Register of Historic Places, as well other properties and resources of cultural importance to the state.

Air Quality and Noise

Baseline conditions and air quality regulatory status.

Climate Change

Contribution to climate change via greenhouse gas emissions, as well as consideration of likely climate change scenarios.

Human Health and Safety

Issues relevant to New Jersey, including worker or community health concerns related to environmental contamination.

New Jersey



POTENTIAL IMPACTS IN NEW JERSEY

How Potential Impacts Are Assessed

The Draft Programmatic Environmental Impact Statement assessed impacts to a wide range of physical, cultural, and socioeconomic resources in New Jersey. Levels of potential impacts to these resources were defined as follows, and are shown in the matrix below.*†

- 1 Potentially significant:** There is substantial evidence that an effect may be significant.
- 2 Less than significant with best management practices (BMPs) and mitigation measures incorporated** (as defined through the consultation with the relevant resource agency): The use of BMPs and mitigation measures reduces impacts from potentially significant to less than significant.
- 3 Less than significant:** The Proposed Action is expected to result in impacts that are not potentially significant, regardless of whether BMPs and mitigation measures are incorporated.
- 4 No impact:** The Proposed Action is not likely to cause an impact.

Resource	Impact Ratings
Infrastructure	3
Soils	3
Geology	3
Water Resources	3
Wetlands	3
Threatened/Endangered Species, Species of Conservation Concern*	2
Other Biological Resources	3
Land Use, Airspace, and Recreation	3
Visual Resources	3 2
Socioeconomics	3
Environmental Justice	3
Cultural Resources†	3
Air Quality	3
Noise	3
Effects on Climate Change	3
Effects of Climate Change on FirstNet	2
Human Health and Safety	3

Notable Potential Impacts in New Jersey

- **Threatened and Endangered Species and Species of Conservation Concern**, particularly mammals, birds, reptiles, invertebrates, and plants; however, these impacts may affect but are not likely to adversely affect these species, with BMPs and mitigation measures incorporated through consultation with the relevant resource agency.
- **Visual Resources**, particularly nighttime lighting in isolated, rural areas; however, these effects are expected to be less than significant with BMPs and mitigation measures incorporated.
- **Climate change** is expected to have impacts on the Proposed Action that could be potentially significant, from natural events such as flooding and storms. BMPs and mitigation measures are expected to reduce these effects. No impacts from the project are expected on climate change.

*Impact ratings for Threatened and Endangered Species and Species of Conservation Concern: **1** = May affect, likely to adversely affect; **2** = May affect, not likely to adversely affect; **3** = No effect. †Impact Ratings for Cultural Resources: **1** = Adverse effect; **2** = Mitigated adverse effect; **3** = Effect, but not adverse; **4** = No effect

BMPs and Mitigation Measures

The following examples reflect FirstNet's general approach to BMPs and mitigation measures associated with potential impacts on resources in New Jersey:

- Ensure design of above ground structures and equipment has included allowances for maximum temperature and precipitation changes, as well as flooding (and sea level rise near coastal areas); reinforce structures to include allowances for extreme weather events and flooding.
- To the maximum extent practicable, avoid activity in and disturbance of habitats and spawning sites associated with Threatened and Endangered Species and Species of Conservation Concern. Seasonal and spatial buffer zones may be implemented, among other considerations.
- Select infrastructure locations as far from recreation lands as possible and screened from view by topography or vegetation. Select infrastructure designs that minimize contrast with surrounding landscape and minimize the use of nighttime lighting.

AFFECTED ENVIRONMENT IN PENNSYLVANIA

The Draft Programmatic Environmental Impact Statement assessed natural and cultural resources and socioeconomic conditions in Pennsylvania related to construction of the nationwide public safety broadband network (NPSBN). Specific resources assessed include:

Infrastructure

Roadways, bridges, rail, airports, harbors and ports, public safety services, and utilities.

Soils and Geology

Geologic and soil characteristics across eight soil suborders; geologic properties of minerals and paleontological resources; as well as geologic hazards such as seismic activity, landslides, and land subsidence.

Water Resources

Inland surface water, watersheds, freshwater, rivers, floodplains, and groundwater characteristics.

Wetlands

More than 400,000 acres, and providing ecological, cultural, and socioeconomic benefits.

Biological Resources

Terrestrial vegetation, wildlife, fisheries and aquatic habitats, and threatened and endangered species, including Pennsylvania's 14 federally-listed species of mammals, birds, reptiles, fish, plants, and invertebrates.

Land Use, Airspace, and Recreation

Including forested land, which covers almost 61% of the state, as well as agricultural land covering close to 24% and developed land at 12%.

Visual Resources

Includes beaches, heritage sites and areas, historic sites, wildlife refuges parks, recreational areas, forests, trails, natural areas, scenic byways, and coastal areas.

Socioeconomics and Environmental Justice

Economic activity focused on manufacturing and agricultural; housing costs and characteristics; as well as the presence of potential environmental justice populations across the state.

Cultural Resources

There are no federally recognized tribes; 3,377 resources included in the National Register of Historic Places, as well other properties and resources of cultural importance to the state.

Air Quality and Noise

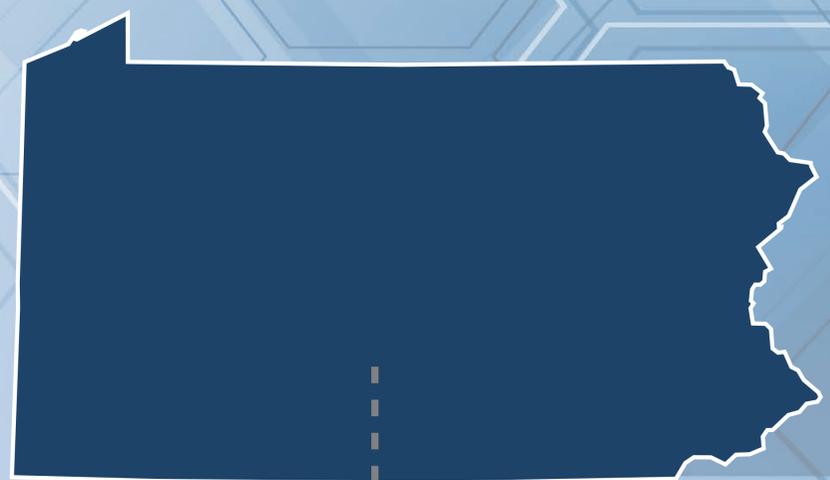
Baseline conditions and air quality regulatory status.

Climate Change

Contribution to climate change via greenhouse gas emissions, as well as consideration of likely climate change scenarios.

Human Health and Safety

Issues relevant to Pennsylvania, including worker or community health concerns related to environmental contamination.



○ Pennsylvania

POTENTIAL IMPACTS IN PENNSYLVANIA

How Potential Impacts Are Assessed

The Draft Programmatic Environmental Impact Statement assessed impacts to a wide range of physical, cultural, and socioeconomic resources in Pennsylvania. Levels of potential impacts to these resources were defined as follows, and are shown in the matrix below.*†

- 1 Potentially significant:** There is substantial evidence that an effect may be significant.
- 2 Less than significant with best management practices (BMPs) and mitigation measures incorporated** (as defined through the consultation with the relevant resource agency): The use of BMPs and mitigation measures reduces impacts from potentially significant to less than significant.
- 3 Less than significant:** The Proposed Action is expected to result in impacts that are not potentially significant, regardless of whether BMPs and mitigation measures are incorporated.
- 4 No impact:** The Proposed Action is not likely to cause an impact.

Resource	Impact Ratings
Infrastructure	3
Soils	3
Geology	3
Water Resources	3
Wetlands	3
Threatened/Endangered Species, Species of Conservation Concern*	2
Other Biological Resources	3
Land Use, Airspace, and Recreation	3
Visual Resources	3 2
Socioeconomics	3
Environmental Justice	3
Cultural Resources†	3
Air Quality	3
Noise	3
Effects on Climate Change	3
Effects of Climate Change on FirstNet	2
Human Health and Safety	3

Notable Potential Impacts in Pennsylvania

- **Threatened and Endangered Species and Species of Conservation Concern**, particularly mammals, birds, reptiles, invertebrates, fish, and plants; however, these impacts may affect but are not likely to adversely affect these species, with BMPs and mitigation measures incorporated through consultation with the relevant resource agency.
- **Visual Resources**, particularly nighttime lighting in isolated, rural areas; however, these effects are expected to be less than significant with BMPs and mitigation measures incorporated.
- **Climate change** is expected to have impacts on the Proposed Action that could be potentially significant, from natural events such as flooding and storms. BMPs and mitigation measures are expected to reduce these effects. No impacts from the project are expected on climate change.

*Impact ratings for Threatened and Endangered Species and Species of Conservation Concern: **1** = May affect, likely to adversely affect; **2** = May affect, not likely to adversely affect; **3** = No effect. †Impact Ratings for Cultural Resources: **1** = Adverse effect; **2** = Mitigated adverse effect; **3** = Effect, but not adverse; **4** = No effect

BMPs and Mitigation Measures

The following examples reflect FirstNet's general approach to BMPs and mitigation measures associated with potential impacts on resources in Pennsylvania:

- Ensure design of above ground structures and equipment has included allowances for maximum temperature and precipitation changes, as well as flooding; reinforce structures to include allowances for extreme weather events and flooding.
- To the maximum extent practicable, avoid activity in and disturbance of habitats and spawning sites associated with Threatened and Endangered Species and Species of Conservation Concern. Seasonal and spatial buffer zones may be implemented, among other considerations.
- Select infrastructure locations as far from recreation lands as possible and screened from view by topography or vegetation. Select infrastructure designs that minimize contrast with surrounding landscape and minimize the use of nighttime lighting.