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Native American Reservations

National Heritage Areas

National Scenic Byways

National Register of Historic Places – All Properties

National Register of Historic Places – Historic Districts

Wetlands and Water Bodies

USFWS IPAC Federally Listed Species and Migratory Birds

State Listed Species

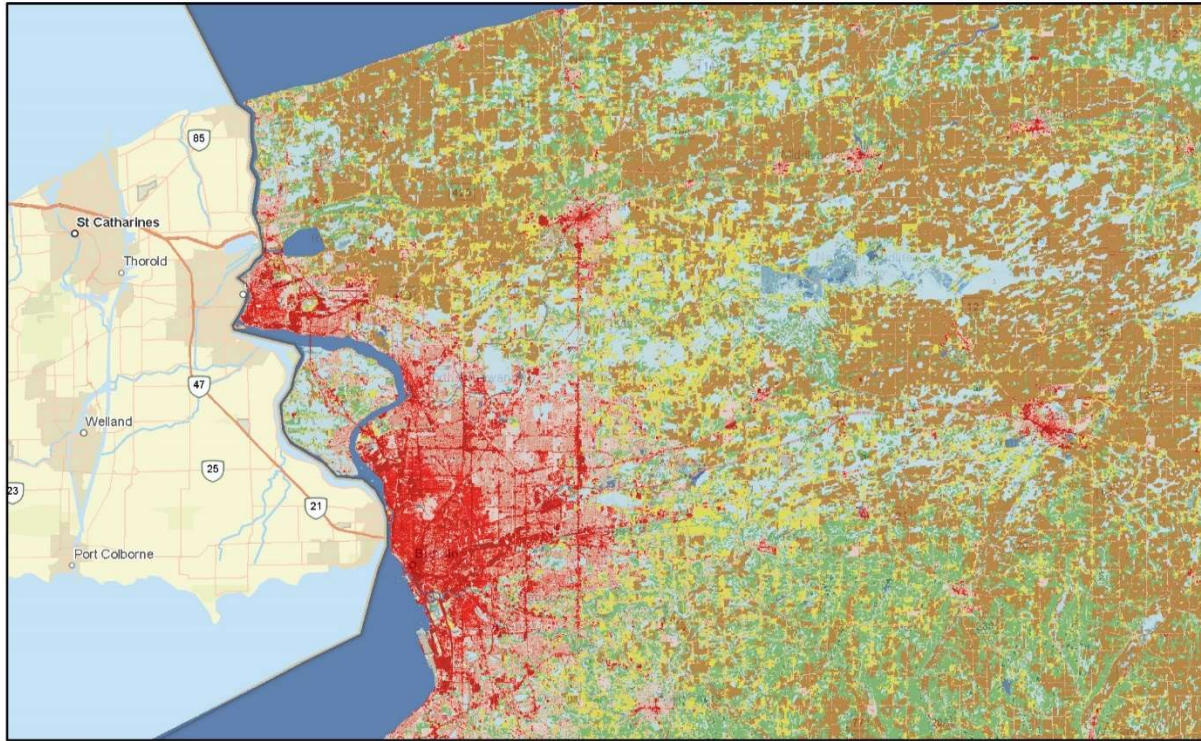
Bald Eagle Breeding Occurrence

USEPA Environmental Justice Screen Report

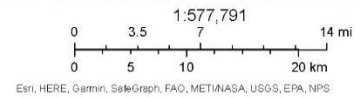
Railroads

Airports

- Open Water (11)
- Perennial Ice/Snow (12)
- Developed, Open Space (21)
- Developed, Low Intensity (22)
- Developed, Medium Intensity (23)
- Developed, High Intensity (24)
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- Unconsolidated Shore (32)
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- Evergreen Forest (42)
- Mixed Forest (43)
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- Shrub/Scrub (52)
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- Moss (AK only) (74)
- Pasture/Hay (81)
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- Woody Wetlands (90)
- Emergent Herbaceous Wetlands (9



June 1, 2022

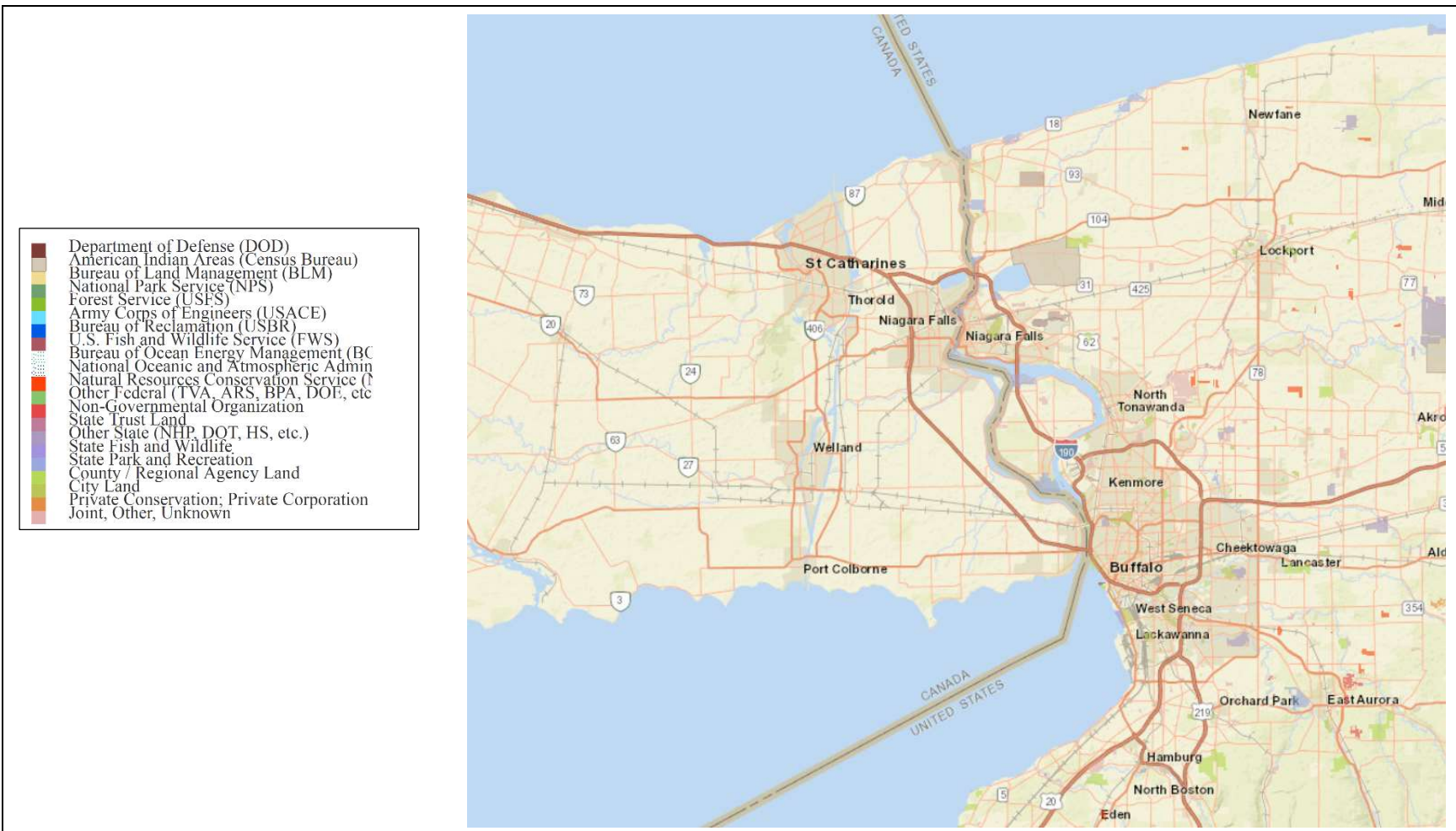


Land Cover

Figure 1

Niagara Falls and Buffalo, New York

Source: NEPAssist	Date: June 2022	Drawn: AMG	Approved: DHS
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Protected Areas

Figure 2

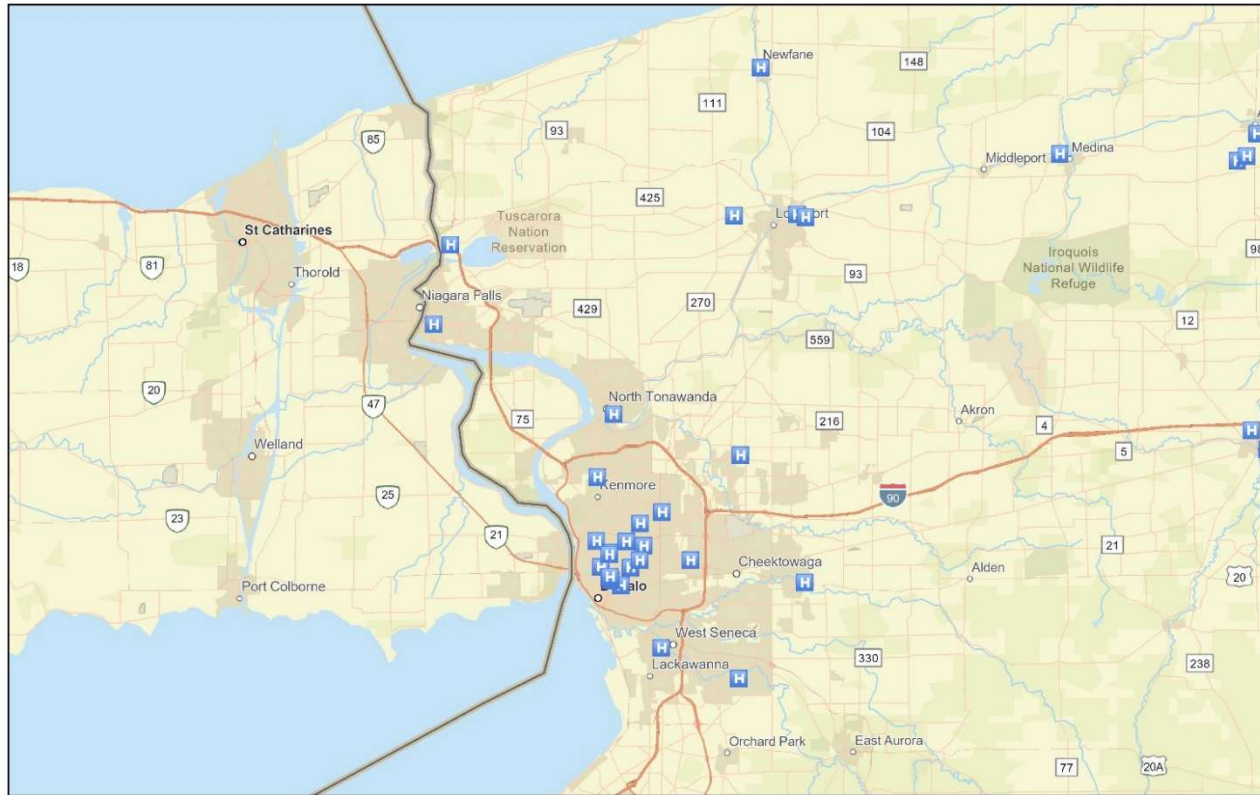
U.S. Geological Survey Gap Analysis Project,
the Protected Areas Database of the United
States

Source:
<https://maps.usgs.gov/padus/>


Date: June
2022

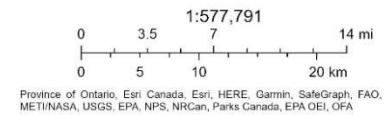
Drawn:
AMG

Approved:
DHS



June 2, 2022

 Hospitals



Hospitals

Figure 3

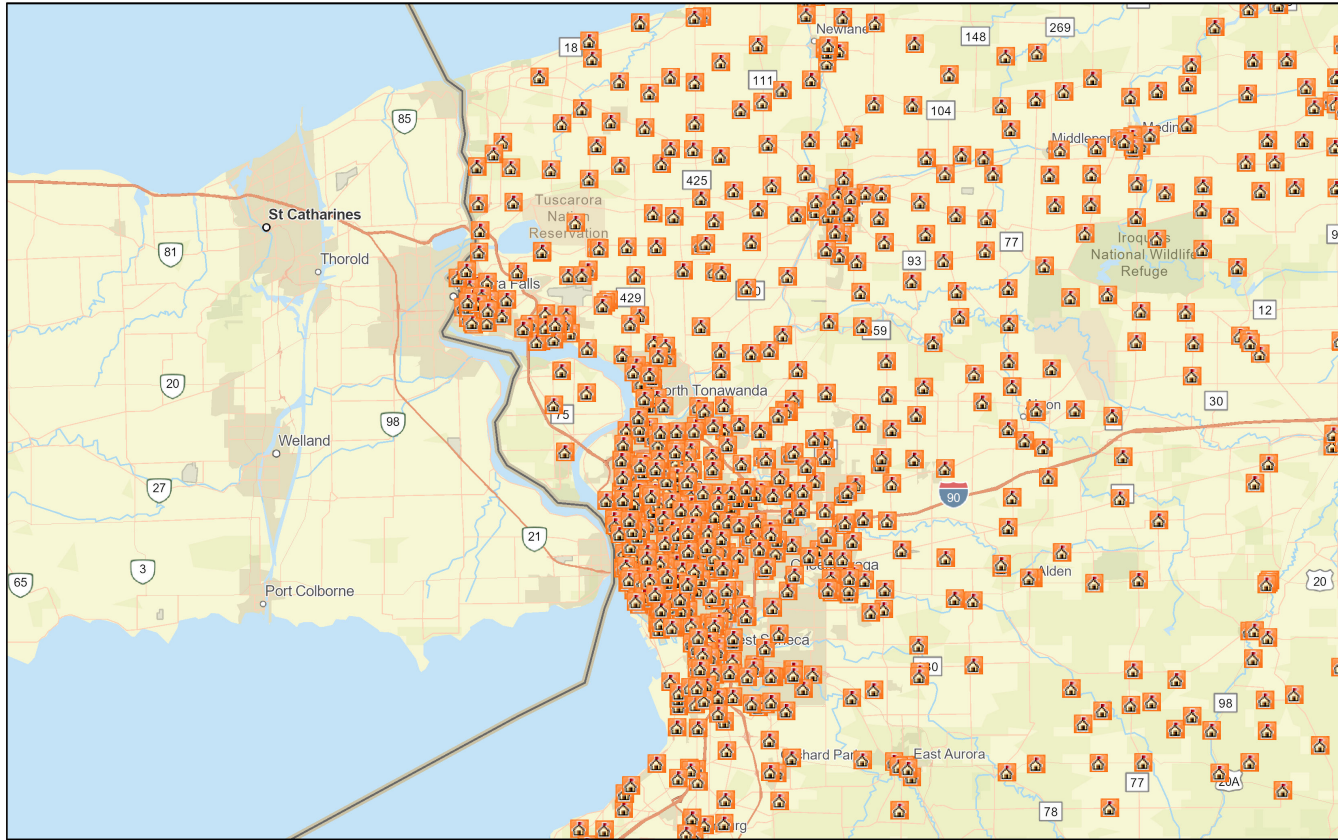
Niagara Falls and Buffalo, New York

Source: NEPAssist

Date: June 2022

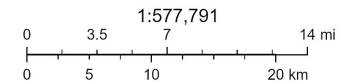
Drawn:
AMG

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DHS



April 22, 2022

 Schools



Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, NRCAN, Parks Canada, EPA OEI, OFA

Schools

Niagara Falls and Buffalo, New York

Figure 4

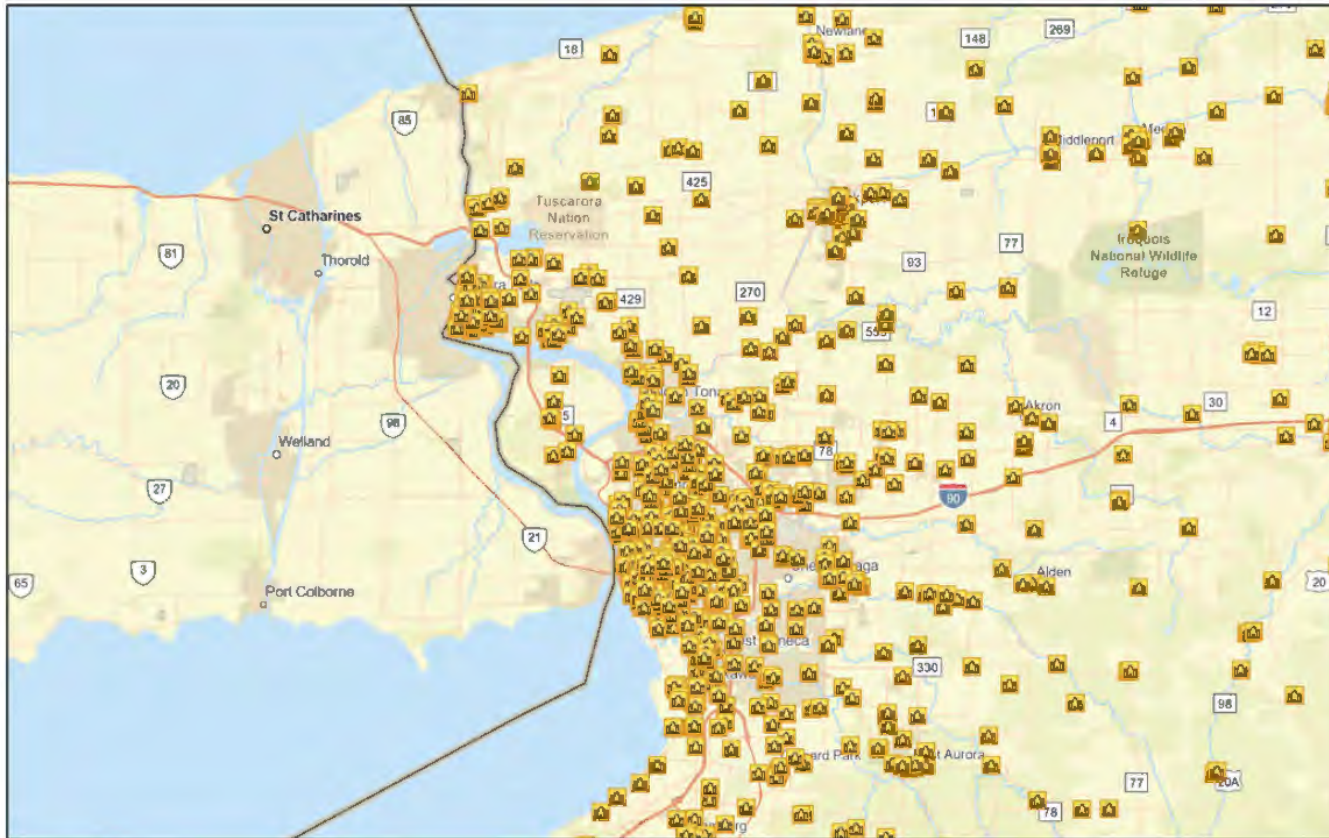


Source: NEPAassist


Date: April 2022

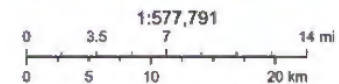
Drawn: AMG

Approved: DHS



April 22, 2022

 Places of Worship



Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, EPA/OEI, OFA

Places of Worship

Niagara Falls and Buffalo, New York

Figure 5

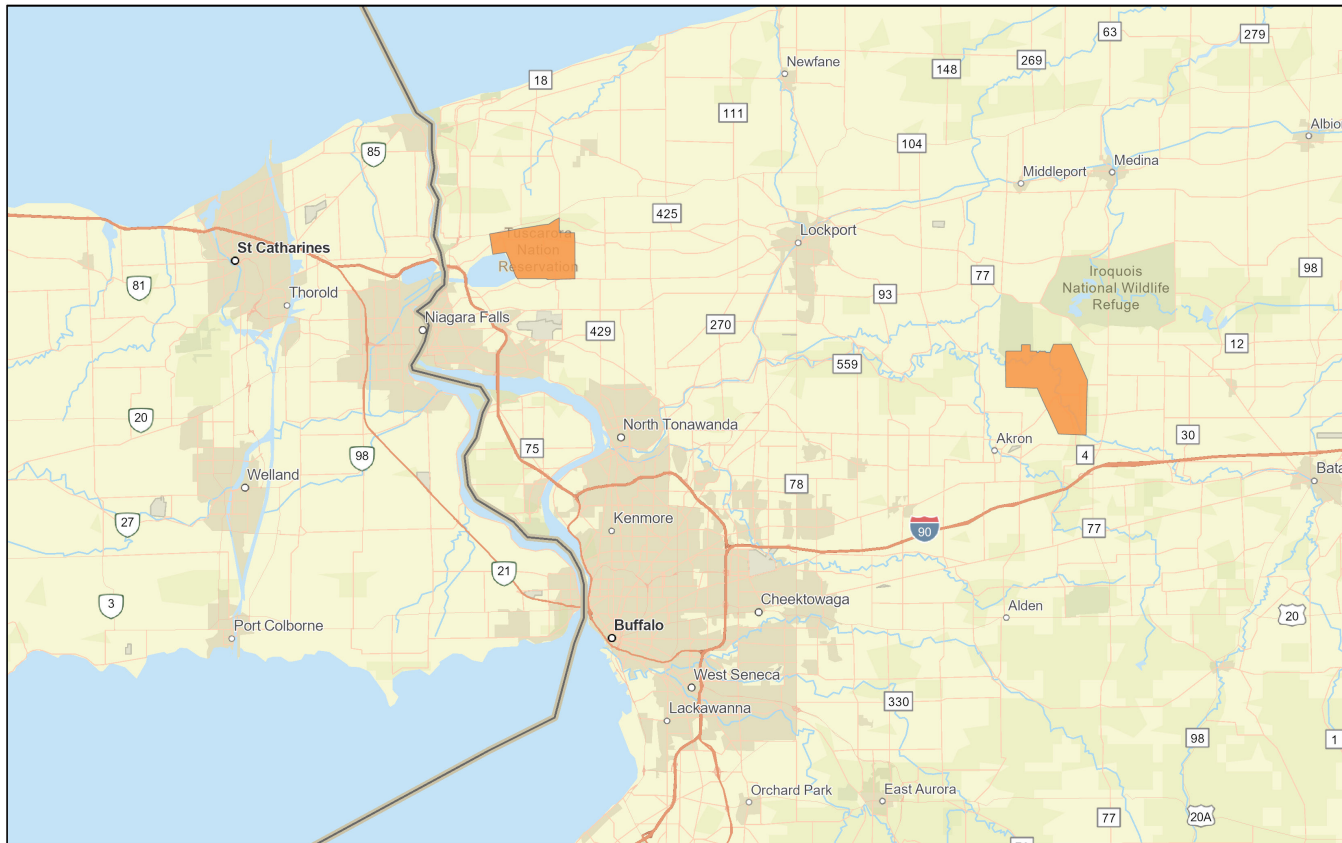


Source: NEPAassist

Date: April 2022

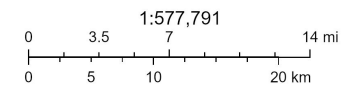
Drawn: AMG

Approved: DHS



April 22, 2022

 American Indian Reservations



Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, NRCAN, Parks Canada

Native American Reservations

Niagara Falls and Buffalo, New York

Figure 6

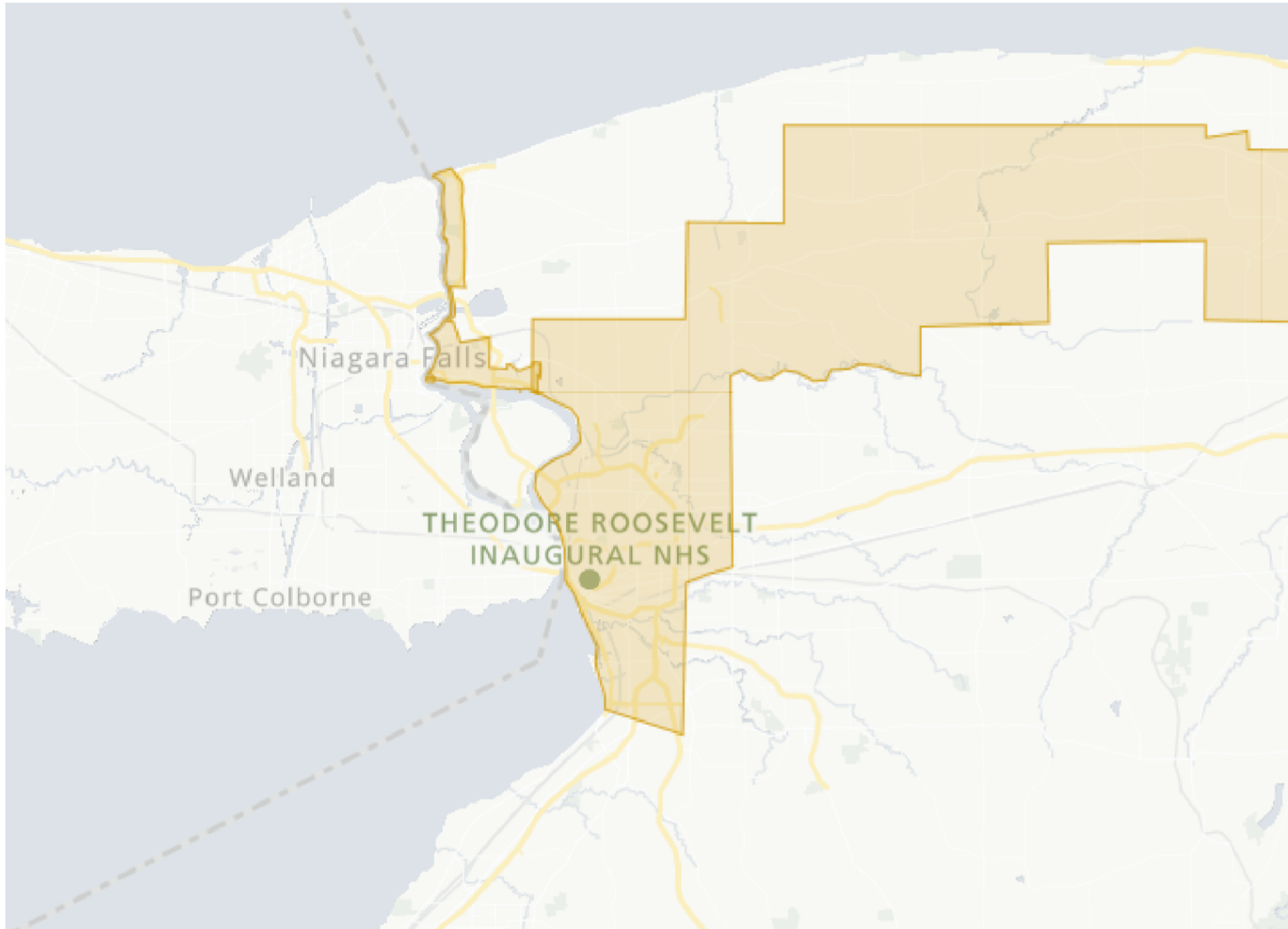


Source: NEPAassist

Date: April 2022

Drawn: AMG

Approved: DHS



Natural Heritage Areas

Niagara Falls and Buffalo, NY

Figure 7



Source: NEPAassist

Date: April 2022

Drawn: AMG

Approved: DHS



National Scenic Byway Great Lakes Seaway Trail

Niagara Falls and Buffalo, New York

Figure 8

Source: https://www.fhwa.dot.gov/byways/byways/2488/maps/Chautauqua_Niagara_Section

Date: June 2022

Drawn: AMG

Approved: DHS

New York

The National Scenic Byways Program

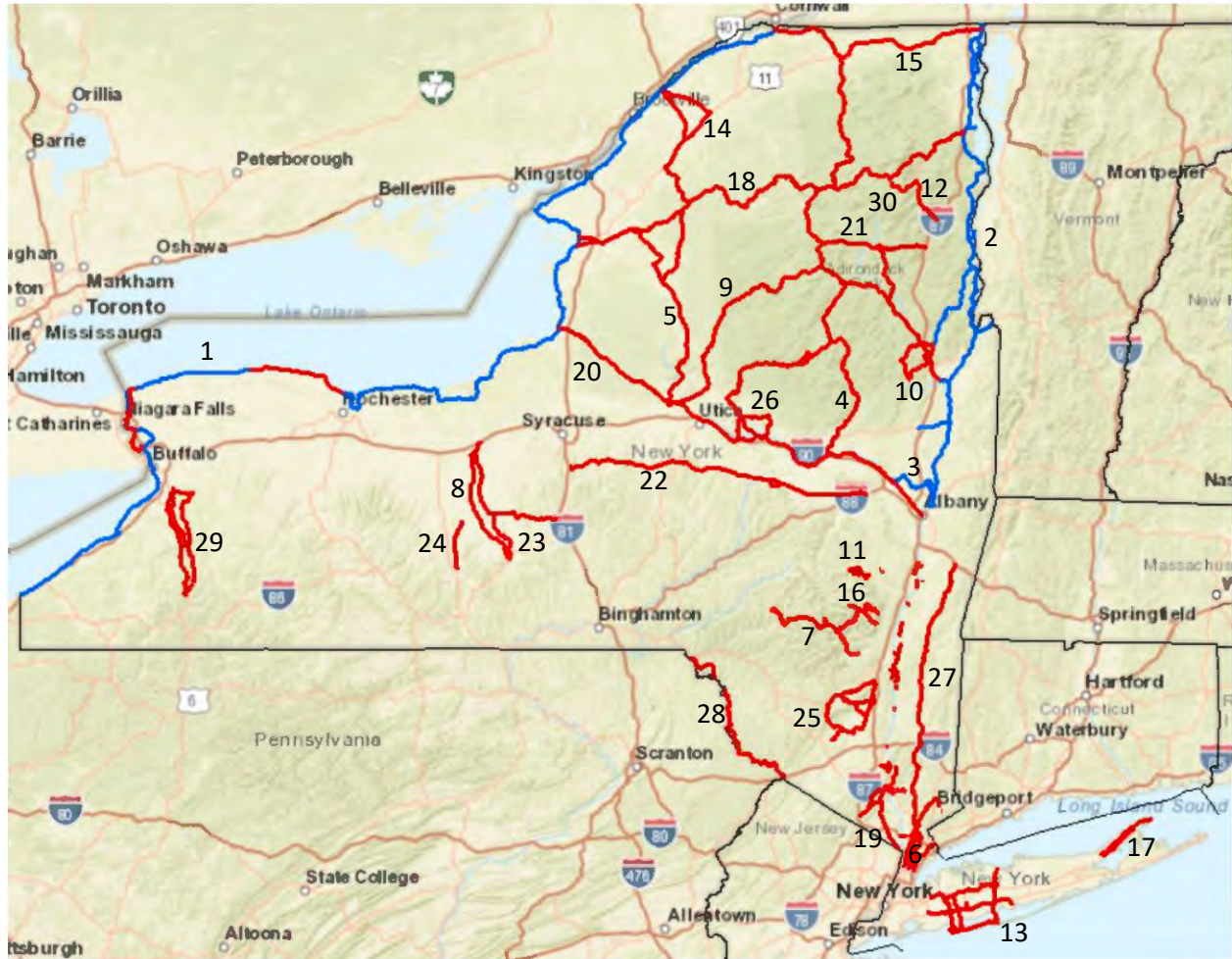
The National Scenic Byways Program, established by Congress in 1991, recognizes historic, scenic and culturally important roads and promotes tourism and economic development in nearby communities. The New York State Scenic Byways Program was created by the state legislature in 1992. The program encourages not only economic development but also resource conservation. New York was an early pioneer of scenic road development, building 4 parkways between the years of 1913 and 1930. Since the creation of New York's Scenic Byways Program, over 3,100 miles of byways have been designated across the state.

Key points:

- New York is home to 95 Scenic Byways, including 3 National Scenic Byways and 27 State Scenic Byways, as well as 46 Scenic Roads and 19 State Scenic Parkways.
- New York State's 2016 Calendar Year Report showed an expanding tourism economy with [2.7%](#) growth in traveler spending, reaching an all-time high of \$65 billion.
- Headline results in the [2016](#) Calendar Report showed that travel and tourism are substantial growing components of the state's economy.
- Additionally, the report showed that over 780,000 jobs were sustained by tourism activity in 2016 with a total income of [\\$34.6 billion](#).



The Taconic Parkway is an Eastern Hudson scenic byway with fascinating autumn scenery connecting Interstate 90 to lower New York's Parkways in Valhalla.



New York State National and State Designated Scenic Byways

National Scenic Byways in New York:

- [Great Lakes Seaway Trail](#) (1)
- [Lakes to Locks Passage](#) (2)*
- [Mohawk Towpath Byway](#) (3)

State Scenic Byways in New York:

- [Adirondack Trail](#) (4)
- [Black River Trail](#) (5)
- [Bronx River Parkway](#) (6)
- [Catskill Mountains](#) (7)
- [Cayuga Lake](#) (8)
- [Central Adirondack Trail](#) (9)

- [Dude Ranch Trail](#) (10)
- [Durham Valley](#) (11)
- [High Peaks Byway](#) (12)
- [Historic Parkways of Long Island](#) (13)
- [Maple Traditions Trail](#) (14)
- [Military Trail](#) (15)
- [Mountain Cloves](#) (16)
- [North Fork Trail](#) (17)
- [Olympic Trail](#) (18)
- [Palisades Scenic Byway](#) (19)
- [Revolutionary Byway](#) (20)
- [Roosevelt-Marcy Trail](#) (21)
- [The US Route 20 Byway](#) (22)

- [Scenic Route 90](#) (23)
- [Seneca Lake Byway](#) (24)
- [Shawangunk Mountains](#) (25)
- [Southern Adirondack Trail](#) (26)
- [Taconic State Parkway](#) (27)
- [Upper Delaware](#) (28)
- [Western New York](#)
- [Southtowns](#) (29)
- [Blue Ridge Road](#) (30)

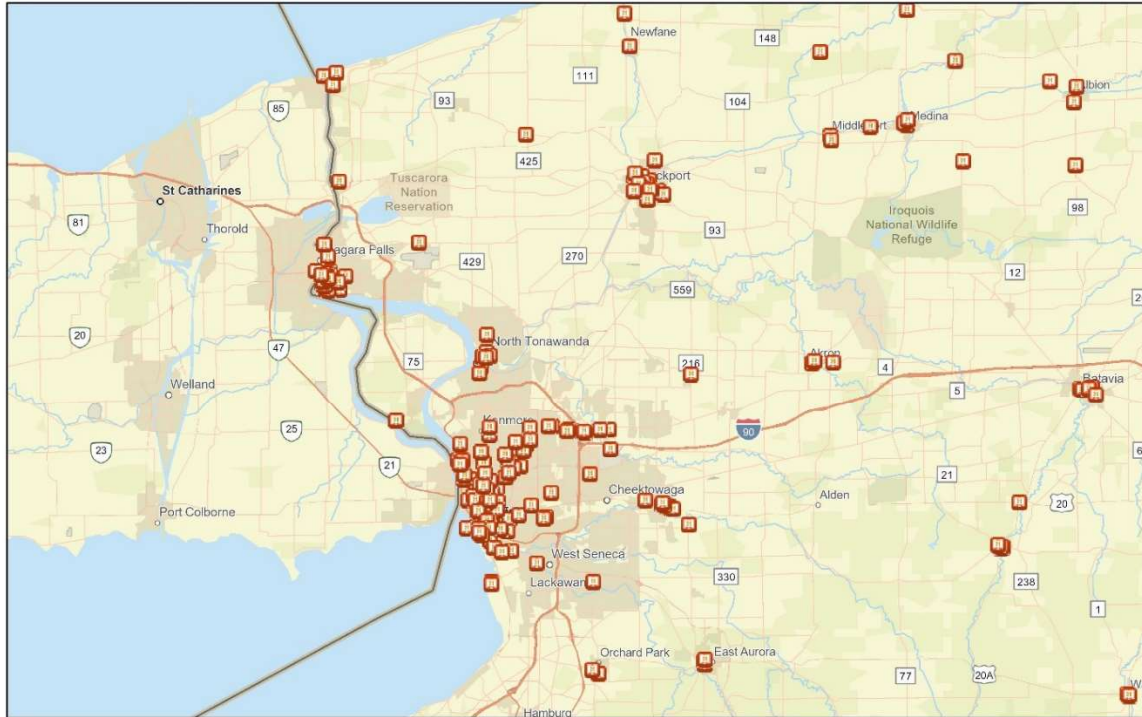
Additional Legislated New York State Scenic Byways:

- [46 NYS Scenic Roads](#)
- [19 NYS Parkways](#)

Map Key:

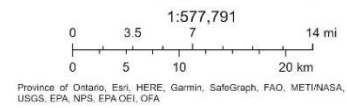
The numbers following each byway name above match the byway's numbered location on the map.

*Asterisk denotes an All-American Road.



June 2, 2022

 National Register of Historic Places



National Register of Historic Places

Niagara Falls and Buffalo, New York

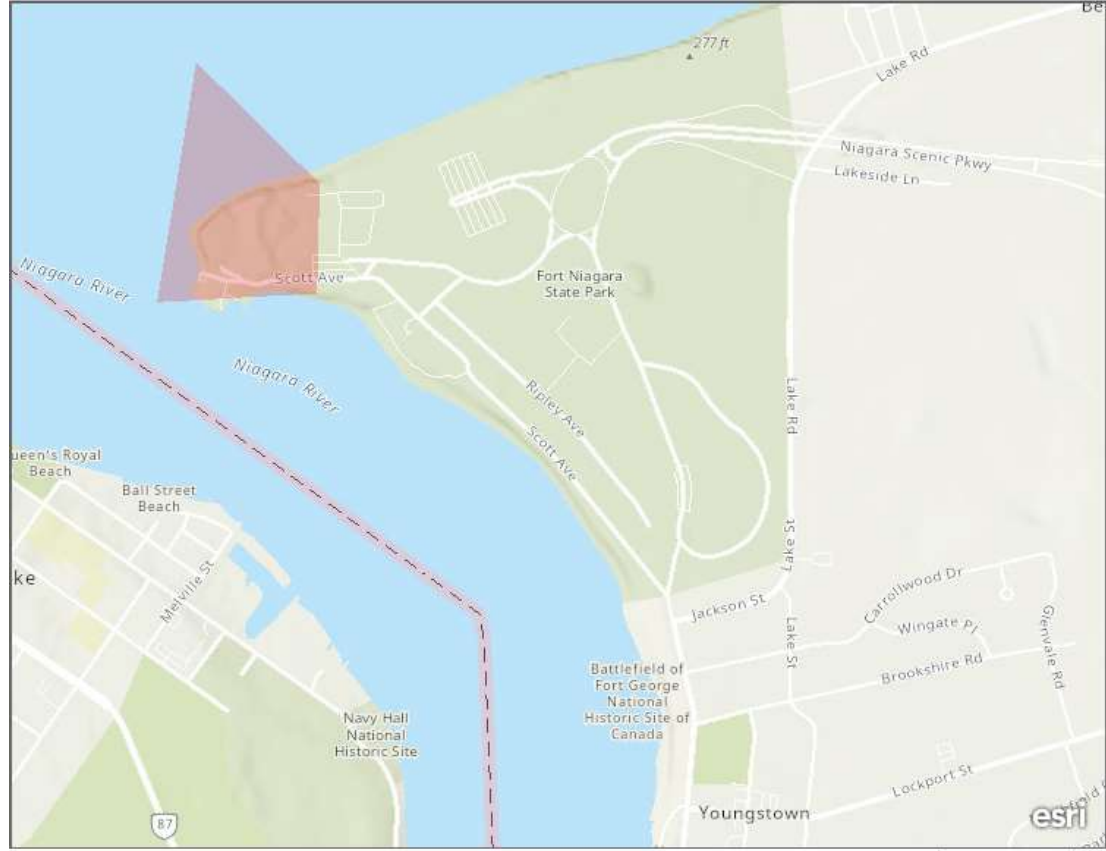
Figure 9

Source: NEPAassist

Date: June 2022

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AMG

Approved:
DHS



**National Register of Historic Places – Districts
(panel 1 of 3)**

Figure 10

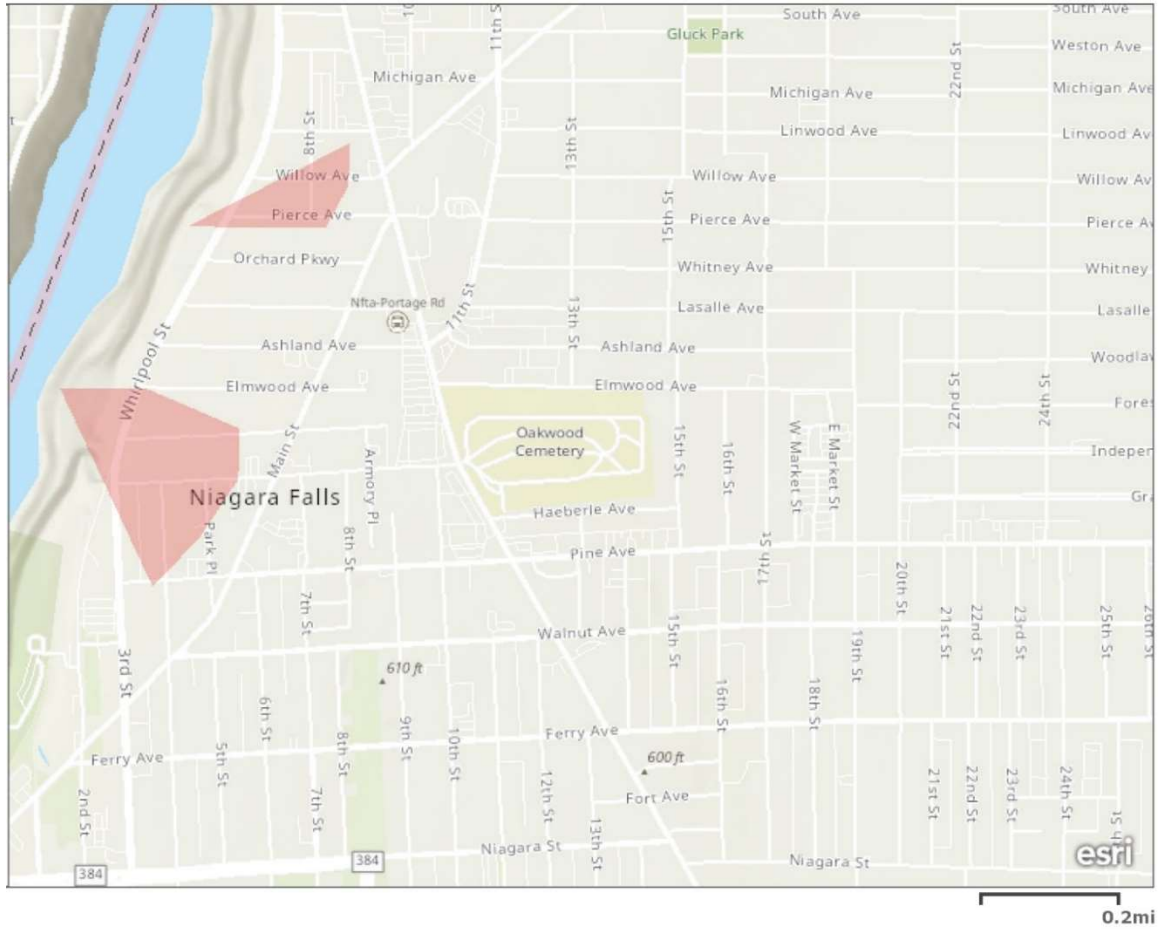
Niagara Falls and Buffalo, New York

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS



National Register of Historic Places – Districts (panel 2 of 3)

Figure 11

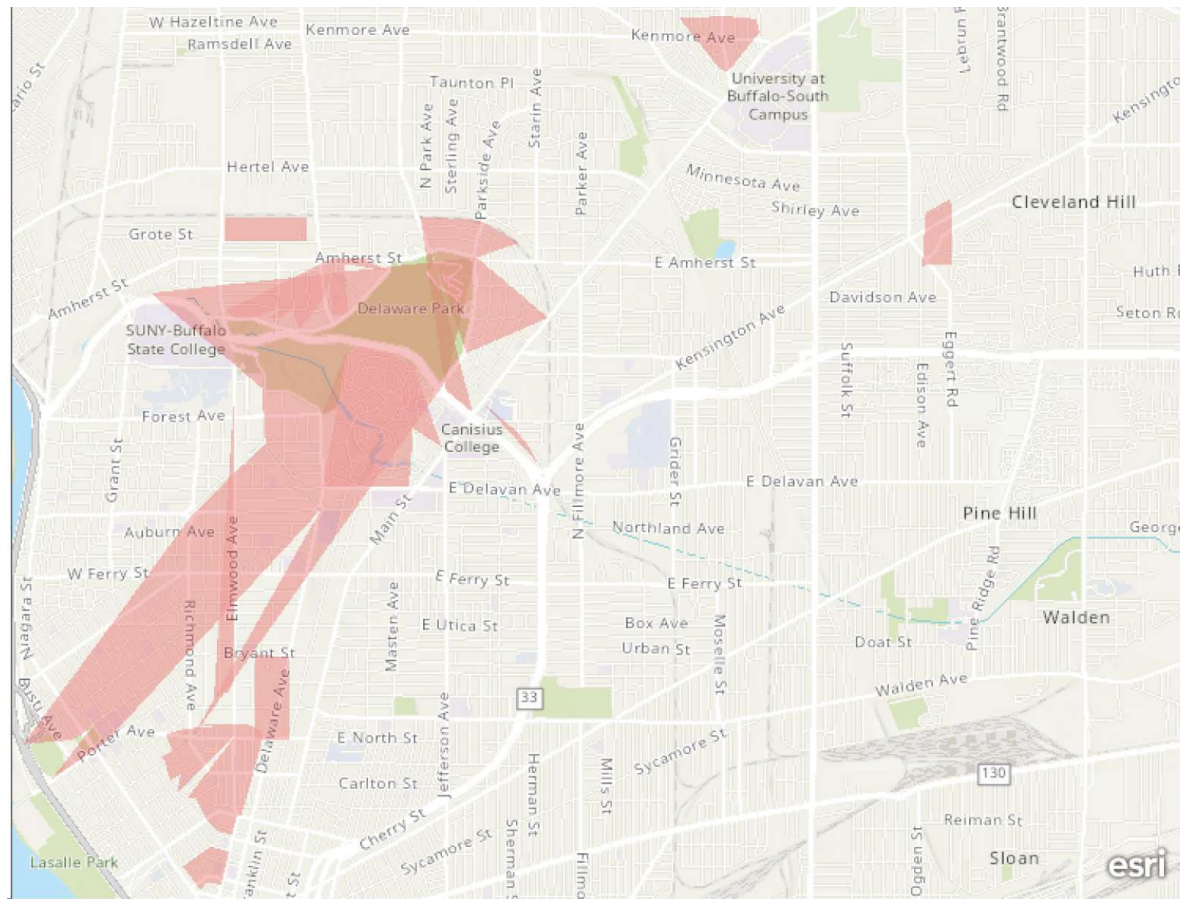
Niagara Falls and Buffalo, New York

Source: NEPAassist

Date: June 2022

Drawn: AMG

Approved: DHS



**National Register of Historic Places – Districts
(panel 3 of 3)**

Figure 12

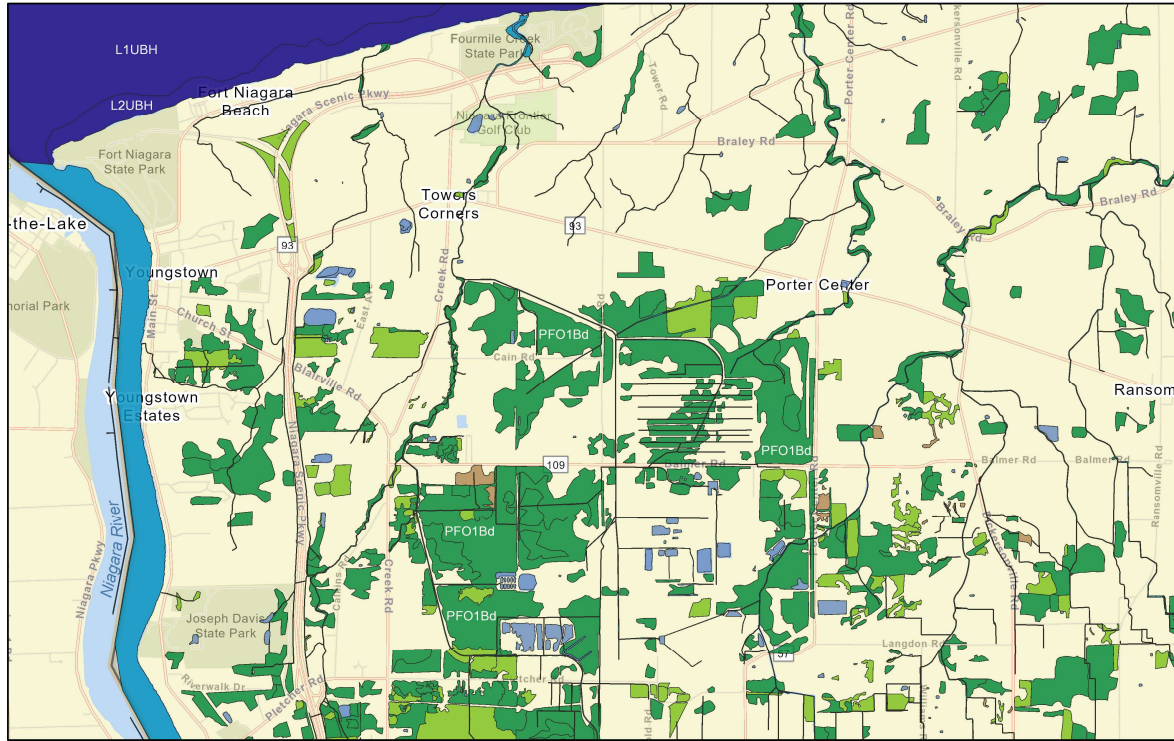
Niagara Falls and Buffalo, New York

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS

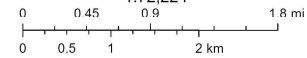


June 2, 2022

Wetlands

- | | | |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland |  Lake |
|  Estuarine and Marine Wetland |  Freshwater Forested/Shrub Wetland |  Other |
| |  Freshwater Pond |  Riverine |

1:72,224



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov, Province of Ontario, Niagara Region, Esri Canada.



Wetlands and Water Bodies

Niagara Falls and Buffalo, New York

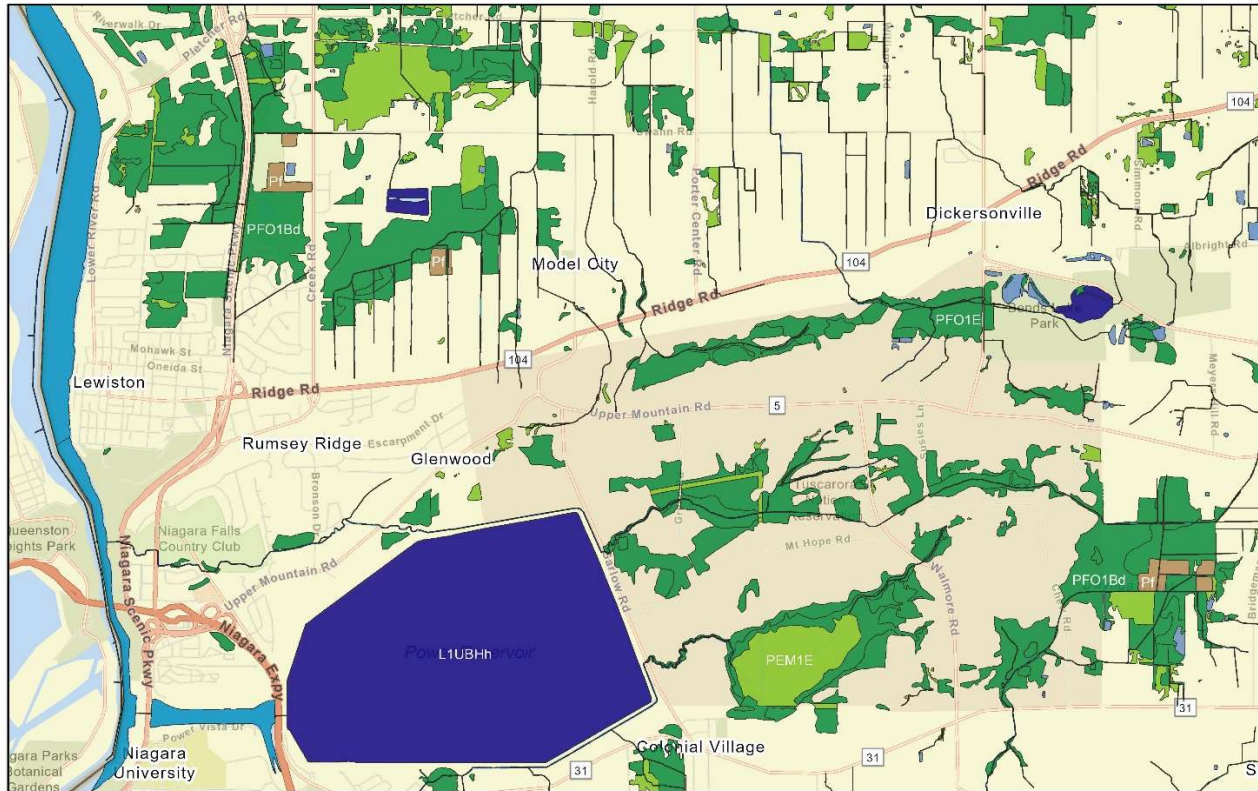
Figure 13-1

Source: NEPAassist

Date: June 2022

Drawn:
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Approved:
DHS

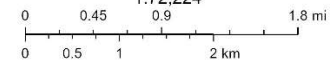


June 2, 2022

Wetlands

- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
|  | Freshwater Pond |  | |  | Riverine |

1:72,224



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Wetlands and Water Bodies

Niagara Falls and Buffalo, New York

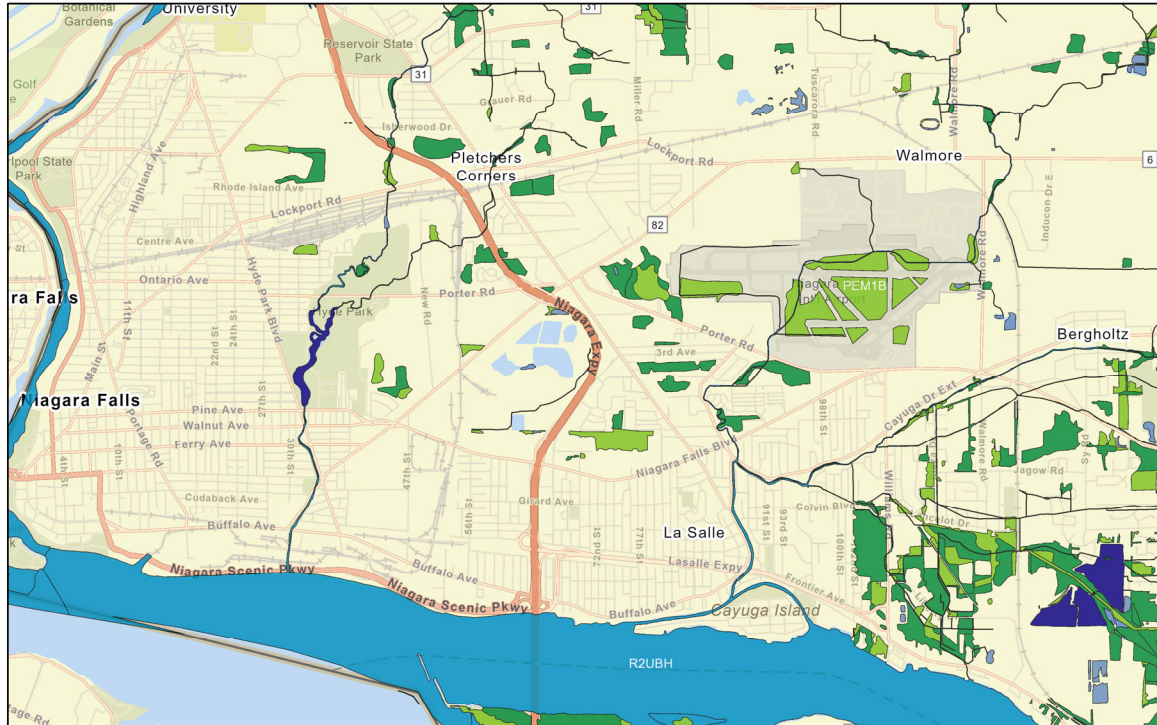
Figure 13-2

Source: NEPAssist

Date: June 2022

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June 2, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov, Province of Ontario, Niagara Region, East Canada.



Wetlands and Water Bodies

Niagara Falls and Buffalo, New York

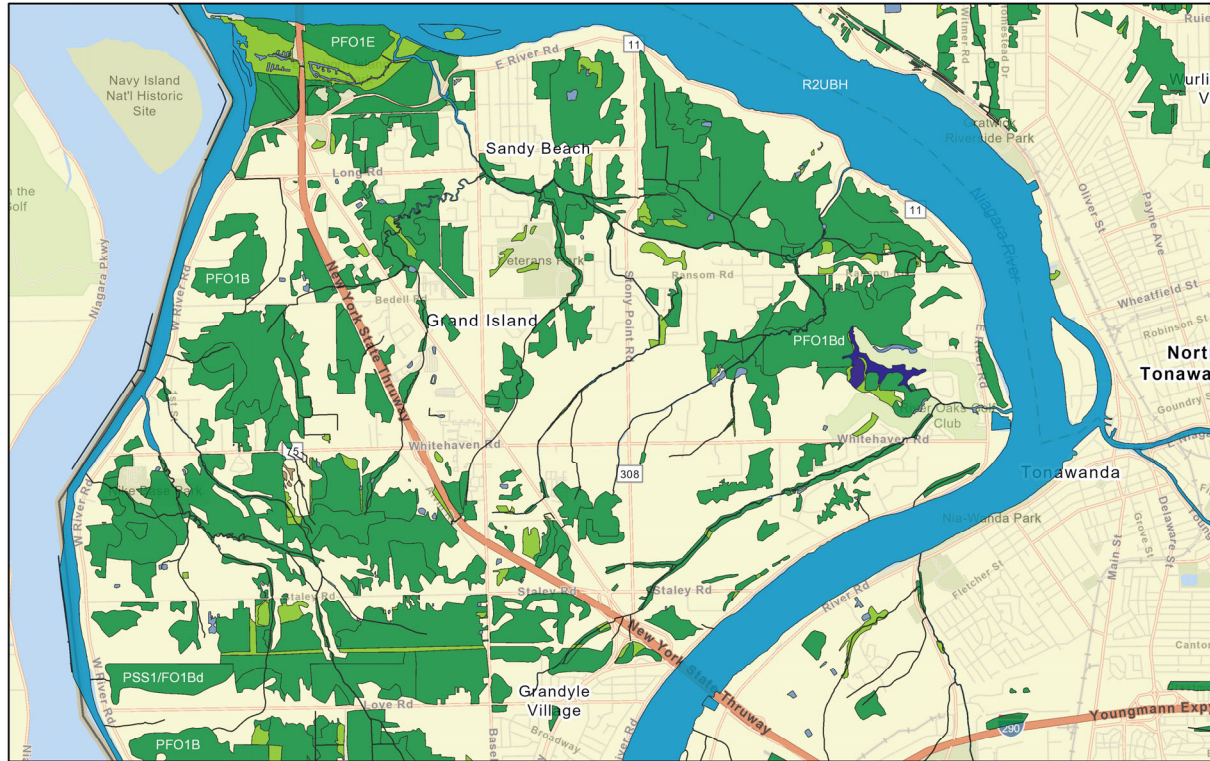
Figure 13-3

Source: NEPAssist

Date: June 2022

Drawn:
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Approved:
DHS

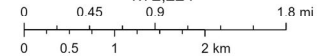


June 2, 2022

Wetlands

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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Wetlands and Water Bodies

Niagara Falls and Buffalo, New York

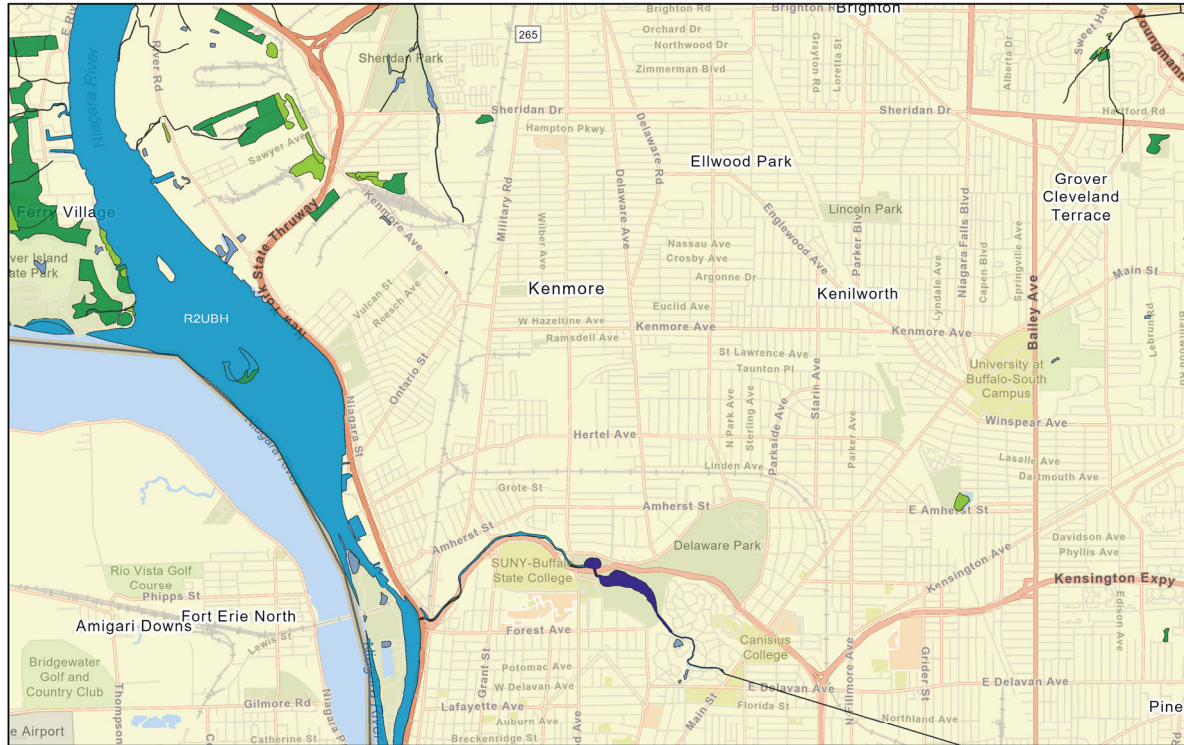
Figure 13-4

Source: NEPAassist

Date: June 2022

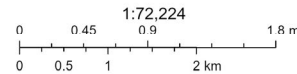
Drawn:
AMG

Approved:
DHS



June 2, 2022

- | | | |
|--------------------------------|-----------------------------------|----------|
| Wetlands | Freshwater Emergent Wetland | Lake |
| Estuarine and Marine Deepwater | Freshwater Forested/Shrub Wetland | Other |
| Estuarine and Marine Wetland | Freshwater Pond | Riverine |



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov, Province of Ontario, Esri Canada, Esri, HERE.



Wetlands and Water Bodies

Niagara Falls and Buffalo, New York

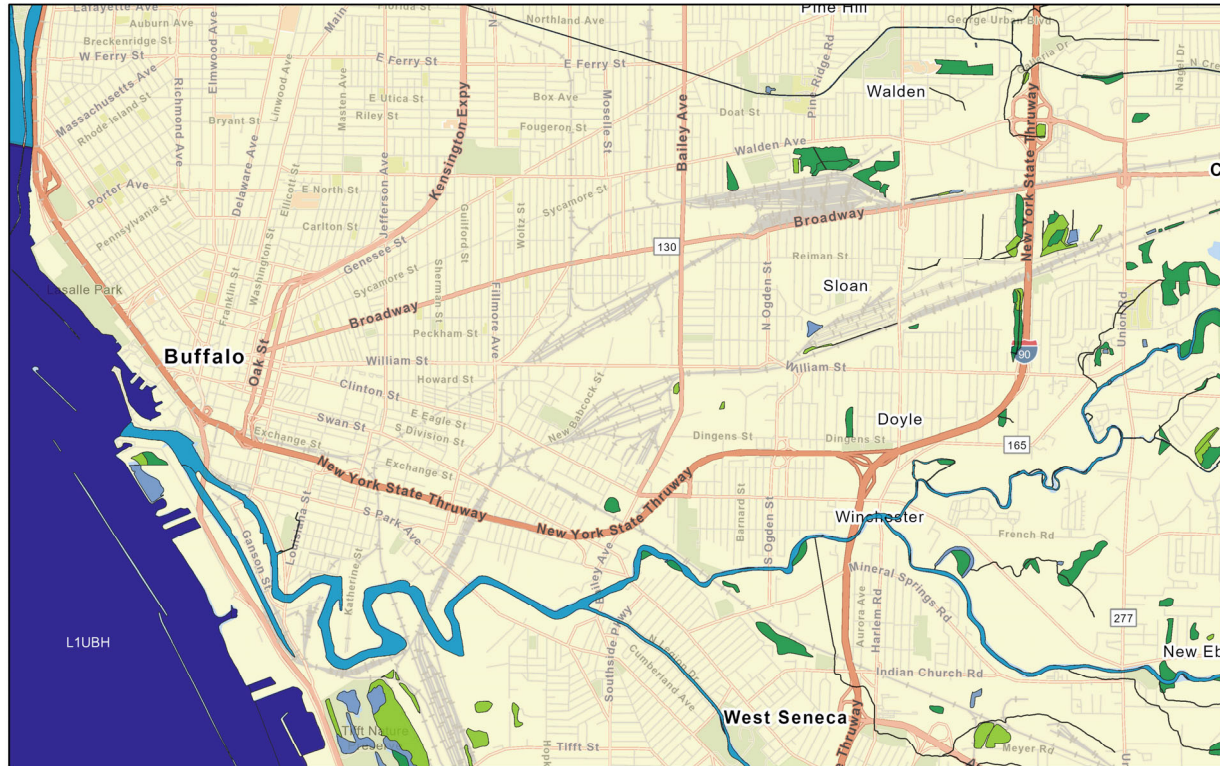
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Date: June 2022

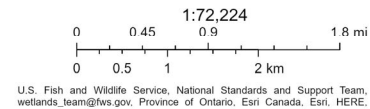
Drawn:
AMG

Approved:
DHS



June 2, 2022

- | | | |
|---|--|---|
| Wetlands | ■ Freshwater Emergent Wetland | ■ Lake |
| ■ Estuarine and Marine Deepwater | ■ Freshwater Forested/Shrub Wetland | ■ Other |
| ■ Estuarine and Marine Wetland | ■ Freshwater Pond | ■ Riverine |



Wetlands and Water Bodies

Niagara Falls and Buffalo, New York

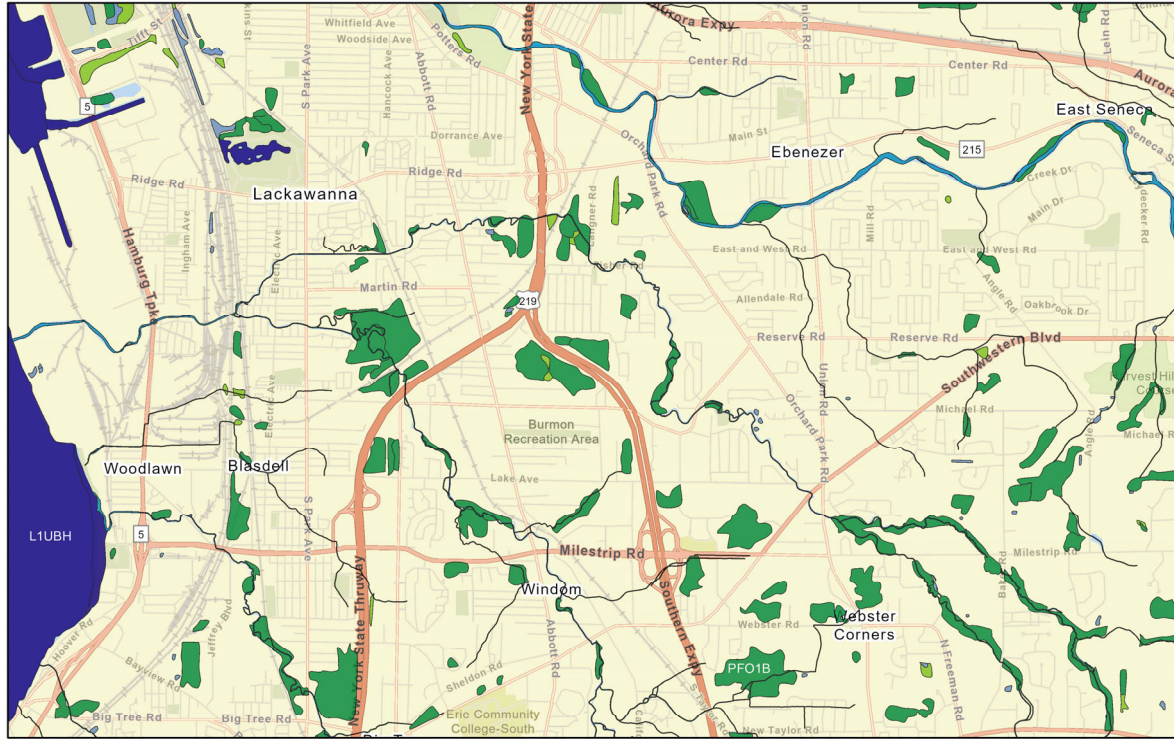
Figure 13-6

Source: NEPAAssist

Date: June 2022

Drawn:
AMG

Approved:
DHS

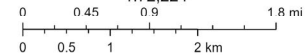


June 2, 2022

Wetlands

- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
|  | Freshwater Pond |  | |  | Riverine |

1:72,224



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Wetlands and Water Bodies

Figure 13-7

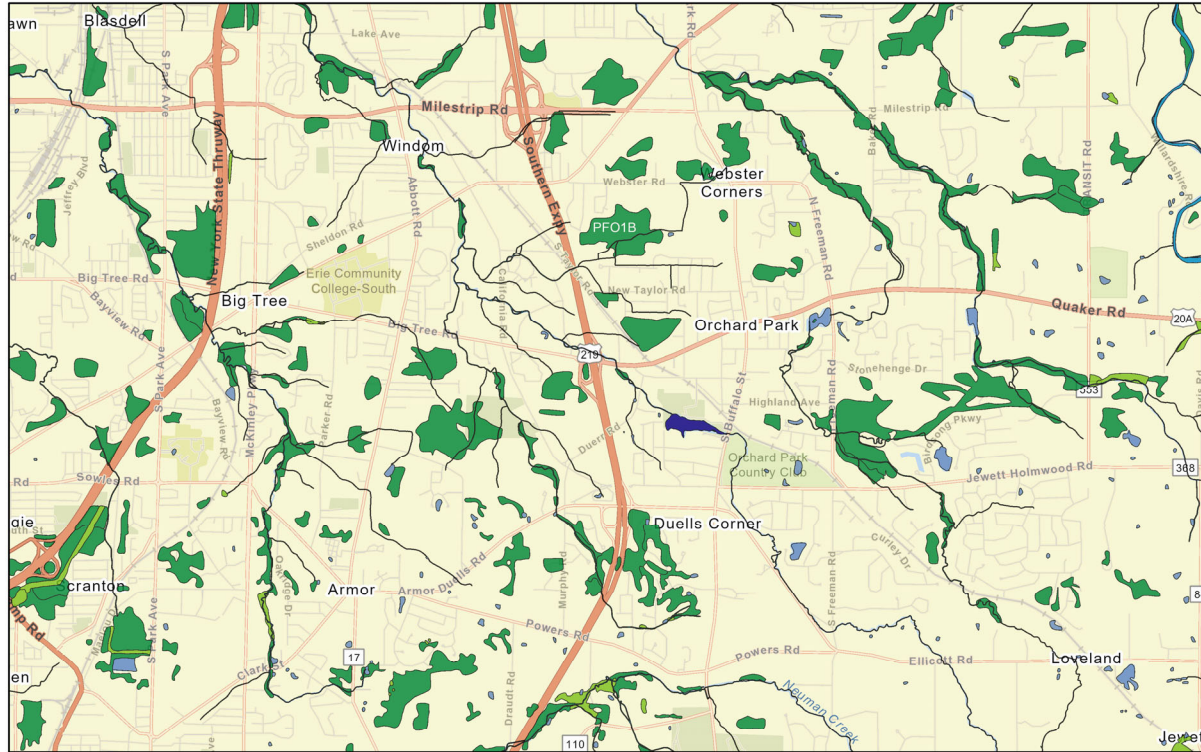
Niagara Falls and Buffalo, New York

Source: NEPAassist

Date: June 2022

Drawn:
AMG

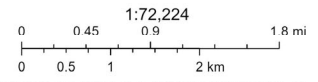
Approved:
DHS



June 2, 2022

Wetlands

- Estuarine and Marine Deepwater
- Freshwater Emergent Wetland
- Lake
- Estuarine and Marine Wetland
- Freshwater Forested/Shrub Wetland
- Other
- Freshwater Pond
- Riverine



Province of Ontario, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METNUSA, USGS, EPA, NPS, USDA, U.S. Fish and Wildlife Service.



Wetlands and Water Bodies

Niagara Falls and Buffalo, New York

Figure 13-8

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources* under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) project-specific (e.g., magnitude and timing of proposed activities) information.


Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.


Location

Erie and Niagara counties, New York

Local office

New York Ecological Services Field Office

 (607) 753-9334

 (607) 753-9699

3817 Luker Road
Cortland, NY 13045-9385

<http://www.fws.gov/northeast/nyfo/es/section7.htm>

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the [FAQ below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IN A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10

<p>Blue-winged Warbler <i>Vermivora pinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds May 1 to Jun 30
<p>Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 20 to Jul 31
<p>Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 20 to Aug 10
<p>Cerulean Warbler <i>Dendroica cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974</p>	Breeds Apr 20 to Jul 20
<p>Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 1 to Aug 20
<p>Evening Grosbeak <i>Coccothraustes vespertinus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 15 to Aug 10
<p>Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680</p>	Breeds Jan 1 to Aug 31
<p>Golden-winged Warbler <i>Vermivora chrysoptera</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745</p>	Breeds May 1 to Jul 20
<p>Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679</p>	Breeds elsewhere

<p>Long-eared Owl <i>asio otus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3631</p>	Breeds Mar 1 to Jul 15
<p>Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 1 to Jul 31
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Sep 10
<p>Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds elsewhere
<p>Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480</p>	Breeds elsewhere
<p>Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that

- week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

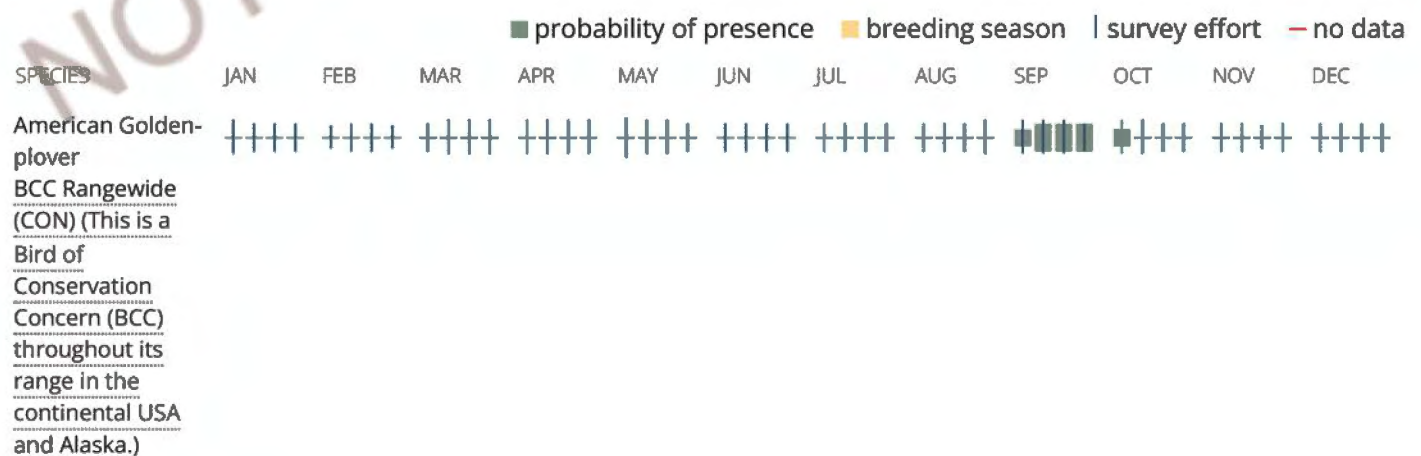
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

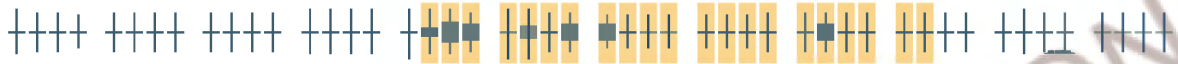
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald Eagle
 Non-BCC
 Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



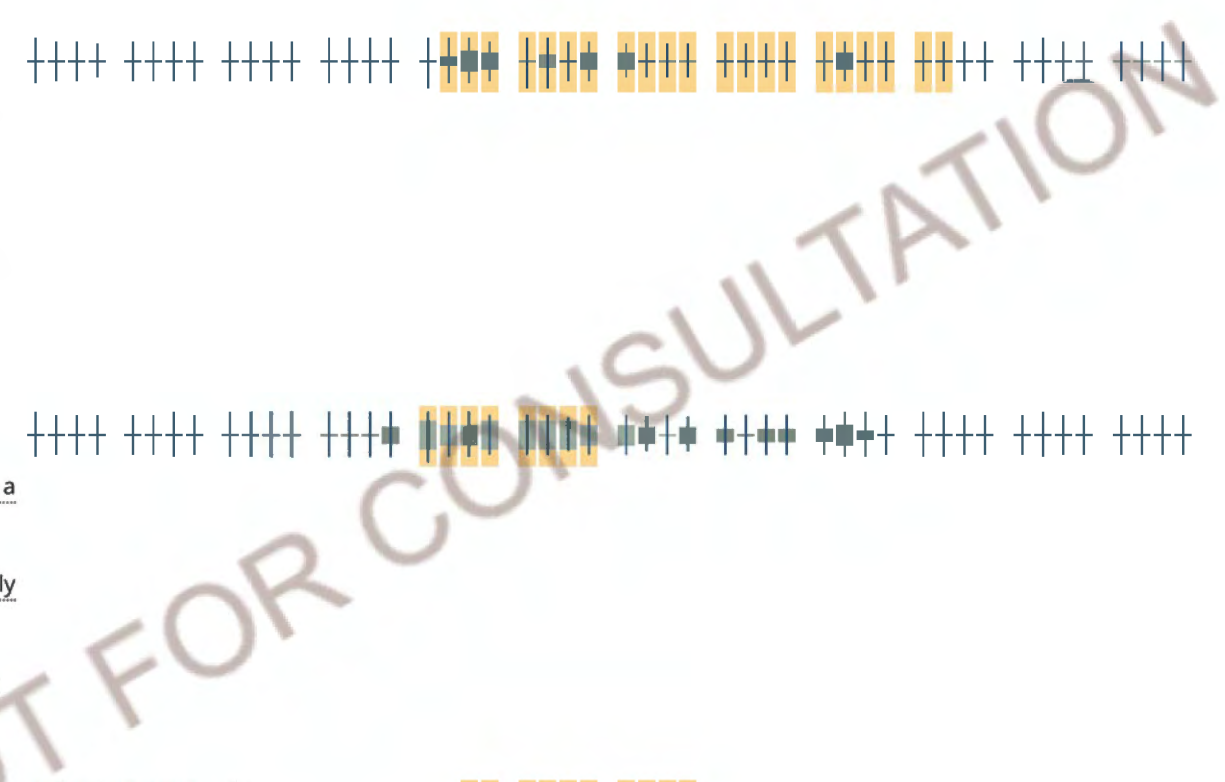
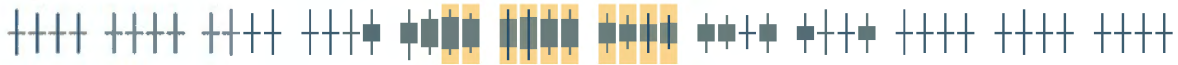
Black-billed Cuckoo
 BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Blue-winged Warbler
 BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



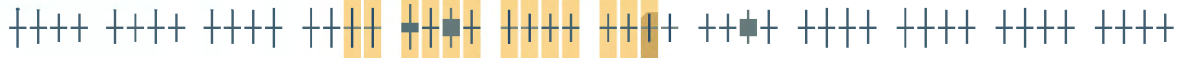
Bobolink
 BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Canada Warbler
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



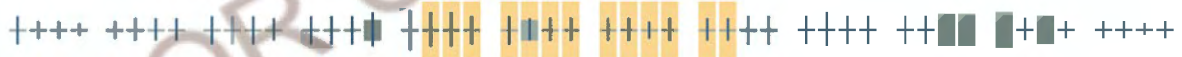
Cerulean Warbler
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



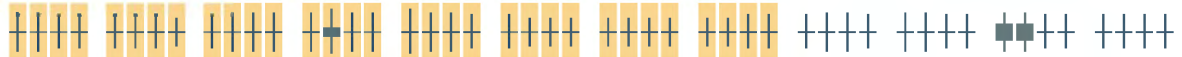
Eastern Whip-
 poor-will
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Evening Grosbeak
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Golden Eagle
 Non-BCC
 Vulnerable (This is
 not a Bird of
 Conservation
 Concern (BCC) in
 this area, but
 warrants attention
 because of the
 Eagle Act or for
 potential
 susceptibilities in
 offshore areas
 from certain types
 of development or
 activities.)



NOT FOR CONSULTATION

Golden-winged Warbler



BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Lesser Yellowlegs



BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

SPECIES

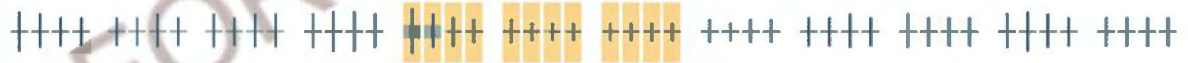
JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Long-eared Owl



BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Prairie Warbler

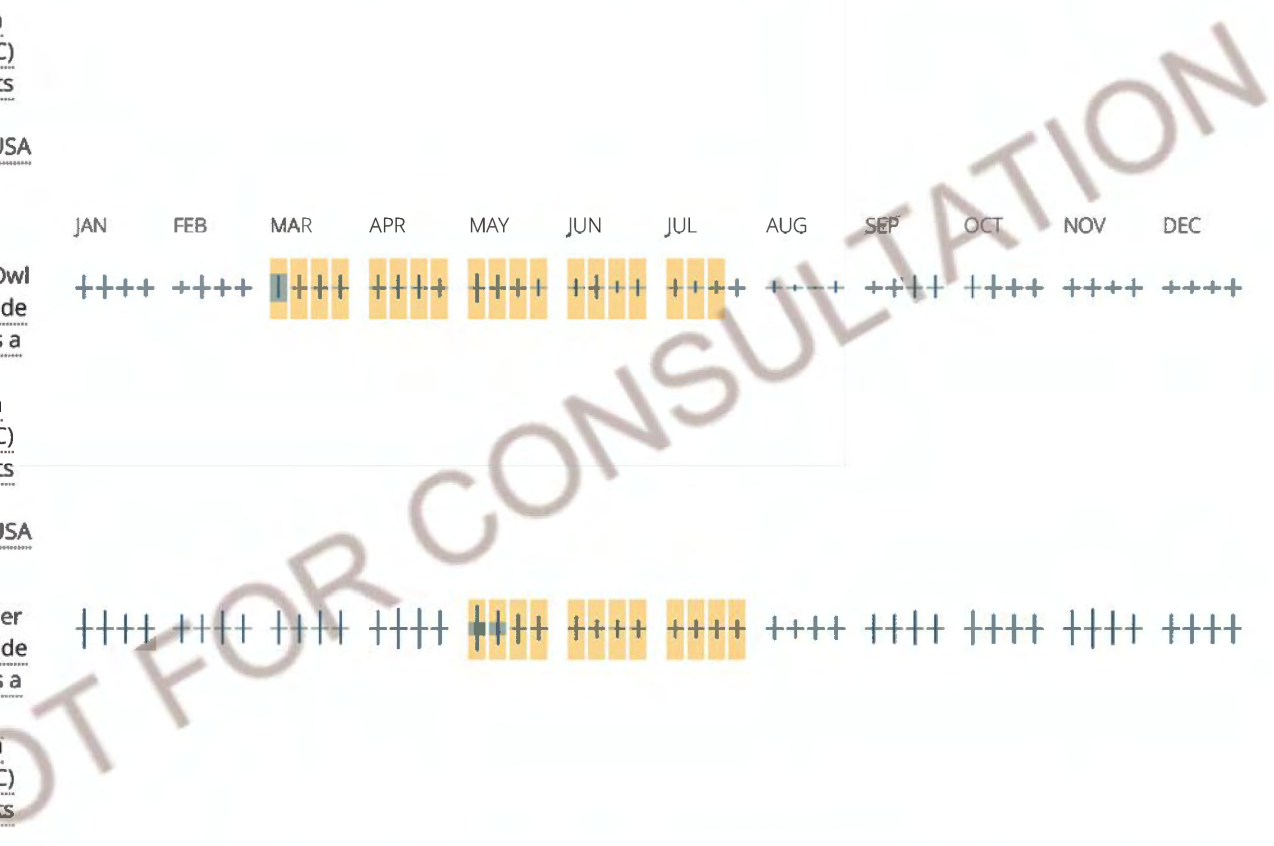


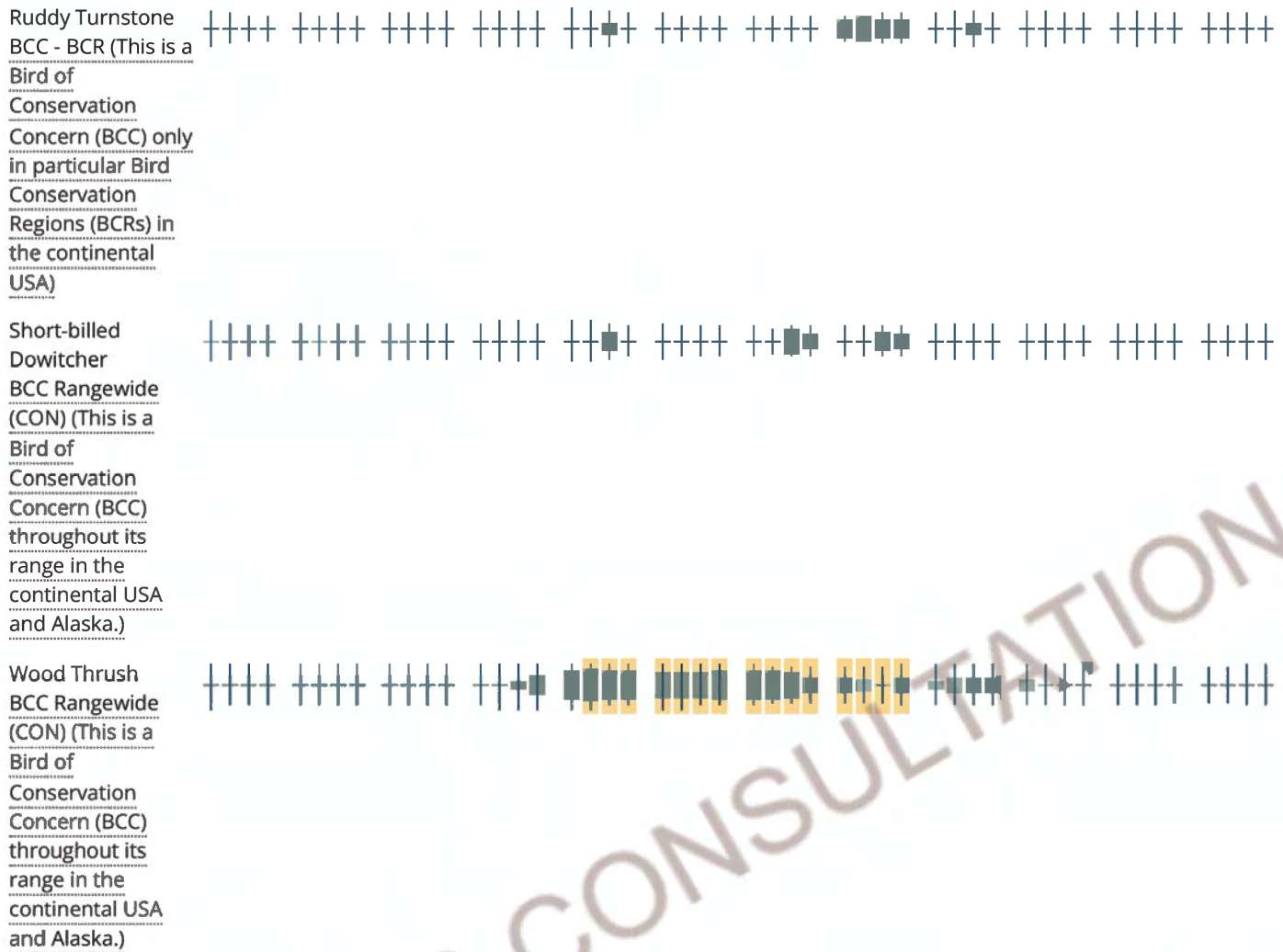
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Red-headed Woodpecker



BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



The following rare plants, rare animals, and significant natural communities have records in the Natural Heritage database within the

Low-energy radiofrequency radar study area

May 2022

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	NY STATE RANK*
Erie County			
Birds (all are breeding records)			
Henslow's Sparrow	<i>Ammodramus henslowii</i>	Threatened	S3B
Northern Harrier	<i>Circus hudsonius</i>	Threatened	S3B,S3N
Sedge Wren	<i>Cistothorus stellaris</i>	Threatened	S3B
Peregrine Falcon	<i>Falco peregrinus</i>	Endangered	S3B
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Threatened	S2S3B,S2N
Least Bittern	<i>Ixobrychus exilis</i>	Threatened	S3B,S1N
Pied-billed Grebe	<i>Podilymbus podiceps</i>	Threatened	S3B,S1N
Common Tern	<i>Sterna hirundo</i>	Threatened	S3B
Gull Colony			
Waterfowl Winter Concentration Area			
Reptiles			
Spiny Softshell	<i>Apalone spinifera</i>	Special Concern	S2S3
Queen Snake	<i>Regina septemvittata</i>	Endangered	S1
Fish			
Lake Sturgeon	<i>Acipenser fulvescens</i>	Threatened	S2S3
Eastern Sand Darter	<i>Ammocrypta pellucida</i>	Threatened	S2S3
Mooneye	<i>Hiodon tergisus</i>	Threatened	S2
Iowa Darter	<i>Etheostoma exile</i>	Unlisted	S2
Bigeye Chub	<i>Hybopsis amblops</i>	Unlisted	S1S2
Northern Brook Lamprey	<i>Ichthyomyzon fossor</i>	Unlisted	S2
Northern Sunfish	<i>Lepomis peltastes</i>	Threatened	S1
Black Redhorse	<i>Moxostoma duquesnei</i>	Special Concern	S2
Bigmouth Shiner	<i>Notropis dorsalis</i>	Unlisted	S2
Blacknose Shiner	<i>Notropis heterolepis</i>	Unlisted	S2S3
Beetles			
Appalachian Tiger Beetle	<i>Cicindela ancocisconensis</i>	Unlisted	S2
Crustaceans			
Devil Crawfish	<i>Lacunicambarus diogenes</i>	Unlisted	S2
Freshwater Mussels			
Slippershell Mussel	<i>Alasmidonta viridis</i>	Unlisted	S1?
Wabash Pigtoe	<i>Fusconaia flava</i>	Unlisted	S2
Pocketbook	<i>Lampsilis ovata</i>	Unlisted	S2
Fragile Papershell	<i>Leptodea fragilis</i>	Unlisted	S2S3
Eastern Pondmussel	<i>Ligumia nasuta</i>	Unlisted	S2
Hickorynut	<i>Obovaria olivaria</i>	Unlisted	S1
Round Pigtoe	<i>Pleurobema sintoxia</i>	Unlisted	S2
Pink Heelsplitter	<i>Potamilus alatus</i>	Unlisted	S2
Kidneyshell	<i>Ptychobranhus fasciolaris</i>	Unlisted	S2
Lilliput	<i>Toxolasma parvum</i>	Unlisted	S2
Paper Pondshell	<i>Utterbackia imbecillis</i>	Unlisted	S2S3
Rainbow	<i>Villosa iris</i>	Unlisted	S2S3

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	NY STATE RANK*
Plants			
False Hop Sedge	<i>Carex lupuliformis</i>	Threatened	S2
Big Shellbark Hickory	<i>Carya laciniosa</i>	Threatened	S2S3
Southern Blue Flag	<i>Iris virginica</i>	Endangered	S1
Wafer Ash	<i>Ptelea trifoliata</i> var. <i>trifoliata</i>	Threatened	S2
Shumard Oak	<i>Quercus shumardii</i>	Endangered	S1
Leonard's Skullcap	<i>Scutellaria parvula</i> var. <i>missouriensis</i>	Endangered	S1
Stiff Flat-topped Goldenrod	<i>Solidago rigida</i> var. <i>rigida</i>	Threatened	S2

Communities

Great Lakes Dunes at Woodlawn Beach	S1
Oak Openings at Harris Hill	S1
Deep Emergent Marsh at Buckhorn Island Marsh	S3
Silver Maple-Ash Swamp at Buckhorn Island Marsh	S3
Silver Maple-Ash Swamp at Beaver Island	S3
Silver Maple-Ash Swamp at Hopkins Road Swamp	S3
Silver Maple-Ash Swamp at Hemstreet Road Wetlands	S3
Silver Maple-Ash Swamp at Gun Creek Wetland	S3

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	NY STATE RANK*
Niagara County			
Birds (Breeding records unless noted)			
Short-eared Owl – <i>Breeding and wintering</i>	<i>Asio flammeus</i>	Endangered	S2
Northern Harrier – <i>Breeding and wintering</i>	<i>Circus hudsonius</i>	Threatened	S3B,S3N
Sedge Wren	<i>Cistothorus stellaris</i>	Threatened	S3B
Peregrine Falcon	<i>Falco peregrinus</i>	Endangered	S3B
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Threatened	S2S3B,S2N
Least Bittern	<i>Ixobrychus exilis</i>	Threatened	S3B,S1N
Common Tern	<i>Sterna hirundo</i>	Threatened	S3B
Gull Colony			SNRB
Waterfowl Winter Concentration Area			S3S4N
Fish			
Lake Sturgeon	<i>Acipenser fulvescens</i>	Threatened	S2S3
Iowa Darter	<i>Etheostoma exile</i>	Unlisted	S2
Northern Sunfish	<i>Lepomis peltastes</i>	Threatened	S1
Black Redhorse	<i>Moxostoma duquesnei</i>	Special Concern	S2
Blacknose Shiner	<i>Notropis heterolepis</i>	Unlisted	S2S3
Sauger	<i>Sander canadensis</i>	Unlisted	S1
Crustaceans			
Devil Crawfish	<i>Lacunicambarus diogenes</i>	Unlisted	S2
Freshwater Mussels			
Fragile Papershell	<i>Leptodea fragilis</i>	Unlisted	S2S3
Hickorynut	<i>Obovaria olivaria</i>	Unlisted	S1
Pink Heelsplitter	<i>Potamilus alatus</i>	Unlisted	S2
Lilliput	<i>Toxolasma parvum</i>	Unlisted	S2
Deertoe	<i>Truncilla truncata</i>	Unlisted	S1S2
Rainbow	<i>Villosa iris</i>	Unlisted	S2S3
Plants			
Yellow Giant Hyssop	<i>Agastache nepetoides</i>	Threatened	S2S3
White Death Camas	<i>Anticlea elegans</i> var. <i>glauca</i>	Threatened	S2
Pawpaw	<i>Asimina triloba</i>	Threatened	S2
Elk Sedge	<i>Carex garberi</i>	Endangered	S1
Big Shellbark Hickory	<i>Carya laciniosa</i>	Threatened	S2S3
Smaller Fringed Gentian	<i>Gentianopsis virgata</i> ssp. <i>virgata</i>	Endangered	S1
Canada Bluets	<i>Houstonia canadensis</i>	Threatened	S2
Southern Blue Flag	<i>Iris virginica</i>	Endangered	S1
Few-headed Blazing Star	<i>Liatris cylindracea</i>	Endangered	S1
Linear-leaved Loosestrife	<i>Lysimachia quadriflora</i>	Endangered	S1
Smooth Cliffbrake	<i>Pellaea glabella</i> ssp. <i>glabella</i>	Threatened	S2
Bushy Cinquefoil	<i>Potentilla supina</i> ssp. <i>paradoxa</i>	Endangered	S1
Shumard Oak	<i>Quercus shumardii</i>	Endangered	S1
Ohio Goldenrod	<i>Solidago ohioensis</i>	Threatened	S2
Stiff Flat-topped Goldenrod	<i>Solidago rigida</i> var. <i>rigida</i>	Threatened	S2
Sky-blue Aster	<i>Symphotrichum oolentangiense</i>	Endangered	S1

Communities

Calcareous Cliff Community at Niagara Gorge Whirlpool	S3
Calcareous Talus Slope Woodland at Niagara Gorge Whirlpool	S3
Maple-Basswood Rich Mesic Forest at Niagara Escarpment	S3

* Conservation status in NYS as ranked by NY Natural Heritage Program on a 1 to 5 scale:

S1 = Critically imperiled

S2 = Imperiled

S3 = Rare or uncommon

S4 = Abundant and apparently secure

S5 = Demonstrably abundant and secure

Range rank, e.g., **S2S3**, indicates current information could support either a rank of S2 or S3.

B after a rank indicates the rank is for breeding populations of that species.

N after a rank indicates the rank is for wintering, nonbreeding populations of that species.

Information about many of the rare animals, rare plants, and natural communities in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org.

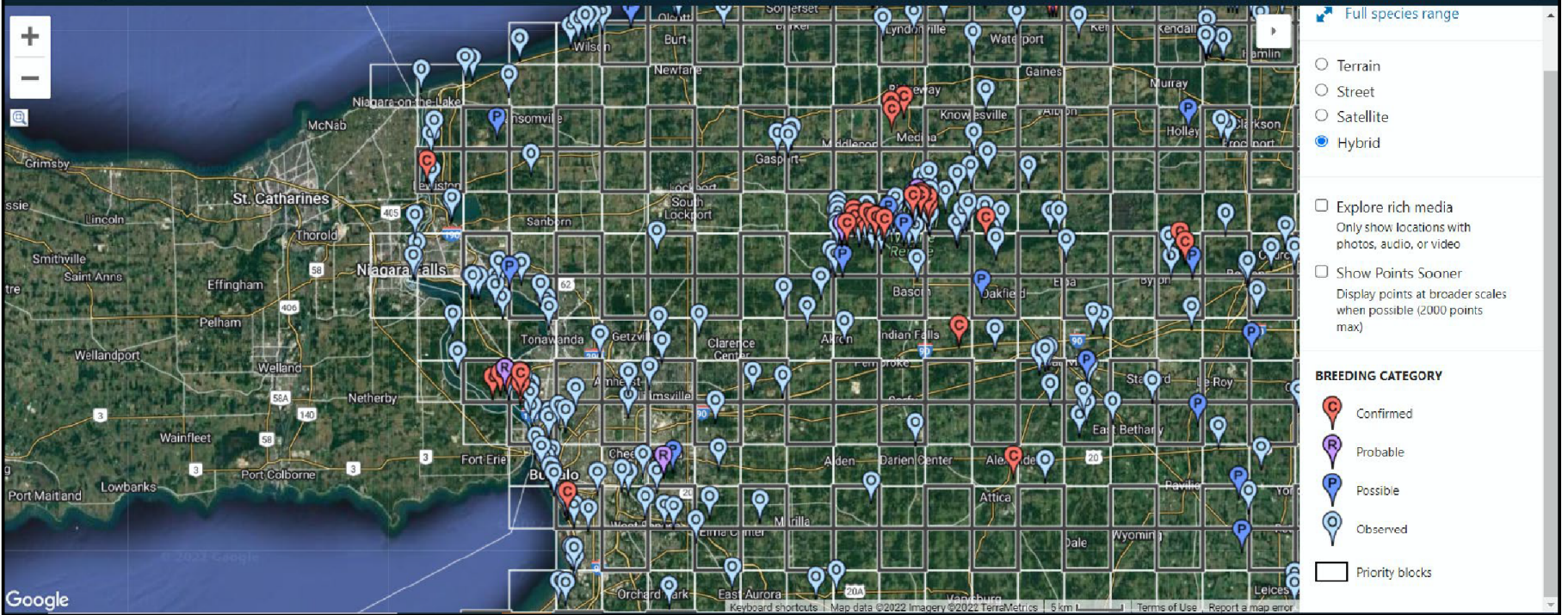
This report only includes records from the NY Natural Heritage databases. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. This information should not be substituted for on-site surveys.



Species: Bald Eagle (*Haliaeetus leucocephalus*)

DATE: Year-round, NYBBA

LOCATION: Enter place name or address...



Source:
<https://ebird.org/atlasny/map/baleag>
 eBird, New York Breeding Bird Atlas III: Bald Eagle, 2022

Bald Eagle Breeding Occurrence

Niagara Falls and Buffalo, NY

Figure 14

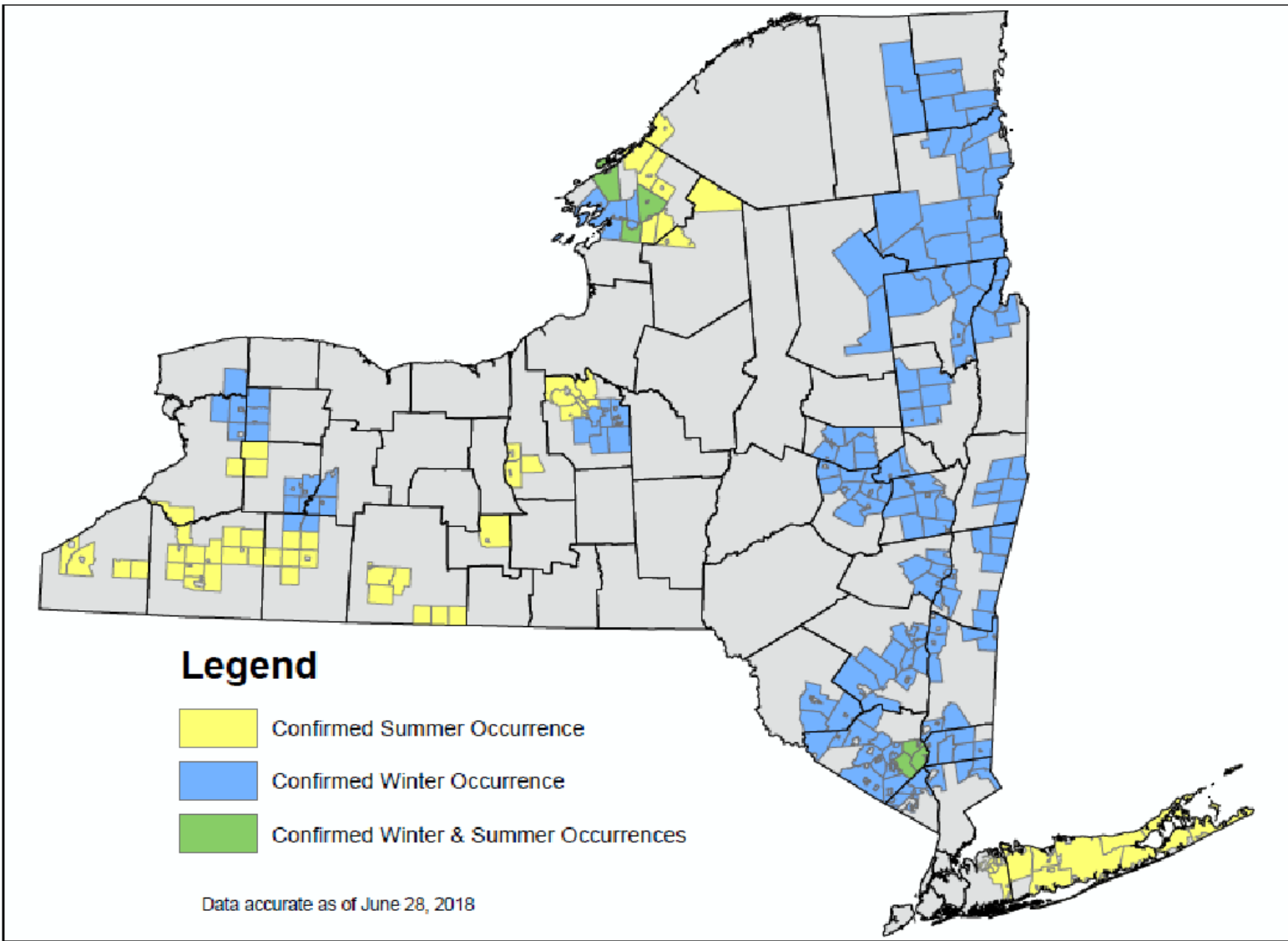


Source: eBird.org

Date: April 2022

Drawn: AMG

Approved: DHS



Northern Long-eared Bat Occurrences by Town

Niagara Falls and Buffalo, NY

Figure 15

Source: NYNHP

Date: April 2022

Drawn: AMG

Approved: DHS

Northern Long-eared Bat Occurrences by Town

*if your town is highlighted in yellow, please contact [NYNHP](#) to see whether your project site is within 0.25 miles of a hibernacula, or 150 feet of a summer occurrence.

County	Name	Occurrence	
		Summer	Winter
Albany	Altamont		Yes
	Berne		Yes
	Bethlehem		Yes
	Coeymans		Yes
	Guilderland		Yes
	Knox		Yes
	New Scotland		Yes
	Voorheesville		Yes
	Westerlo		Yes
Allegany	Allen	Yes	
	Angelica	Yes	
	Belfast	Yes	
	Caneadea	Yes	
	Friendship	Yes	
	Granger		Yes
	Hume		Yes
	New Hudson	Yes	
Cattaraugus	Ellicottville	Yes	
	Farmersville	Yes	
	Franklinville	Yes	
	Great Valley	Yes	
	Little Valley	Yes	
	Lyndon	Yes	
	Machias	Yes	
	Mansfield	Yes	
	Napoli	Yes	
	New Albion	Yes	
	Otto	Yes	
Salamanca	Yes		
Cayuga	Ledyard	Yes	
	Scipio	Yes	
	Springport	Yes	
Chautauqua	Chautauqua	Yes	
	Ellington	Yes	
	Gerry	Yes	
	Westfield	Yes	
Clinton	Ausable		Yes
	Black Brook		Yes
	Dannemora		Yes
	Peru		Yes
	Saranac		Yes

Note: not all portions of listed towns are covered by a buffer. If your town is listed, contact [NYNHP](#) or your [regional DEC office](#) to see whether your project site falls within known occupied habitat.

County	Name	Occurrence	
		Summer	Winter
Columbia	Ancram		Yes
	Austerlitz		Yes
	Canaan		Yes
	Chatham		Yes
	Copake		Yes
	Germantown		Yes
	Greenport		Yes
	Hudson		Yes
	Livingston		Yes
	New Lebanon		Yes
Dutchess	East Fishkill		Yes
	Fishkill		Yes
	Hyde Park		Yes
	Millerton		Yes
	Northeast		Yes
	Pine Plains		Yes
	Red Hook		Yes
	Rhinebeck		Yes
Erie	Akron		Yes
	Alden		Yes
	Clarence		Yes
	Collins	Yes	
	Newstead		Yes
	Wales	Yes	
Essex	Chesterfield		Yes
	Crown Point		Yes
	Elizabethtown		Yes
	Essex		Yes
	Jay		Yes
	Lewis		Yes
	Minerva		Yes
	Moriah		Yes
	Newcomb		Yes
	North Hudson		Yes
	Schroon		Yes
	Ticonderoga		Yes
	Westport		Yes
Wilmington		Yes	
Franklin	Bellmont		Yes
	Franklin		Yes
Genesee	Alabama		Yes
	Corfu		Yes
	Darien		Yes
	Pembroke		Yes

Note: not all portions of listed towns are covered by a buffer. If your town is listed, contact [NYNHP](#) or your [regional DEC office](#) to see whether your project site falls within known occupied habitat.

County	Name	Occurrence	
		Summer	Winter
Greene	Athens		Yes
	Cairo		Yes
	Catskill		Yes
	Coxsackie		Yes
Hamilton	Indian Lake		Yes
	Wells		Yes
Jefferson	Alexandria	Yes	
	Black River	Yes	
	Brownville		Yes
	Champion	Yes	
	Chaumont		Yes
	Clayton	Yes	Yes
	Dexter		Yes
	Evans Mills	Yes	
	Glen Park		Yes
	Hounsfield		Yes
	Le Ray	Yes	Yes
	Lyme		Yes
	Pamelia		Yes
	Philadelphia	Yes	
	Rutland	Yes	
	Theresa	Yes	
Watertown	Yes	Yes	
Lewis	Copenhagen	Yes	
	Denmark	Yes	
	Diana	Yes	
Livingston	Mount Morris		Yes
	Nunda		Yes
	Portage		Yes
Montgomery	Ames		Yes
	Canajoharie		Yes
	Charleston		Yes
	Glen		Yes
	Mohawk		Yes
	Nelliston		Yes
	Palatine		Yes
	Palatine Bridge		Yes
Root		Yes	
Nassau	Brookville	Yes	
	Muttontown	Yes	
	Oyster Bay	Yes	
	Oyster Bay Cove	Yes	
	Upper Brookville	Yes	
Niagara	Royalton		Yes

Note: not all portions of listed towns are covered by a buffer. If your town is listed, contact [NYNHP](#) or your [regional DEC office](#) to see whether your project site falls within known occupied habitat.

County	Name	Occurrence	
		Summer	Winter
Onondaga	Camillus	Yes	
	Clay	Yes	
	De Witt		Yes
	East Syracuse		Yes
	Fayetteville		Yes
	Geddes	Yes	
	La Fayette		Yes
	Liverpool	Yes	
	Lysander	Yes	
	Manlius		Yes
	Minoa		Yes
	Onondaga		Yes
	Pompey		Yes
	Salina	Yes	
	Syracuse		Yes
	Van Buren	Yes	
Orange	Blooming Grove		Yes
	Chester		Yes
	Cornwall	Yes	Yes
	Cornwall-on-Hudson		Yes
	Crawford		Yes
	Deerpark		Yes
	Goshen		Yes
	Greenwood Lake		Yes
	Hamptonburgh		Yes
	Harriman		Yes
	Highland Falls		Yes
	Highlands	Yes	Yes
	Kiryas Joel		Yes
	Monroe		Yes
	Mount Hope		Yes
	Otisville		Yes
	South Blooming Grove		Yes
	Tuxedo		Yes
	Tuxedo Park		Yes
	Wallkill		Yes
Warwick		Yes	
Washingtonville		Yes	
Woodbury	Yes	Yes	
Putnam	Brewster		Yes
	Carmel		Yes
	Cold Spring		Yes
	Kent		Yes
	Nelsonville		Yes
	Philipstown		Yes
	Putnam Valley		Yes
	Southeast		Yes

Note: not all portions of listed towns are covered by a buffer. If your town is listed, contact [NYNHP](#) or your [regional DEC office](#) to see whether your project site falls within known occupied habitat.

County	Name	Occurrence	
		Summer	Winter
Rensselaer	Berlin		Yes
	Grafton		Yes
	Petersburgh		Yes
	Poestenkill		Yes
	Sand Lake		Yes
	Stephentown		Yes
Rockland	Haverstraw		Yes
	Hillburn		Yes
	Pomona		Yes
	Ramapo		Yes
	Sloatsburg		Yes
	Stony Point		Yes
Saratoga	Corinth		Yes
	Edinburg		Yes
	Galway		Yes
	Greenfield		Yes
	Milton		Yes
	Providence		Yes
Schenectady	Delanson		Yes
	Duanesburg		Yes
	Princetown		Yes
Schoharie	Carlisle		Yes
	Cobleskill		Yes
	Esperance		Yes
	Esperance		Yes
	Fulton		Yes
	Middleburgh		Yes
	Schoharie		Yes
	Seward		Yes
	Sharon		Yes
	Wright		Yes
Schuyler	Hector	Yes	
St Lawrence	Hammond	Yes	
Steuben	Cameron	Yes	
	Canisteo	Yes	
	Caton	Yes	
	Jasper	Yes	
	Lindley	Yes	
	Tuscarora	Yes	
Suffolk	Brookhaven	Yes	
	Dering Harbor	Yes	
	East Hampton	Yes	
	Huntington	Yes	
	Islandia	Yes	
	Islip	Yes	
	Lloyd Harbor	Yes	
	Mastic Beach	Yes	

Note: not all portions of listed towns are covered by a buffer. If your town is listed, contact [NYNHP](#) or your [regional DEC office](#) to see whether your project site falls within known occupied habitat.

County	Name	Occurrence	
		Summer	Winter
Suffolk (cont'd)	Riverhead	Yes	
	Sag Harbor	Yes	
	Shelter Island	Yes	
	Shoreham	Yes	
	Smithtown	Yes	
	Southampton	Yes	
	Southold	Yes	
	Village of the Branch	Yes	
Sullivan	Bloomingburg		Yes
	Forestburgh		Yes
	Mamakating		Yes
	Thompson		Yes
	Wurtsboro		Yes
Ulster	Esopus		Yes
	Hurley		Yes
	Kingston		Yes
	Marbletown		Yes
	New Paltz		Yes
	Rochester		Yes
	Rosendale		Yes
	Shawangunk		Yes
	Ulster		Yes
	Wawarsing		Yes
Warren	Bolton		Yes
	Chester		Yes
	Hague		Yes
	Horicon		Yes
	Johnsburg		Yes
	Lake George		Yes
	Queensbury		Yes
Washington	Dresden		Yes
	Fort Ann		Yes
	Putnam		Yes
	Whitehall		Yes
Westchester	Cortlandt		Yes
	Lewisboro		Yes
	North Salem		Yes
	Somers		Yes
Wyoming	Bennington	Yes	
	Castile		Yes
	Gainesville		Yes
	Genesee Falls		Yes
	Pike		Yes
	Sheldon	Yes	

Note: not all portions of listed towns are covered by a buffer. If your town is listed, contact [NYNHP](#) or your [regional DEC office](#) to see whether your project site falls within known occupied habitat.

EJScreen Report (Version 2.0)



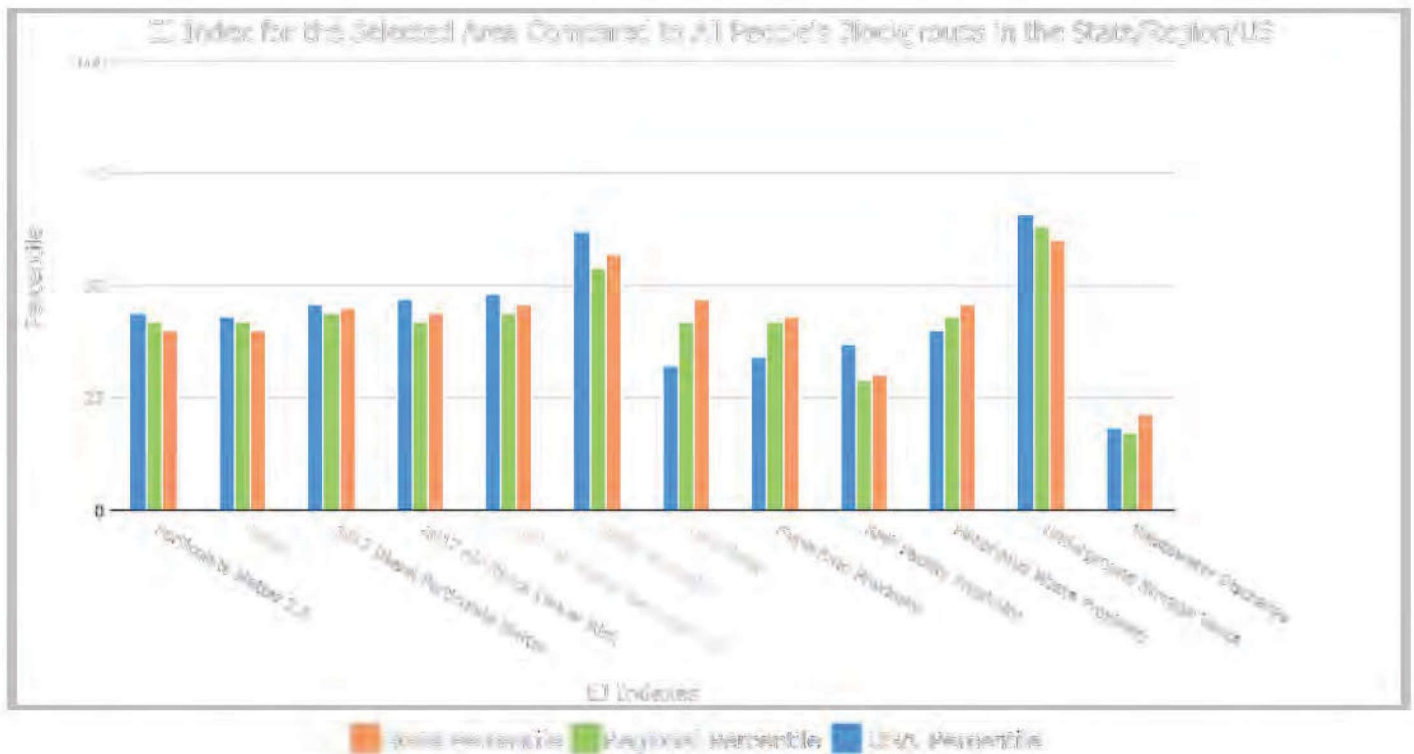
the User Specified Area, NEW YORK, EPA Region 2

Approximate Population: 870,641

Input Area (sq. miles): 593.21

Niagara Falls and Buffalo (The study area contains 2 blockgroup(s) with zero population.)

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	40	42	44
EJ Index for Ozone	40	42	43
EJ Index for 2017 Diesel Particulate Matter*	45	44	46
EJ Index for 2017 Air Toxics Cancer Risk*	44	42	47
EJ Index for 2017 Air Toxics Respiratory HI*	46	44	48
EJ Index for Traffic Proximity	57	54	62
EJ Index for Lead Paint	47	42	32
EJ Index for Superfund Proximity	43	42	34
EJ Index for RMP Facility Proximity	30	29	37
EJ Index for Hazardous Waste Proximity	46	43	40
EJ Index for Underground Storage Tanks	60	63	66
EJ Index for Wastewater Discharge	21	17	18



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

EJScreen Report (Version 2.0)



the User Specified Area, NEW YORK, EPA Region 2

Approximate Population: 870,641

Input Area (sq. miles): 593.21

Niagara Falls and Buffalo (The study area contains 2 blockgroup(s) with zero population.)



Sites reporting to EPA	
Superfund NPL	2
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	104

EJScreen Report (Version 2.0)

the User Specified Area, NEW YORK, EPA Region 2

Approximate Population: 870,641

Input Area (sq. miles): 593.21



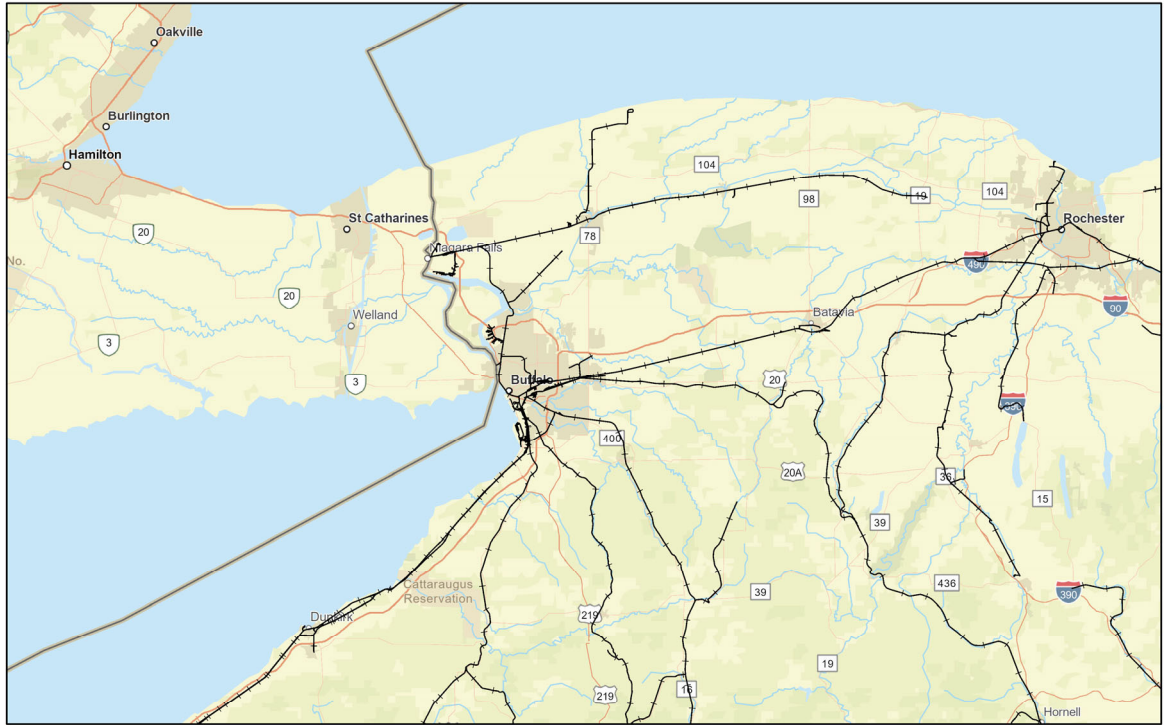
Niagara Falls and Buffalo (The study area contains 2 blockgroup(s) with zero population.)

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Pollution and Sources							
Particulate Matter 2.5 ($\mu\text{g}/\text{m}^3$)	7.99	7.9	47	8.03	42	8.74	33
Ozone (ppb)	43.6	41.6	88	41.8	90	42.6	63
2017 Diesel Particulate Matter* ($\mu\text{g}/\text{m}^3$)	0.244	0.646	32	0.558	<50th	0.295	50-60th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	20	29	42	29	<50th	29	<50th
2017 Air Toxics Respiratory HI*	0.26	0.39	38	0.37	<50th	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	450	870	53	840	55	710	66
Lead Paint (% Pre-1960 Housing)	0.62	0.55	53	0.46	62	0.28	84
Superfund Proximity (site count/km distance)	0.087	0.23	33	0.28	28	0.13	62
RMP Facility Proximity (facility count/km distance)	1.5	0.5	93	0.62	90	0.75	85
Hazardous Waste Proximity (facility count/km distance)	3.5	6.2	51	4.9	59	2.2	82
Underground Storage Tanks (count/km ²)	2.5	8.1	47	9.3	47	3.9	63
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.028	3.9	65	2.3	68	12	76
Socioeconomic Indicators							
Demographic Index	30%	37%	49	41%	46	36%	49
People of Color	27%	44%	42	49%	37	40%	45
Low Income	32%	30%	61	32%	60	31%	58
Unemployment Rate	5%	5%	52	6%	48	5%	53
Linguistically Isolated	3%	8%	48	14%	43	5%	61
Less Than High School Education	9%	13%	45	13%	46	12%	50
Under Age 5	6%	6%	53	6%	55	6%	48
Over Age 64	17%	16%	62	16%	62	16%	65

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

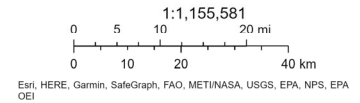
For additional information, see: www.epa.gov/environmentaljustice

EJScreen is a screening tool for pre decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.



June 2, 2022

—+— Railroads



Railroads

Niagara Falls and Buffalo, New York

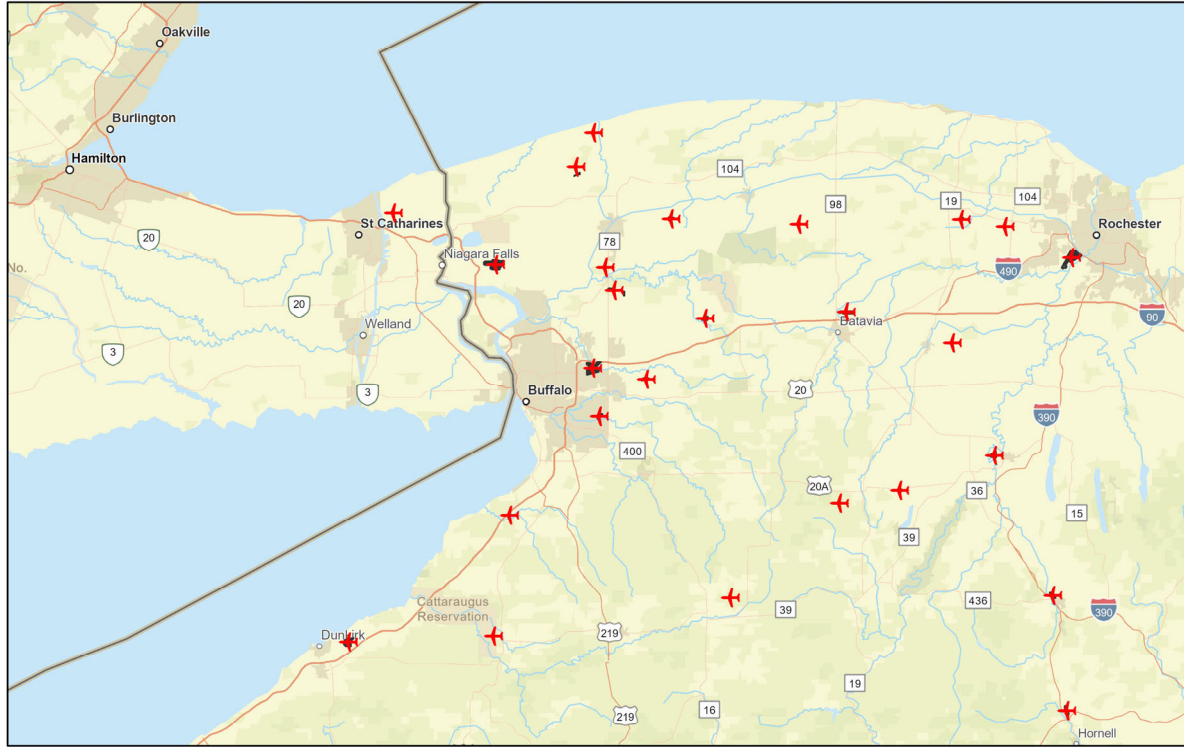
Figure 16

Source: NEPAassist



Date: June 2022

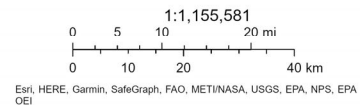
Drawn:
AMG

Approved:
DHS



June 2, 2022

-  Airport Points
-  Airport Polygons



Airports

Niagara Falls and Buffalo, New York

Figure 17

Source: NEPAssist

Date: June 2022

Drawn:
AMG

Approved:
DHS

APPENDIX B – GREATER PHILADELPHIA, PENNSYLVANIA

Figure Sequence

Land Cover

Protected Areas Database of the United States

Federal Lands

Hospitals

Schools

Places of Worship

National Heritage Areas

National Scenic Byways

National Register of Historic Places – All Properties National Register of

Historic Places – Historic Districts Water Bodies

USFWS IPAC Federally Listed Species and Migratory Birds State Listed
Species

Bald Eagle Nesting Sites

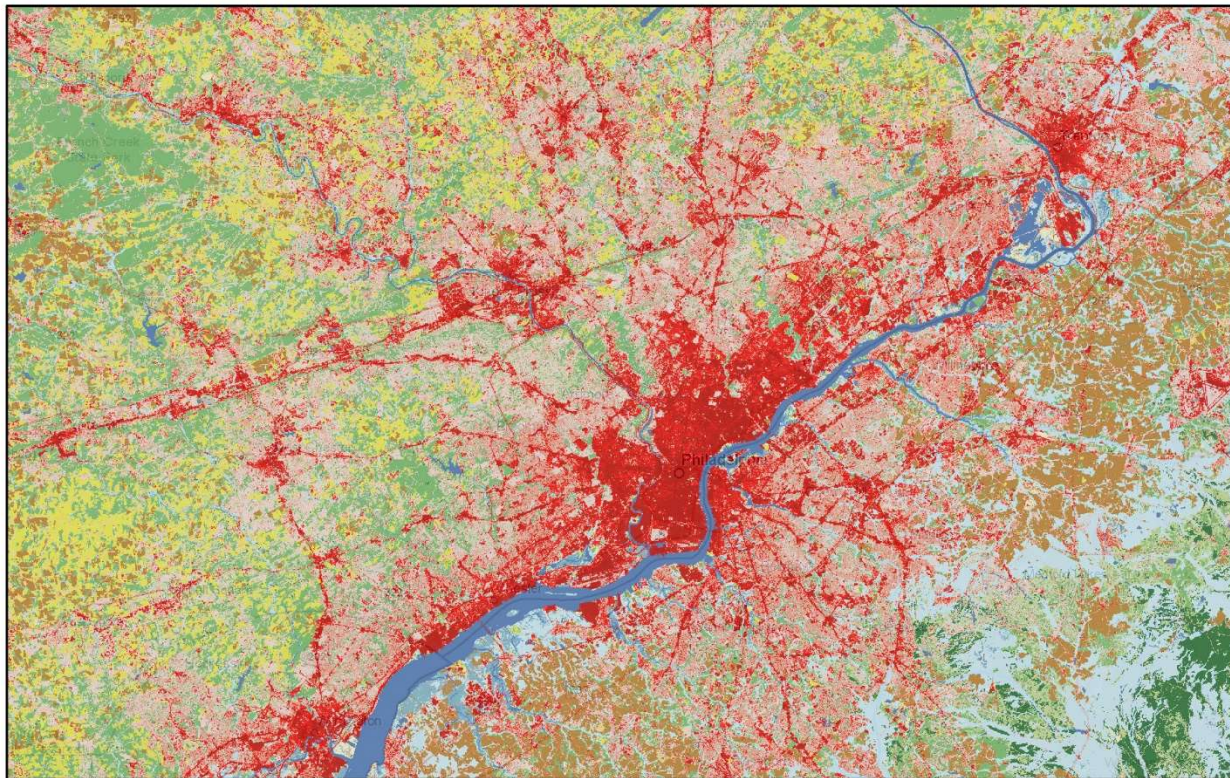
USEPA Environmental Justice Screen Report

Railroads

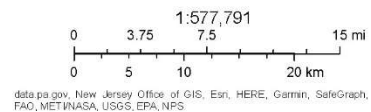
Airports

Wetlands

- Open Water (11)
- Perennial Ice/Snow (12)
- Developed, Open Space (21)
- Developed, Low Intensity (22)
- Developed, Medium Intensity (23)
- Developed, High Intensity (24)
- Barran Land (Rock/Sand/Clay) (31)
- Unconsolidated Shore (32)
- Deciduous Forest (41)
- Evergreen Forest (42)
- Mixed Forest (43)
- Dwarf Scrub(AK only) (51)
- Shrub/Scrub (52)
- Grasslands/Herbaceous (71)
- Sedge/Herbaceous(AK only) (72)
- Lichens (AK only) (73)
- Moss (AK only) (74)
- Pasture/Hay (81)
- Cultivated Crops (82)
- Woody Wetlands (90)
- Emergent Herbaceous Wetlands (91)



June 1, 2022



Land Cover

Greater Philadelphia, PA

Figure 1

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS



Protected Areas Database of the United States

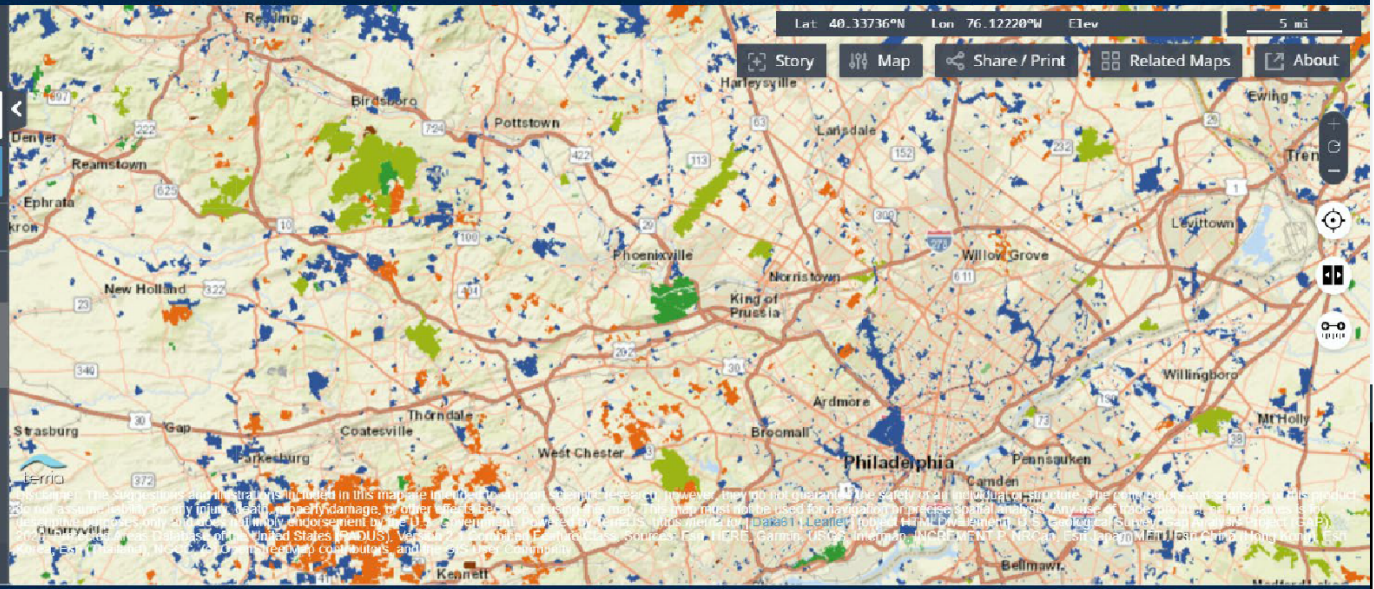
Search for locations

Add data

DATA SETS [13] Remove All

Opacity: 100 %

- Protected Areas Database of the United States (PAD-US) v2.1
- Federal
- American Indian Areas
- State
- Local Government
- Regional Agency Special District
- Non-Governmental Organization
- Private
- Joint
- Territorial
- Unknown



Protected Areas Database of the US

Greater Philadelphia, PA

Figure 2

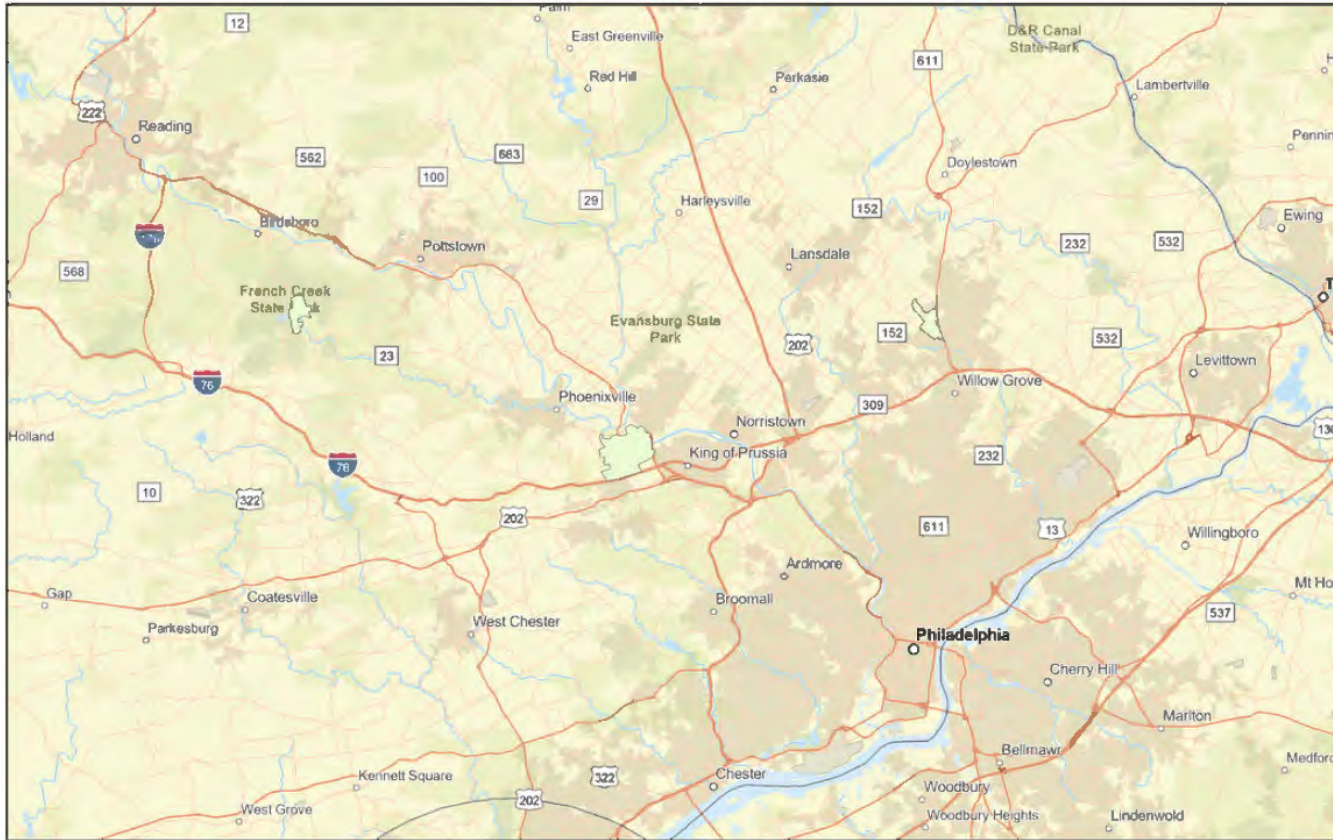


Source: USGS

Date: April 2022

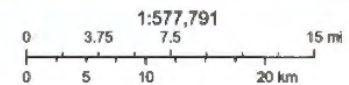
Drawn: AMG

Approved: DHS



April 29, 2022

Federal Lands



Bucks County, PA, County of Chester, data.pa.gov, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, EPA

Federal Lands

Figure 3

Greater Philadelphia, PA

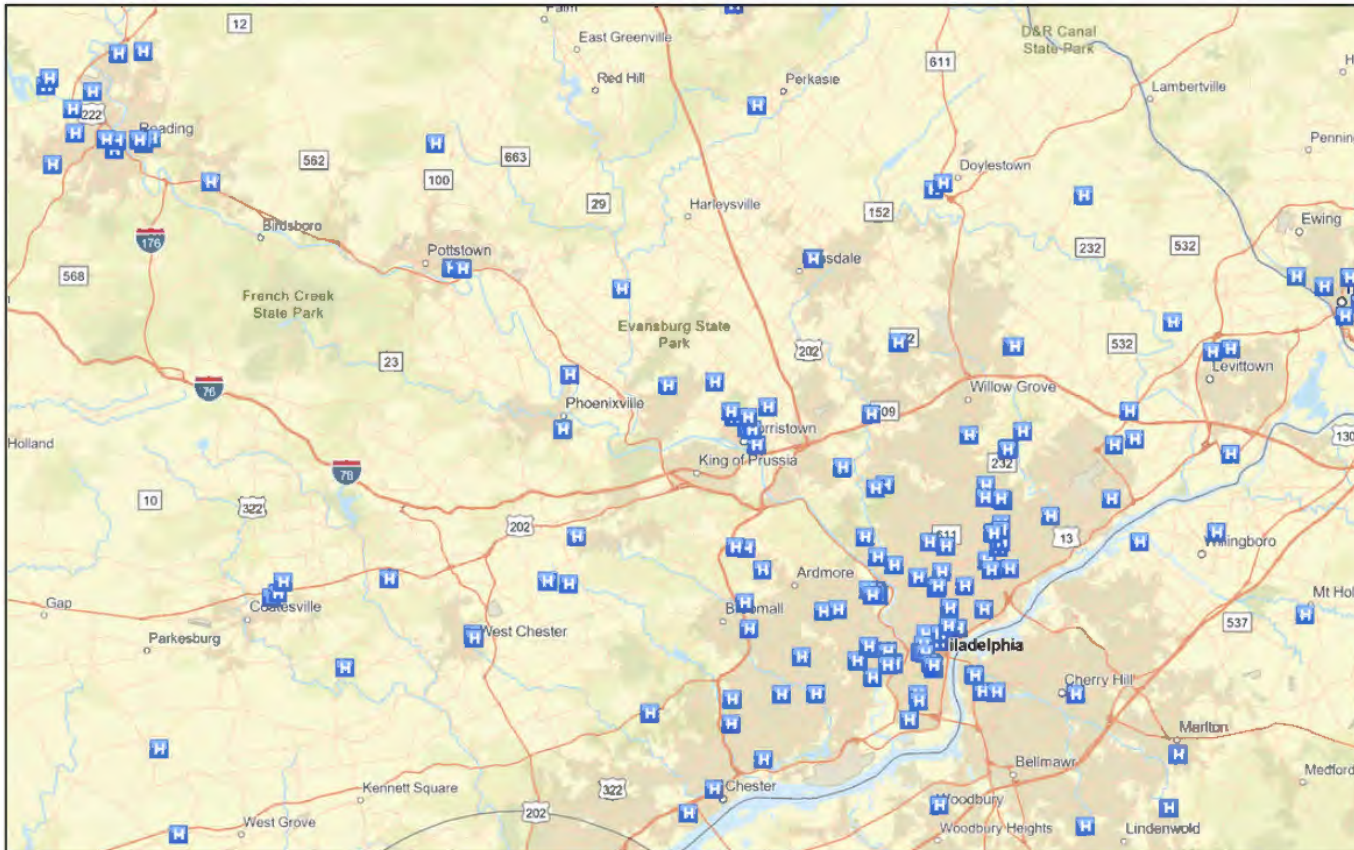


Source: NEPAassist

Date: April 2022

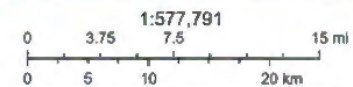
Drawn: AMG

Approved: DHS



April 29, 2022

 Hospitals



Bucks County, PA, County of Chester, data.pa.gov, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, EPA

Hospitals

Greater Philadelphia, PA

Figure 4

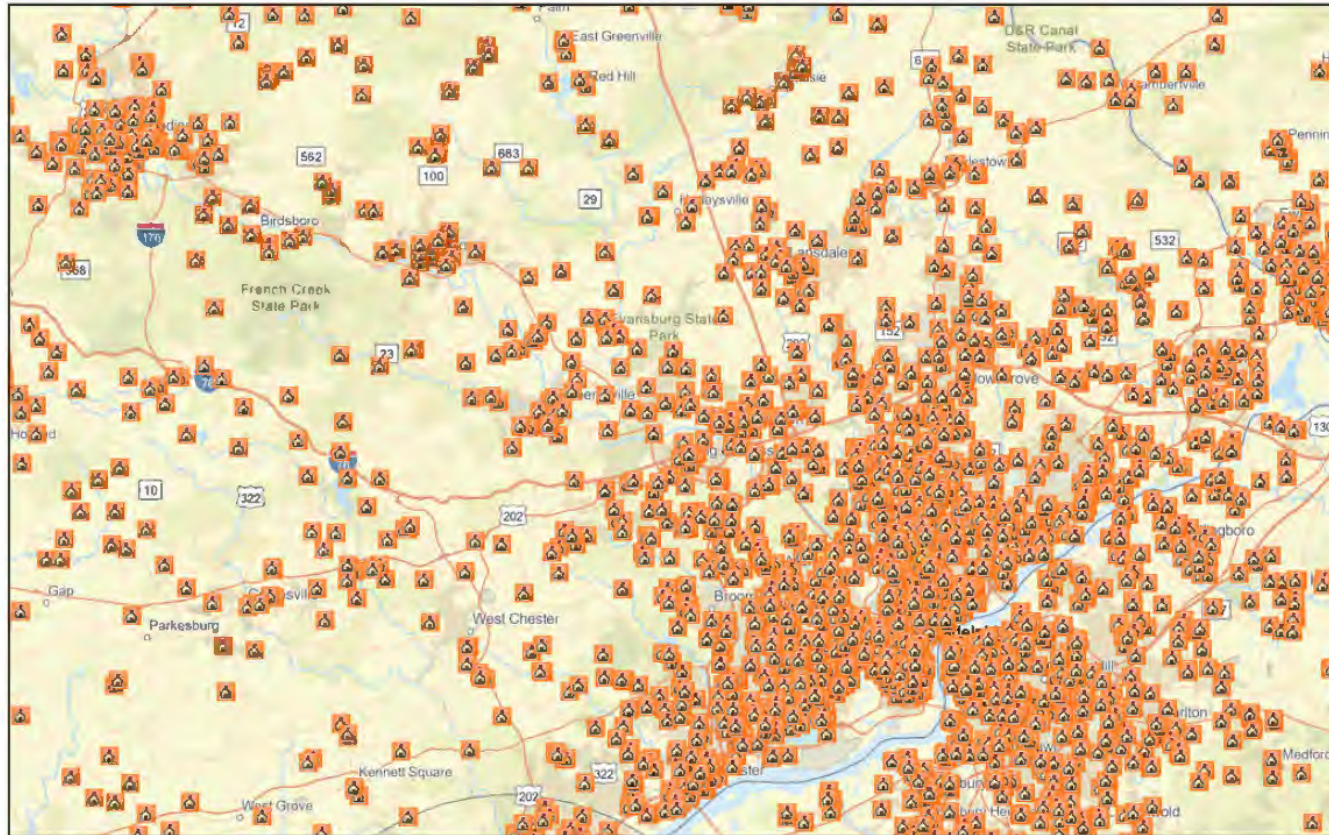


Source: NEPAassist


Date: April 2022

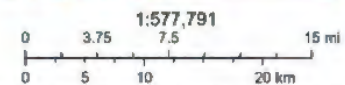
Drawn: AMG

Approved: DHS



April 29, 2022

 Schools



Bucks County, PA, County of Chester, data.pa.gov, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, EPA

Schools

Greater Philadelphia, PA

Figure 5

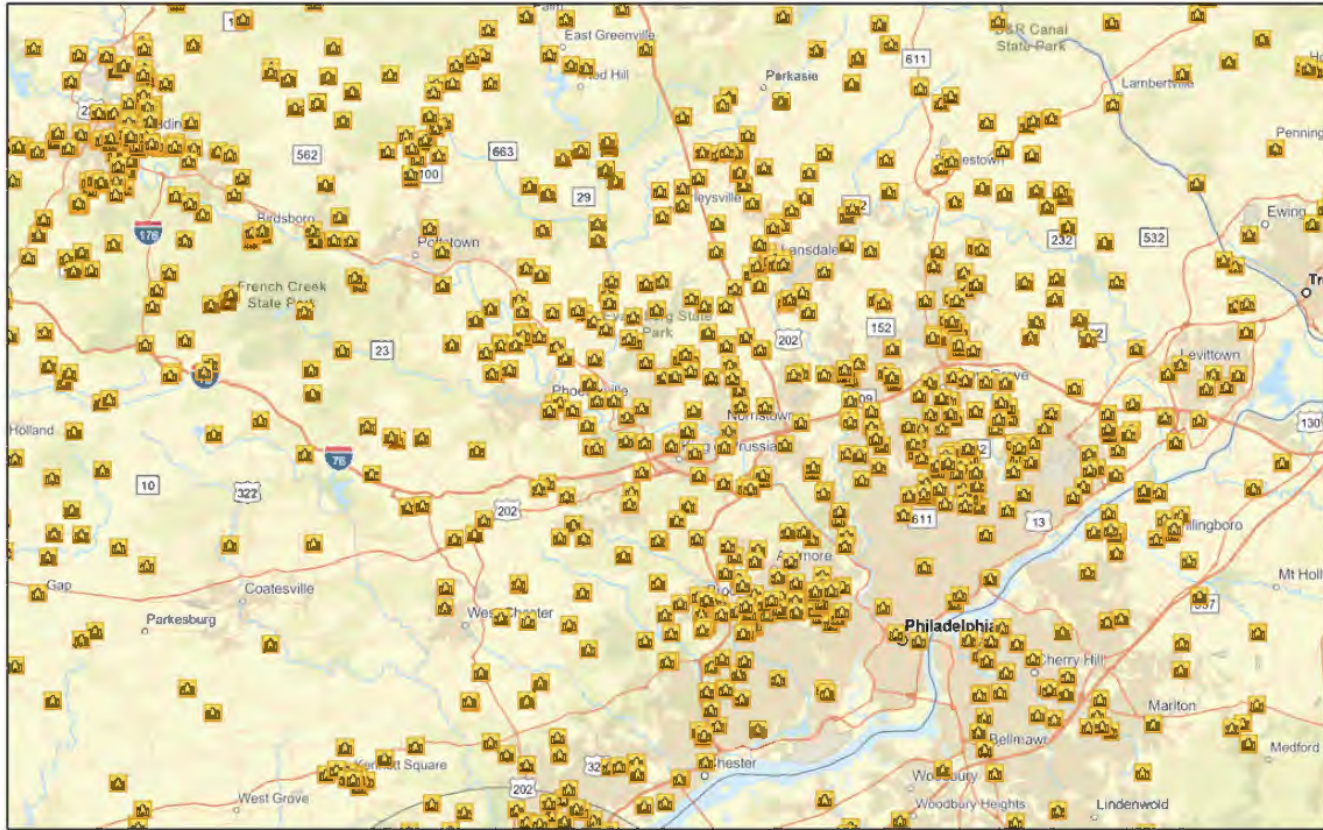


Source: NEPAassist


Date: April 2022

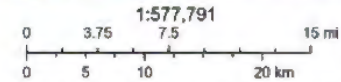
Drawn: AMG

Approved: DHS



April 29, 2022

 Places of Worship



Bucks County, PA, County of Chester, data provided by New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, EPA

Places of Worship

Figure 6

Greater Philadelphia, PA

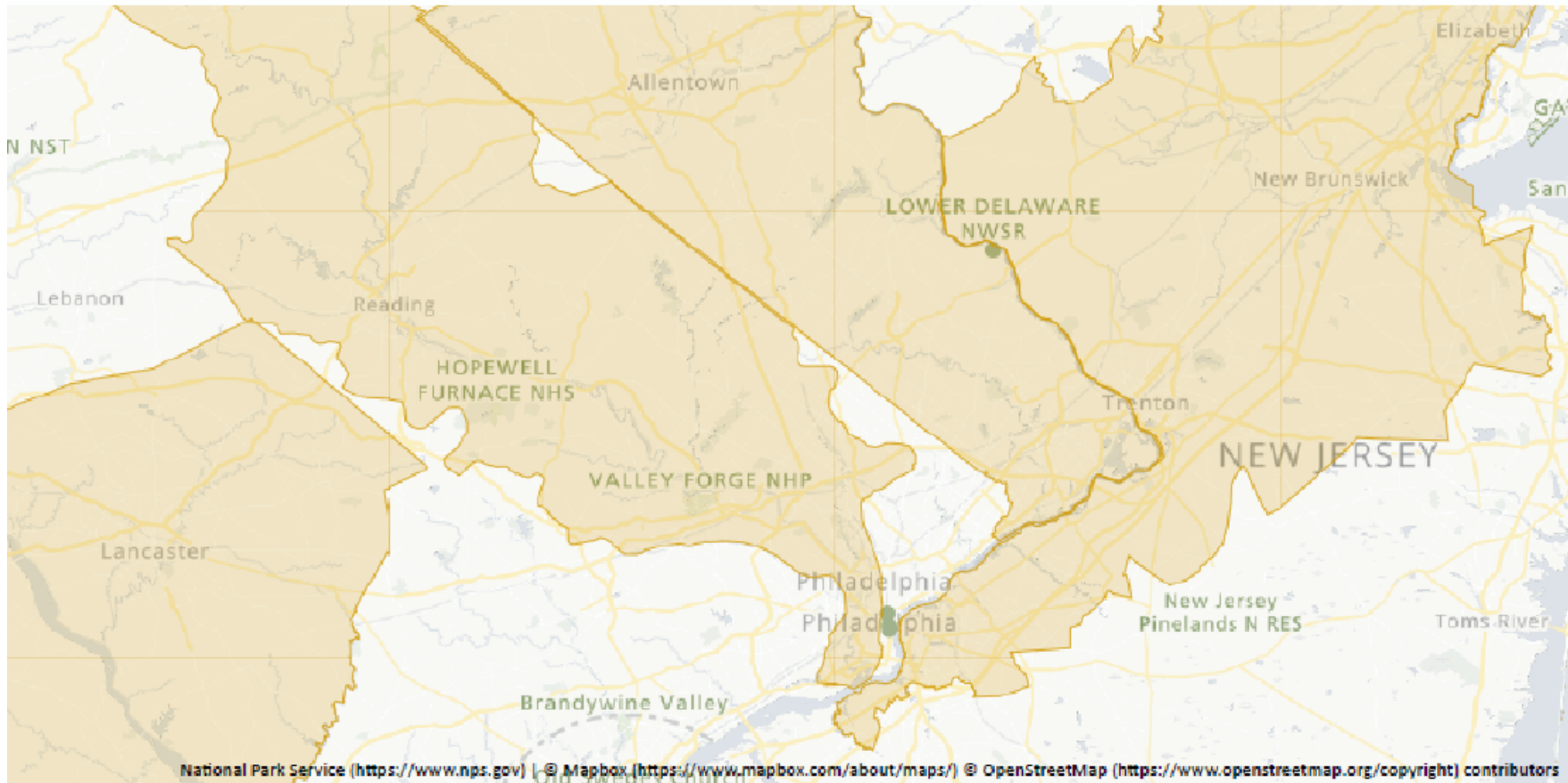


Source: NEPAassist

Date: April 2022

Drawn: AMG

Approved: DHS



National Heritage Areas

Greater Philadelphia, PA

Figure 7



Source: NPS.gov

Date: April 2022

Drawn: AMG

Approved: DHS

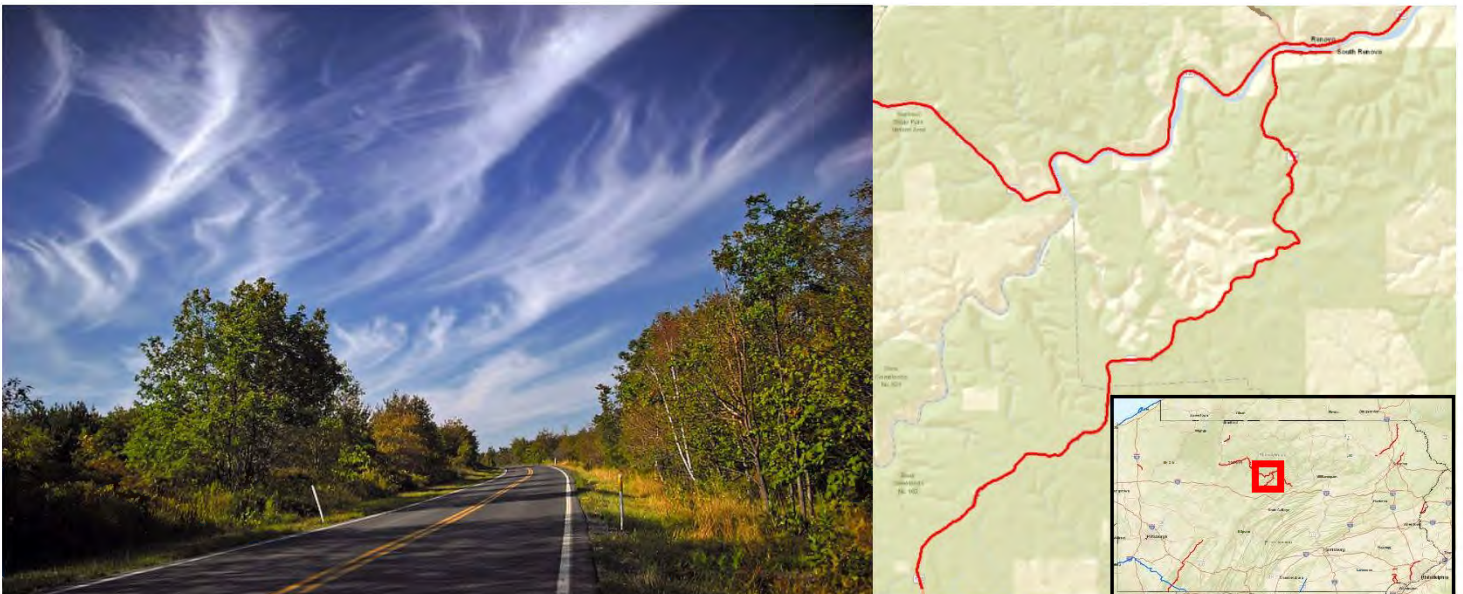
Pennsylvania

The National Scenic Byways Program

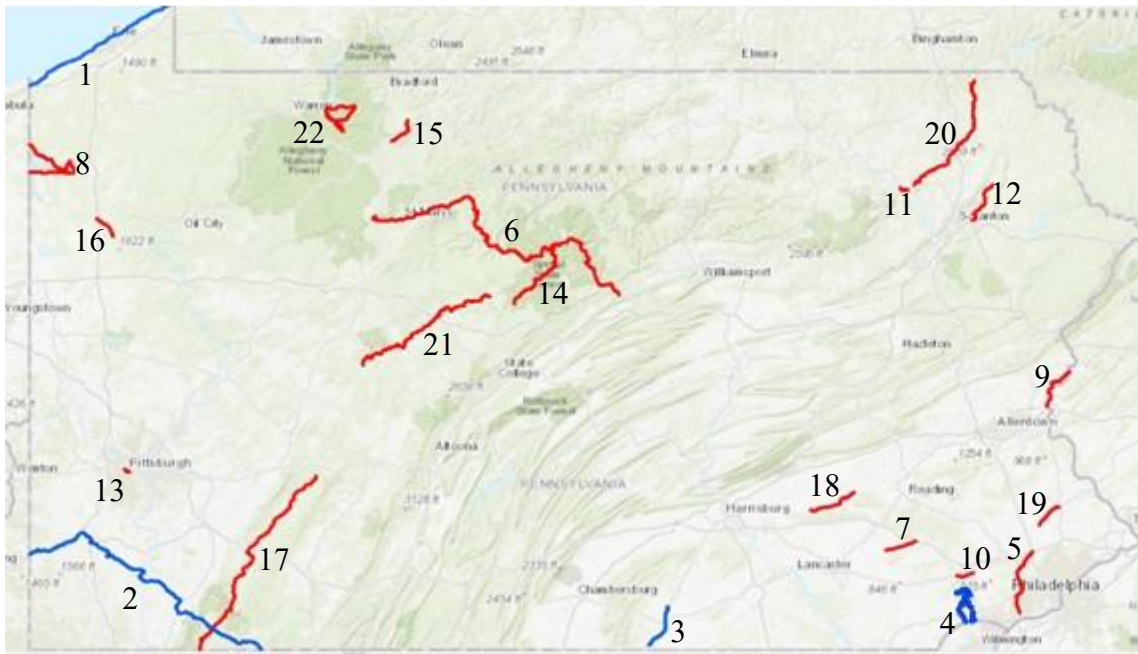
The National Scenic Byways Program, established by Congress in 1991, recognizes historic, scenic, and culturally important roads and promotes tourism and economic development in nearby communities. Pennsylvania created its own [Byways Program](#) in 2001 with the approval of the Pennsylvania Department of Transportation (PennDOT). The program was created and is managed by the Program Management Committee within the Department of Transportation. Pennsylvania boasts 22 scenic byways, four of which are FHWA National Scenic Byways. The program's goal is to support local governments and economic development. However, the program also focuses on the protection and preservation of scenic land, and education for tourists and residents in the communities along scenic byways.

Key points:

- Pennsylvania is home to four national scenic byways and eighteen state and other scenic byways.
- Byways play a key role in the state travel and tourism industry, which in 2019 featured 211 million visitors who spent a combined \$46 billion, and supported employment of 333,100 people.
- The [Historic National Road](#) National Scenic Byway, built in 1811, is the first major highway in the United States.
- The national program continues to grow, and in February 2021 the Brandywine Valley route was designated Pennsylvania's newest national scenic byway.



The High Plateau Scenic Byway offers travelers fantastic panoramic views of central Pennsylvania.



Scenic Byways in Pennsylvania

— National Scenic Byways in Pennsylvania:

[Great Lakes Seaway Trail](#) (1)

[Historic National Road](#) (2)*

[Journey Through Hallowed Ground](#) (3)

[Brandywine Valley](#) (4)

— State and Federal Land Management Agency Byways in Pennsylvania:

[Blue Route](#) (5)

[Bucktail Trail](#) (6)

[Conestoga Ridge Road](#) (7)

[Crawford Lakelands](#) (8)

[Delaware River Valley](#) (9)

[Exton Bypass](#) (10)

[Gateway to the Endless Mountains](#) (11)

[Governor Casey Byway](#) (12)

[Grand View Byway](#) (13)

[High Plateau – PA 144](#) (14)

[Kinzua Scenic Byway](#) (15)

[Lake Wilhelm Byway](#) (16)

[Laurel Highlands](#) (17)

[Lebanon Cornwall](#) (18)

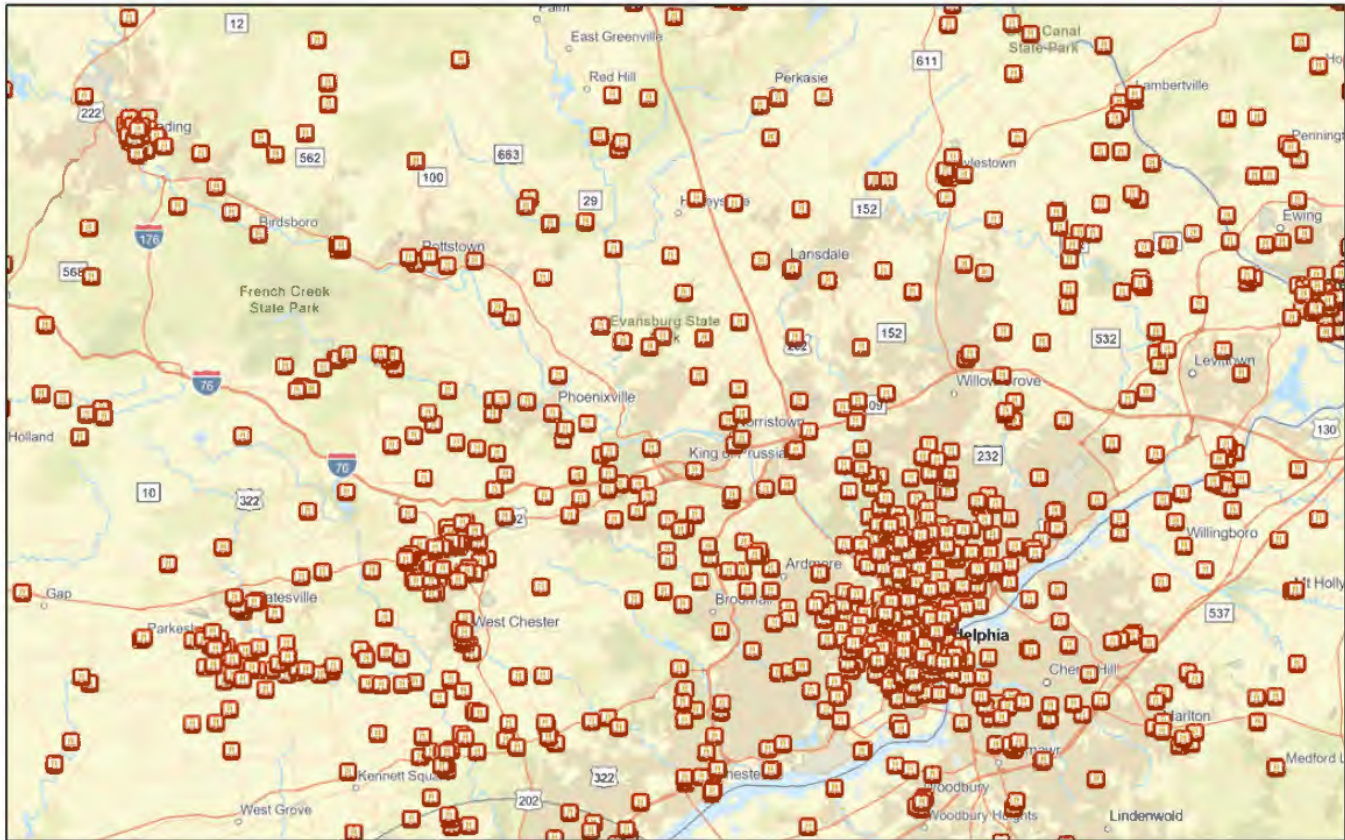
[U.S. Route 202 Parkway](#) (19)

[Viaduct Valley Way](#) (20)

[West Branch Susquehanna River](#) (21)

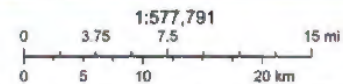
[Longhouse National Forest Byway](#) (22)

*Asterisk denotes an All-American Road.



April 29, 2022

 National Register of Historic Places



Bucks County, PA, County of Chester, data.pa.gov, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, FAO, METINASA, USGS, EPA, NPS, EPA

National Register of Historic Places

Greater Philadelphia, PA

Figure 8

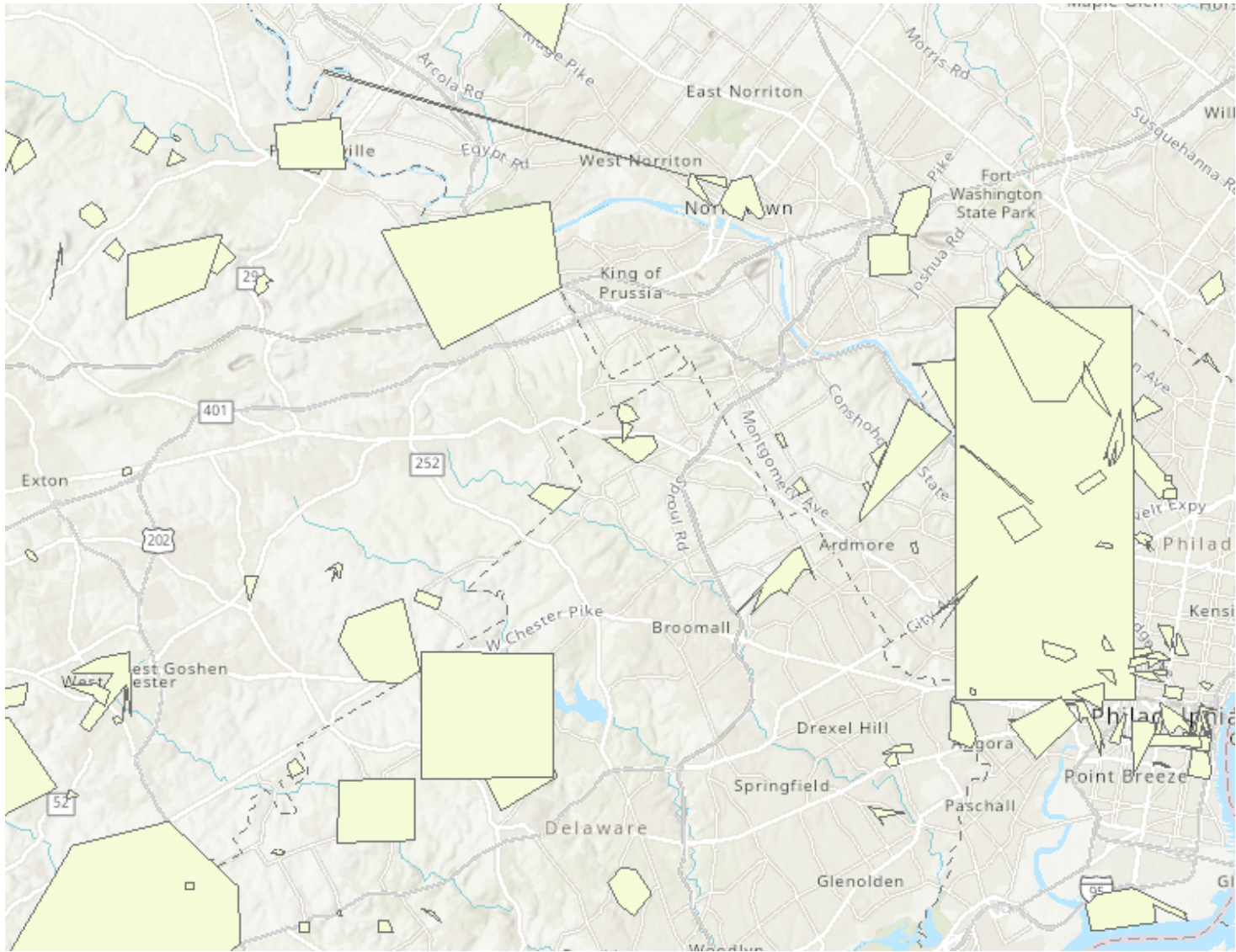


Source: NEPAassist

Date: April 2022

Drawn: AMG

Approved: DHS



National Register of Historic Places - Historic Districts

Greater Philadelphia, PA

Figure 9



Source: NEPAassist

Date: April 2022

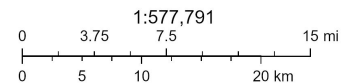
Drawn: AMG

Approved: DHS



April 29, 2022

 Water Bodies



County of Chester, data.pa.gov, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS

Water Bodies

Figure 10

Greater Philadelphia, PA



Source: NEPAassist

Date: April 2022

Drawn: AMG

Approved: DHS

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.


Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.


Location

New Jersey and Pennsylvania

Local offices

Pennsylvania Ecological Services Field Office

 (814) 234-4090

 (814) 234-0748

MAILING ADDRESS

110 Radnor Road Suite 101
State College, PA 16801-7987

PHYSICAL ADDRESS

110 Radnor Road

Suite 101}
State College, PA 16801-7987

<http://www.fws.gov/northeast/pafo/>

New Jersey Ecological Services Field Office

☎ (609) 646-9310

📠 (609) 646-0352

4 E. Jimmie Leeds Road, Suite 4
Galloway, NJ 08205

<http://www.fws.gov/northeast/njfieldoffice/Endangered/consultation.html>

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
 2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Red Knot <i>Calidris canutus rufa</i> Wherever found This species only needs to be considered if the following condition applies: <ul style="list-style-type: none"> This activity area is upstream of red knot habitat. Consultation is needed ONLY for proposed new or changed petroleum product storage or transport, and for spill response planning. No other activity types are expected to affect red knots in this area. There is proposed critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/1864	Threatened

Reptiles

NAME	STATUS
Bog Turtle <i>Glyptemys muhlenbergii</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6962	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
------	--------

Small Whorled Pogonia *Isotria medeoloides* Threatened
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/1890>

Swamp Pink *Helonias bullata* Threatened
 Wherever found
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/4333>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip:

enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Sep 1 to Aug 31

Black Skimmer *Rynchops niger*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/5234>

Breeds May 20 to Sep 15

Black-billed Cuckoo *Coccyzus erythrophthalmus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9399>

Breeds May 15 to Oct 10

Blue-winged Warbler *Vermivora pinus*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds May 1 to Jun 30

Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Cerulean Warbler <i>Dendroica cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 28 to Jul 20
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere
Gull-billed Tern <i>Gelochelidon nilotica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9501	Breeds May 1 to Jul 31
Hudsonian Godwit <i>Limosa haemastica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
King Rail <i>Rallus elegans</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8936	Breeds May 1 to Sep 5

<p>Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679</p>	Breeds elsewhere
<p>Long-eared Owl <i>asio otus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3631</p>	Breeds Mar 1 to Jul 15
<p>Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 1 to Jul 31
<p>Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Apr 1 to Jul 31
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Sep 10
<p>Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds elsewhere
<p>Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds elsewhere
<p>Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480</p>	Breeds elsewhere
<p>Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Apr 20 to Aug 5
<p>Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Bobolink
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Canada Warbler
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Cerulean Warbler
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Eastern Whip-
 poor-will
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Golden Eagle
 Non-BCC
 Vulnerable (This is
 not a Bird of
 Conservation
 Concern (BCC) in
 this area, but
 warrants attention
 because of the
 Eagle Act or for
 potential
 susceptibilities in
 offshore areas
 from certain types
 of development or
 activities.)



Gull-billed Tern
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Hudsonian Godwit
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Kentucky Warbler
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



SPECIES

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

King Rail
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Lesser Yellowlegs
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Long-eared Owl
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Prairie Warbler
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Prothonotary
 Warbler
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



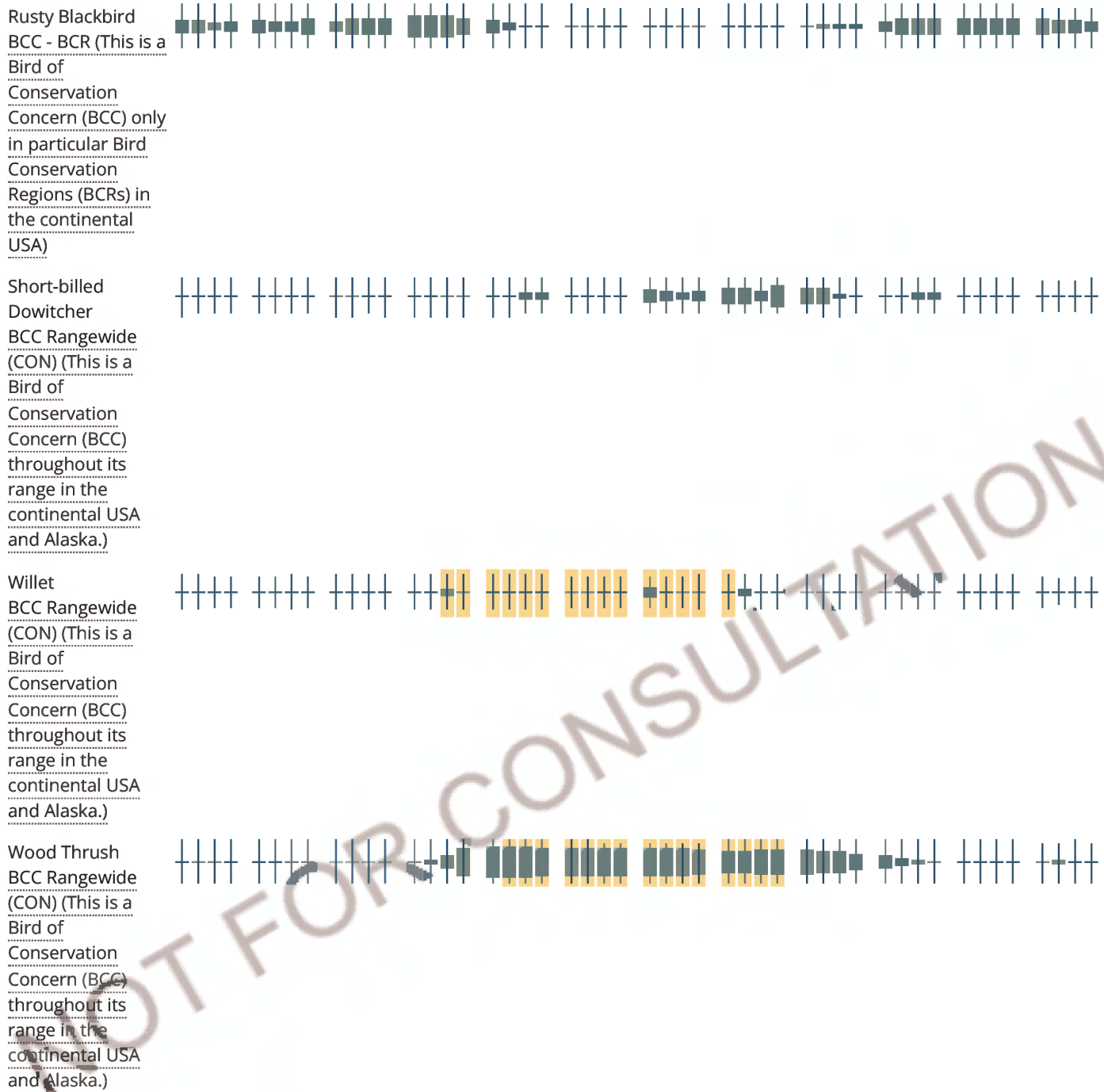
Red-headed
 Woodpecker
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Ruddy Turnstone
 BCC - BCR (This is a
 Bird of
 Conservation
 Concern (BCC) only
 in particular Bird
 Conservation
 Regions (BCRs) in
 the continental
 USA)



NOT FOR CONSULTATION



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review.

Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

This location overlaps the following National Wildlife Refuge lands:

LAND	ACRES
JOHN HEINZ NATIONAL WILDLIFE REFUGE AT TINICUM	1,010.25 acres

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in

activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

Greater Philadelphia, PA State-Listed Species for Combined Five Counties

PA Counties: Bucks, Chester, Delaware, Montgomery, Philadelphia

Source: Pennsylvania Natural Heritage Program, 2022

<https://www.naturalheritage.state.pa.us/species.aspx>

Scientific Name	Common Name	State Status (see note below)
<i>Acipenser brevirostrum</i> *	Shortnose Sturgeon	PE
<i>Acipenser oxyrinchus</i> *	Atlantic Sturgeon	PE
<i>Acris crepitans</i> *	Eastern Cricket Frog	PE
<i>Agalinis auriculata</i>	Eared False-foxtail	PE
<i>Alasmidonta heterodon</i> *	Dwarf Wedgemussel	PE
<i>Alosa mediocris</i> *	Hickory Shad	PE
<i>Aristida purpurascens</i>	Arrow-feathered Three Awned	PT
<i>Asclepias variegata</i>	White Milkweed	PE
<i>Bartramia longicauda</i> *	Upland Sandpiper	PE
<i>Bidens bidentoides</i>	Swamp Beggar-ticks	PT
<i>Carex alata</i>	Broad-winged Sedge	PT
<i>Carex bicknellii</i>	Bicknell's Sedge	PE
<i>Carex bullata</i>	Bull Sedge	PE
<i>Carex crinita</i> var. <i>brevicrinis</i>	Short Hair Sedge	PE
<i>Carex prairea</i>	Prairie Sedge	PT
<i>Carex sterilis</i>	Sterile Sedge	PT
<i>Carex tetanica</i>	A Sedge	PT
<i>Carex typhina</i>	Cattail Sedge	PE
<i>Chasmanthium laxum</i>	Slender Sea-oats	PE
<i>Chrysopsis mariana</i>	Maryland Golden-aster	PT
<i>Cistothorus platensis</i> *	Sedge Wren	PE
<i>Cyperus diandrus</i>	Umbrella Flatsedge	PE
<i>Cyperus refractus</i>	Reflexed Flatsedge	PE
<i>Dichanthelium scoparium</i>	Velvety Panic-grass	PE
<i>Dichanthelium spretum</i>	Eaton's Witchgrass	PX
<i>Echinochloa walteri</i>	Walter's Barnyard-grass	PE
<i>Eleocharis intermedia</i>	Matted Spike-rush	PT
<i>Eleocharis obtusa</i> var. <i>peasei</i>	Wrights Spike Rush	PE
<i>Eleocharis parvula</i>	Little-spike Spike-rush	PE
<i>Eleocharis quadrangulata</i>	Four-angled Spike-rush	PE
<i>Ellisia nyctelea</i>	Ellisia	PT
<i>Eriophorum gracile</i>	Slender Cotton-grass	PE
<i>Eriophorum viridicarinatum</i>	Thin-leaved Cotton-grass	PT
<i>Euthamia caroliniana</i>	Grass-leaved Goldenrod	PT
<i>Glyptemys muhlenbergii</i> *	Bog Turtle	PE
<i>Helianthemum bicknellii</i>	Bicknell's Hoary Rockrose	PE
<i>Heteranthera multiflora</i>	Multiflowered Mud-plantain	PE
<i>Hypericum densiflorum</i>	Bushy St. John's-wort	PT
<i>Hypericum gymnanthum</i>	Clasping-leaved St. John's-wort	PX
<i>Ilex opaca</i>	American Holly	PT
<i>Iris prismatica</i>	Slender Blue Iris	PE
<i>Iris verna</i>	Dwarf Iris	PE
<i>Isotria medeoloides</i>	Small-whorled Pogonia	PE
<i>Itea virginica</i>	Virginia Willow	PX
<i>Juncus dichotomus</i>	Forked Rush	PE
<i>Juncus scirpoides</i>	Scirpus-like Rush	PE
<i>Kinosternon subrubrum subrubrum</i> *	Southeastern Mud Turtle	PE
<i>Linum intercursum</i>	Sandplain Wild Flax	PE

Scientific Name	Common Name	State Status (see note below)
<i>Listera australis</i>	Southern Twayblade	PE
<i>Listera cordata</i>	Heart-leaved Twayblade	PE
<i>Lithobates sphenoccephalus utricularius*</i>	Coastal Plains Leopard Frog	PE
<i>Lycopodiella alopecuroides</i>	Foxtail Clubmoss	PE
<i>Lycopodiella appressa</i>	Southern Bog Clubmoss	PT
<i>Lycopus rubellus</i>	Bugleweed	PE
<i>Lyonia mariana</i>	Stagger-bush	PE
<i>Magnolia virginiana</i>	Sweet Bay Magnolia	PT
<i>Myotis leibii*</i>	Eastern Small-footed Bat	PT
<i>Myotis septentrionalis*</i>	Northern Long-eared Bat	PE
<i>Myriophyllum farwellii</i>	Farwell's Water-milfoil	PE
<i>Notropis chalybaeus*</i>	Ironcolor Shiner	PE
<i>Nyctanassa violacea*</i>	Yellow-crowned Night-heron	PE
<i>Nymphoides cordata</i>	Floating-heart	PT
<i>Parnassia glauca</i>	Carolina Grass-of-parnassus	PE
<i>Platanthera peramoena</i>	Purple-fringeless Orchid	PT
<i>Poa autumnalis</i>	Autumn Bluegrass	PE
<i>Polygala cruciata</i>	Cross-leaved Milkwort	PE
<i>Polystichum braunii</i>	Braun's Holly Fern	PE
<i>Potamogeton alpinus</i>	Northern Pondweed	PX
<i>Potamogeton pulcher</i>	Spotted Pondweed	PE
<i>Prunus maritima</i>	Beach Plum	PE
<i>Pseudacris kalmi*</i>	New Jersey Chorus Frog	PE
<i>Pseudemys rubriventris*</i>	Northern Red-bellied Cooter	PT
<i>Ptelea trifoliata</i>	Common Hop-tree	PT
<i>Pycnanthemum torrei</i>	Torrey's Mountain-mint	PE
<i>Quercus falcata</i>	Southern Red Oak	PE
<i>Quercus phellos</i>	Willow Oak	PE
<i>Ratibida pinnata</i>	Gray-headed Prairie Coneflower	PE
<i>Rhexia mariana</i>	Maryland Meadow-beauty	PE
<i>Rhynchospora capillacea</i>	Capillary Beaked-rush	PE
<i>Rubus cuneifolius</i>	Sand Blackberry	PE
<i>Sagittaria calycina</i>	Long-lobed Arrow-head	PE
<i>Scaphiopus holbrookii*</i>	Eastern Spadefoot	PT
<i>Schoenoplectus smithii</i>	Smith's Bulrush	PE
<i>Scleria pauciflora</i>	Few Flowered Nutrush	PT
<i>Sedum rosea</i>	Roseroot Stonecrop	PE
<i>Sericocarpus linifolius</i>	Narrow-leaved White-topped Aster	PE
<i>Sisyrinchium atlanticum</i>	Eastern Blue-eyed Grass	PE
<i>Symphyotrichum novi-belgii</i>	New York Aster	PT
<i>Triphora trianthophora</i>	Nodding Pogonia	PE
<i>Triplasis purpurea</i>	Purple Sandgrass	PE
<i>Trollius laxus</i>	Spreading Globeflower	PE
<i>Utricularia intermedia</i>	Flat-leaved Bladderwort	PT
<i>Viburnum nudum</i>	Possum-haw	PE
<i>Viola brittoniana</i>	Coast Violet	PE
<i>Arabis missouriensis</i>	Missouri Rock-cress	PE
<i>Arethusa bulbosa</i>	Dragon's Mouth	PE
<i>Arnica acaulis</i>	Leopard's-bane	PE
<i>Asio flammeus*</i>	Short-eared Owl	PE
<i>Asio otus*</i>	Long-eared Owl	PT

Scientific Name	Common Name	State Status (see note below)
<i>Asplenium bradleyi</i>	Bradley's Spleenwort	PT
<i>Botaurus lentiginosus</i> *	American Bittern	PE
<i>Bouteloua curtipendula</i>	Tall Gramma	PT
<i>Carex aquatilis</i>	Water Sedge	PT
<i>Carex polymorpha</i>	Variable Sedge	PE
<i>Cerastium velutinum var. villosissimum</i>	Goat Hill Chickweed	PE
<i>Cirsium horridulum</i>	Horrible Thistle	PE
<i>Clematis viorna</i>	Vase-vine Leather-flower	PE
<i>Cryptotis parva</i> *	North American Least Shrew	PE
<i>Eriophorum tenellum</i>	Rough Cotton-grass	PE
<i>Euphorbia purpurea</i>	Glade Spurge	PE
<i>Festuca paradoxa</i>	Cluster Fescue	PE
<i>Fimbristylis annua</i>	Annual Fimbry	PT
<i>Hypericum majus</i>	Larger Canadian St. John's-wort	PT
<i>Ixobrychus exilis</i> *	Least Bittern	PE
<i>Linum sulcatum</i>	Grooved Yellow Flax	PE
<i>Lobelia puberula</i>	Downy Lobelia	PE
<i>Magnolia tripetala</i>	Umbrella Magnolia	PT
<i>Nycticorax nycticorax</i> *	Black-crowned Night-heron	PE
<i>Ophedrys aestivus aestivus</i> *	Northern Rough Greensnake	PE
<i>Percina bimaculata</i> *	Chesapeake Logperch	PT
<i>PheMERANTHUS teretifolius</i>	Round-leaved Fame-flower	PT
<i>Phyllanthus caroliniensis</i>	Carolina Leaf-flower	PE
<i>Poa paludigena</i>	Bog Bluegrass	PT
<i>Polygala curtissii</i>	Curtis's Milkwort	PE
<i>Polygala incarnata</i>	Pink Milkwort	PE
<i>Rallus elegans</i> *	King Rail	PE
<i>Ranunculus fascicularis</i>	Tufted Buttercup	PE
<i>Ranunculus hederaceus</i>	Long-stalked Crowfoot	PX
<i>Rhamnus lanceolata</i>	Lance-leaved Buckthorn	PE
<i>Scleria muehlenbergii</i>	Reticulated Nutrush	PE
<i>Scutellaria serrata</i>	Showy Skullcap	PX
<i>Spiranthes vernalis</i>	Spring Ladies'-tresses	PE
<i>Spiza americana</i> *	Dickcissel	PE
<i>Sporobolus heterolepis</i>	Prairie Dropseed	PE
<i>Symphotrichum depauperatum</i>	Serpentine Aster	PT
<i>Vernonia glauca</i>	Tawny Ironweed	PE
<i>Agalinis paupercula</i>	Small-flowered False-foxglove	PE
<i>Alisma triviale</i>	Northern Water-plantain	PE
<i>Ardea alba</i> *	Great Egret	PE
<i>Bombus affinis</i> *	Rusty Patched Bumble Bee	Not categorized
<i>Circus cyaneus</i> *	Northern Harrier	PT
<i>Cladium mariscoides</i>	Twig Rush	PE
<i>Gasterosteus aculeatus</i> *	Threespine Stickleback	PE
<i>Glyceria obtusa</i>	Blunt Manna-grass	PE
<i>Juncus militaris</i>	Bayonet Rush	PE
<i>Passiflora lutea</i>	Passion-flower	PE
<i>Populus balsamifera</i>	Balsam Poplar	PE
<i>Sparganium androcladum</i>	Branching Bur-reed	PE
<i>Trichostema setaceum</i>	Blue-curls	PE
<i>Clitoria mariana</i>	Butterfly-pea	Not categorized

Scientific Name	Common Name	State Status (see note below)
<i>Eleocharis tuberculosa</i>	Long-tubercled Spike-rush	Not categorized
<i>Lobelia kalmii</i>	Brook Lobelia	Not categorized
<i>Matelea obliqua</i>	Oblique Milkvine	Not categorized
<i>Potentilla paradoxa</i>	Bushy Cinquefoil	Not categorized
<i>Primula fassettii</i>	Fassett Jeweled Shooting-Star	Not categorized
<i>Spiranthes romanzoffiana</i>	Hooded Ladies'-tresses	Not categorized
<i>Euphorbia polygonifolia</i>	Small Sea-side Spurge	PT
<i>Muhlenbergia uniflora</i>	Fall Dropseed Muhly	PE
<i>Potamogeton vaseyi</i>	Vasey's Pondweed	PE

Notes: PT - Pennsylvania Threatened; PE - Pennsylvania Endangered; PX - Pennsylvania Extirpated

* Denotes a species of greatest conservatin need (SGCN)



Bald Eagle Nesting Sites

Greater Philadelphia, PA

Figure 11



Source: USFWS.gov

Date: April 2022

Drawn: AMG

Approved: DHS

EJScreen Report (Version 2.0)



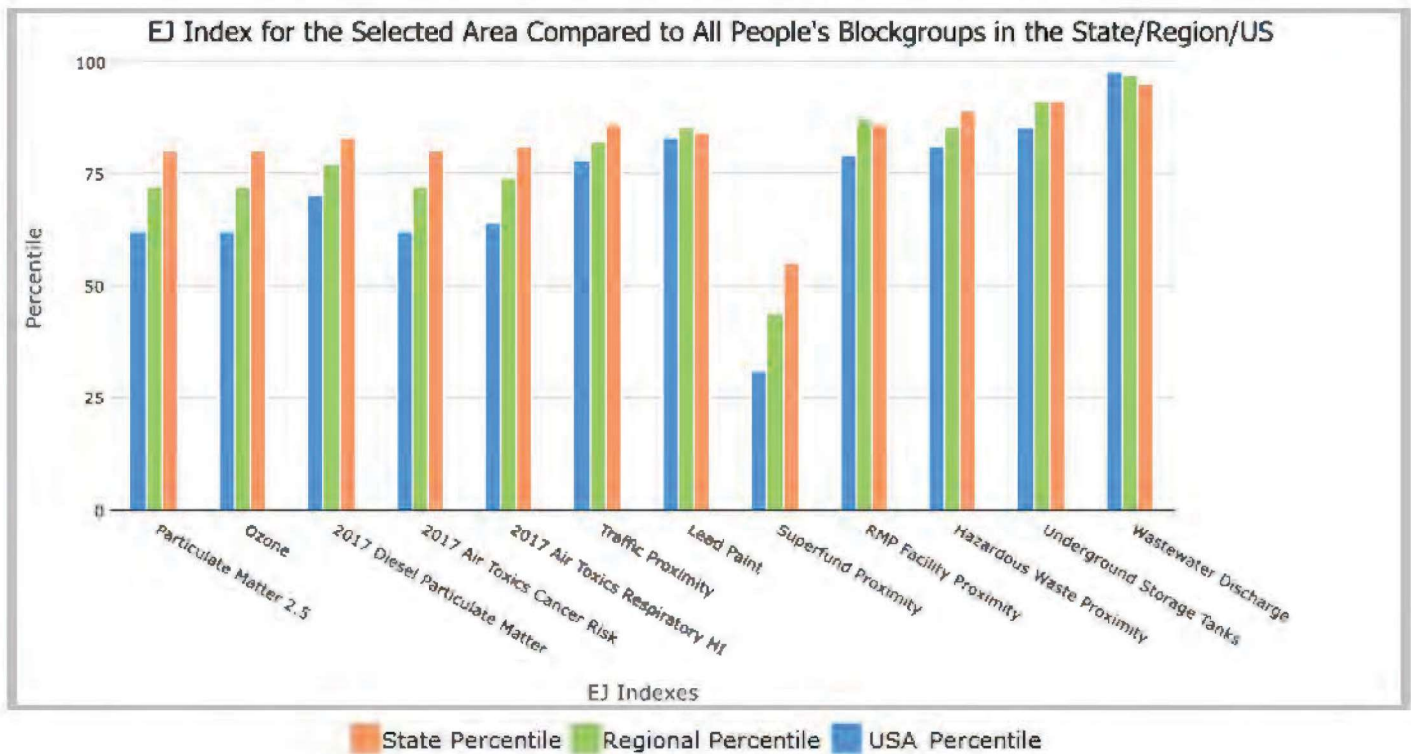
15 miles Ring Centered at 40.069139,-75.325699, PENNSYLVANIA, EPA Region 3

Approximate Population: 2,739,968

Input Area (sq. miles): 706.66

Conshohoken, PA (The study area contains 8 blockgroup(s) with zero population.)

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	80	72	62
EJ Index for Ozone	80	72	62
EJ Index for 2017 Diesel Particulate Matter*	83	77	70
EJ Index for 2017 Air Toxics Cancer Risk*	80	72	62
EJ Index for 2017 Air Toxics Respiratory HI*	81	74	64
EJ Index for Traffic Proximity	86	82	78
EJ Index for Lead Paint	84	85	83
EJ Index for Superfund Proximity	55	44	31
EJ Index for RMP Facility Proximity	86	87	79
EJ Index for Hazardous Waste Proximity	89	85	81
EJ Index for Underground Storage Tanks	91	91	85
EJ Index for Wastewater Discharge	95	97	98



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

EJScreen Report (Version 2.0)



15 miles Ring Centered at 40.069139,-75.325699, PENNSYLVANIA, EPA Region 3

Approximate Population: 2,739,968

Input Area (sq. miles): 706.66

Conshohoken, PA (The study area contains 8 blockgroup(s) with zero population.)



Sites reporting to EPA	
Superfund NPL	24
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	104

EJScreen Report (Version 2.0)



15 miles Ring Centered at 40.069139,-75.325699, PENNSYLVANIA, EPA Region 3

Approximate Population: 2,739,968

Input Area (sq. miles): 706.66

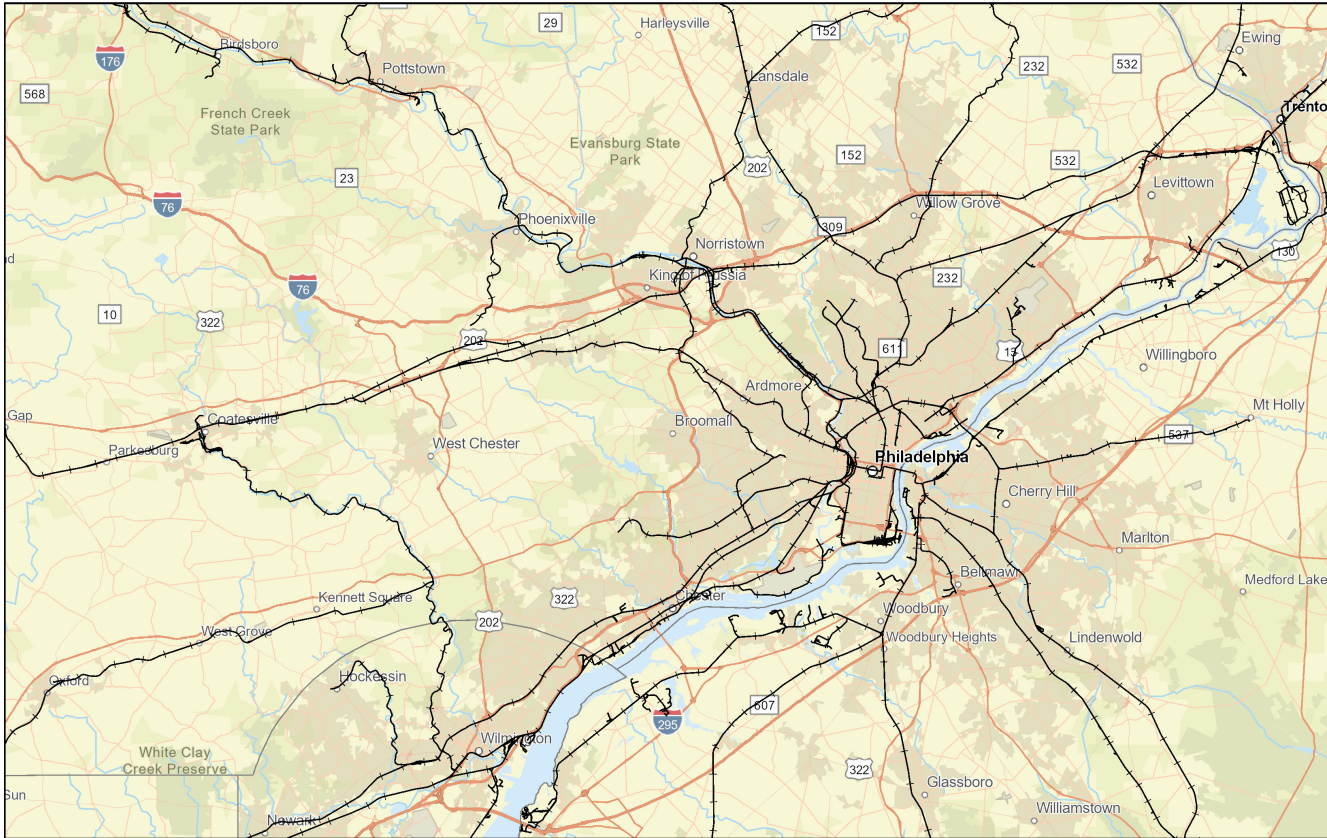
Conshohocken, PA (The study area contains 8 blockgroup(s) with zero population.)

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Pollution and Sources							
Particulate Matter 2.5 ($\mu\text{g}/\text{m}^3$)	9.23	8.72	76	8.2	90	8.74	67
Ozone (ppb)	43.2	42.1	69	41.9	69	42.6	59
2017 Diesel Particulate Matter* ($\mu\text{g}/\text{m}^3$)	0.41	0.269	86	0.267	80-90th	0.295	70-80th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	30	31	84	30	80-90th	29	80-90th
2017 Air Toxics Respiratory HI*	0.38	0.32	91	0.34	80-90th	0.36	70-80th
Traffic Proximity (daily traffic count/distance to road)	1200	580	88	680	84	710	85
Lead Paint (% Pre-1960 Housing)	0.61	0.47	65	0.35	78	0.28	84
Superfund Proximity (site count/km distance)	0.36	0.19	88	0.15	91	0.13	93
RMP Facility Proximity (facility count/km distance)	1.1	0.81	75	0.63	82	0.75	78
Hazardous Waste Proximity (facility count/km distance)	2.9	1.4	86	1.9	81	2.2	78
Underground Storage Tanks (count/km ²)	7.8	3.4	86	2.7	91	3.9	85
Wastewater Discharge (toxicity-weighted concentration/m distance)	170	66	93	33	96	12	99
Socioeconomic Indicators							
Demographic Index	41%	26%	81	30%	74	36%	65
People of Color	50%	24%	83	33%	73	40%	65
Low Income	33%	28%	65	27%	67	31%	58
Unemployment Rate	7%	5%	73	5%	74	5%	71
Linguistically Isolated	5%	2%	84	3%	82	5%	70
Less Than High School Education	11%	9%	67	10%	64	12%	58
Under Age 5	6%	6%	64	6%	60	6%	56
Over Age 64	15%	18%	37	16%	46	16%	53

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

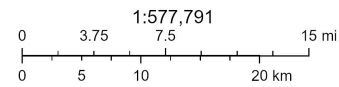
For additional information, see: www.epa.gov/environmentaljustice

EJScreen is a screening tool for pre decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.



April 29, 2022

—+— Railroads



1:577,791
data.pa.gov, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, EPA OEI

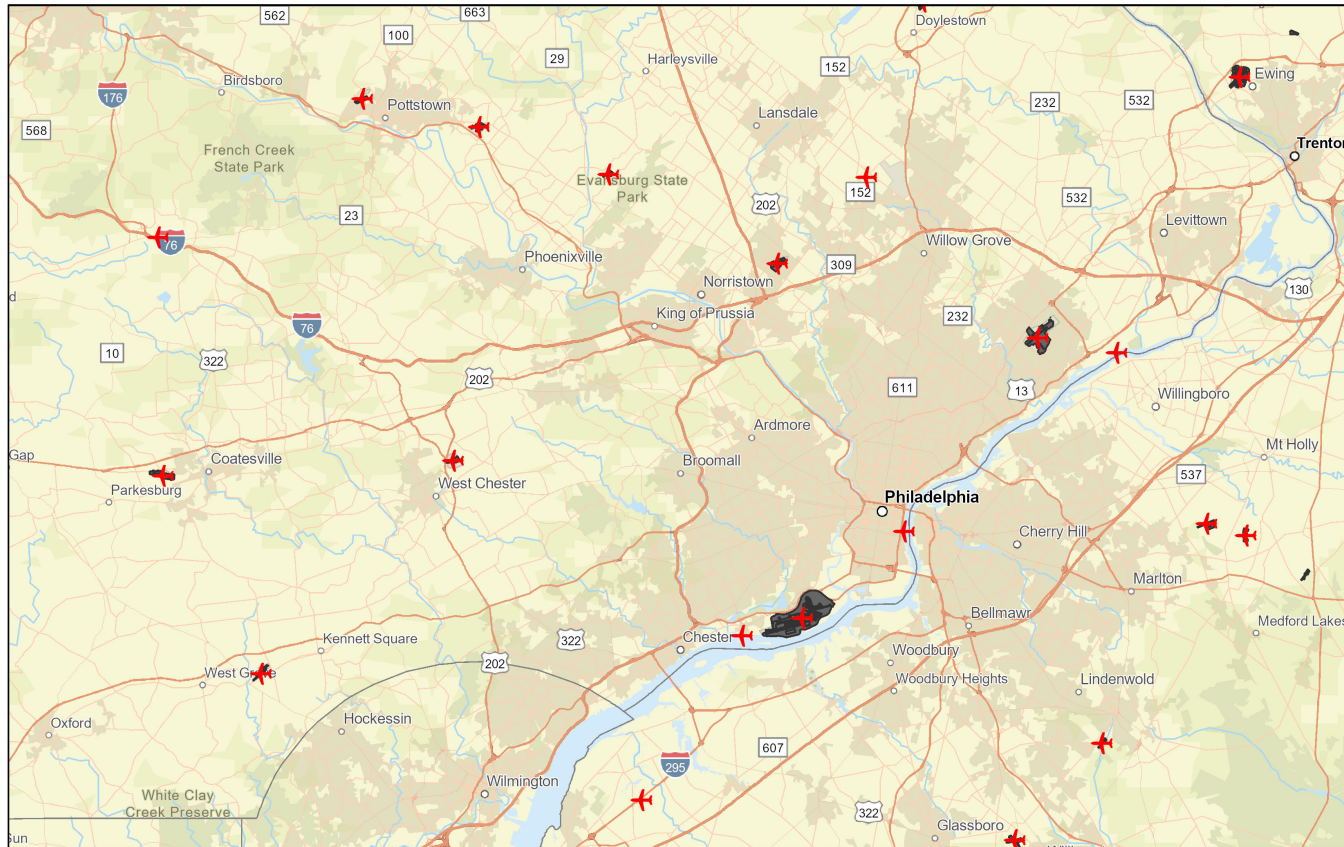
Railroads

Figure 12



Greater Philadelphia, PA

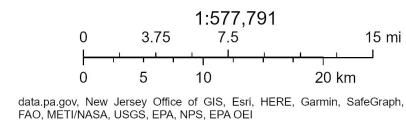


Source: NEPAassist	Date: April 2022	Drawn: AMG	Approved: DHS
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April 29, 2022

-  Airport Points
-  Airport Polygons



Airports

Greater Philadelphia, PA

Figure 13



Source: NEPAassist

Date: April 2022

Drawn: AMG

Approved: DHS

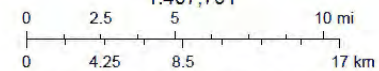


February 28, 2022

Wetlands

- | | | |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Forested/Shrub Wetland |  Other |
|  Freshwater Pond |  Lake |  Riverine |
|  Estuarine and Marine Wetland | |  Project Buffer |
|  Freshwater Emergent Wetland | | |

1:407,791



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Wetlands

Greater Philadelphia, PA

Figure 14



Source: NEPAassist

Date: April 2022

Drawn: AMG

Approved: DHS

APPENDIX C – NORTHEASTERN WEST VIRGINIA

Figure Sequence

Land Cover

Protected Areas Database of the United States

Federal Lands

Schools

Hospitals

Places of Worship

National Scenic Byways

National Register of Historic Places – All Properties

National Register of Historic Places – Historic Districts

Water Bodies and Streams

USFWS IPAC Federally Listed Species and Migratory Birds

State Listed Species

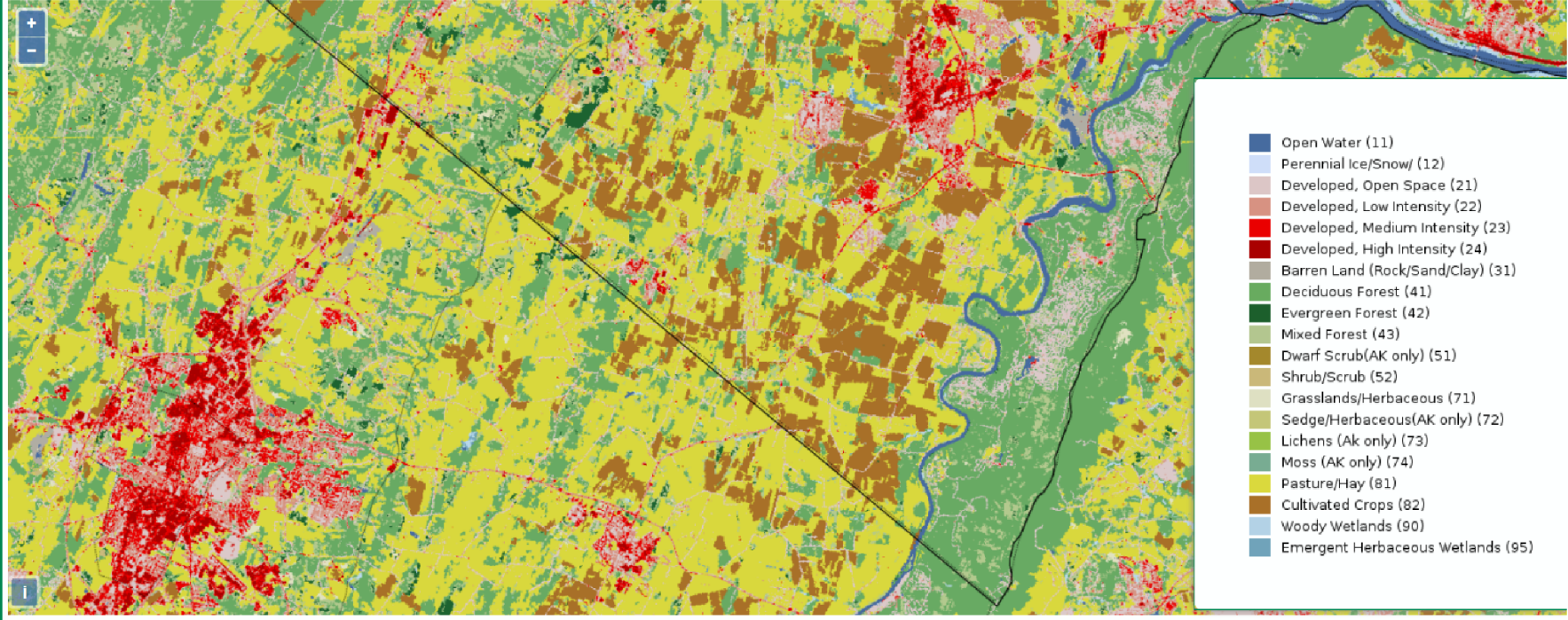
Bald Eagle Occurrence

USEPA Environmental Justice Screen Report

Railroads

Airports

Wetlands



Land Cover

Northeastern West Virginia

Figure 1



Source: MRLC.gov

Date: April 2022

Drawn: AMG

Approved: DHS



Protected Areas Database of the United States

summit point, west virginia

Add data

DATA SETS [13] Remove All

Fee Managers

Manager Name

Manager Type

Zoom To Extent About This Data Split Remove

Opacity: 100%

Protected Areas Database of the United States (PAD-US) v2.1

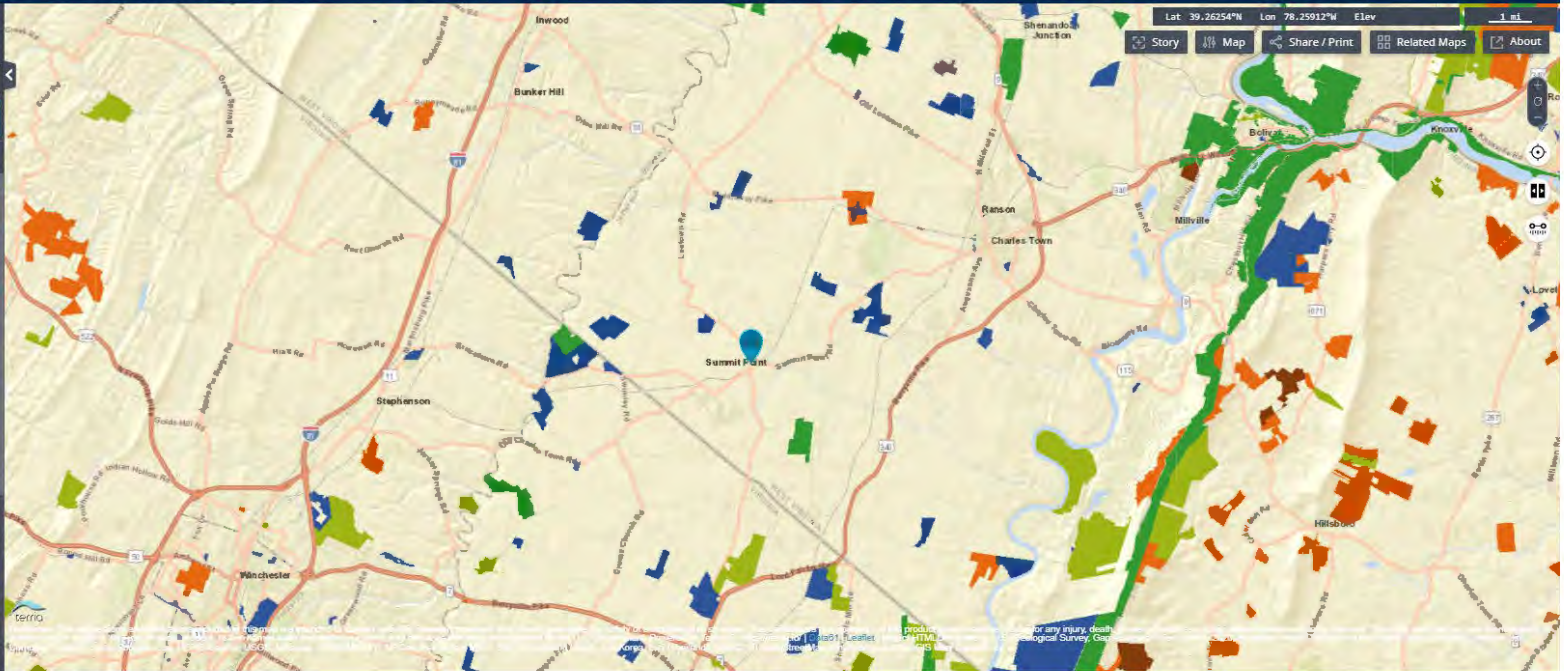
- Federal
- American Indian Areas
- State
- Local Government
- Regional Agency Special District
- Non-Governmental Organization
- Private
- Joint
- Territorial
- Unknown

Protection Mechanism Category

Protection Status by GAP Status Code

Protected Areas by Manager

Public Access



Protected Areas of the US

Figure 2

Northeastern West Virginia

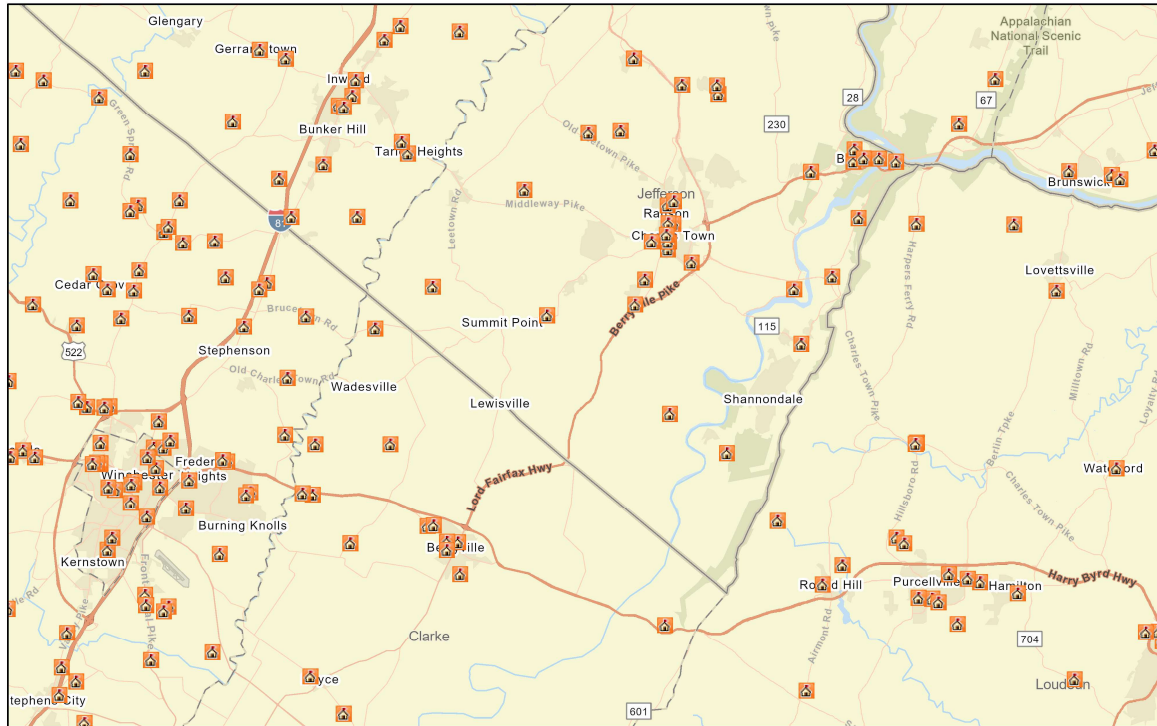


Source: USGS

Date: April 2022

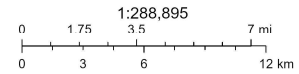
Drawn: AMG

Approved: DHS



June 2, 2022

Schools



County of Loudoun, Jefferson County GIS Office, VGIN, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, EPA OEI, OFA



Schools

Northeastern West Virginia

Figure 3

Source: NEPAassist


Date: June 2022

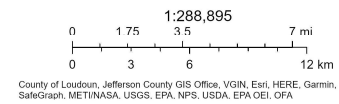
Drawn:
AMG

Approved:
DHS



June 2, 2022

 Hospitals



Hospitals

Northeastern West Virginia

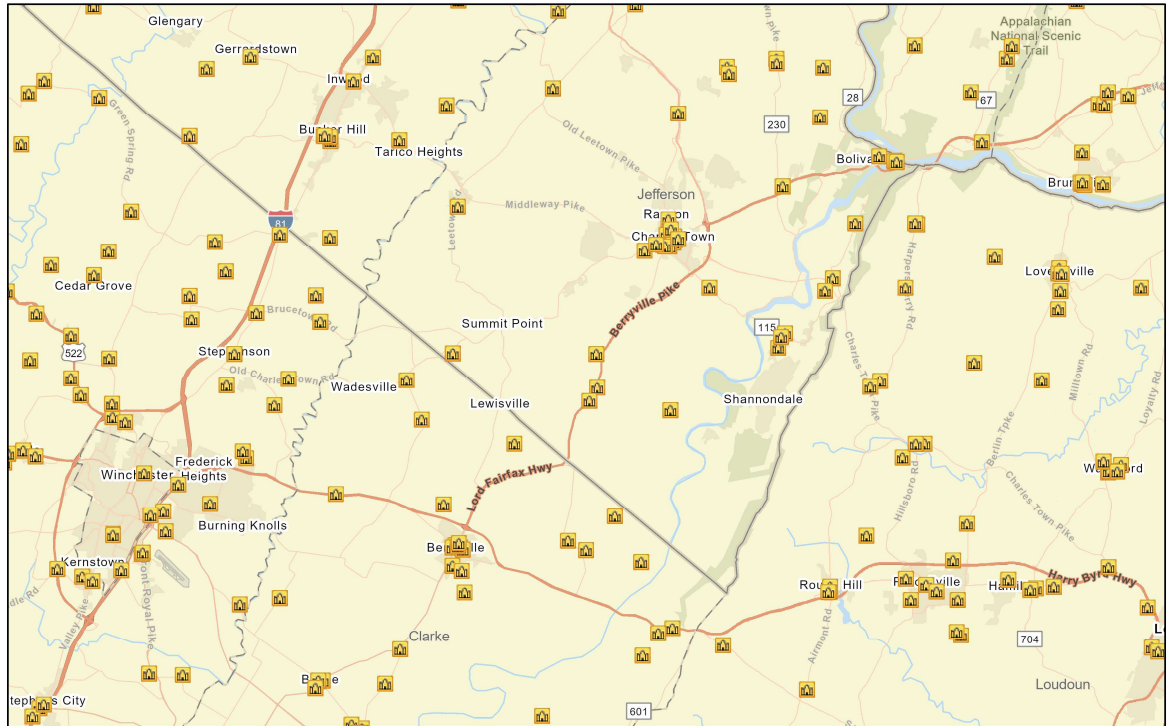
Figure 4

Source: NEPAassist


Date: June 2022

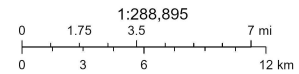
Drawn:
AMG

Approved:
DHS



June 2, 2022

 Places of Worship



1:288,895
 County of Loudoun, Jefferson County GIS Office, VGIN, Esri, HERE, Garmin, SafeGraph, METRANSA, USGS, EPA, NPS, USDA, EPA OEI, OFA



Places of Worship

Northeastern West Virginia

Figure 5

Source: NEPassist

Date: June 2022

Drawn:
AMG

Approved:
DHS

West Virginia

The National Scenic Byways Program

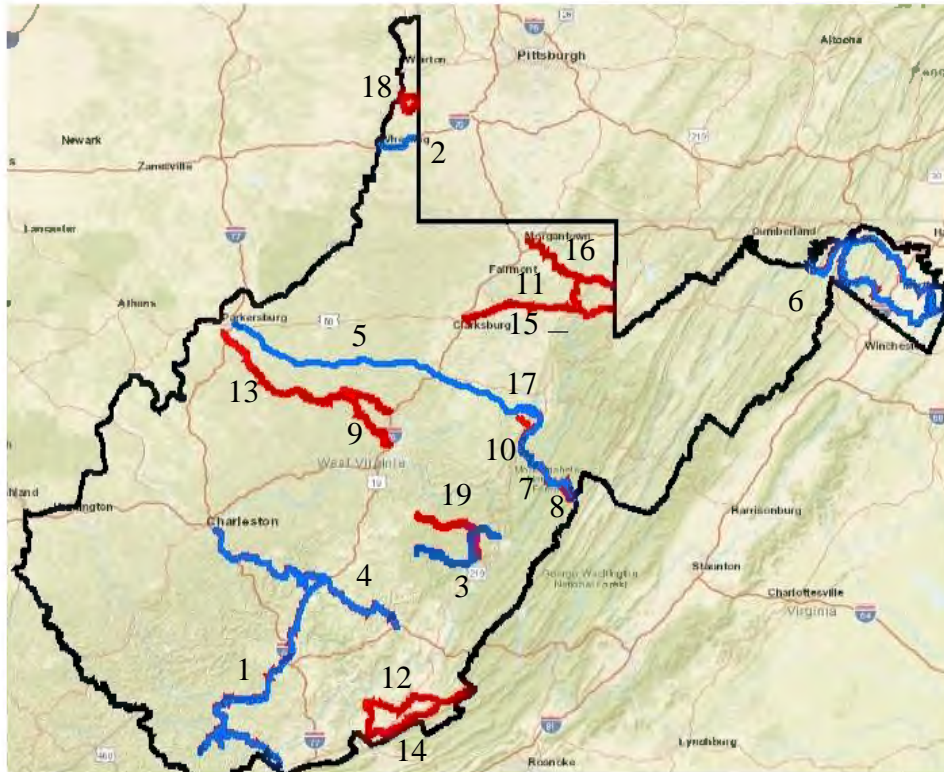
The National Scenic Byways Program, established by Congress in 1991, recognizes historic, scenic, and culturally important roads, all of which promote economic development and tourism in communities around the country. However, this initiative is predated by West Virginia's own State Scenic Highway Program, which began in 1988 with the designation of part of the Midland Trail as a State Scenic Highway. West Virginia boasts six [National Scenic Byways](#), including the Coal Heritage Trail and the Highland Scenic Highway. The Coal Heritage trail offers a look into the state's industrial development, while the Highland Scenic Highway offers a vibrant contrast, as it showcases the natural beauty of West Virginia's Monongahela National Forest.

Key points:

- West Virginia is home to 19 Scenic Byways, including six National Scenic Byways and 13 State and Other Scenic Byways.
- Scenic Byways are found in 49 states, and America has over 1,273 State and National Scenic Byways in total.
- The Coal Heritage Trail is home to West Virginia's first geocache trail, making it a draw for thousands of [geocaching enthusiasts](#).
- The Coal Heritage Trail is an integral part of the Coal Heritage Area, which generates [\\$207 million](#) in economic impact, supports nearly 3,000 jobs and generates \$16.8 million in tax revenue.
- In 2018, the [tourism and travel industry](#) in West Virginia generated \$4.6 billion in spending, growing at a year-over-year rate of 6.5%; the industry contributed \$534.5 million in local and state taxes saving the average household in West Virginia \$720 annually



Recognizing the impact of West Virginia's coal industry, the Coal Heritage Trail provides access to a region that helped fuel the nation's rapid industrial growth.



Scenic Byways in West Virginia

National Scenic Byways in West Virginia:

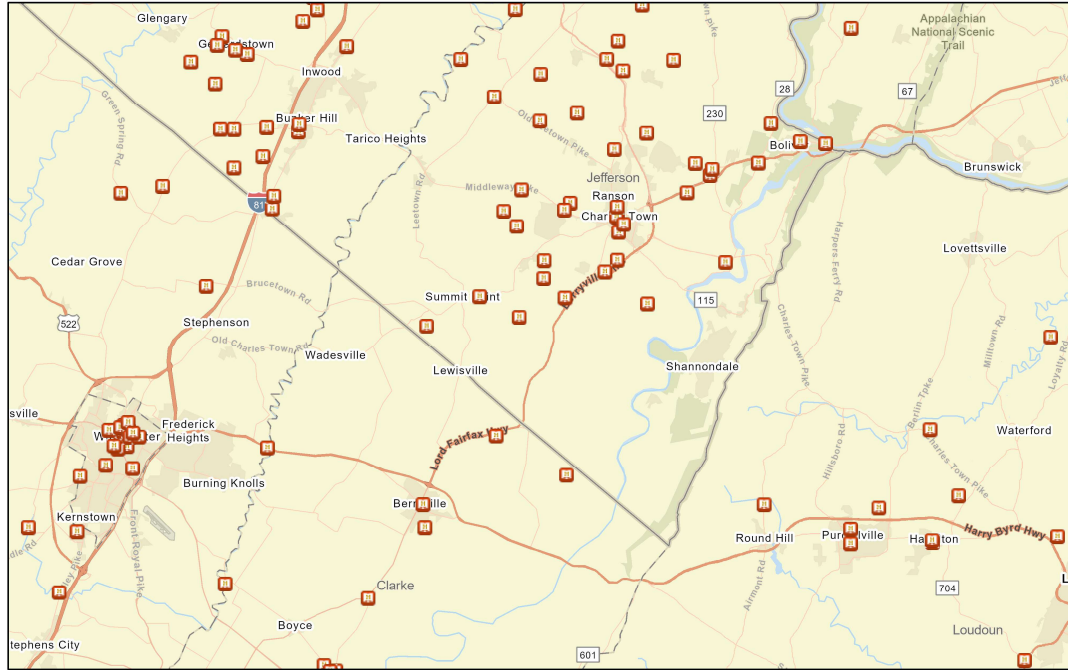
- [Coal Heritage Trail](#) (1)
- [Historic National Road](#) (2)*
- [Highland Scenic Highway](#) (3)
- [The Midland Trail](#) (4)
- [Staunton-Parkersburg Turnpike](#) (5)
- [Washington Heritage Trail](#) (6)

Map Key:


The numbers following each byway name above match the byway's numbered location on the map. An asterisk denotes an All-American Road.

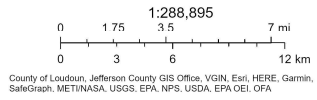
State and Other Scenic Byways in West Virginia:

- [Back Mountain State Backway](#) (7)
- [Camp Allegheny State Backway](#) (8)
- [Cedar Creek Road State Backway](#) (9)
- [Cheat Mountain State Backway](#) (10)
- [Cheat River State Byway](#) (11)
- [Farm Heritage Road](#) (12)
- [Little Kanawha Parkway](#) (13)
- [Mountain's Shadow Trail State Backway](#) (14)
- [Northwestern Turnpike](#) (15)
- [Old Route 7 State Byway](#) (16)
- [Rich Mountain State Backway](#) (17)
- [Wellsburg-Bethany State Byway](#) (18)
- [Williams River State Backway](#) (19)



June 2, 2022

 National Register of Historic Places



National Register of Historic Places

Figure 6

Northeastern West Virginia

Source: NEPAassist

Date: June 2022

Drawn:
AMG

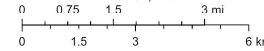
Approved:
DHS



June 2, 2022

National Register District

1:144,448



WVU Facilities, County of Loudoun, Jefferson County GIS Office, VGIN, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS, EPA.



National Register of Historic Places - Districts

Figure 7

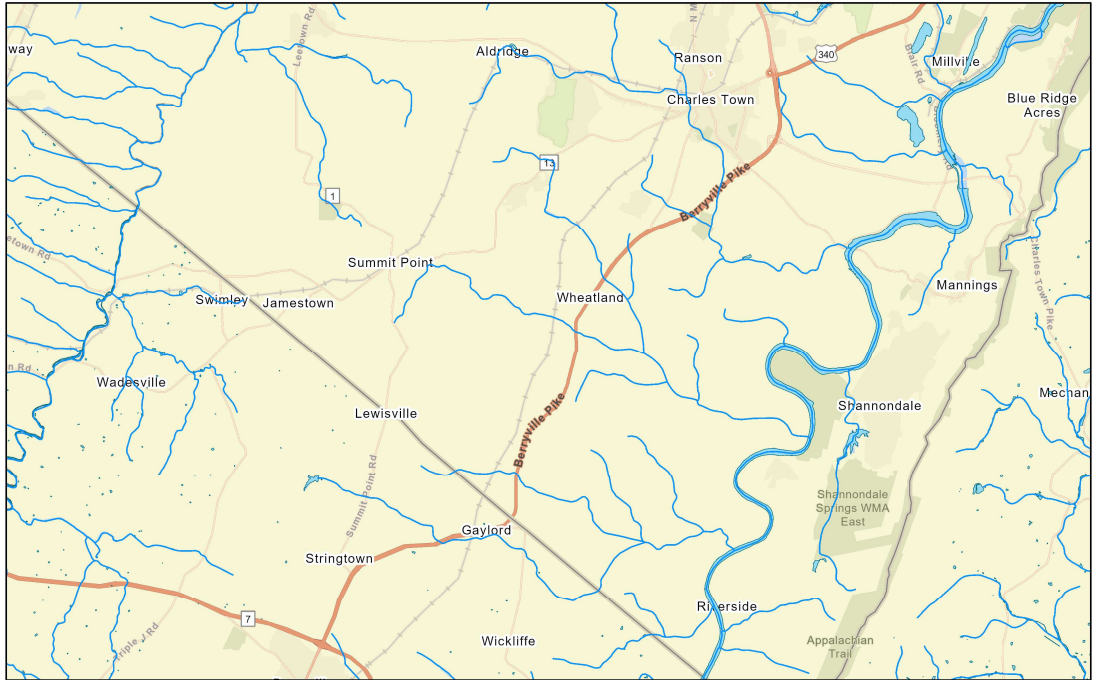
Northeastern West Virginia

Source: NEPAassist

Date: June 2022

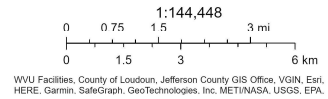
Drawn:
AMG

Approved:
DHS



June 2, 2022

- Streams
- Water Bodies



Water Bodies and Streams

Northeastern West Virginia

Figure 8

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.


Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.


Location

Virginia and West Virginia

Local offices

Virginia Ecological Services Field Office

 (804) 693-6694

 (804) 693-9032

6669 Short Lane
Gloucester, VA 23061-4410

<https://fws.gov/northeast/virginiafield/>

West Virginia Ecological Services Field Office

☎ (304) 636-6586

📠 (304) 636-7824

90 Vance Drive
Elkins, WV 26241-9475

<http://www.fws.gov/westvirginiafieldoffice/>

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
 2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> Wherever found There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Crustaceans

NAME	STATUS
Madison Cave Isopod <i>Antrolana lira</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4162	Threatened

Flowering Plants

NAME	STATUS
Harperella <i>Ptilimnium nodosum</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3739	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A
BREEDING SEASON IS INDICATED
FOR A BIRD ON YOUR LIST, THE
BIRD MAY BREED IN YOUR
PROJECT AREA SOMETIME WITHIN
THE TIMEFRAME SPECIFIED,
WHICH IS A VERY LIBERAL
ESTIMATE OF THE DATES INSIDE

WHICH THE BIRD BREEDS
ACROSS ITS ENTIRE RANGE.
"BREEDS ELSEWHERE" INDICATES
THAT THE BIRD DOES NOT LIKELY
BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Sep 1 to Aug 31

Black-billed Cuckoo *Coccyzus erythrophthalmus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9399>

Breeds May 15 to Oct 10

Black-capped Chickadee *Poecile atricapillus praticus*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Apr 10 to Jul 31

Bobolink *Dolichonyx oryzivorus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 20 to Jul 31

Canada Warbler *Cardellina canadensis*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 20 to Aug 10

Cerulean Warbler *Dendroica cerulea*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/2974>

Breeds Apr 27 to Jul 20

Eastern Whip-poor-will *Antrostomus vociferus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Aug 20

Golden Eagle *Aquila chrysaetos*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Breeds elsewhere

<p>Henslow's Sparrow <i>Ammodramus henslowii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941</p>	Breeds May 1 to Aug 31
<p>Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Apr 20 to Aug 20
<p>Northern Saw-whet Owl <i>Aegolius acadicus acadicus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds Mar 1 to Jul 31
<p>Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 1 to Jul 31
<p>Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Apr 1 to Jul 31
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Sep 10
<p>Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds elsewhere
<p>Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be

used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald Eagle
 Non-BCC
 Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Black-billed Cuckoo
 BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Black-capped Chickadee
 BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Bobolink
 BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Canada Warbler
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Cerulean Warbler
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Eastern Whip-
 poor-will
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)

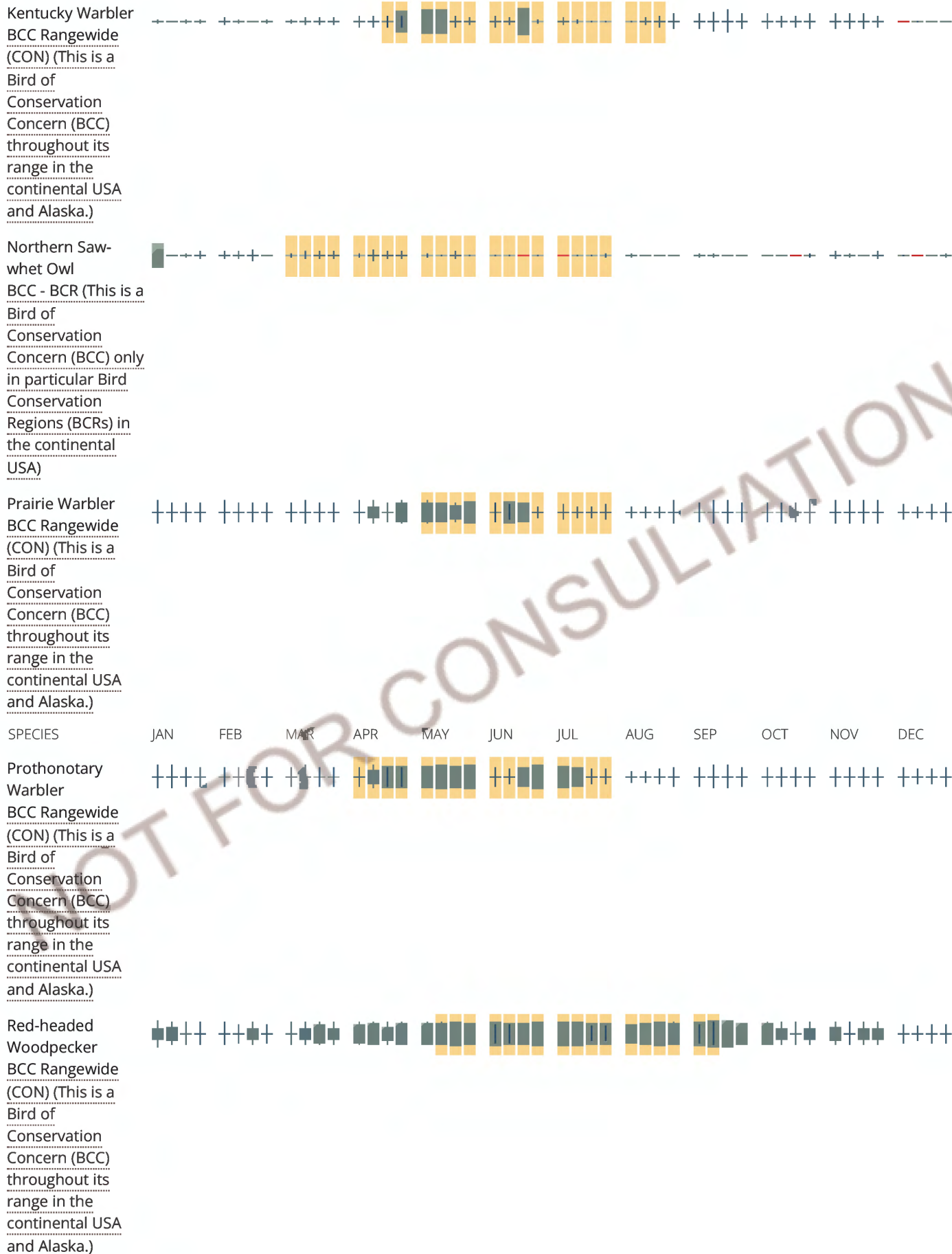


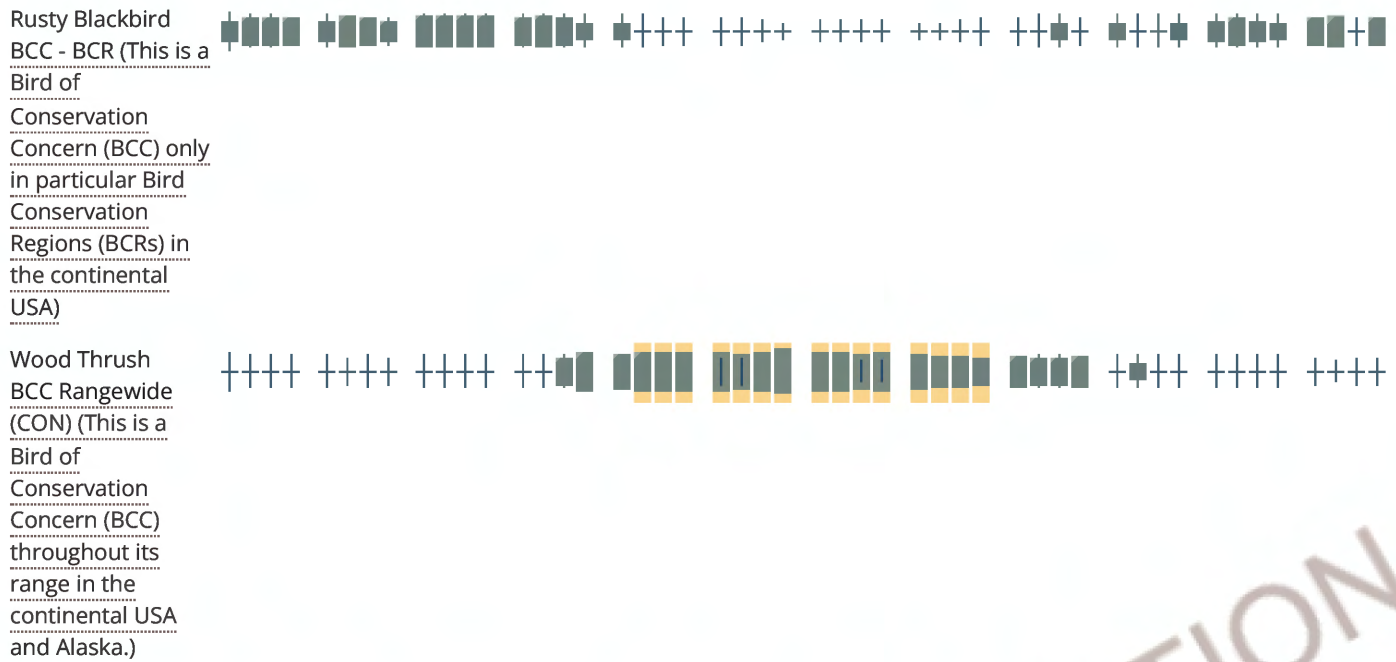
Golden Eagle
 Non-BCC
 Vulnerable (This is
 not a Bird of
 Conservation
 Concern (BCC) in
 this area, but
 warrants attention
 because of the
 Eagle Act or for
 potential
 susceptibilities in
 offshore areas
 from certain types
 of development or
 activities.)



Henslow's Sparrow
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)







Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in

my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Northeastern WV State-Listed Species

Note: West Virginia does not further categorize species as threatened or endangered

Source: West Virginia Department of Natural Resources

(<https://wvdnr.gov/wp-content/uploads/2021/04/2021.03.05-Federally-Threatened-Endangered-Species-in-WV.pdf>)

Scientific Name

Acris creptians
Ameiurus nebulosus
Antrolana lira
Boloria selene myrina
Caecidotea pricei
Clemmys guttata
Cottus sp. 7
Etheostoma olmstedii
Glyptemys insculpta
Lanius ludovicianus
Margariscus margarita
Notropis procne
Stygobromus gracilipes
Tyto alba
Carexbushii
Carex comosa
Carex conoidea
Carex lacustris
Carex lasiocarpa var. americana
Carex molesta
Carex pellita
Carex suberecta
Carex tetanica
Carex trichocarpa
Eleocharis erythropoda
Eleocharis intermedia
Eleocharis palustris
Equisetum fluviatile
Eupatorium maculatum var. maculatum
Hierochloa hirta spp. arctica
Hydrocotyle ranunculoides
Juncus balticus var. littoralis
Juncus dichotomus
Juncus nodosus var. nodosus
Juncus scirpoides
Juncus torreyi
Lathyrus palustris
Lysimachia quadriflora
Lythrum alatum var. alatum
Pilea fontana
Polygonum amphibium

Common Name

Northern cricket frog
Brown bullhead
Madison Cave isopod
Silver-bordered fritillary
Price's cave isopod
Spotted turtle
Checked sculpin
Tessellated darter
Wood turtle
Loggerhead shrike
Pearl dace
Swallowtail shiner
Shenandoah Valley cave amphipod
Barn owl
Bush's sedge
Bearded sedge
Field sedge
Lake sedge
Slender sedge
Troublesome sedge
Woolly sedge
Prairie straw sedge
Rigid sedge
Hairy fruit sedge
Bald spike-rush
Matted spikerush
Marsh spikerush
Water horsetail
Spotted joe-pyeweed
Holy grass
Swamp pennywort
Baltic rush
Forked rush
Knotted rush
Needle-pod rush
Torrey's rush
Vetchling peavine
Four-flower loosestrife
Winged loosestrife
Black-fruited clearweed
Water knotweed

Scientific Name

Salix discolor

Schoenoplectus acutus var. acutus

Scutellaria galericulata

Sparganium angrocladum

Utricularia macrorhiza

Carex stricta - Carex pellita - Eutrochium

maculatum - Juncus balticus Marl Fen

Platanus occidentalis - Acer negundo - Juglans

nigra | *Asimina triloba* | *Merlensia viminica*

Floodplain Forest

Common Name

Pussy willow

Hardstem bulrush

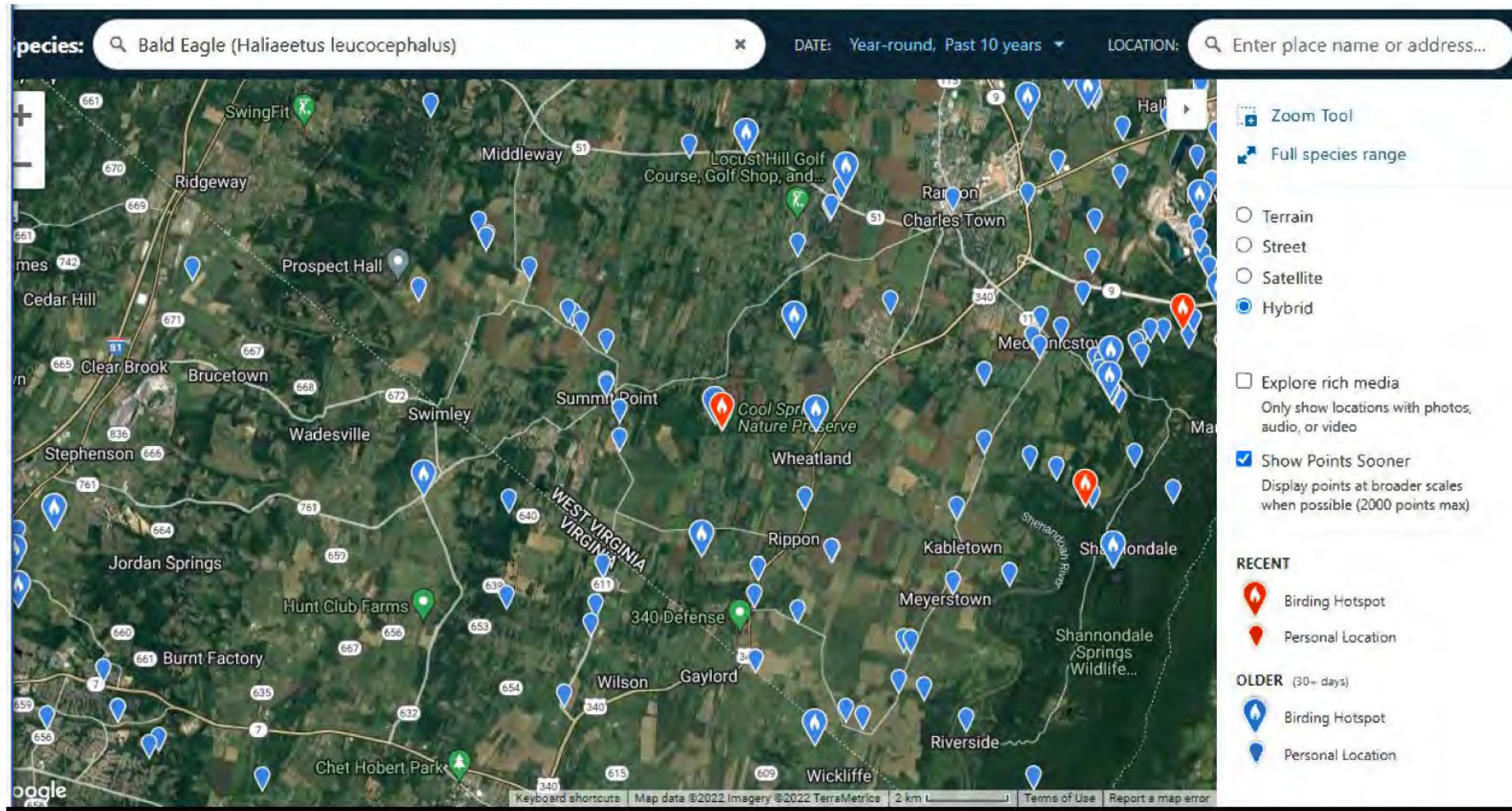
Hooded skullcap

Branched bur-reed

Greater bladderwort

Shenandoah Valley Marl Fen

Potomac River Rich Floodplain Forest



Bald Eagle Occurrence

Northeastern West Virginia

Figure 9



Source: eBird.org

Date: April 2022

Drawn: AMG

Approved: DHS

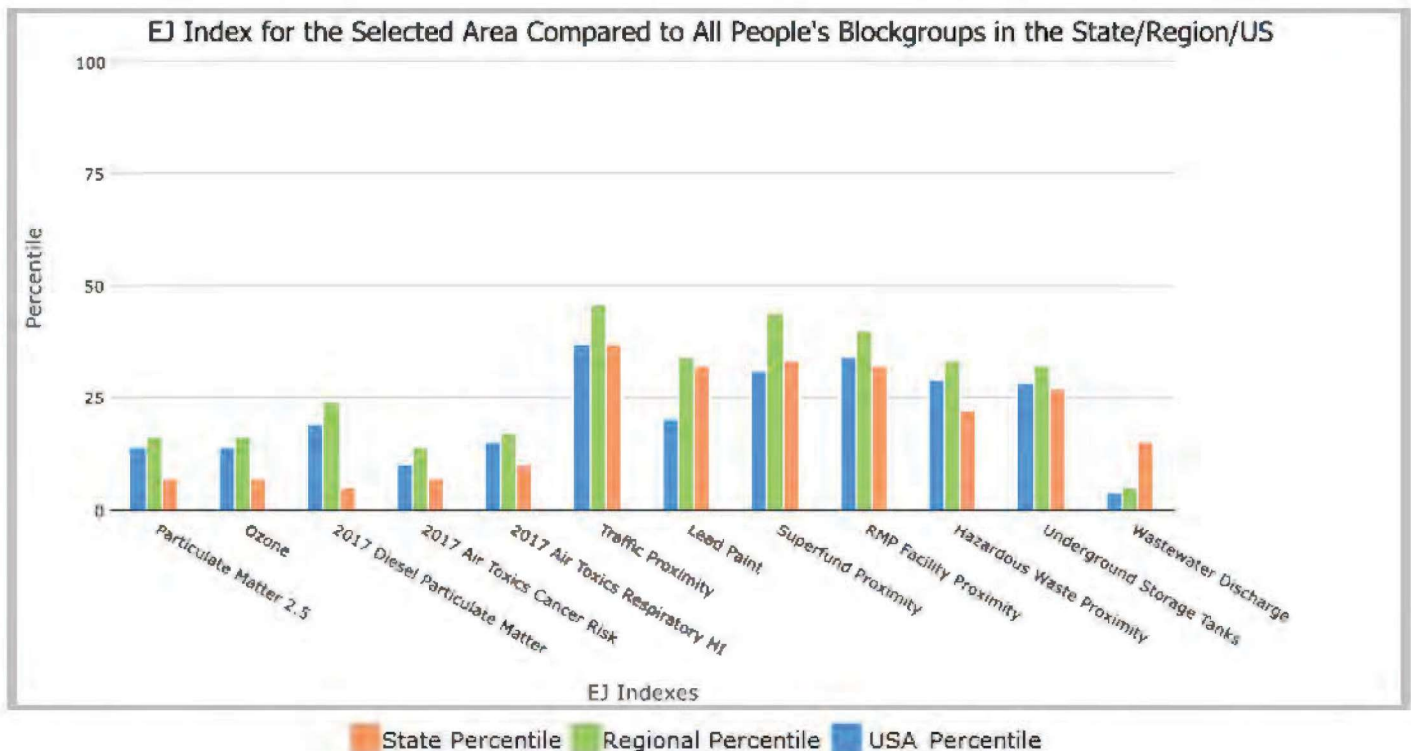
6 miles Ring Centered at 39.233803,-77.965389, WEST VIRGINIA, EPA Region 3

Approximate Population: 17,724

Input Area (sq. miles): 113.08

Summit Point, West Virginia

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	7	16	14
EJ Index for Ozone	7	16	14
EJ Index for 2017 Diesel Particulate Matter*	5	24	19
EJ Index for 2017 Air Toxics Cancer Risk*	7	14	10
EJ Index for 2017 Air Toxics Respiratory HI*	10	17	15
EJ Index for Traffic Proximity	37	46	37
EJ Index for Lead Paint	32	34	20
EJ Index for Superfund Proximity	33	44	31
EJ Index for RMP Facility Proximity	32	40	34
EJ Index for Hazardous Waste Proximity	22	33	29
EJ Index for Underground Storage Tanks	27	32	28
EJ Index for Wastewater Discharge	15	5	4



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

EJScreen Report (Version 2.0)



6 miles Ring Centered at 39.233803,-77.965389, WEST VIRGINIA, EPA Region 3

Approximate Population: 17,724

Input Area (sq. miles): 113.08

Summit Point, West Virginia



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJScreen Report (Version 2.0)



6 miles Ring Centered at 39.233803,-77.965389, WEST VIRGINIA, EPA Region 3

Approximate Population: 17,724

Input Area (sq. miles): 113.08

Summit Point, West Virginia

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Pollution and Sources							
Particulate Matter 2.5 ($\mu\text{g}/\text{m}^3$)	7.76	7.64	54	8.2	29	8.74	27
Ozone (ppb)	39.4	39.8	37	41.9	15	42.6	29
2017 Diesel Particulate Matter* ($\mu\text{g}/\text{m}^3$)	0.168	0.128	76	0.267	<50th	0.295	<50th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	30	28	91	30	80-90th	29	80-90th
2017 Air Toxics Respiratory HI*	0.3	0.33	63	0.34	50-60th	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	38	220	37	680	18	710	19
Lead Paint (% Pre-1960 Housing)	0.18	0.34	29	0.35	39	0.28	51
Superfund Proximity (site count/km distance)	0.026	0.084	28	0.15	9	0.13	23
RMP Facility Proximity (facility count/km distance)	0.12	0.45	43	0.63	24	0.75	20
Hazardous Waste Proximity (facility count/km distance)	0.17	0.74	52	1.9	25	2.2	26
Underground Storage Tanks (count/km ²)	0.4	1.7	53	2.7	37	3.9	33
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.12	2.3	68	33	88	12	85
Socioeconomic Indicators							
Demographic Index	18%	23%	33	30%	35	36%	26
People of Color	16%	8%	84	33%	40	40%	30
Low Income	20%	38%	15	27%	43	31%	34
Unemployment Rate	5%	7%	45	5%	55	5%	53
Linguistically Isolated	1%	0%	90	3%	60	5%	49
Less Than High School Education	12%	13%	50	10%	67	12%	60
Under Age 5	5%	5%	54	6%	51	6%	47
Over Age 64	17%	19%	42	16%	58	16%	64

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

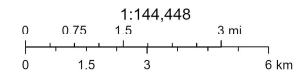
For additional information, see: www.epa.gov/environmentaljustice

EJScreen is a screening tool for pre decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.



June 2, 2022

— Railroads



1:144,448
 WVU Facilities, County of Loudoun, Jefferson County GIS Office, VGIN, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc. METI/NASA, USGS, EPA.



Railroads

Figure 10

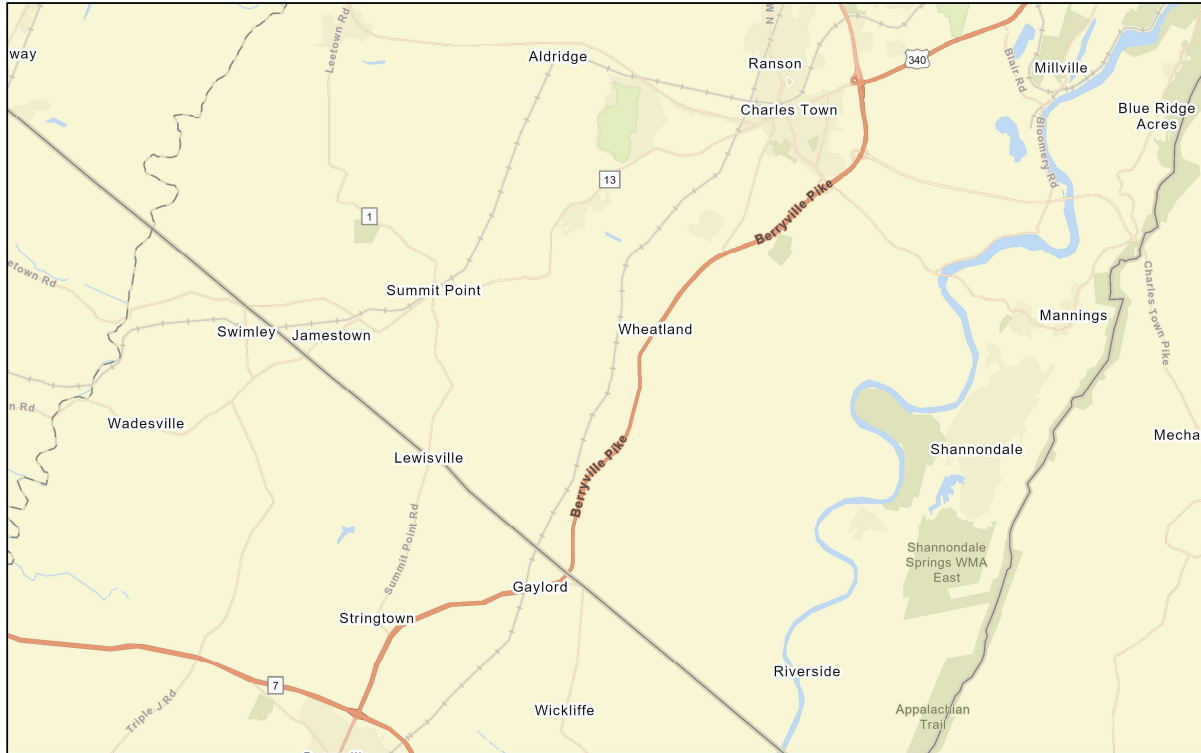
Northeastern West Virginia

Source: NEPAassist

Date: June 2022

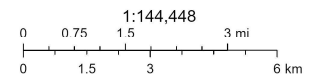
Drawn:
AMG

Approved:
DHS



June 2, 2022

- ✚ Airport Points
- Airport Polygons



1:144,448
 WVU Facilities, County of Loudoun, Jefferson County GIS Office, VGIN, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc. METI/NASA, USGS, EPA.



Airports

Figure 11

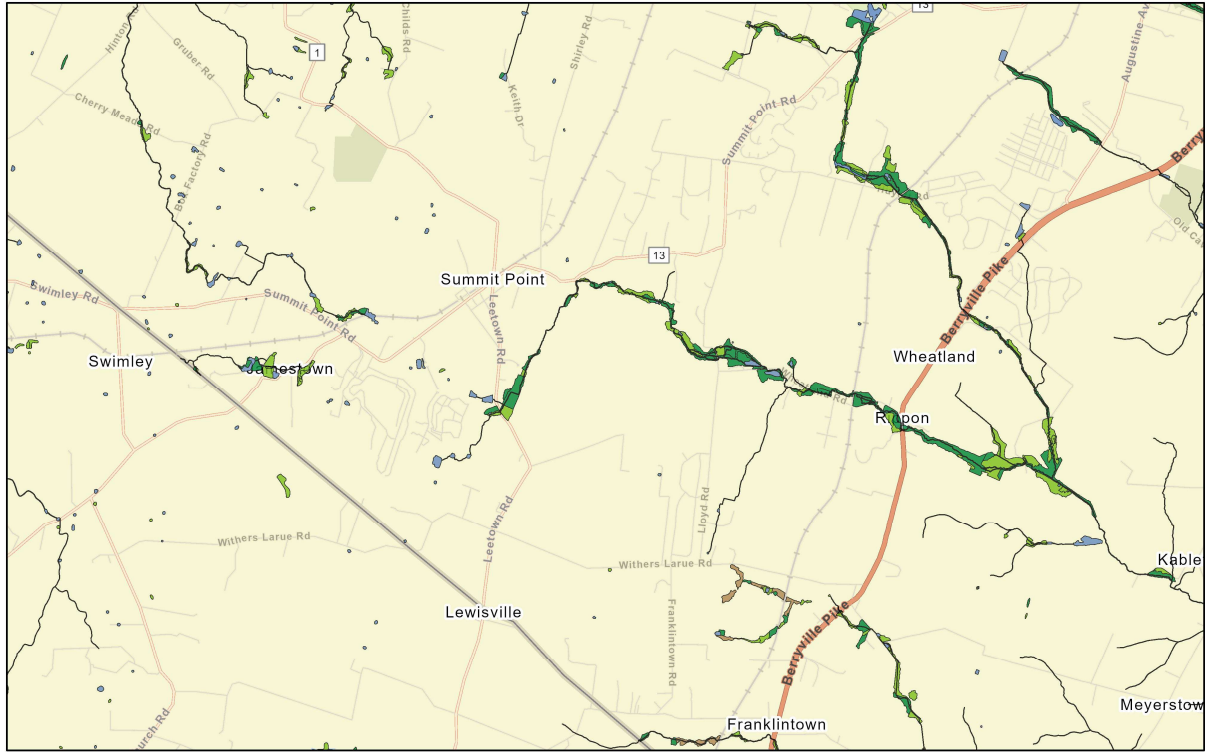
Northeastern West Virginia

Source: NEPAassist

Date: June 2022

Drawn:
AMG

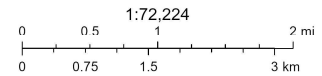
Approved:
DHS



June 2, 2022

Wetlands

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Pond
- Lake
- Other
- Riverine



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov, WVU Facilities, County of Loudoun, Jefferson



Wetlands

Northeastern West Virginia

Figure 12

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS

APPENDIX D – NATIONAL CAPITAL REGION, GREATER WASHINGTON, D.C.

Figure Sequence

Land Cover

Protected Areas Database of the United States

Federal Lands

Hospitals

Schools

Places of Worship

National Scenic Byways

National Register of Historic Places – All Properties

National Register of Historic Places – Historic Districts

Water Bodies and Streams

USFWS IPAC Federally Listed Species and Migratory Birds

State and D.C. Listed Species

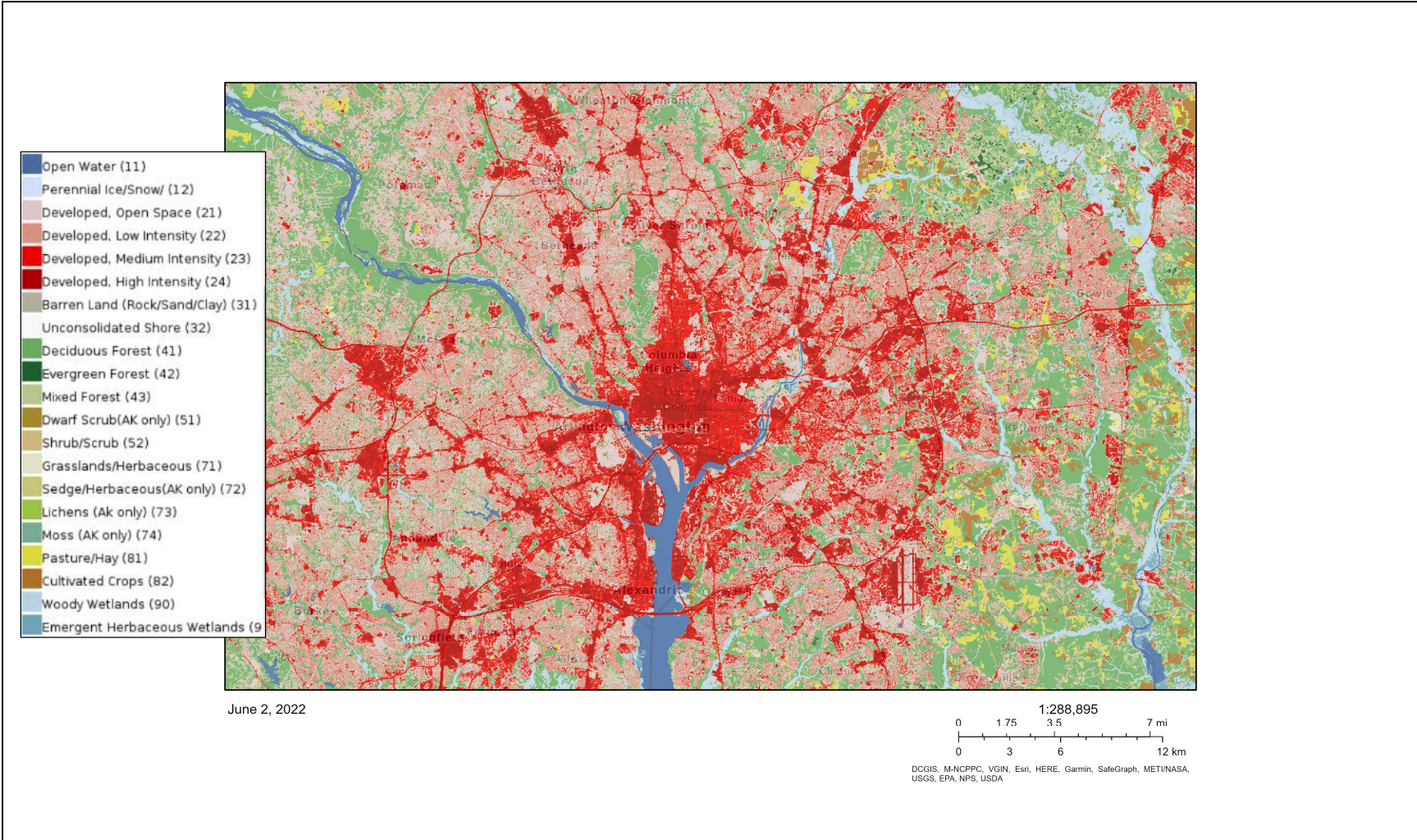
Bald Eagle Nests

USEPA Environmental Justice Screen Report

Railroads

Airports

Wetlands



- Open Water (11)
- Perennial Ice/Snow (12)
- Developed, Open Space (21)
- Developed, Low Intensity (22)
- Developed, Medium Intensity (23)
- Developed, High Intensity (24)
- Barren Land (Rock/Sand/Clay) (31)
- Unconsolidated Shore (32)
- Deciduous Forest (41)
- Evergreen Forest (42)
- Mixed Forest (43)
- Dwarf Scrub(AK only) (51)
- Shrub/Scrub (52)
- Grasslands/Herbaceous (71)
- Sedge/Herbaceous(AK only) (72)
- Lichens (Ak only) (73)
- Moss (AK only) (74)
- Pasture/Hay (81)
- Cultivated Crops (82)
- Woody Wetlands (90)
- Emergent Herbaceous Wetlands (9

Land Cover

Figure 1

National Capital Region, Greater Washington, D.C.

Source: NEPAssist

Date: June 2022

Drawn:
AMG

Approved:
DHS





Protected Areas of the US

National Capital Region, Greater Washington, D.C.

Figure 2

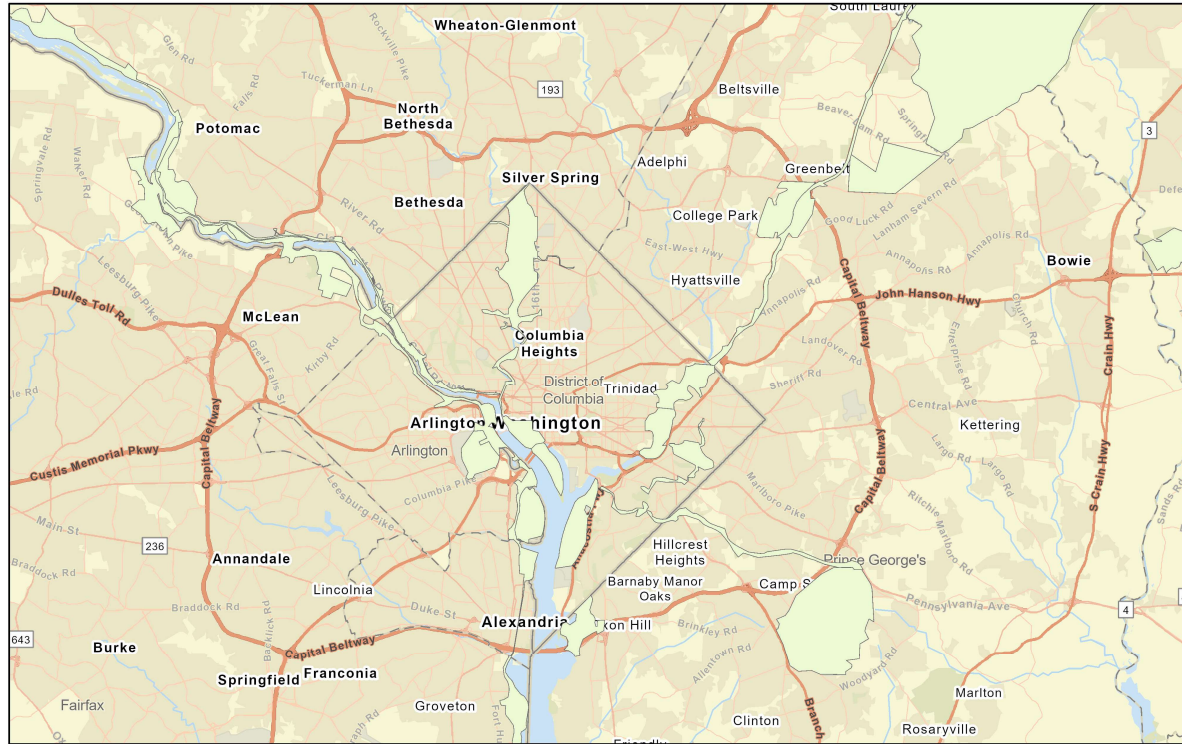


Source: USGS

Date: April 2022

Drawn: AMG

Approved: DHS



June 2, 2022

Federal Lands

1:288,895
 0 1.75 3.5 7 mi
 0 3 6 12 km
EPA OEI, DCGIS, M-NCPPC, VGIN, Esri, HERE, Garmin, SafeGraph, METI/
 NASA, USGS, EPA, NPS, USDA



Federal Lands

Figure 3

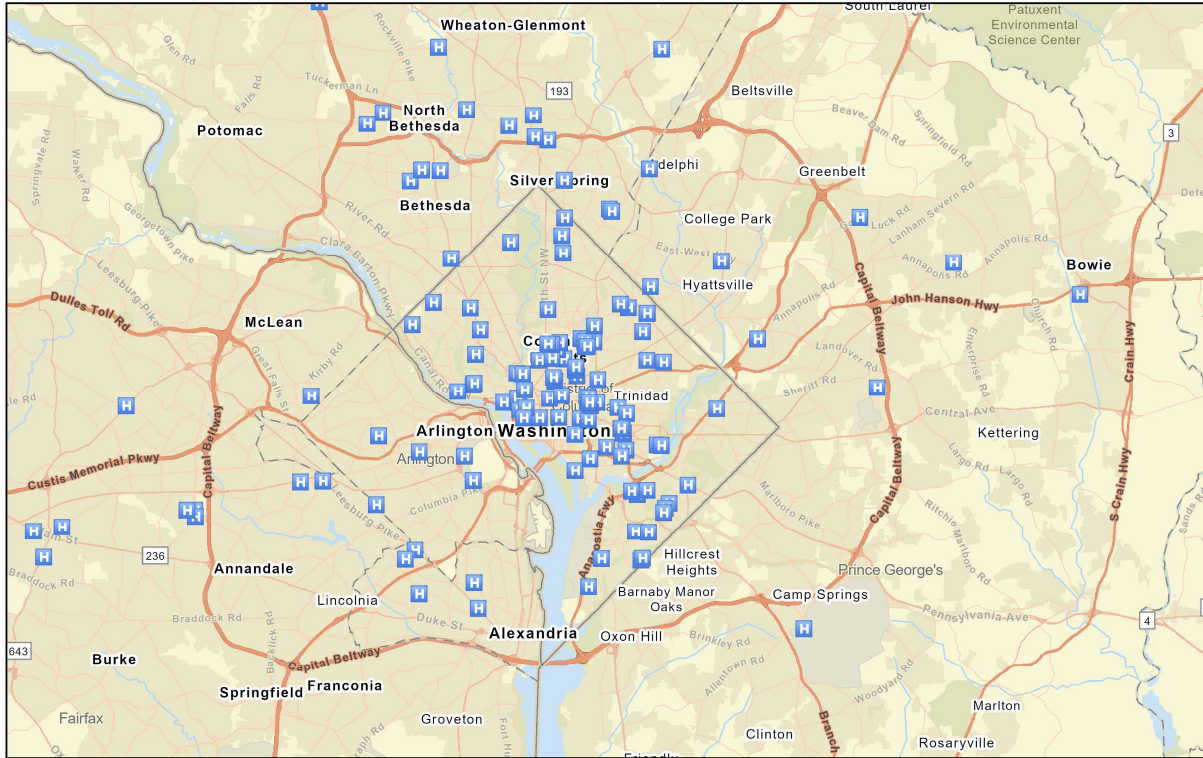
National Capital Region, Greater Washington, D.C.

Source: NEPassist


Date: June 2022

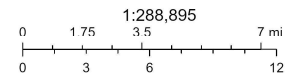
Drawn:
AMG

Approved:
DHS



June 2, 2022

 Hospitals



DCGIS, M-NCPPC, VGIN, Esri, HERE, Garmin, SafeGraph, METINASA, USGS, EPA, NPS, USDA, EPA OEI, OFA



Hospitals

Figure 4

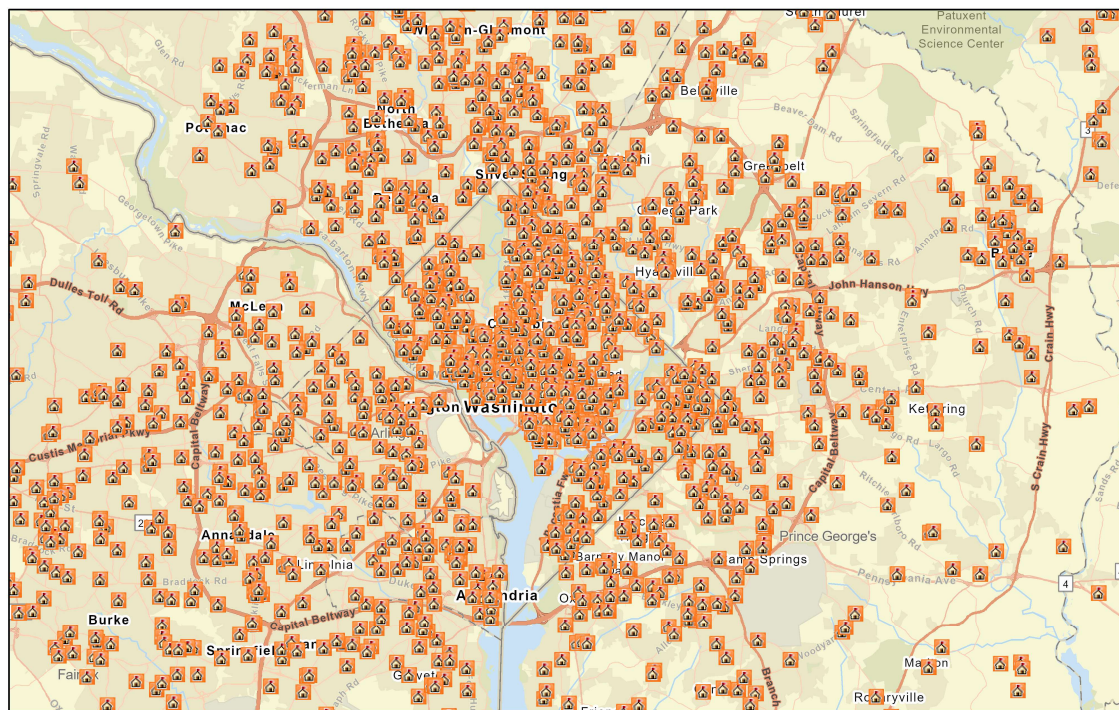
National Capital Region, Greater Washington, D.C.

Source: NEPAassist

Date: June 2022

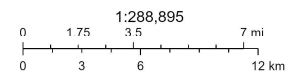
Drawn:
AMG

Approved:
DHS



June 2, 2022

 Schools



1:288,895
DCGIS, MNCPPC, VGIN, Esri, HERE, Garmin, SafeGraph, METINASA, USGS, EPA, NPS, USDA, EPA/GEI, OFA



Schools

Figure 5

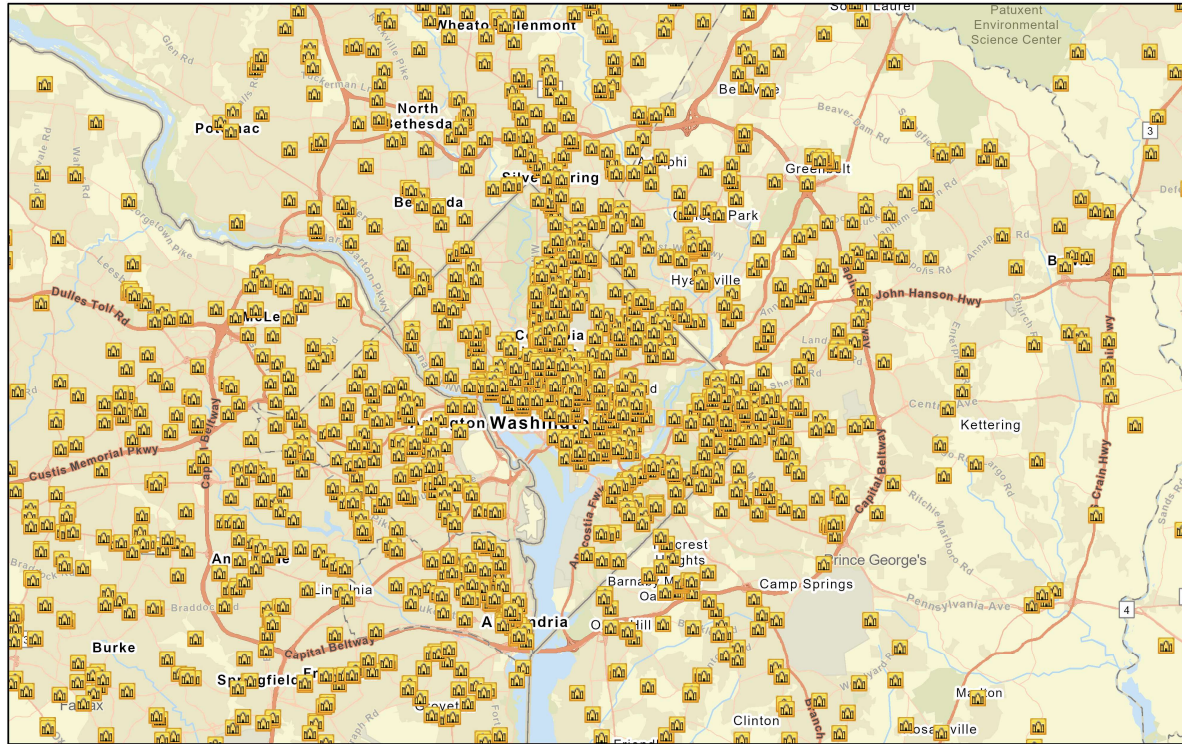
National Capital Region, Greater Washington, D.C.

Source: NEPAassist


Date: June 2022

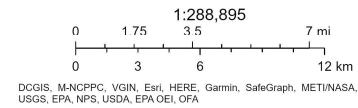
Drawn:
AMG

Approved:
DHS



June 2, 2022

 Places of Worship



Places of Worship

Figure 6

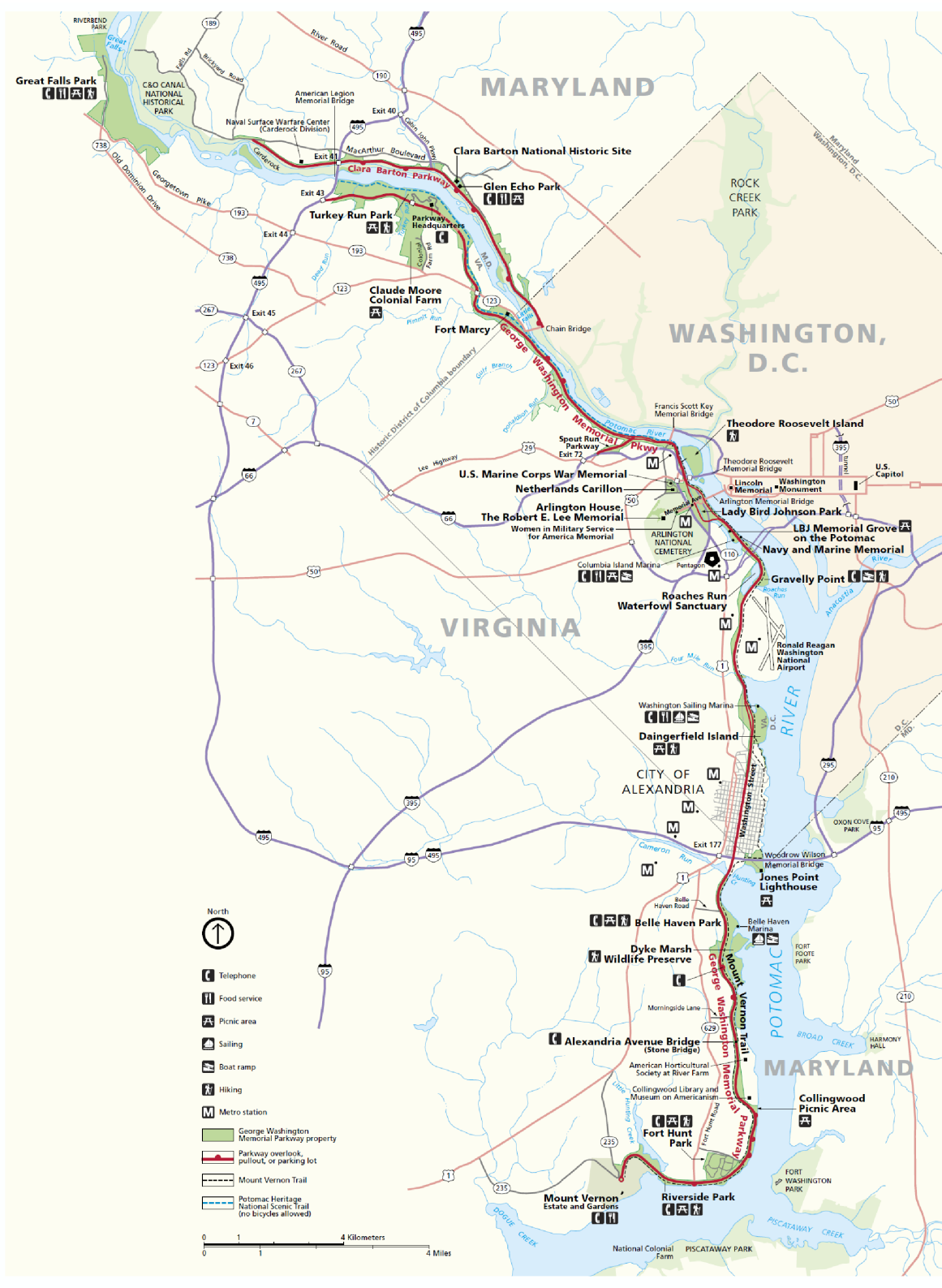
National Capital Region, Greater Washington, D.C.

Source: NEPAAssist

Date: June 2022

Drawn:
AMG

Approved:
DHS



Source: <https://www.nps.gov/gwmp/playourvisit/upload/George-Washington-Memorial-Parkway-map-508-2021.pdf>

National Scenic Byway George Washington Memorial Parkway

Figure 7

Drawn: AMG

Approved: DHS

National Capital Region, Greater Washington, D.C.

Source: NPS.gov

Date: May 2022



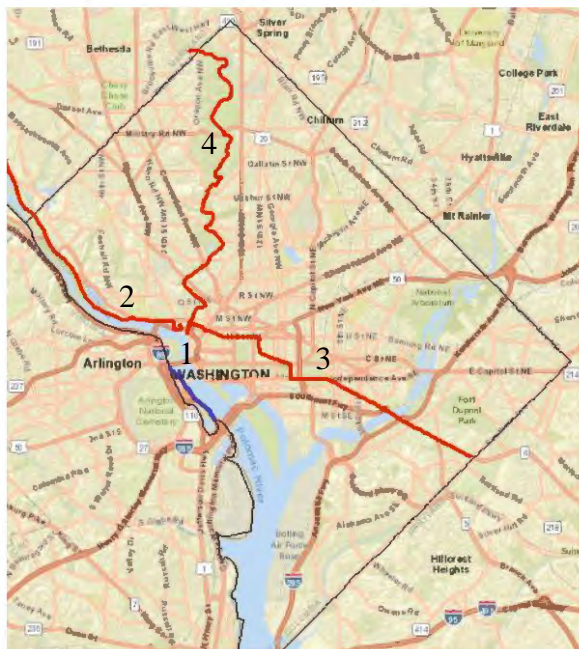
District of Columbia

The National Scenic Byways Program

The National Scenic Byways Program, established by Congress in 1991, recognizes historic, scenic and culturally important roads, all of which promote economic development and tourism in communities around the country. The District of Columbia's byway program was developed and administered by the District Department of Transportation (DDOT), and includes a variety of roads primarily located within National Parks Service lands in the District. One prominent byway is Canal Road, an extension of the C&O Canal Scenic Byway which follows the Potomac River into the central portions of Washington. The District also includes a portion of the George Washington Memorial Parkway, a National Scenic Byway which has been designated an All-American Road, the Federal Highway Administration's highest roadway honor.

Key points:

- The District of Columbia is home to 1 National Scenic Byway and 3 District Byways.
- [Pennsylvania Avenue](#) is a primary artery in L'Enfant's 1791 Plan for the City of Washington and has become a major thoroughfare, often referred to as America's Main Street
- In part of L'Enfant's [1791 design](#), the Capitol building as well as the White House are on a sight line via Pennsylvania Avenue.
- A recent National Scenic Byway Foundation survey showed that 44 state scenic byways in 24 states are prepared to seek designation as a National Scenic Byway.



Scenic Byways in Washington, D.C.

National Scenic Byways in the District of Columbia

[George Washington Memorial Parkway](#) (1)*

District Scenic Byways in the District of Columbia:

[Canal Road Byway](#) (2)

[Pennsylvania Avenue Byway](#) (3)

[Rock Creek Byway](#) (4)

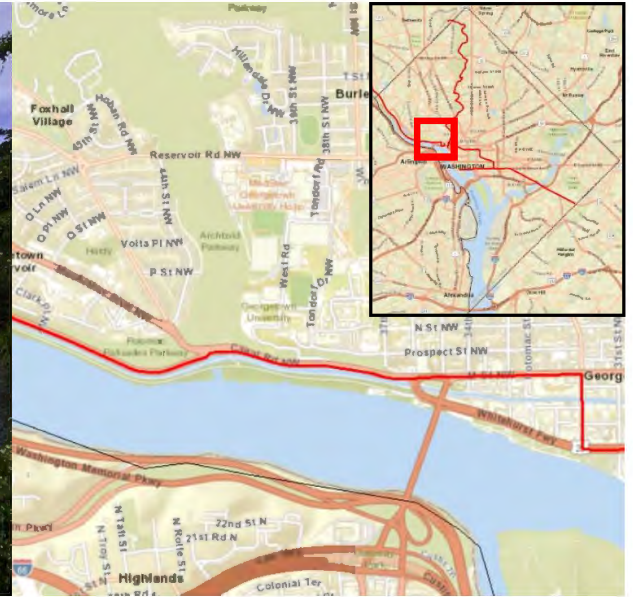
Map Key:

The numbers following each byway name above match with the respective byway's numbered location on the map.

*Asterisk denotes an All-American Road.



Photo credit: Wikipedia Commons



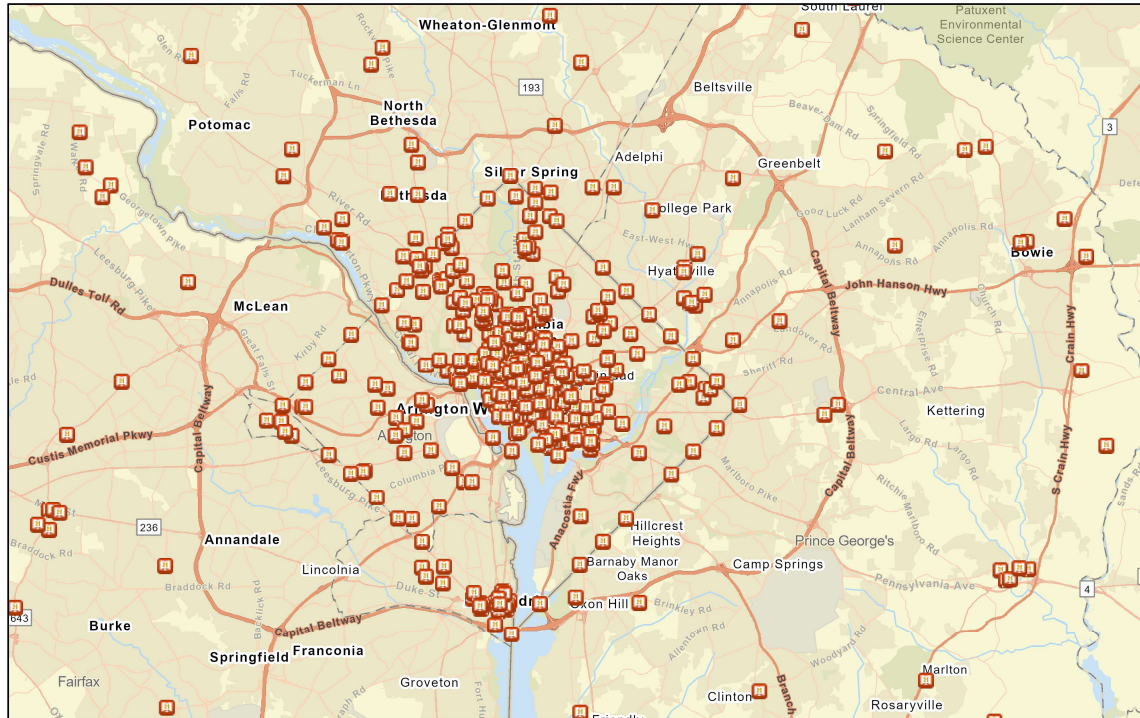
Canal Road follows the Potomac into the heart of Washington and offers gorgeous views of the river.



Photo credit: Travel & Leisure



Rock Creek byway runs along the water feature of the same name through the heart of Northwestern D.C. offering forest scenery a world away from the city that surrounds it.



June 2, 2022

 National Register of Historic Places

1:288,895
 0 1.75 3.5 7 mi
 0 3 6 12 km
 DCGIS, M-NCPPC, VGIN, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, EPA/OEI, OFA



National Register of Historic Places

Figure 8

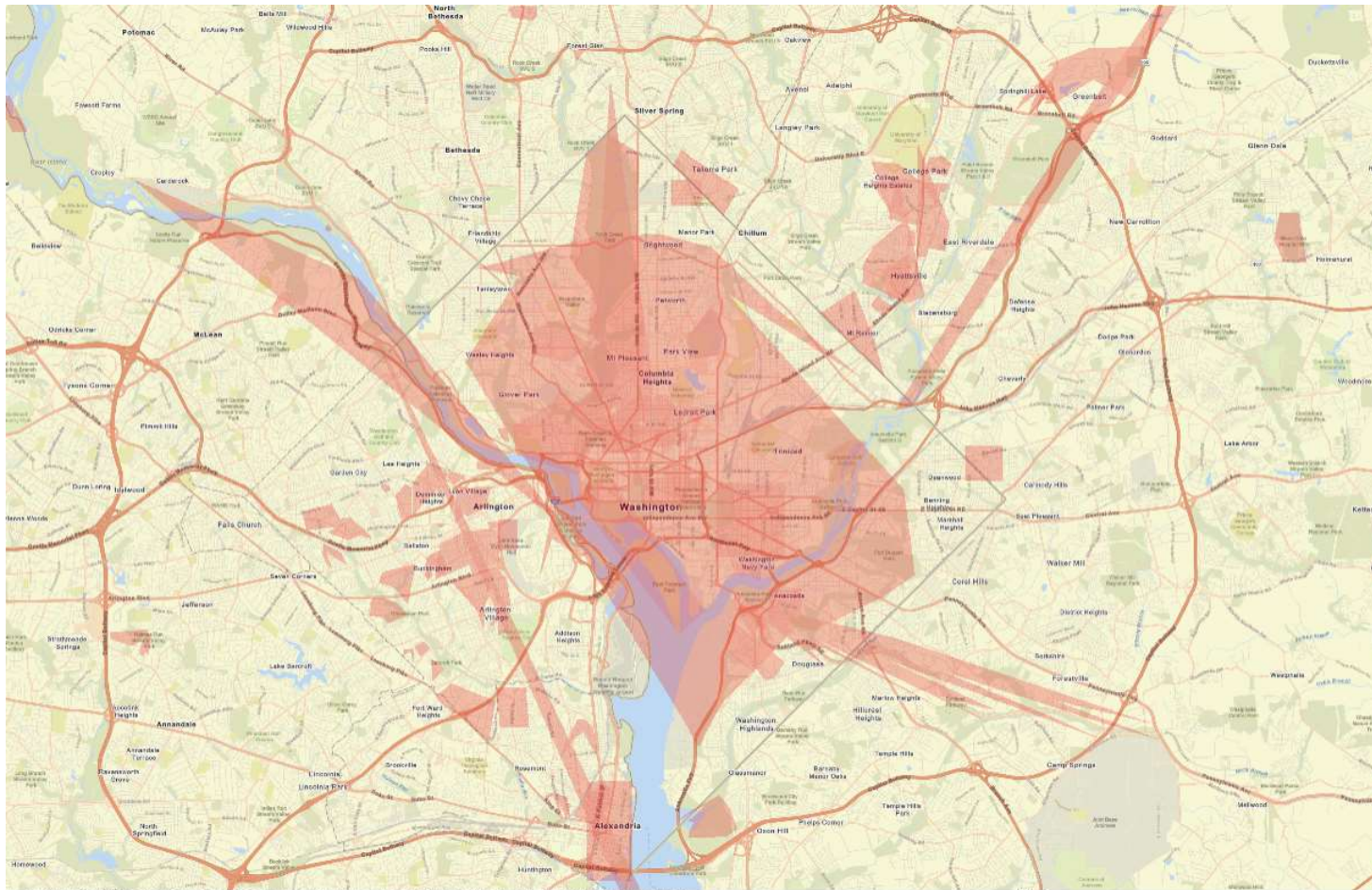
National Capital Region, Greater Washington, D.C.

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS



National Register of Historic Places - Districts

Figure 9

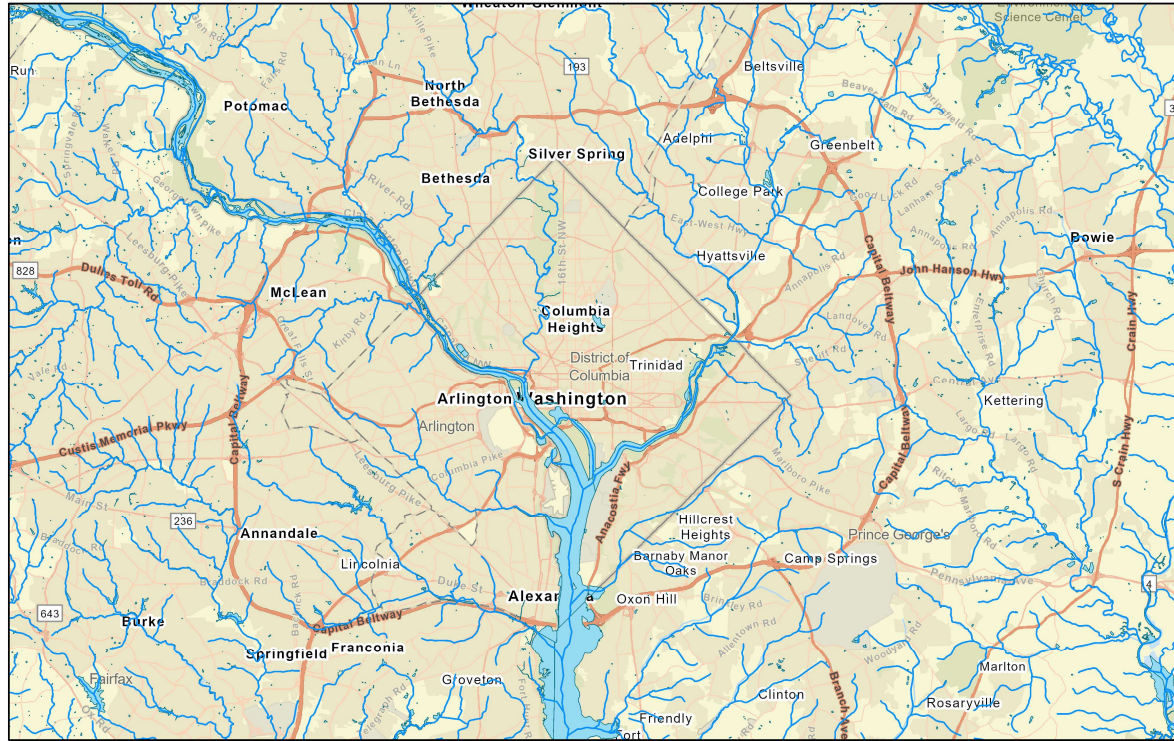
National Capital Region, Greater Washington, D.C.

Source: NEPAassist

Date: June 2022

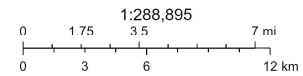
Drawn:
AMG

Approved:
DHS



June 3, 2022

- Streams
- Water Bodies



DCGIS, M-NCPPC, VGIN, Esri, HERE, Garmin, SafeGraph, METINASA, USGS, EPA, NPS, USDA



Water Bodies and Streams

National Capital Region, Greater Washington, D.C.

Figure 10

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Clams

NAME	STATUS
Dwarf Wedgemussel <i>Alasmidonta heterodon</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/784	Endangered

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Crustaceans

NAME	STATUS
Hay's Spring Amphipod <i>Stygobromus hayi</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8410	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur on the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in o shore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Blue-winged Warbler <i>Vermivora pinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Jun 30
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Cerulean Warbler <i>Dendroica cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 28 to Jul 20
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in o shore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere
Hudsonian Godwit <i>Limosa haemastica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere

<p>Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Apr 20 to Aug 20
<p>King Rail <i>Rallus elegans</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8936</p>	Breeds May 1 to Sep 5
<p>Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679</p>	Breeds elsewhere
<p>Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 1 to Jul 31
<p>Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Apr 1 to Jul 31
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Sep 10
<p>Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds elsewhere
<p>Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds elsewhere
<p>Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480</p>	Breeds elsewhere
<p>Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Apr 20 to Aug 5

Wood Thrush *Hylocichla mustelina*

Breeds May 10 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence ()

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data ()

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas on the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bobolink
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



Canada Warbler
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



Cerulean Warbler
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



Eastern Whip-
poor-will
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



Golden Eagle
Non-BCC
Vulnerable (This is
not a Bird of
Conservation
Concern (BCC) in
this area, but
warrants attention
because of the
Eagle Act or for
potential
susceptibilities in
offshore areas from
certain types of
development or
activities.)



Hudsonian Godwit
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



Kentucky Warbler
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



King Rail
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



Lesser Yellowlegs
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



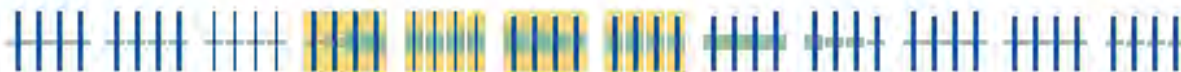
SPECIES

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Prairie Warbler
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



Prothonotary Warbler
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Red-headed Woodpecker
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Ruddy Turnstone
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



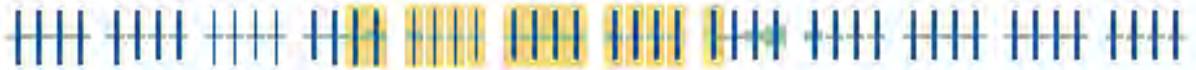
Rusty Blackbird
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



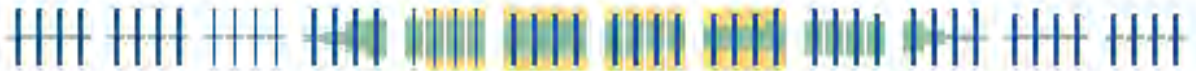
Short-billed Dowitcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Willet
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Wood Thrush
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to on shore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in

my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

National Capitol Region and Greater Washington DC State and District-Listed Species

Maryland

Source: MD Dept. Natural Resources.

(https://dnr.maryland.gov/wildlife/Pages/plants_wildlife/rte/rteplants.aspx,
https://dnr.maryland.gov/wildlife/Pages/plants_wildlife/rte/rteanimals.aspx)

Scientific Name	Common Name	MD Status (see note below)
Animals		
<i>Attheyella spinipes</i>	A Cyclopoid Copepod	Not designated
<i>Stygobromus pizzinii</i>	Pizzini's Cave Amphipod	S1
<i>Stygobromus kenki</i>	Rock Creek Groundwater Amphipod	E
<i>Cambarus acuminatus</i>	Acuminate Crayfish	I
<i>Phanogomphus quadricolor</i>	Rapids Clubtail	I
<i>Libellula flavida</i>	Yellow-sided Skimmer	Not designated
<i>Strophitus undulatus</i>	Creeper	I
<i>Falco peregrinus anatum</i>	Peregrine Falcon	I
Plants		
<i>Asclepias rubra</i>	Red Milkweed	E
<i>Astragalus canadensis</i>	Canadian Milkvetch	E
<i>Baptisia australis</i>	Blue Wild Indigo	T
<i>Carex careyana</i>	Carey's Sedge	E
<i>Coreopsis tripteris</i>	Tall Tickseed	E
<i>Cyperus refractus</i>	Reflexed Fladsedge	Not designated
<i>Dirca palustris</i>	Eastern Leatherwood	T
<i>Eriocaulon decangulare</i>	Ten-angle Pipewort	Not designated
<i>Erythronium albidum</i>	White Trout Lily	T
<i>Gonolobus suberosus var. suberosus</i>	Angular-fruit Milkvine	Not designated
<i>Helianthus occidentalis</i>	McDowell's Sunflower	T
<i>Ilex decidua</i>	Deciduous Holly	Not designated
<i>Iresine rhizomatosa</i>	Eastern Bloodleaf	E
<i>Iris cristata</i>	Dwarf Crested Iris	E
<i>uncus longii</i>	Long's Rush	E
<i>Linum intercursum</i>	Sandplain Flax	T
<i>Lipocarpha micrantha</i>	Dwarf Bulrush	E
<i>Lythrum alatum</i>	Winged Loosestrife	E
<i>Maianthemum stellatum</i>	Starflower Solomon's-plume	E
<i>Matelea obliqua</i>	Climbing Milkweed	E
<i>Matteuccia struthiopteris</i>	Ostrich Fern	Not designated
<i>Mecardonia acuminata</i>	Purple Mecardonia	E
<i>Paspalum fluitans</i>	Horse-tail paspalum	T
<i>Phacelia covillei</i>	Coville's Phacelia	T
<i>Polygala cruciata</i>	Crossleaf Milkwort	T
<i>Polygala polygama</i>	Racemed Milkwort	T
<i>Quercus macrocarpa</i>	Bur Oak	Not designated
<i>Quercus shumardii</i>	Shumard oak	T
<i>Rhynchospora cephalantha</i>	Capitate Beakrush	E
<i>Rhynchospora rariflora</i>	Few-flowered Beakrush	X
<i>Ripariosida hermaphrodita</i>	Virginia Mallow	E
<i>Ruellia strepens</i>	Limestone Wild Petunia	Not designated
<i>Rumex altissimus</i>	Tall Dock	E
<i>Sarracenia purpurea</i>	Northern Pitcherplant	T
<i>Scutellaria nervosa</i>	Veined Skullcap	T
<i>Senecio suaveolens</i>	Sweet-scented Indian-plantain	E
<i>Smilax pseudochina</i>	Long-stalk Greenbrier	T
<i>Stellaria alsine</i>	Trailing Stitchwort	E
<i>Thelypteris simulata</i>	Bog Fern	T
<i>Thyrsanthella difformis</i>	Climbing Dogbane	E
<i>Triosteum angustifolium</i>	Yellowleaf Tinker's-weed	E
<i>Valeriana pauciflora</i>	Valerian	E

Note: E=Endangered; T=Threatened; X=Extirpated; I = In Need of Consideration

Virginia

Source: Virginia Department of Wildlife Resources

(<https://dwr.virginia.gov/wp-content/uploads/media/virginia-threatened-endangered-species.pdf>)

Scientific Name	Common Name	VA Status (see note below)
<i>Acipenser oxyrinchus</i>	Sturgeon, Atlantic	FESE
<i>Myotis septentrionalis</i>	Bat, northern long-eared	FTST
<i>Elliptio lanceolata</i>	Lance, yellow	FTST
<i>Myotis lucifugus</i>	Bat, little brown	SE
<i>Perimyotis subflavus</i>	Bat, tri-colored	SE
<i>Alasmidonta varicosa</i>	Floater, brook	SE
<i>Glyptemys insculpta</i>	Turtle, wood	ST
<i>Falco peregrinus</i>	Falcon, peregrine	ST
<i>Lanius ludovicianus</i>	Shrike, loggerhead	ST
<i>Centronyx henslowii</i>	Sparrow, Henslow's	ST
<i>Pyrgus wyandot</i>	Skipper, Appalachian grizzled	ST
<i>Lanius ludovicianus migrans</i>	Shrike, migrant loggerhead	ST

Note: FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened

District of Columbia

Source: D.C. Department of Energy and Environment, 2015 District of Columbia Wildlife Action Plan

(<https://doee.dc.gov/service/wildlifeactionplan>)

Scientific Name	Common Name	Tier Priority (see notes below)
Birds		
<i>Aix sponsa</i>	Wood Duck	1
<i>Ammodramus savannarum</i>	Grasshopper Sparrow	1
<i>Anas rubripes</i>	American Black Duck	1
<i>Antrostomus vociferus</i>	Eastern Whip-poor-will	3
<i>Botaurus lentiginosus</i>	American Bittern	2
<i>Cardellina canadensis</i>	Canada Warbler	2
<i>Catharus fuscescens</i>	Veery	1
<i>Certhia americana</i>	Brown Creeper	2
<i>Chaetura pelagica</i>	Chimney Swift	1
<i>Chordeiles minor</i>	Common Nighthawk	2
<i>Cistothorus palustris</i>	Marsh Wren	2
<i>Coccyzus americanus</i>	Yellow-billed Cuckoo	2
<i>Colinus virginianus</i>	Northern Bobwhite	3
<i>Dolichonyx oryzivorus</i>	Bobolink	1
<i>Egretta caerulea</i>	Little Blue Heron	1
<i>Empidonax traillii</i>	Willow Flycatcher	1
<i>Euphagus carolinus</i>	Rusty Blackbird	1
<i>Falco peregrinus</i>	Peregrine Falcon	1
<i>Falco sparverius</i>	American Kestrel	1
<i>Gallinago delicata</i>	Wilson's Snipe	1
<i>Geothlypis formosa</i>	Kentucky Warbler	2
<i>Haliaeetus leucocephalus</i>	Bald Eagle	2
<i>Helmitheros vermivorum</i>	Worm-eating Warbler	2
<i>Hylocichla mustelina</i>	Wood Thrush	1
<i>Icteria virens</i>	Yellow-breasted Chat	2
<i>Icterus galbula</i>	Baltimore Oriole	1
<i>Ixobrychus exilis</i>	Least Bittern	3
<i>Megascops asio</i>	Eastern Screech-Owl	2
<i>Melanerpes erythrocephalus</i>	Red-headed Woodpecker	2
<i>Mniotilta varia</i>	Black-and-white Warbler	1
<i>Nyctanassa violacea</i>	Yellow-crowned Night Heron	1
<i>Nycticorax nycticorax</i>	Black-crowned Night Heron	1
<i>Parkesia motacilla</i>	Louisiana Waterthrush	1
<i>Pipilo erythrophthalmus</i>	Eastern Towhee	1
<i>Piranga olivacea</i>	Scarlet Tanager	1
<i>Porzana carolina</i>	Sora	2
<i>Progne subis</i>	Purple Martin	1
<i>Protonotaria citrea</i>	Prothonotary Warbler	2
<i>Rallus limicola</i>	Virginia Rail	2
<i>Scolopax minor</i>	American Woodcock	1

Scientific Name	Common Name	Tier Priority (see notes below)
<i>Seiurus aurocapilla</i>	Ovenbird	1
<i>Setophaga caerulescens</i>	Black-throated Blue Warbler	1
<i>Setophaga castanea</i>	Bay-breasted Warbler	2
<i>Setophaga cerulea</i>	Cerulean Warbler	2
<i>Setophaga citrina</i>	Hooded Warbler	1
<i>Setophaga discolor</i>	Prairie Warbler	1
<i>Setophaga fusca</i>	Blackburnian Warbler	1
<i>Setophaga pennsylvanica</i>	Chestnut-sided Warbler	2
<i>Setophaga virens</i>	Black-throated Green Warbler	1
<i>Spizella pusilla</i>	Field Sparrow	1
<i>Sterna forsteri</i>	Forster's Tern	2
<i>Sturnella magna</i>	Eastern Meadowlark	1
<i>Toxostoma rufum</i>	Brown Thrasher	1
<i>Tringa flavipes</i>	Lesser Yellowlegs	2
<i>Vermivora chrysoptera</i>	Golden-winged Warbler	1
<i>Vermivora cyanoptera</i>	Blue-winged Warbler	2
<i>Vireo flavifrons</i>	Yellow-throated Vireo	2
<i>Vireo griseus</i>	White-eyed Vireo	1
Mammals		
<i>Myotis septentrionalis</i>	Northern Long-Eared Bat	1
<i>Myotis leibii</i>	Eastern Small-Footed Bat	1
<i>Myotis lucifugus</i>	Little Brown Bat	1
<i>Perimyotis subflavus</i>	Tri-colored Bat	1
<i>Lontra canadensis</i>	Northern River Otter	1
<i>Mephitis mephitis</i>	Striped Skunk	2
<i>Lasiurus cinereus</i>	Hoary Bat	1
<i>Nycticeius humeralis</i>	Evening Bat	1
<i>Neovison vison</i>	American Mink	2
<i>Lasiurus borealis</i>	Eastern Red Bat	1
<i>Ondrata zibethicus</i>	Muskrat	1
<i>Eptesicus fuscus</i>	Big Brown Bat	1
<i>Lasionycteris noctivagans</i>	Silver Haired Bat	1
<i>Castor canadensis</i>	Beaver	2
<i>Tamias striatus</i>	Eastern Chipmunk	1
<i>Glaucomys volans</i>	Southern Flying Squirrel	1
<i>Urocyon cinereoargenteus</i>	Gray Fox	1
<i>Didelphis virginiana</i>	Virginia Opossum	1
<i>Blarina brevicauda</i>	Northern Short-tailed Shrew	1
<i>Microtus pennsylvanicus</i>	Meadow Vole	1
<i>Sylvilagus floridanus</i>	Eastern Cottontail	1
Reptiles		
<i>Agkistrodon contortrix</i>	Northern Copperhead	1
<i>Carphophis amoneous</i>	Eastern Worm Snake	1
<i>Chrysemys picta picta</i>	Eastern Painted Turtle	1
<i>Clemmys guttata</i>	Spotted Turtle	1
<i>Crotalus horridus</i>	Timber Rattlesnake	3
<i>Diadophis punctatus</i>	Northern Ringneck Snake	1
<i>Glyptemys insculpta</i>	Wood Turtle	2
<i>Glyptemys muhlenbergii</i>	Bog Turtle	3
<i>Kinosternon subrubrum</i>	Eastern Mud Turtle	1
<i>Opheodrys aestivus</i>	Rough Green Snake	1
<i>Plestidon faciatus</i>	Five-lined Skink	1
<i>Pseudemys rubriventris</i>	Eastern Redbelly Turtle	1
<i>Regina septemvittata</i>	Queen Snake	1
<i>Sternotherus odoratus</i>	Common Musk Turtle	1
<i>Storeria dekayi dekayi</i>	Northern Brown Snake	1
<i>Terrepene carolina carolina</i>	Eastern Box Turtle	1
<i>Thamnophis sirtalis</i>	Eastern Garter Snake	1
Amphibians		
<i>Ambystoma maculatum</i>	Spotted Salamander	1
<i>Ambystoma opacum</i>	Marbled Salamander	2

Scientific Name	Common Name	Tier Priority (see notes below)
<i>Anaxyrus americanus</i>	American Toad	1
<i>Anaxyrus fowleri</i>	Fowler's Toad	1
<i>Desmognathus fuscus</i>	Northern Dusky Salamander	1
<i>Eurycea bislineata</i>	Northern Two-lined Salamander	1
<i>Hyla chrysoscelis</i>	Cope's Gray Tree Frog	1
<i>Hyla cinerea</i>	Green Tree Frog	3
<i>Hyla versicolor</i>	Gray Tree Frog	1
<i>Lithobates clamitans</i>	Green Frog	1
<i>Lithobates palustris</i>	Pickerel Frog	1
<i>Lithobates sphenoccephalus</i>	Southern Leopard Frog	1
<i>Lithobates sylvatica</i>	Wood Frog	1
<i>Notopthalmus viridescens</i>	Eastern Newt	1
<i>Plethodon cinereus</i>	Redback Salamander	1
<i>Pseudacris crucifer</i>	Northern Spring Peeper	1
<i>Pseudacris feriarum</i>	Upland Chorus Frog	1
<i>Pseudotriton ruber</i>	Northern Red Salamander	1
Fish		
<i>Acipenser brevirostrum</i>	Shortnose Sturgeon	2
<i>Acipenser oxyrinchus</i>	Atlantic Sturgeon	3
<i>Alosa aestivalis</i>	Blueback Herring	1
<i>Alosa mediocris</i>	Hickory Shad	1
<i>Alosa pseudoharengus</i>	Alewife	1
<i>Alosa sapidissima</i>	American Shad	1
<i>Ameriurus nebulosus</i>	Brown Bullhead	1
<i>Amia calva</i>	Bowfin	2
<i>Anguilla rostrata</i>	American Eel	1
<i>Margariscus margarita</i>	Pearl Dace	3
<i>Morone saxatilis</i>	Striped Bass	1
<i>Notropis bifrenatus</i>	Bridle Shiner	3
Dragonflies and Damselflies		
<i>Anax longipes</i>	Comet Darner	2
<i>Archilestes grandis</i>	Great Spreadwing	1
<i>Argia sedula</i>	Blue-ringed Dancer	2
<i>Argomphus villosipes</i>	Unicorn Clubtail	1
<i>Cordulegaster erronea</i>	Tiger Spiketail	1
<i>Enallagma aspersum</i>	Azure Bluet	2
<i>Enallagma basidens</i>	Double-striped Bluet	2
<i>Enallagma divagans</i>	Turquoise Bluet	1
<i>Enallagma traviatum</i>	Slender Bluet	2
<i>Erpetogomphus designatus</i>	Eastern Ringtail	2
<i>Gomphus exilis</i>	Lancet Clubtail	2
<i>Gomphus vastus</i>	Cobra Clubtail	2
<i>Hagenius brevistylus</i>	Dragonhunter	1
<i>Ischnura kellicotti</i>	Lilypad Forktail	1
<i>Ischnura ramburii</i>	Rambur's Forktail	2
<i>Lestes forcipatus</i>	Sweetflag Spreadwing	2
<i>Lestes inaequalis</i>	Elegant Spreadwing	2
<i>Nasiaeschna pentacantha</i>	Cyrano Darner	1
<i>Nehalennia gracilis</i>	Sphagnum Sprite	3
<i>Nehalennia irene</i>	Sedge Sprite	3
<i>Neurocordulia obsoleta</i>	Umber Shadowdragon	2
<i>Somatochlora filosa</i>	Fine-lined Emerald	3
<i>Somatochlora linearis</i>	Mocha Emerald	1
<i>Somatochlora tenebrosa</i>	Clamp-tipped Emerald	2
<i>Stylogomphus albistylus</i>	Eastern Least Clubtail	2

Scientific Name	Common Name	Tier Priority (see notes below)
<i>Stylurus plagiatus</i>	Russet-tipped Clubtail	1
Butterflies		
<i>Callophrys irus</i>	Frosted Elfin	3
<i>Danaus plexippus</i>	Monarch	1
<i>Euphydryas phaeton</i>	Baltimore Checkerspot	1
<i>Hesperia leonardus</i>	Leonard's Skipper	1
<i>Lycaena hyllus</i>	Bronze Copper	2
<i>Polites origenes</i>	Crossline Skipper	1
<i>Pompeius verna</i>	Little Glassywing	3
<i>Satyrium edwardsii</i>	Edwards' Hairstreak	3
<i>Speyeria cybele</i>	Great Spangled Fritillary	2
<i>Speyeria idalia</i>	Regal Fritillary	2
Bees		
<i>Bombus affinis</i>	Rusty-patched Bumble Bee	2
<i>Lasioglossum michiganense</i>	A Sweat Bee	2
<i>Protandrena abdominalis</i>	A Mining Bee	2
<i>Pseudopanurgus virginicus</i>	A Slender Tri-color Mining Bee	2
Mussels and Snails		
<i>Alasmidonta heterodon</i>	Dwarf Wedgemussel	3
<i>Alasmidonta undulata</i>	Triangle Floater	2
<i>Alasmidonta varicosa</i>	Brook Floater	2
<i>Anguispira fergusonii</i>	Coastal-plain Tigersnail	2
<i>Anodonta implicata</i>	Alewife Floater	2
<i>Fontigens bottimeri</i>	Appalachian Springsnail	3
<i>Lampsilis cariosa</i>	Yellow Lampmussel	2
<i>Lasmigona subviridis</i>	Green Floater	2
<i>Leptodea ochracea</i>	Tidewater Mucket	2
<i>Ligumia nasuta</i>	Eastern Pondmussel	2
<i>Oxyloma effusum</i>	Coastal-plain Ambersnail	2
<i>Oxyloma subeffusum</i>	Chesapeake Ambersnail	2
<i>Stenotrema barbatum</i>	Bristled Slitmouth	2
Crustaceans		
<i>Acanthocyclops columbiensis</i>	Copepod sp.	1
<i>Attheyella (Mrazekiella) carolinensis</i>	Copepod sp.	2
<i>Attheyella (Mrazekiella) obotogamen</i>	Copepod sp.	2
<i>Attheyella (Mrazekiella) spinipes</i>	A harpacticoid copepod	2
<i>Bryocamptus zschokkei alleganiensis</i>	Copepod sp.	2
<i>Bryocamptus (Bryocamptus) hutchins</i>	Copepod sp.	2
<i>Bryocamptus (Bryocamptus) minutus</i>	Copepod sp.	2
<i>Bryocamptus (Limocamptus) nivalis</i>	Copepod sp.	2
<i>Cambarus acuminatus</i>	Acuminate crayfish	2
<i>Cambarus diogenes</i>	Devil Crawfish	2
<i>Cambarus dubius</i>	Upland Burrowing Crayfish	2
<i>Diacyclops harryi</i>	Copepod sp.	2
<i>Diacyclops navus</i>	Copepod sp.	2
<i>Eucyclops elegans</i>	Copepod sp.	2
<i>Macrocyclus albidus</i>	Copepod sp.	2
<i>Paracyclops poppei</i>	Copepod sp.	2
<i>Skistodiaptomus pallidus</i>	A calanoid copepod	2
<i>Stygobromus hayi</i>	Hay's Spring Amphipod	1
<i>Stygobromus kenki</i>	Kenk's Amphipod	1
<i>Stygobromus pizzinii</i>	Pizzini's Cave Amphipod	2
<i>Stygobromus sextarius</i>	Capital Area groundwater amphipod	2
<i>Stygobromus tenuis potomacus</i>	Potomac Groundwater Amphipod	1
Sponges		
<i>Ephydatia</i> sp.	A Freshwater Sponge	2
<i>Spongilla</i> sp.	A Freshwater Sponge	2

Notes:

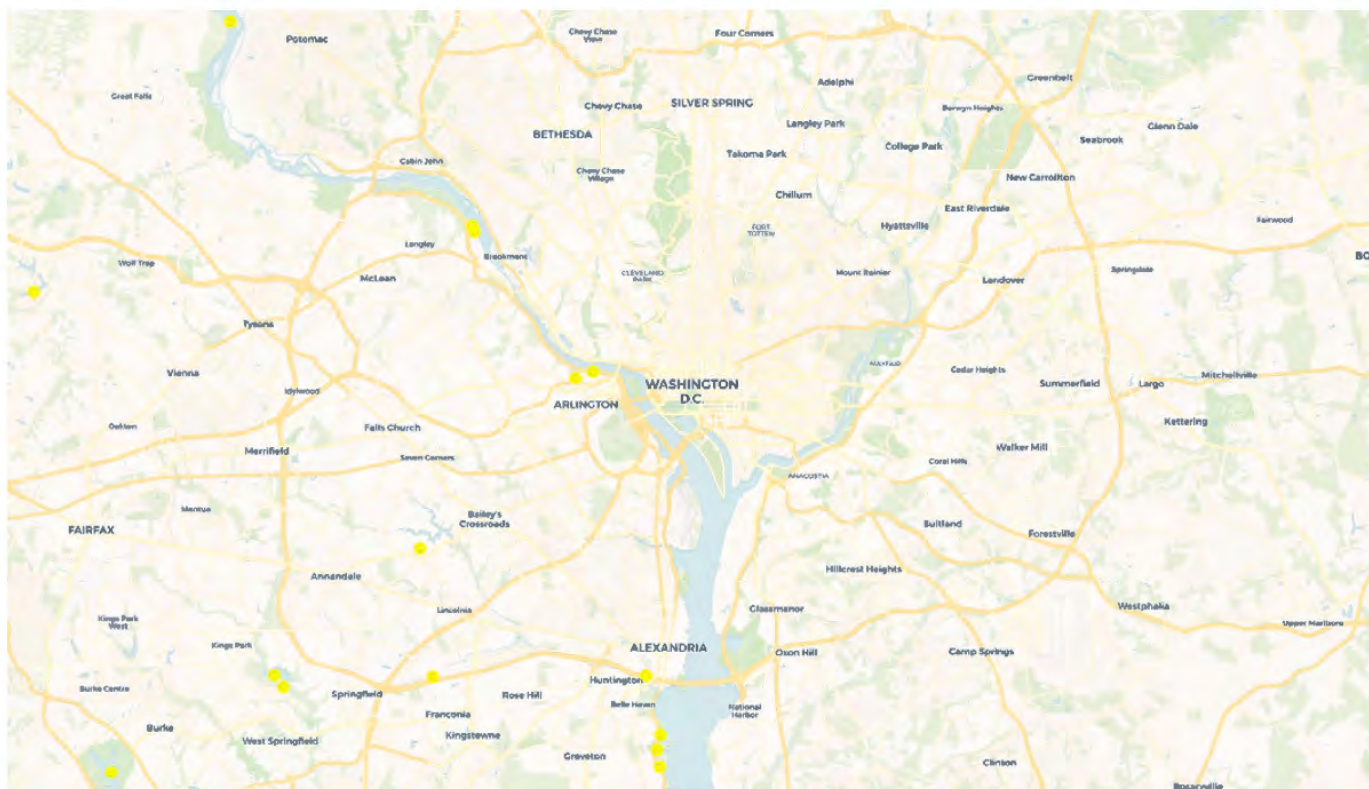
Tier 1 = Federally listed species known to occur in Washington, D.C. and species targeted for

Tier 2 = Species that should be targeted for inventory, but not any formal conservation actions

Tier 3 = Never been encountered within the District or have not been encountered in more than



CCB Mapping Portal



Layers: Eagle Roosts, VA Eagle Nest Locator, VA Eagle Nest Buffers, Eagle Roost Polygons, Eagle Roost Buffers

Map Link:

https://www.ccbirds.org/maps/#layer=Eagle+Roosts&layer=VA+Eagle+Nest+Locator&layer=VA+Eagle+Nest+Buffers&layer=Eagle+Roost+Polygons&layer=Eagle+Roost+Buffers&zoom=12&lat=38.89076560366622&lng=-77.04883575439453&legend=legend_tab_7c321b7e-e523-11e4-aaa0-0e0c41326911&base=Street+Map+%28OSM%2FCarto%29

Report Generated On: 03/29/2022

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Report generated by [The Center for Conservation Biology Mapping Portal](#).

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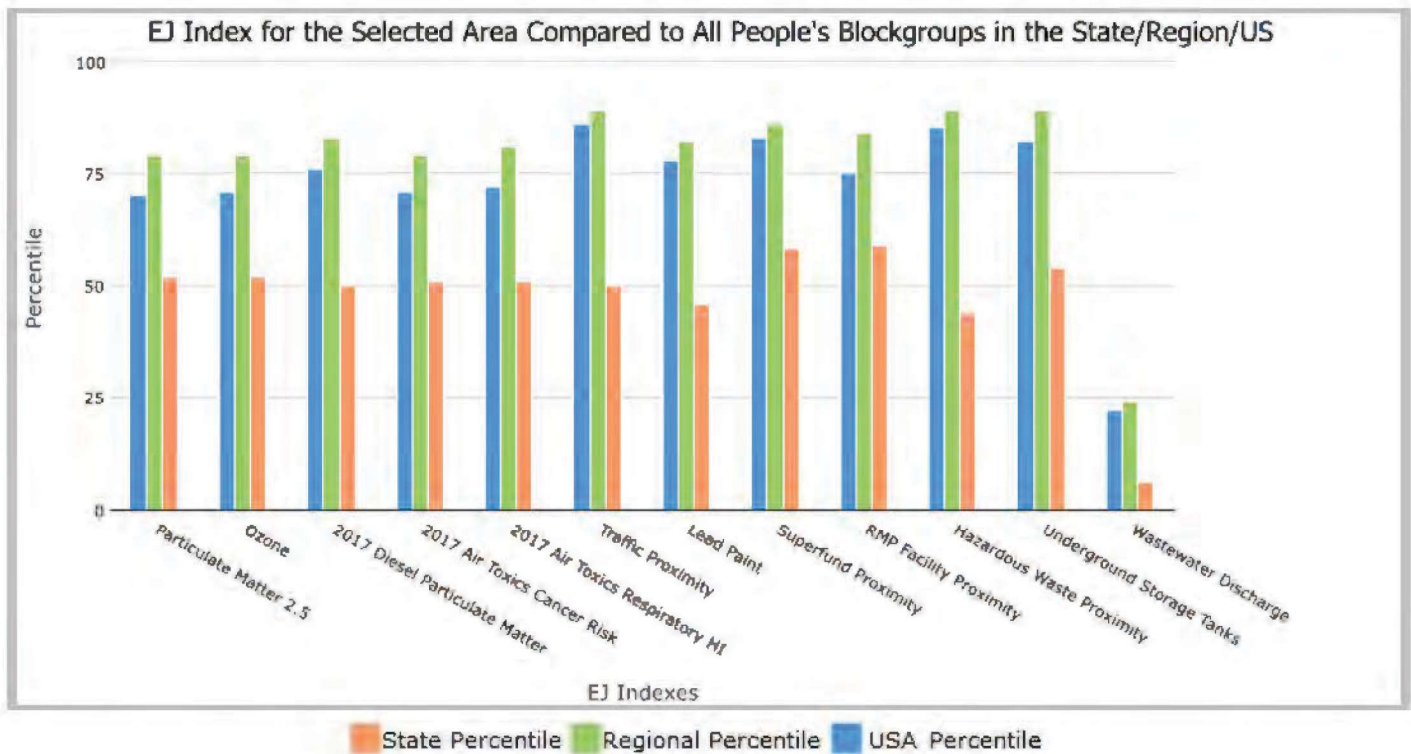
the User Specified Area, DISTRICT OF COLUMBIA, EPA Region 3

Approximate Population: 1,949,449

Input Area (sq. miles): 275.81

NCR (The study area contains 2 blockgroup(s) with zero population.)

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	52	79	70
EJ Index for Ozone	52	79	71
EJ Index for 2017 Diesel Particulate Matter*	50	83	76
EJ Index for 2017 Air Toxics Cancer Risk*	51	79	71
EJ Index for 2017 Air Toxics Respiratory HI*	51	81	72
EJ Index for Traffic Proximity	50	89	86
EJ Index for Lead Paint	46	82	78
EJ Index for Superfund Proximity	58	86	83
EJ Index for RMP Facility Proximity	59	84	75
EJ Index for Hazardous Waste Proximity	44	89	85
EJ Index for Underground Storage Tanks	54	89	82
EJ Index for Wastewater Discharge	6	24	22



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

EJScreen Report (Version 2.0)



the User Specified Area, DISTRICT OF COLUMBIA, EPA Region 3

Approximate Population: 1,949,449

Input Area (sq. miles): 275.81

NCR (The study area contains 2 blockgroup(s) with zero population.)



Sites reporting to EPA	
Superfund NPL	1
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	132

EJScreen Report (Version 2.0)



the User Specified Area, DISTRICT OF COLUMBIA, EPA Region 3

Approximate Population: 1,949,449

Input Area (sq. miles): 275.81

NCR (The study area contains 2 blockgroup(s) with zero population.)

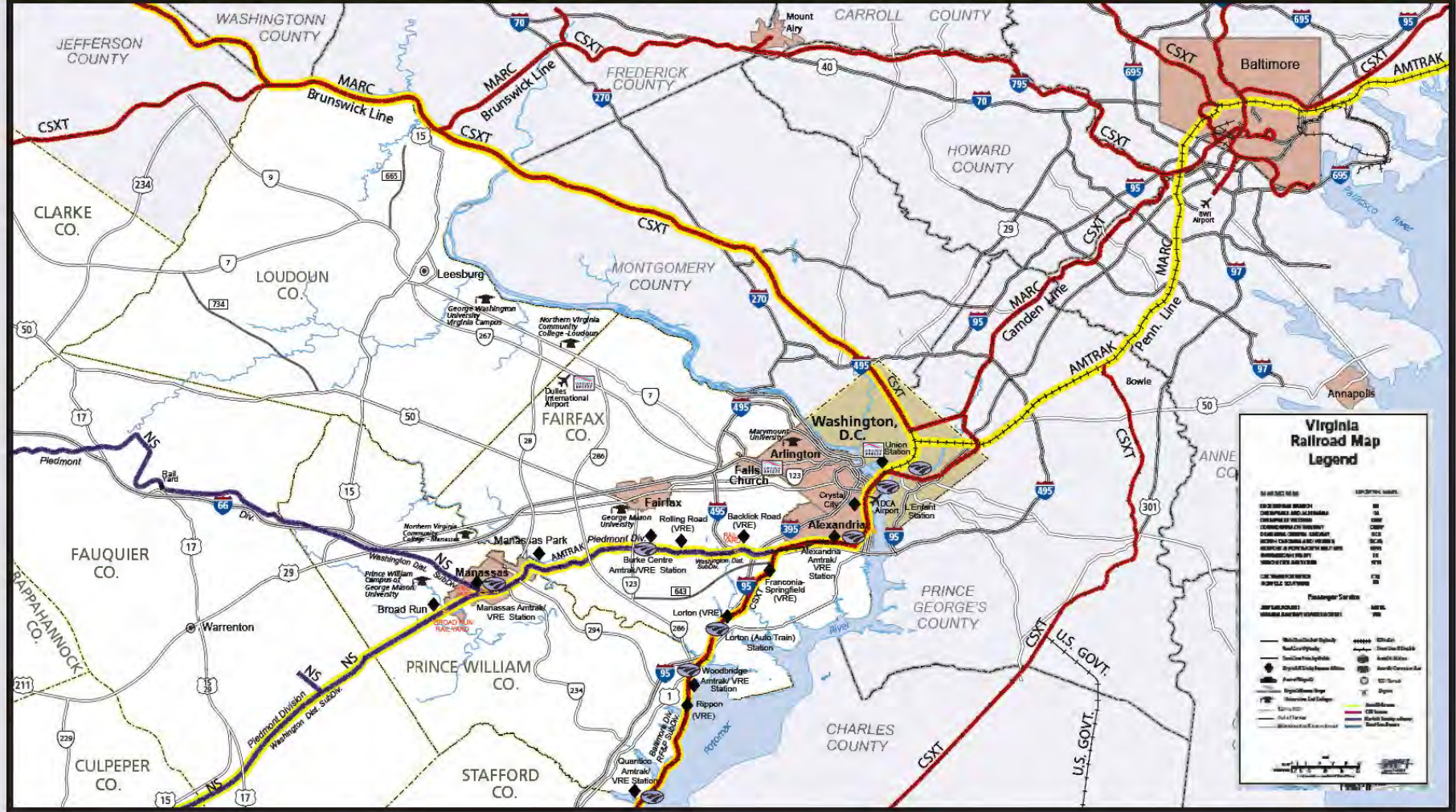
Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Pollution and Sources							
Particulate Matter 2.5 ($\mu\text{g}/\text{m}^3$)	8.54	8.62	14	8.2	62	8.74	48
Ozone (ppb)	43	42.9	46	41.9	66	42.6	58
2017 Diesel Particulate Matter* ($\mu\text{g}/\text{m}^3$)	0.481	0.534	29	0.267	90-95th	0.295	80-90th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	35	36	68	30	90-95th	29	90-95th
2017 Air Toxics Respiratory HI*	0.44	0.47	57	0.34	95-100th	0.36	80-90th
Traffic Proximity (daily traffic count/distance to road)	2400	3600	50	680	94	710	93
Lead Paint (% Pre-1960 Housing)	0.44	0.58	27	0.35	66	0.28	74
Superfund Proximity (site count/km distance)	0.15	0.24	40	0.15	74	0.13	79
RMP Facility Proximity (facility count/km distance)	0.45	0.65	43	0.63	62	0.75	57
Hazardous Waste Proximity (facility count/km distance)	8.2	17	26	1.9	95	2.2	93
Underground Storage Tanks (count/km ²)	6.9	12	39	2.7	89	3.9	83
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0039	0.0014	92	33	67	12	61
Socioeconomic Indicators							
Demographic Index	43%	46%	49	30%	76	36%	67
People of Color	62%	63%	47	33%	80	40%	73
Low Income	25%	28%	52	27%	53	31%	44
Unemployment Rate	5%	7%	50	5%	62	5%	60
Linguistically Isolated	6%	3%	81	3%	85	5%	74
Less Than High School Education	11%	9%	64	10%	64	12%	58
Under Age 5	7%	7%	55	6%	65	6%	61
Over Age 64	12%	12%	58	16%	33	16%	39

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

For additional information, see: www.epa.gov/environmentaljustice

EJScreen is a screening tool for pre decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

NORTHERN VIRGINIA AREA (NOVA)



Railroads

Figure 11



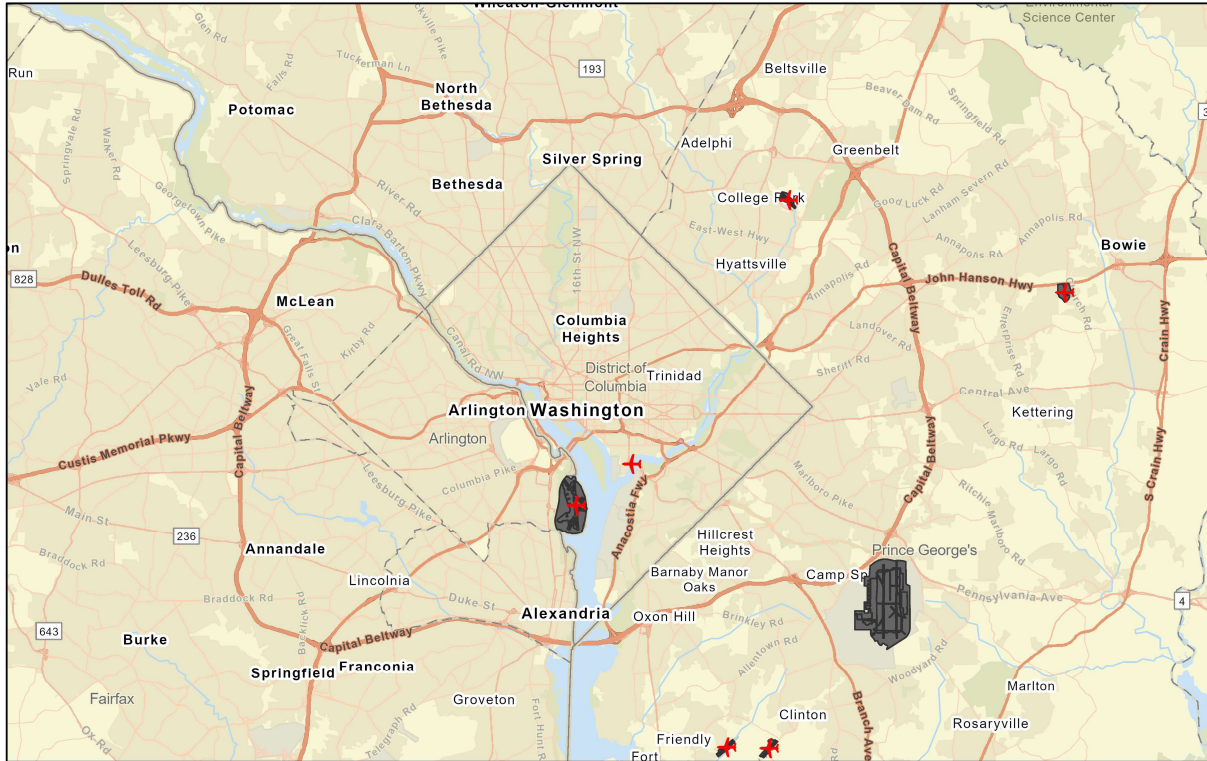
National Capital Region, Greater Washington, D.C.

Source: NEPAassist



Date: April 2022

Drawn: AMG

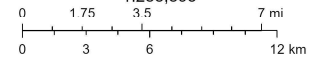
Approved: DHS



June 3, 2022

-  Airport Points
-  Airport Polygons

1:288,895



EPA, OGI, DCGIS, M-NCPPC, VGIN, Esri, HERE, Garmin, SafeGraph, METI/
NASA, USGS, EPA, NPS, USDA



Airports

Figure 12

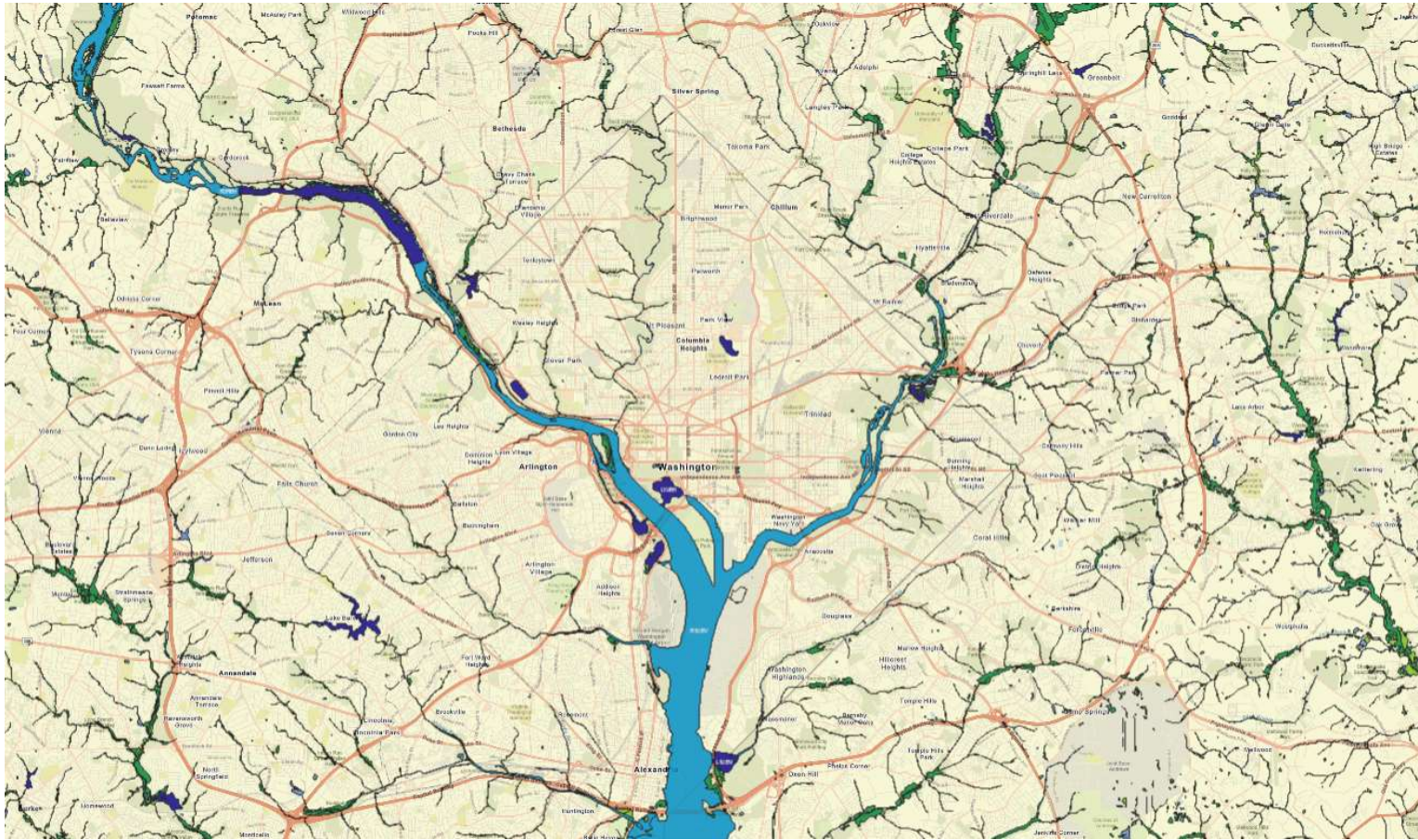
National Capital Region, Greater Washington, D.C.

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS



Wetlands

National Capital Region, Greater Washington, D.C.

Figure 13

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS

APPENDIX E – RICHMOND, VIRGINIA

Figure Sequence

Land Cover

Protected Areas Database of the United States

Federal Lands

Hospitals

Schools

Places of Worship

National Scenic Byways

National Register of Historic Places – All Properties

National Register of Historic Places – Historic Districts

Water Bodies and Streams

Wetlands

USFWS IPAC Federally Listed Species and Migratory Birds

State Listed Species

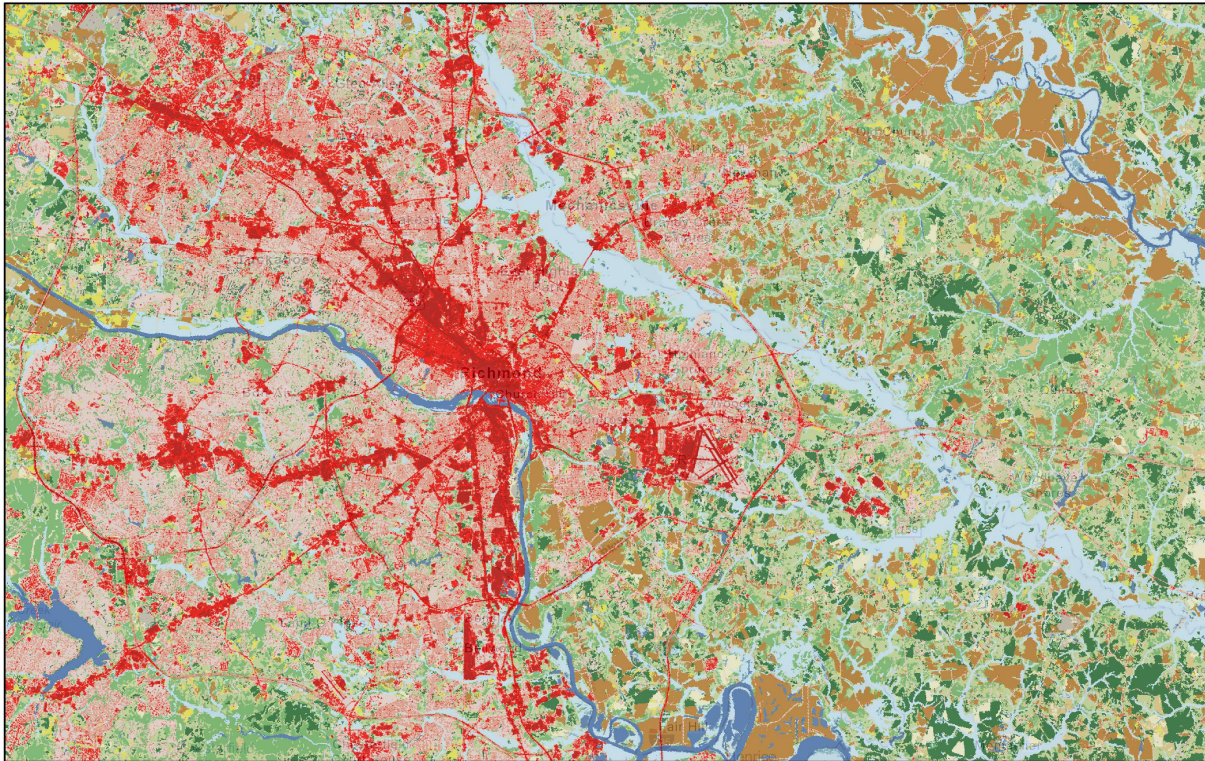
Bald Eagle Nests

USEPA Environmental Justice Screen Report

Railroads

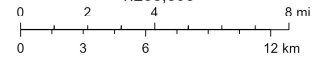
Airports

- Open Water (11)
- Perennial Ice/Snow/ (12)
- Developed, Open Space (21)
- Developed, Low Intensity (22)
- Developed, Medium Intensity (23)
- Developed, High Intensity (24)
- Barren Land (Rock/Sand/Clay) (31)
- Unconsolidated Shore (32)
- Deciduous Forest (41)
- Evergreen Forest (42)
- Mixed Forest (43)
- Dwarf Scrub(AK only) (51)
- Shrub/Scrub (52)
- Grasslands/Herbaceous (71)
- Sedge/Herbaceous(AK only) (72)
- Lichens (AK only) (73)
- Moss (AK only) (74)
- Pasture/Hay (81)
- Cultivated Crops (82)
- Woody Wetlands (90)
- Emergent Herbaceous Wetlands (9



June 3, 2022

1:288,895



County of Henrico, VGIN, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA



Land Cover

Richmond, Virginia

Figure 1

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS



Protected Areas Database of the United States

Richmond, Va

Add data

DATASETS [1] Remove All

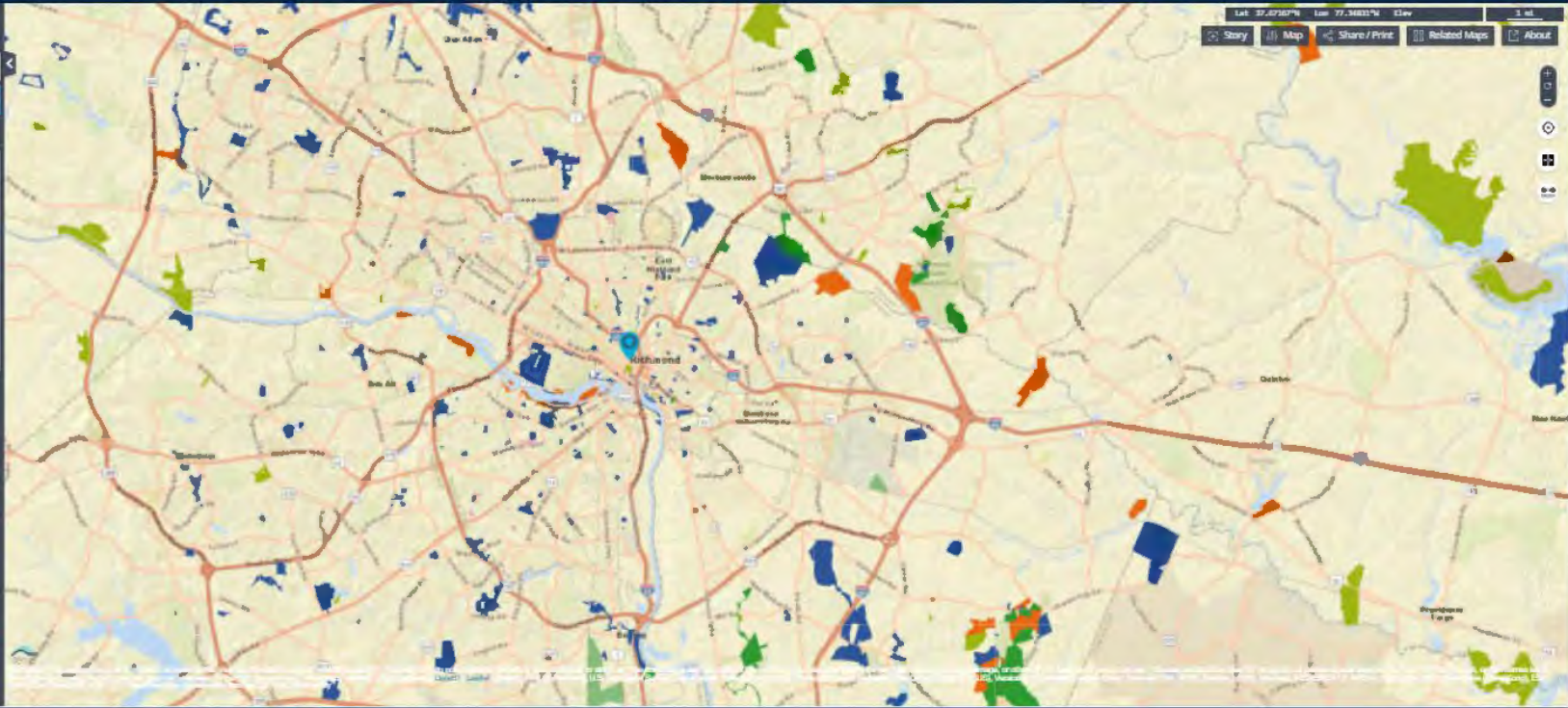
Manager Type

Zoom To Coast About This Data Split Remove

Opacity: 100 %

Protected Areas Database of the United States (PAD-US) v2.1

- Federal American Indian Areas
- State
- Local Government
- Regional Agency Special District
- Non-Governmental Organization
- Private
- Joint
- Territorial
- Unknown



Protected Areas of the US

Richmond, Virginia

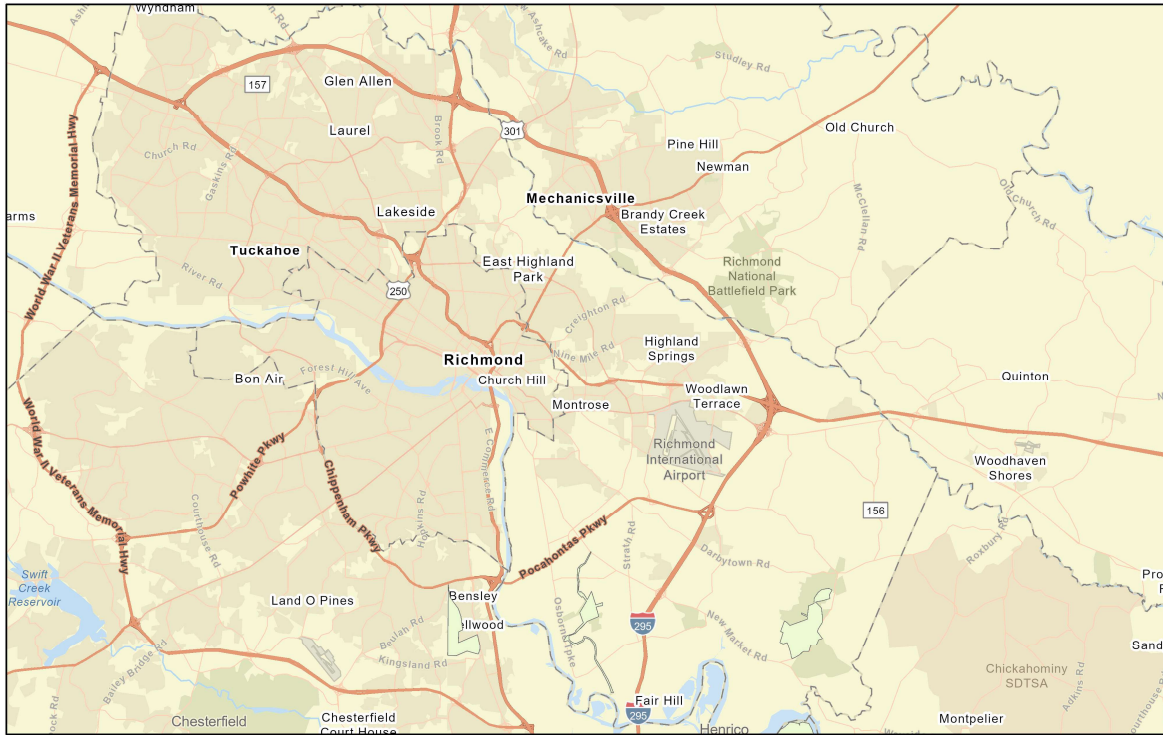
Figure 2

Source: USGS

Date: April 2022

Drawn: AMG

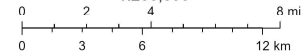
Approved: DHS



June 3, 2022

■ Federal Lands

1:288,895



County of Henrico, VGIN, Esri, HERE, Garmin, SafeGraph, METINASA, USGS, EPA, NPS, USDA, EPA OEI



Federal Lands

Richmond, Virginia

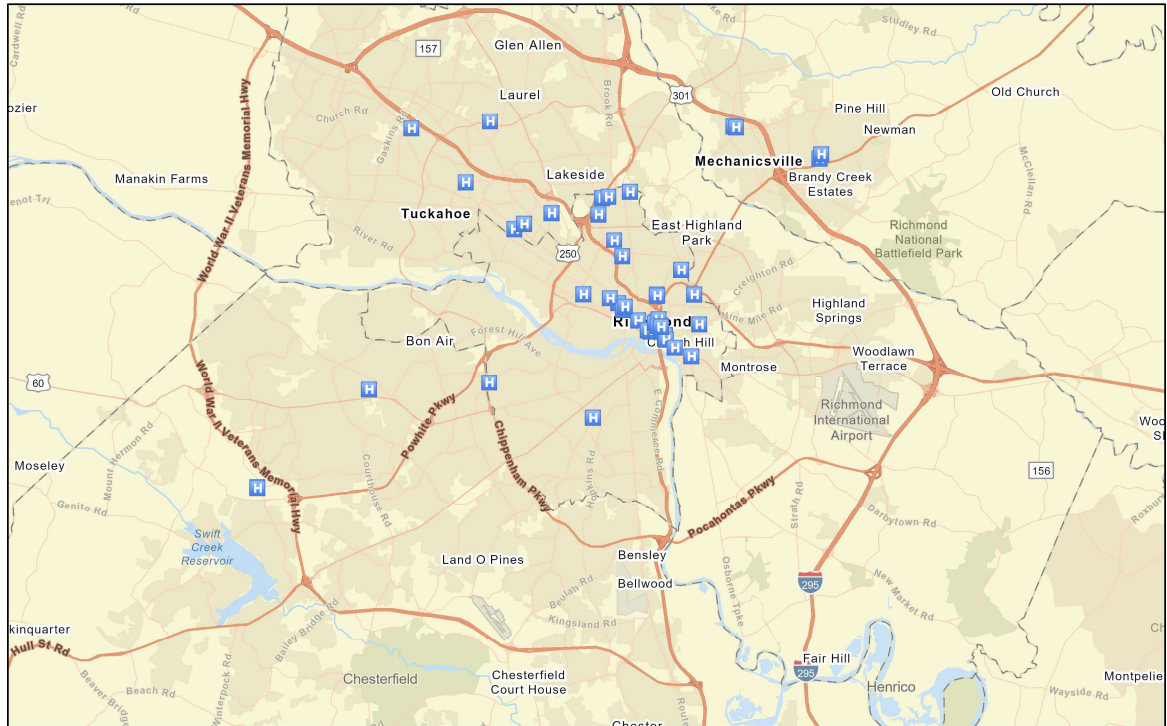
Figure 3

Source: NEPAassist


Date: June 2022

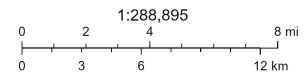
Drawn:
AMG

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DHS



June 3, 2022

 Hospitals



City of Richmond, County of Henrico, VGIN, Esri, HERE, Garmin, SafeGraph, METINASA, USGS, EPA, NPS, USDA, EPA/GEI, OFA



Hospitals

Richmond, Virginia

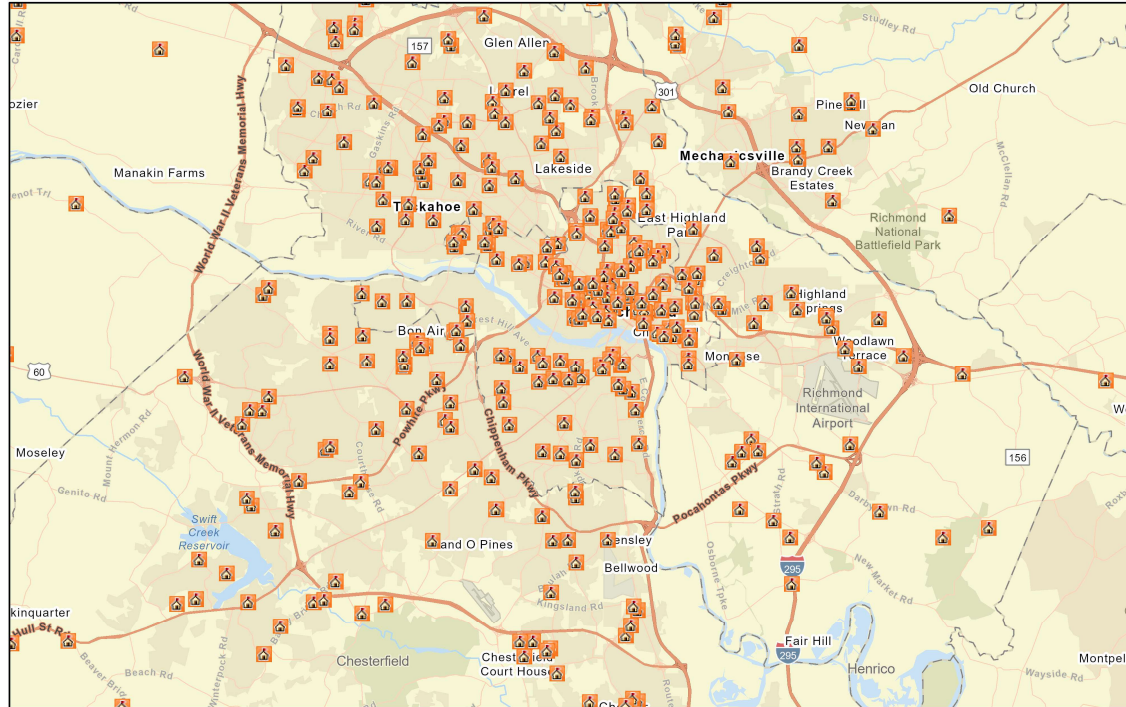
Figure 4

Source: NEPAassist


Date: June 2022

Drawn:
AMG

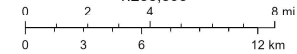
Approved:
DHS



June 3, 2022

 Schools

1:288,895



City of Richmond, County of Henrico, VGIN, Esti, HERE, Garmin, SafeGraph, METINASA, USGS, EPA, NPS, USDA, EPA OEI, OFA



Schools

Richmond, Virginia

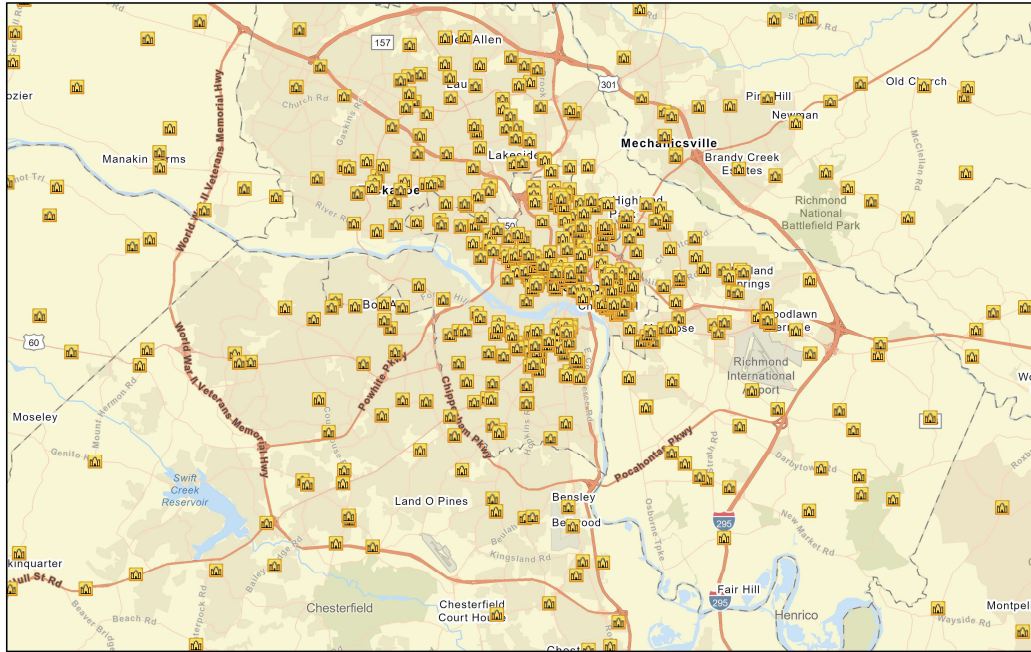
Figure 5

Source: NEPAassist


Date: June 2022

Drawn:
AMG

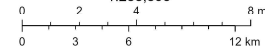
Approved:
DHS



June 3, 2022

 Places of Worship

1:288,895



City of Richmond, County of Henrico, VGIN, Esri, HERE, Garmin, SafeGraph, METANASA, USGS, EPA, NPS, USDA, EPA OEL, OFA



Places of Worship

Richmond, Virginia

Figure 6

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS

Virginia

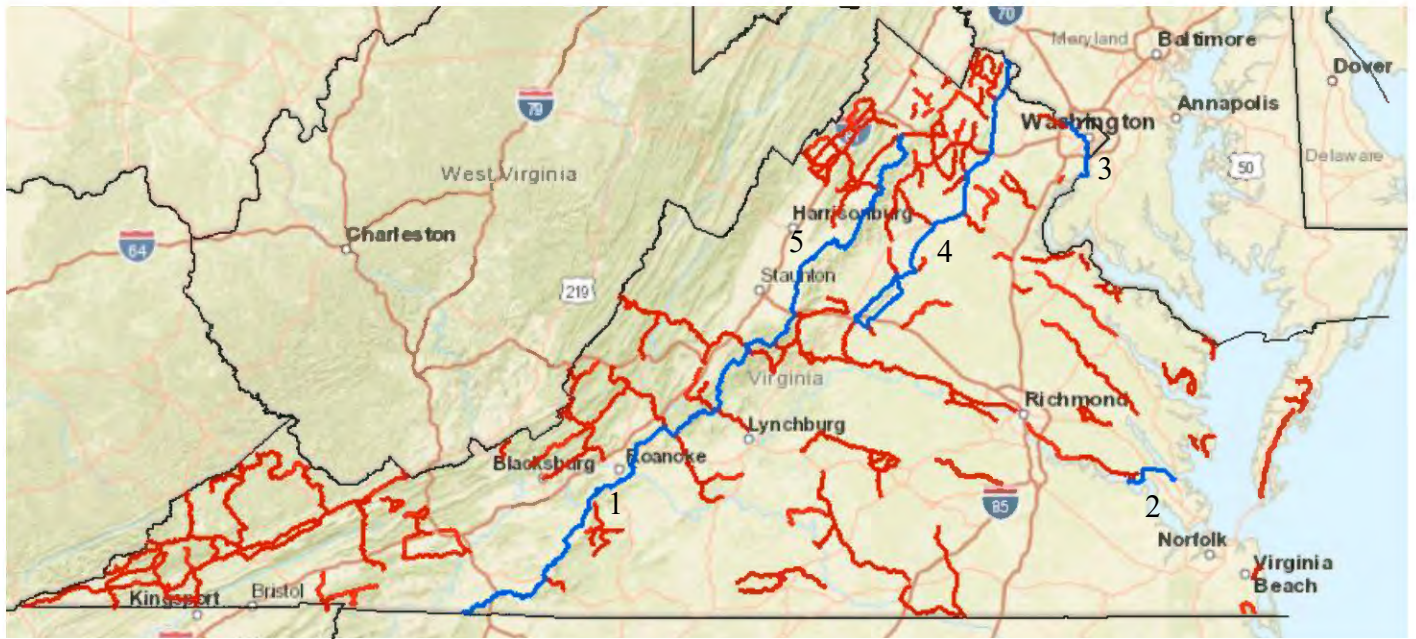
The National Scenic Byway Program

The National Scenic Byways Program, established by Congress in 1991, recognizes historic, scenic and culturally important roads, and promotes tourism and economic development in nearby communities. The Virginia General Assembly passed the State Scenic Highway and Virginia Byways Act in 1966. This act was created in response to the Statewide Comprehensive Outdoor Recreation Plan, known as the Virginia Outdoors Plan. Since the program's creation, over 3,500 miles of road have been designated. Virginia's byways include both state and national designated roads. The extensive byways system is managed by the Virginia Department of Transportation (VDOT). Virginia hosts five National Scenic Byways, including three All American Roads, the highest honor the Federal Highway Administration bestows upon byways, and has over 200 scenic byways in total.

Key points:

- Virginia has a total of 227 Scenic Byways, including 5 National Scenic Byways and 222 State Scenic Byways
- The NPS describes the [George Washington Memorial Parkway](#), an All American Road, as “dotted with memorials and places with nationally significant history”; traversing the parkway will bring you from Mount Vernon and Fort Hunt to the Jones Point Lighthouse to the Alexandria Waterfront to the US Marine Corps War Memorial
- According to the 2018 Virginia Outdoor Plan, [67%](#) of residents who responded said they enjoyed driving as a way to connect with nature
- [2018 domestic travel](#) in Virginia generated \$25.8 billion, a year-over-year increase of 4.4%, supporting 234,500 jobs within the state – 45 Virginia counties received over \$100 million in domestic travel expenditures and 43 counties realized one thousand or more jobs directly supported by domestic travelers





Scenic Byways in Virginia

National Scenic Byways

- Blue Ridge Parkway (1)*
- Colonial Parkway (2)*
- George Washington Memorial Parkway (3)*
- Journey Through Hallowed Ground Byway (4)
- Skyline Drive (5)

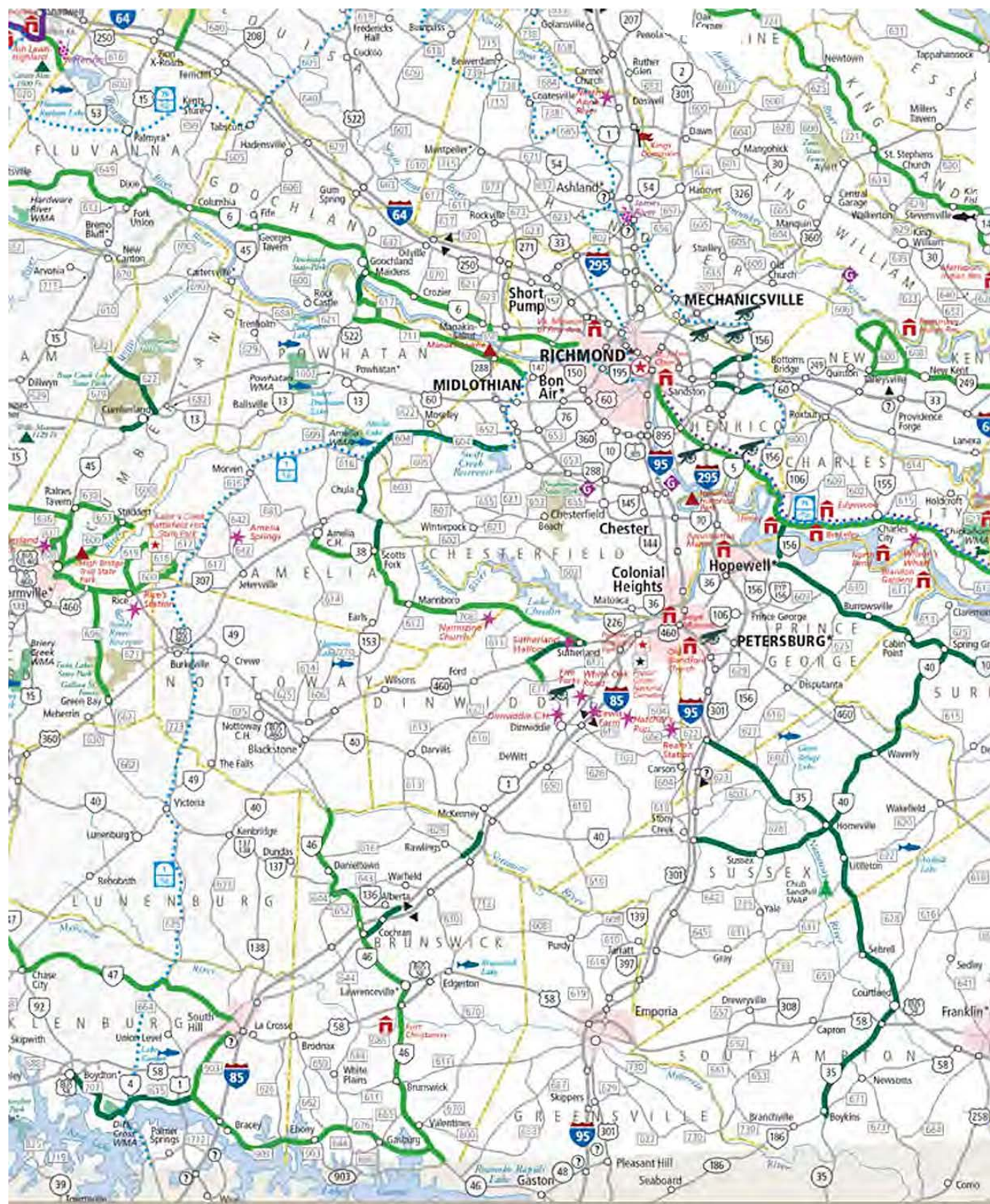
State Scenic Byways

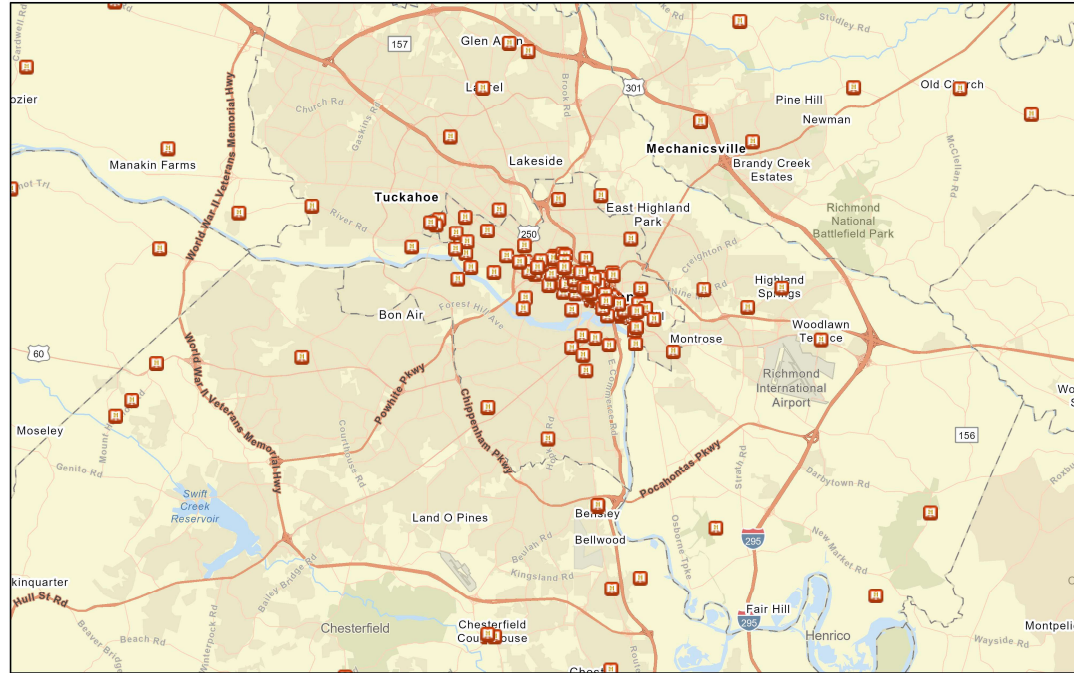
See [Virginia Department of Transportation](#) for Complete State Byways Information

Map Key:

The numbers following each byway name above match with the respective byway's numbered location on the map.

*Asterisk denotes an All-American Road.

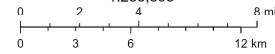




June 3, 2022

 National Register of Historic Places

1:288,895



City of Richmond, County of Henrico, VA, Esri, HERE, Garmin, SafeGraph, METINASA, USGS, EPA, NPS, USDA, EPA OEL OFA



National Register of Historic Places

Figure 7

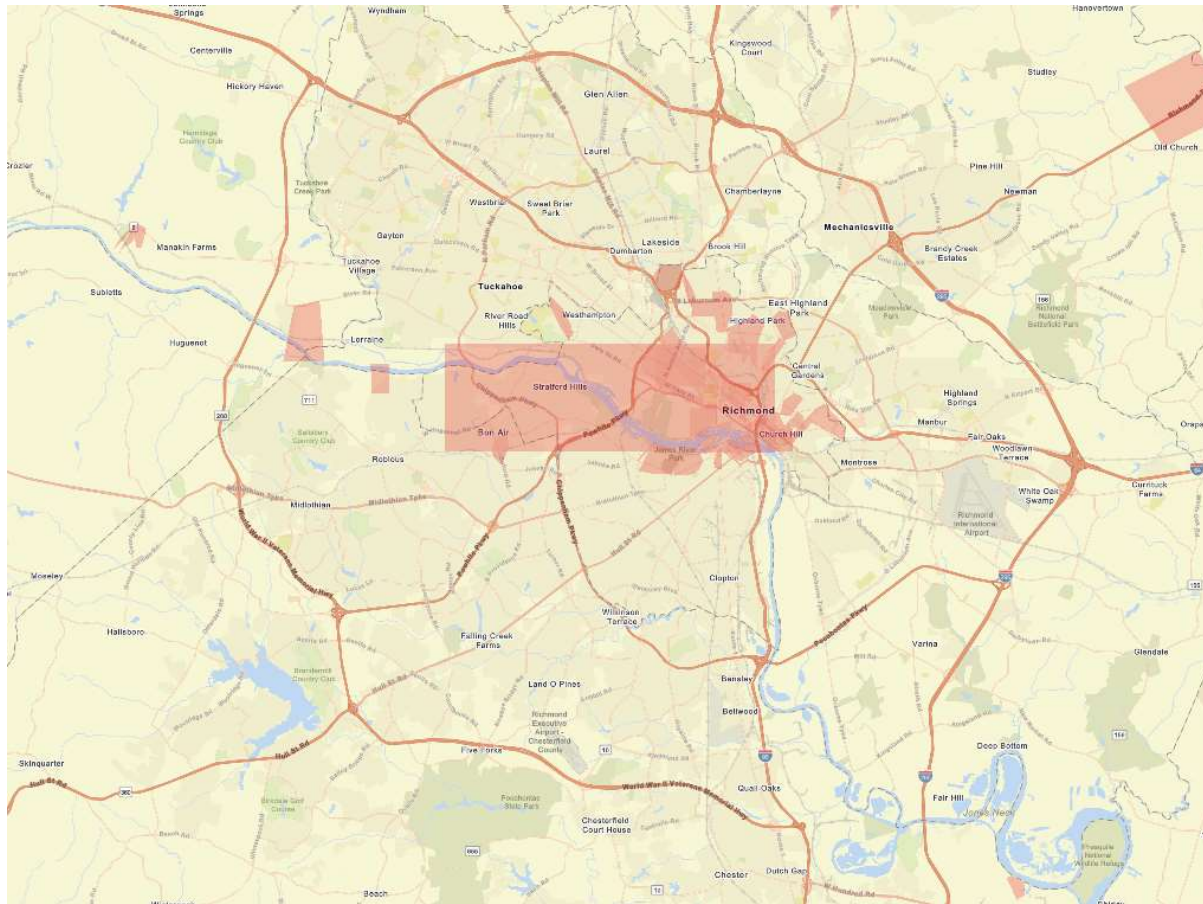
Richmond, Virginia

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS



National Register of Historic Places - Districts

Figure 8

Richmond, Virginia

Source: NEPAassist

Date: June 2022

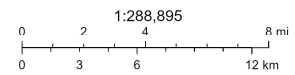
Drawn:
AMG

Approved:
DHS



June 3, 2022

- Streams
- Water Bodies



City of Richmond, County of Henrico, VGIN, Esri, HERE, Garmin, SafeGraph, METANASA, USGS, EPA, NPS, USDA



Water Bodies and Streams

Richmond, Virginia

Figure 9

Source: NEPAssist

Date: June 2022

Drawn:
AMG

Approved:
DHS

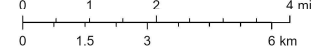


June 3, 2022

Wetlands

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Lake
- Freshwater Pond
- Other
- Riverine

1:144,448



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov, City of Richmond, County of Henrico, VGIN, Esri.



Wetlands

Richmond, Virginia

Figure 10

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.


Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.


Location

Virginia

Local office

Virginia Ecological Services Field Office

 (804) 693-6694

 (804) 693-9032

6669 Short Lane

Gloucester, VA 23061-4410

<https://www.fws.gov/northeast/virginiafield/>

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
 2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Swamp Pink <i>Helonias bullata</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4333	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern
- Measures for avoiding and minimizing impacts to birds
Nationwide conservation measures for birds

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the [FAQ below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

Breeds Sep 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

<p>Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399</p>	Breeds May 15 to Oct 10
<p>Blue-winged Warbler <i>Vermivora pinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds May 1 to Jun 30
<p>Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 20 to Jul 31
<p>Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 20 to Aug 10
<p>Cerulean Warbler <i>Dendroica cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974</p>	Breeds Apr 28 to Jul 20
<p>Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 1 to Aug 20
<p>Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Apr 20 to Aug 20
<p>King Rail <i>Rallus elegans</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8936</p>	Breeds May 1 to Sep 5
<p>Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679</p>	Breeds elsewhere
<p>Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 1 to Jul 31

Prothonotary Warbler *Protonotaria citrea*

Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red-headed Woodpecker *Melanerpes erythrocephalus*

Breeds May 10 to Sep 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Rusty Blackbird *Euphagus carolinus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Wood Thrush *Hylocichla mustelina*

Breeds May 10 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Blue-winged Warbler

BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Bobolink

BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Canada Warbler

BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Cerulean Warbler

BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Eastern Whip-poor-will

BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Kentucky Warbler
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



King Rail
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Lesser Yellowlegs
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Prairie Warbler
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



Prothonotary Warbler
 BCC Rangewide
 (CON) (This is a
 Bird of
 Conservation
 Concern (BCC)
 throughout its
 range in the
 continental USA
 and Alaska.)



SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Richmond, VA State-Listed Species

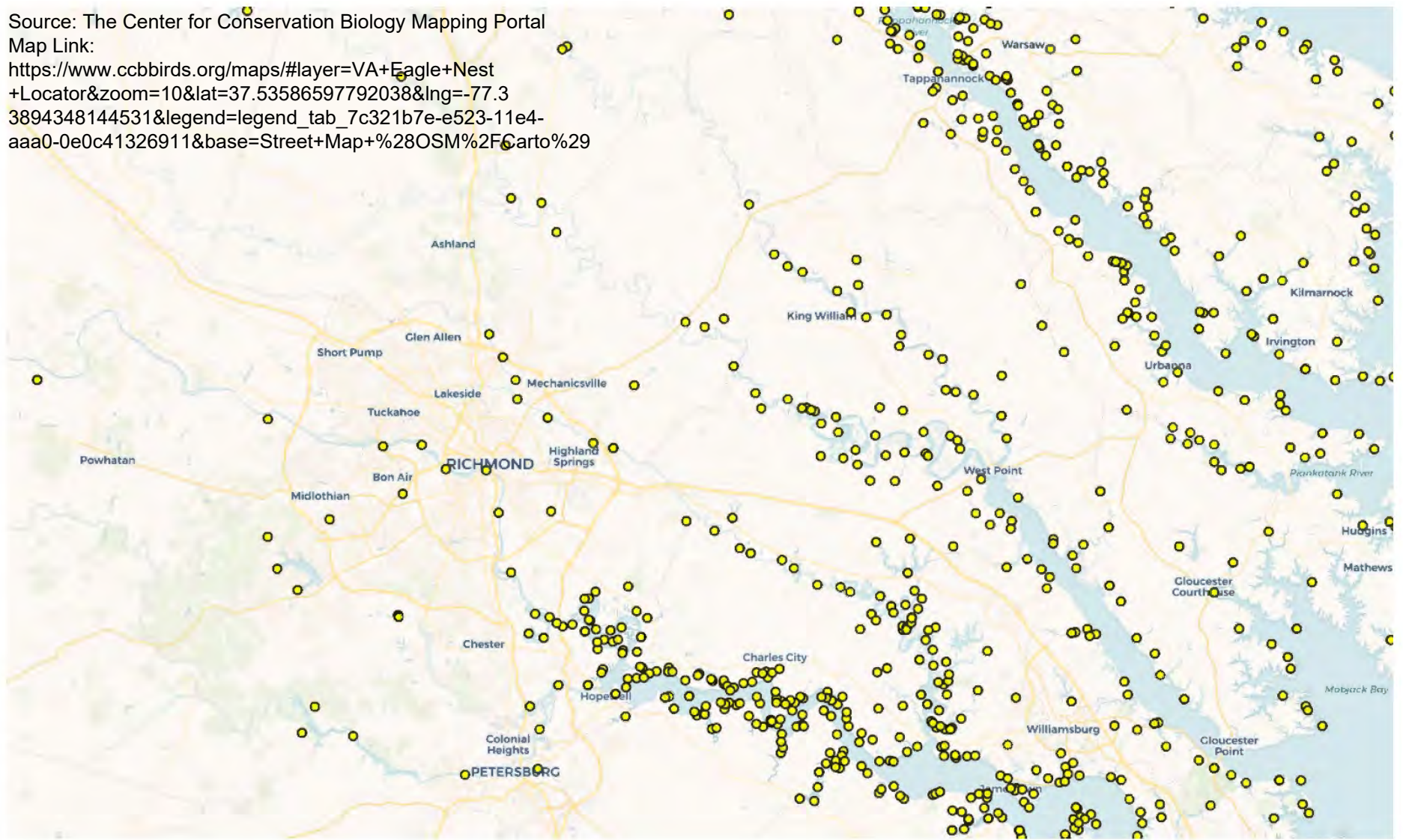
Source: Virginia Department of Wildlife Resources

(<https://dwr.virginia.gov/wp-content/uploads/media/virginia-threatened-endangered-species.pdf>)

Scientific Name	Common Name	Status (see note below)
<i>Parvaspina collina</i>	Spinymussel, James	FESE
<i>Alasmidonta heterodon</i>	Wedgemussel, dwarf	FESE
<i>Acipenser oxyrinchus</i>	Sturgeon, Atlantic	FESE
<i>Myotis septentrionalis</i>	Bat, northern long-eared	FTST
<i>Fusconaia masoni</i>	Pigtoe, Atlantic	FTST
<i>Elliptio lanceolata</i>	Lance, yellow	FTST
<i>Myotis lucifugus</i>	Bat, little brown	SE
<i>Corynorhinus rafinesquii macrotis</i>	Bat, Rafinesque's eastern big-e	SE
<i>Perimyotis subflavus</i>	Bat, tri-colored	SE
<i>Falco peregrinus</i>	Falcon, peregrine	ST
<i>Lanius ludovicianus</i>	Shrike, loggerhead	ST
<i>Lasmigona subviridis</i>	Floater, green	ST
<i>Lanius ludovicianus migrans</i>	Shrike, migrant loggerhead	ST

***Note: FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened**

Source: The Center for Conservation Biology Mapping Portal
Map Link:
https://www.ccbirds.org/maps/#layer=VA+Eagle+Nest+Locator&zoom=10&lat=37.53586597792038&lng=-77.33894348144531&legend=legend_tab_7c321b7e-e523-11e4-aaa0-0e0c41326911&base=Street+Map+%28OSM%2FCarto%29



Bald Eagle Nest Locations

Figure 11



Richmond, Virginia

Source: CCB

Date: April 2022

Drawn: AMG

Approved: DHS

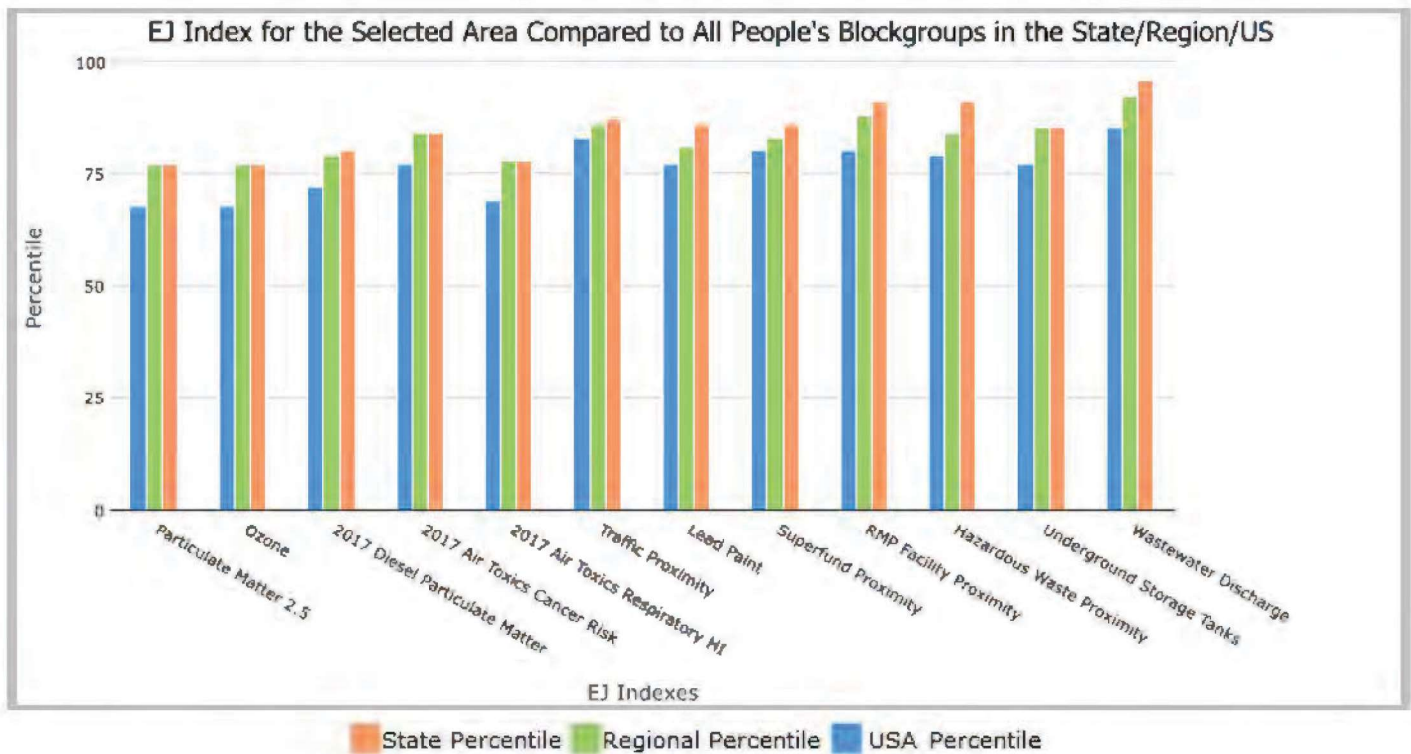
10 miles Ring Centered at 37.542144,-77.437434, VIRGINIA, EPA Region 3

Approximate Population: 617,633

Input Area (sq. miles): 314.03

Richmond, VA (The study area contains 1 blockgroup(s) with zero population.)

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	77	77	68
EJ Index for Ozone	77	77	68
EJ Index for 2017 Diesel Particulate Matter*	80	79	72
EJ Index for 2017 Air Toxics Cancer Risk*	84	84	77
EJ Index for 2017 Air Toxics Respiratory HI*	78	78	69
EJ Index for Traffic Proximity	87	86	83
EJ Index for Lead Paint	86	81	77
EJ Index for Superfund Proximity	86	83	80
EJ Index for RMP Facility Proximity	91	88	80
EJ Index for Hazardous Waste Proximity	91	84	79
EJ Index for Underground Storage Tanks	85	85	77
EJ Index for Wastewater Discharge	96	92	85



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

EJScreen Report (Version 2.0)



10 miles Ring Centered at 37.542144,-77.437434, VIRGINIA, EPA Region 3

Approximate Population: 617,633

Input Area (sq. miles): 314.03

Richmond, VA (The study area contains 1 blockgroup(s) with zero population.)



Sites reporting to EPA	
Superfund NPL	3
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	35

EJScreen Report (Version 2.0)



10 miles Ring Centered at 37.542144,-77.437434, VIRGINIA, EPA Region 3

Approximate Population: 617,633

Input Area (sq. miles): 314.03

Richmond, VA (The study area contains 1 blockgroup(s) with zero population.)

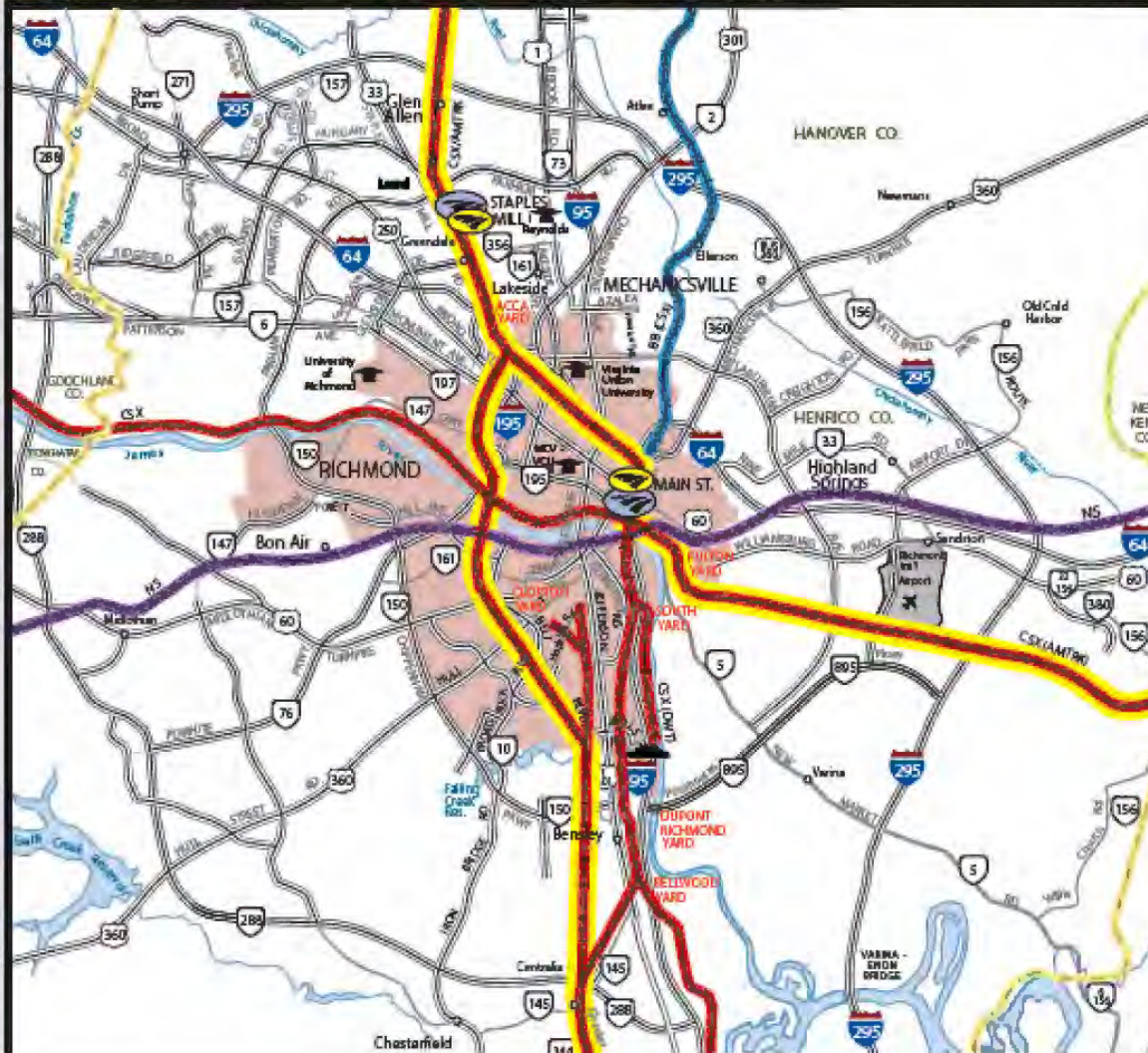
Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Pollution and Sources							
Particulate Matter 2.5 ($\mu\text{g}/\text{m}^3$)	8.07	7.55	71	8.2	39	8.74	35
Ozone (ppb)	40	40.1	45	41.9	23	42.6	32
2017 Diesel Particulate Matter* ($\mu\text{g}/\text{m}^3$)	0.295	0.238	71	0.267	60-70th	0.295	60-70th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	47	31	98	30	95-100th	29	95-100th
2017 Air Toxics Respiratory HI*	0.41	0.36	96	0.34	95-100th	0.36	80-90th
Traffic Proximity (daily traffic count/distance to road)	870	660	80	680	78	710	80
Lead Paint (% Pre-1960 Housing)	0.34	0.21	79	0.35	57	0.28	66
Superfund Proximity (site count/km distance)	0.17	0.11	87	0.15	77	0.13	81
RMP Facility Proximity (facility count/km distance)	0.79	0.38	86	0.63	75	0.75	70
Hazardous Waste Proximity (facility count/km distance)	1.6	0.65	90	1.9	70	2.2	66
Underground Storage Tanks (count/km ²)	2.6	1.8	74	2.7	70	3.9	64
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0036	6.2	85	33	66	12	61
Socioeconomic Indicators							
Demographic Index	42%	32%	75	30%	76	36%	66
People of Color	53%	38%	71	33%	75	40%	67
Low Income	32%	25%	68	27%	66	31%	56
Unemployment Rate	5%	5%	67	5%	63	5%	60
Linguistically Isolated	3%	3%	72	3%	74	5%	62
Less Than High School Education	12%	10%	65	10%	67	12%	60
Under Age 5	6%	6%	55	6%	59	6%	55
Over Age 64	14%	15%	53	16%	44	16%	51

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

For additional information, see: www.epa.gov/environmentaljustice

EJScreen is a screening tool for pre decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

RICHMOND, PETERSBURG, COLONIAL HEIGHTS & HOPEWELL AREA

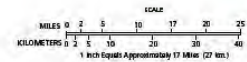


Virginia Railroad Map Legend

RAILROAD NAME	REPORTING MARK
BUCKINGHAM BRANCH	BB
CHESAPEAKE AND ALBEMARLE	CA
CHESAPEAKE WESTERN	CHW
COMMONWEALTH RAILWAY	CWRY
DELMARVA CENTRAL RAILWAY	DCR
NORTH CAROLINA AND VIRGINIA	NCVA
NORFOLK & PORTSMOUTH BELT LINE	NPBL
SHENANDOAH VALLEY	SV
WINCHESTER & WESTERN	WW
CSX TRANSPORTATION	CSX
NORFOLK SOUTHERN	NS

Passenger Service

AMTRAK ROUTES	AMTK
VIRGINIA RAILWAY EXPRESS ROUTES	VRE
Multilane Divided Highway	Railroads
Two Lane Highway	Short Line Railroads
Two Lane Primary Roads	Amtrak Station
Virginia Railway Express Station	Amtrak Connector Bus
Port of Virginia	Rail Tunnel
Virginia Breeze Stops	Airport
Universities and Colleges	Amtrak Routes
Rail to Trail	CSX Routes
Out of Service	Norfolk Southern Routes
Abandoned or Discontinued	Short Line Routes



DRPT
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VDOT, Charlottesville

Railroads

Figure 12

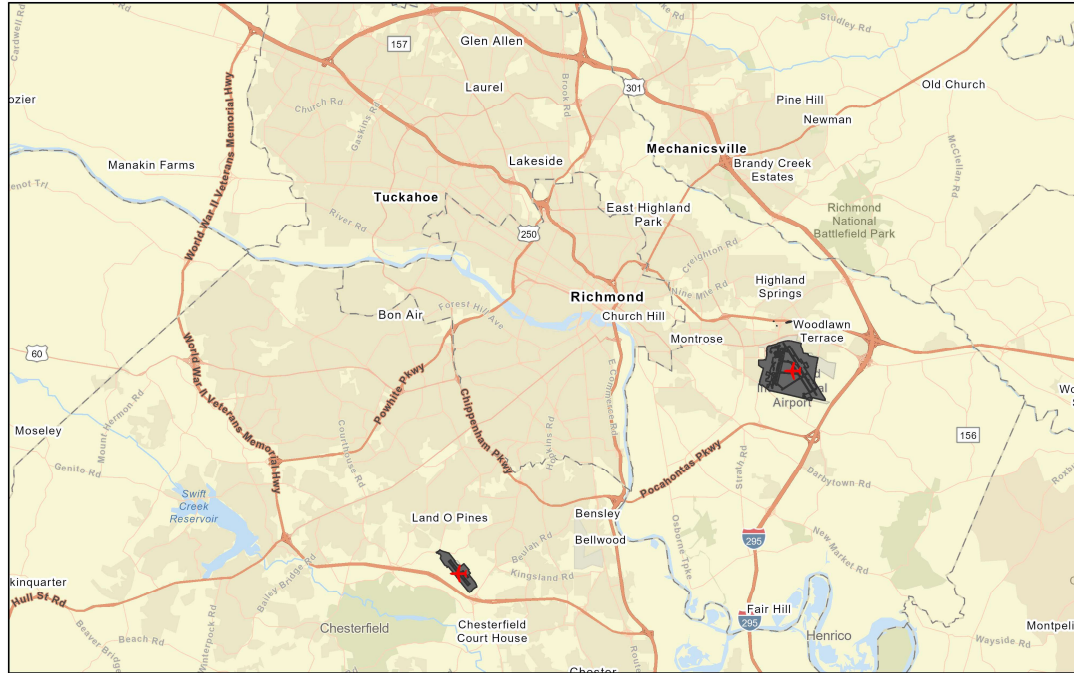
Richmond, Virginia

Source: NEPAassist

Date: April 2022

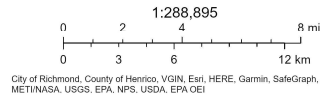
Drawn: AMG

Approved: DHS



June 3, 2022

- + Airport Points
- Airport Polygons



Airports

Richmond, Virginia

Figure 13

Source: NEPAassist

Date: June 2022

Drawn:
AMG

Approved:
DHS