Appendix G
Bald and Golden Eagle Protection Act Documentation

NORTHEAST BALD EAGLE PROJECT SCREENING FORM

Welcome!

What is the purpose of this form? The U.S. Fish and Wildlife Service (Service) designed this form as a voluntary tool to help people comply with the Bald and Golden Eagle Protection Act (BGEPA) by planning activities in a manner that avoids disturbing nesting bald eagles. To disturb a bald eagle nest means to agitate or bother a bald eagle to a degree that causes, or is likely to cause, that eagle to abandon its nest, suffer injury, or be unable to perform activities necessary to its survival. While all guidance included in this form is voluntary, individuals and organizations that disturb eagles may be subject to fine and prosecution under BGEPA.

How is this form different from the National Bald Eagle Management Guidelines? The National Bald Eagle Management Guidelines (Guidelines) is a document published by the Service in 2007 that provides background information on the biology of bald eagles, explains the Federal laws and regulations protecting them, and lays out guidance for several categories of human activities that can affect their nesting. This form takes the Guideline's recommendations, fits them to the regional conditions of the Northeast, and offers them to you in an interactive and intuitive format. Because the form fits its assessments and recommendations to the needs and behaviors of nesting bald eagles in the Northeast, you may find that it differs from the Guidelines on certain details. Nonetheless, the ultimate goal remains the same: to keep project proponents in compliance with BGEPA, while also protecting nesting bald eagles from disturbance.

How this form works. To complete this form, first, find the category of activities that includes your proposed activity. Then, go to the page listed for that category to assess whether your project may risk disturbing nesting bald eagles. If the form identifies that your activities may disturb nesting bald eagles, follow the recommended avoidance measures. These measures will identify factors that could influence nesting eagles' sensitivity to your activities: distance, visibility, timing, and exposure to other human activities. Sign the self-certification that you have committed to implementing the appropriate measures. If your proposed activities fall into multiple categories, repeat this process for each category. Additionally, if your project has the potential to affect multiple nests, complete a separate form for each nest site.

What to do with your completed form. Once you have signed your self-certification, keep the form for your personal records. You do not need to submit your completed form to the Service. Keep the form and additional pages that may be helpful to your future planning and compliance. If a local, state, or federal authority asks for documentation that you are complying with the Service's regional guidance, you can present them with your completed and signed form.

INTRODUCTION

What to know before you start. You will need a few pieces of information to help you complete this form.

Breeding Season

For temporary activities that might be loud or very visible, one of the simplest and most effective ways to avoid disturbing a bald eagle nest is to time the activity when eagles are not nesting, that is, outside the bald eagle breeding season. Wildlife agencies often refer to this type of measure as a time-of-year restriction. The bald eagle breeding season lasts approximately seven to eight months and has many stages. Start and end dates to this season can vary by location, year, and breeding pair. For simplicity, general dates are often set at a statewide level. Consult Appendix A to find the breeding season in your area.

Visibility

For some categories of activities, this form will ask whether your project activities will be visible to the nest. There are two general approaches to answering this question, a desktop assessment and a site visit. A desktop assessment involves consulting online mapping resources, such as Google Maps or state nest maps (see Appendix B), which can display your project location and the nest location on satellite or aerial imagery. When viewing this imagery, look to see whether there are landscape features or structures that might screen the nest's view of your activities. Your assessment is only as good as your imagery. Make sure the imagery is current and accurately reflects visibility conditions on the ground.

The second option is to visit your project location. Assess from various points in your project footprint whether you can see the nest. Use binoculars (4X power or greater) or spotting scope to assist your viewing. If you plan to visit the project site during the breeding season, be aware that your presence could also disturb the nest. Maintain 330' feet between you and the nest, or at least as much distance as the nearest ongoing foot traffic at the nest site. You should only perform your site visit from property legally accessible to you.

Using both the field and desktop approach will give you your best answer. If there is need to select between the two options, a site visit will generally provide a better sense of visibility. In either approach, consider that your activities may become more visible during portions of the year when leaves are off trees and other vegetation.

Nest Location

To figure out how close or how visible your activities will be, you will need precise knowledge of the nest's location. If you do not already have this information, check Appendix B to see if any online or state resources are available. If you are unable to get this information from any of these sources, survey the site. As when assessing visibility, you should only perform your visit on property legally accessible to you. You should also avoid coming within 330 feet of a nest during the breeding season, unless you know that the eagles have previously tolerated people at whatever shorter distance you are planning to use. For descriptions and examples of bald eagle nests, and explanation of how they differ from other large bird nests, see "Appendix C – Guide to Nest Identification."

INTRODUCTION

If you feel unable to perform this search, consider employing the services of a wildlife biologist experienced in this type of surveying. Alternatively, consider contacting your state or local wildlife agency to see if they would be able to perform a site visit (please be aware that many state and local wildlife agencies are constrained in their resources and time and may not be able to offer this service). Be sensitive to sharing information about nest locations. Attracting public interest to a nest site can threaten the safety of that nest. Some states also continue to prohibit the release of nest locations.

It is possible that you will be unable to find a reported nest. While bald eagles commonly use nests across breeding seasons, nests do not always survive from one season to the next. Nests may fall apart of their own accord or be blown down by high winds. Bald eagles may also stop using a nest for one season or more, even if the nest as a structure still exists. In these scenarios, bald eagles may still reuse a former nest site in the following breeding seasons. The temporary absence of a nest or nesting eagles does not absolve you of your responsibilities to avoid disturbing future nesting at that site. The Service recommends implementing the measures included in this form for five years after the last breeding season eagles used a nest or, where the nest no longer exists, three years after the last breeding season in which the nest existed.

Similar Activities

One of the best indicators of what a nesting bald eagle pair will tolerate is what they have already tolerated. In certain places, this form will ask whether the nesting pair has experienced and tolerated similar activities at the nest location. To answer this question, you will need to know about previous human activity at that location. Was that activity similar in nature to what you propose? As close as or closer than what you propose to do? Did it occur at the same time of day? Time of year? Did it last as long? Was it as frequent? Was it as loud? Was it as visible? You will also need to know basic history about the nest. Did the nest exist before that previous activity? Was it ever used after that activity? If your answer to any of these questions is 'no,' you cannot answer 'yes' to the broader question of whether there is similar activity at that site. See "Appendix D – Similar Activity Example Exercise" for a demonstration of how to apply this principle.

Limitations

Know when and how you should be using this form. See "Appendix E – Limitations of this form."

Where to go for help. The Service understands that project proponents may occasionally need clarification on which assessments are relevant to them and how to implement certain avoidance and minimization measures. If you find you are unable to complete this form, you can contact your regional eagle coordinator (Tom Wittig) for assistance at

thomas_wittig@fws.gov - or - 413-253-8577

When emailing, please include in your subject line "BALD EAGLE SCREENING FORM QUESTION." If you are unable to connect with your regional eagle coordinator when calling, please leave a voice message that you are calling about this form and how best to reach you.

For explanation of technical terms used in this form, see "Appendix F – Glossary of Terms."

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PROJECT INFORMATION

PROJECT INFORMATION

Project Name: Patuxent River Complex Testing and Training Activities

City: Patuxent River **County:** St. Mary's & Dorchester **State:** Maryland

Lat/Long (decimal degrees; ex. *38.418310, -76.001096*): 6 nests on 3 NAS PAX River properties

Find Lat/Long via map

Size: 11,969 acres\miles

PROJECT CONTACT INFORMATION

Name: Jackie Smith **Phone:** 301-757-0007

Address: 22445 Peary Road
Patuxent River, Maryland 20670-1603

Email: jacqueline.c.smith@navy.mil

If your project has a Federal (ex. U.S. Army Corps), state (ex. PNDI), or other ID number, please list here: _____

PROJECT ACTIVITY CATEGORY(S)

Place a check next to all activities you plan to perform.

- ☐ Construction and Development Activities → go to pages 5 - 7
- ☐ Maintenance and Restoration Activities → go to pages 8 - 9
- ☐ Timber Operation and Forestry Practices → go to page 10
- ☒ Use of Helicopters and Fixed-wing Aircraft → go to page 11
- ☒ Blasting and Other Loud, Intermittent Noises (including Fireworks) → go to page 12
- ☐ Recreational Activities → go to pages 13 – 14

Feedback? The Service is continuously looking to improve this form. If you have suggested changes, please feel free to email them to us at thomas_wittig@fws.gov. Include "Bald Eagle Project Screening Form – Feedback" in your subject line.

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CONSTRUCTION & DEVELOPMENT

Construction and Development Activities

Which specific construction activities do you plan to perform? (check all that apply)

- ☐ Building construction
- ☐ Tree and land clearing
- ☐ Construction of roads, trails, canals, power lines, pipelines and other linear utilities
- ☐ Agriculture or aquaculture – new or expanded operations
- ☐ Alteration of shorelines or wetlands
- ☐ Installation of docks, piers, or moorings (pile driving may qualify as loud noise, page 12)
- ☐ Water impoundment or withdrawal
- ☐ Mining
- ☐ Oil and natural gas drilling and refining
- ☐ Wind farm construction
- ☐ Installation or expansion of marinas with a capacity of 6 or more boats
- ☐ Communications tower construction (excluding maintenance and repairs)

Is your activity similar to an ongoing or previous activity that coincided with the breeding season and that bald eagles tolerated? Consider both construction and use/operation of your project.

Consider all of the following elements/factors in answering:

-duration	-time of season	-area/footprint
-frequency	-visibility	-magnitude
-time of day	-distance	-nature

- ☐ Yes → No avoidance measures recommended. Go to self-certification (page 7).
- ☐ No → Go to next question.

Will your activities be visible to the bald eagle nest(s)?

- ☐ Yes → Stop. Implement Avoidance Measures (AM) 2, 4, and 5 (see page 7)
- ☐ No → Go to the next question

CONSTRUCTION & DEVELOPMENT

Which of these categories most closely matches your proposed project or activity?
(check all that apply)

☐ Building construction, 1 or 2 story, with a project footprint of ½ acre or less ☐ Construction of roads, trails, canals, power lines, or other linear utilities ☐ Agriculture or aquaculture – new or expanded operations ☐ Alteration of shorelines or wetlands ☐ Installation of docks or moorings ☐ Water impoundment or withdrawal ☐ Construction of communication towers **→ Implement AM 3, 4 and 5 (page 7)**	☐ Building construction or expansion, 3 or more stories ☐ Building construction or expansion, 1 or 2 story, with project footprint more than ½ acre ☐ Mining ☐ Oil and natural gas drilling and refining ☐ Installation or expansion of marinas with a capacity of 6 or more boats **→ Go to the next question**

Is there a similar activity within 1 mile of the nest?

☐ Yes → Implement AM 3, 4 and 5 (see page 7)

☐ No → Implement AM 1 and 5 (see page 7)

CONSTRUCTION & DEVELOPMENT

AVOIDANCE MEASURES - Place a check mark next to each avoidance measure (AM) that this form instructed you to implement and that you can commit to following. The Service recommends you follow the applicable AMs to prevent your activities from disturbing nesting bald eagles.

☐ AM 1 – Maintain a distance buffer of at least 660 feet (200 meters) between all project activities and the nest.

☐ AM 2 – Maintain a distance buffer of at least 660 feet (200 meters) between all project activities and the nest. If there is an existing human-made feature (e.g., house, road, dock) similar to your project that is closer than 660 feet and tolerated by the nesting eagles, maintain a distance buffer equal to or greater than the distance separating that tolerated feature and the nest.

☐ AM 3 – Maintain a distance buffer of at least 330 feet (100 meters) year-round between all project activities and the nest. If a similar activity (i.e., similar in kind and size) is closer than 330 feet and has been tolerated by eagles, the distance buffer will be the same or greater than that of the existing tolerated activity.

☐ AM 4 – Do not perform disruptive project activities within 660 feet (200 meters) of the nest during the breeding season. This time-of-year restriction is in addition to your recommended distance buffer. Disruptive activities include, but are not limited to, external construction, excavation, use of heavy equipment, use of loud equipment or machinery, vegetation clearing, earth disturbance, planting, and landscaping.

☐ AM 5 – Maintain existing landscape buffers that visually screen the activity from the nest.

Do you commit to following all recommended avoidance measures?

☐ YES – I certify that I have completed this form to the best of my ability, answered all questions completely and accurately, and committed to implementing all applicable avoidance measures.

_____ _____

(signature) (date)

U.S. Fish and Wildlife Service Determination: Based on your responses and commitment to implementing all applicable avoidance measures, the Service has determined that your proposed activities are unlikely to disturb nesting bald eagles.

☐ NO – I am unable to follow one or more of the avoidance measures recommended by this form.

Go to page 15 for further instruction.

MAINTENANCE & RESTORATION

Maintenance and Restoration Activities

This category includes outdoor maintenance of existing structures or infrastructure, where the maintenance activity is temporary and obtrusive (e.g., requires use of heavy equipment or loud machinery), and within the previously disturbed footprint of the structure or infrastructure. If maintenance is proposed outside the previously disturbed footprint, see **Construction and Development Activities** (pages 5-7). This category also applies to the maintenance and restoration of natural habitats (e.g., wetlands, streams, rivers, non-forested uplands). This category does not include routine, ongoing activities to which bald eagles have already exhibited a tolerance (e.g., lawn mowing; plowing, planting or harvesting of agricultural fields; etc.).

Which maintenance or restoration activities do you plan to perform? (check all that apply)

- ☐ Maintenance of linear utilities (e.g., power lines, pipelines, water and sewer lines)
- ☐ Road, bridge, or culvert maintenance
- ☐ Trail, campground, or recreational area maintenance
- ☐ Maintenance of oil and gas wells, well pads, and storage tanks
- ☐ Maintenance of dams, levees, berms, canals and other water-control structures
- ☐ Pond, lake, or reservoir maintenance (draw downs, dredging)
- ☐ Stream or stream bank maintenance /restoration (e.g., stream bank fencing, stream bank stabilization, livestock crossings, in-stream habitat improvements, channel maintenance, dredging)
- ☐ Wetland maintenance / restoration (e.g., invasive plant control, restoration of hydrology)
- ☐ Prescribed burning for invasive control
- ☐ Upland habitat maintenance / restoration (e.g., planting or cutting of vegetation, invasive plant control, trash cleanup, abandoned mine lands restoration). This does not include activities in forests/woodlands (see **Timber Operation and Forestry Practices**) or in agricultural fields.

Is your activity similar to an ongoing or previous activity that coincided with the breeding season and that bald eagles tolerated? Consider both construction and use/operation of your project.

Consider all of the following elements/factors in answering:

-duration	-time of season	-area/footprint
-frequency	-visibility	-magnitude
-time of day	-distance	-nature

- ☐ Yes → No avoidance measures recommended. Go to self-certification.
- ☐ No → Go to Avoidance Measures.

MAINTENANCE & RESTORATION

AVOIDANCE MEASURES - Place a check mark next to each AM that you can commit to following. The Service recommends you follow these AMs to prevent your activities from disturbing nesting bald eagles.

☐ AM 6 - Within 660 feet (200 meters) of the nest, perform all loud and intrusive maintenance and restoration work outside the breeding season. These activities include, but are not limited to, the following: construction, excavation, use of heavy equipment, use of loud equipment or machinery, vegetation clearing, earth disturbance, planting, landscaping, and habitat restoration activities.

☐ AM 7 - Maintain existing landscape buffers that visually screen the activity from the nest.

☐ AM 8 - Do not perform prescribed burning within 660 feet (200 meters) of the nest during the breeding season. If there is no practicable alternative to scheduling prescribed burning during the breeding season, only conduct burns when adult eagles and young are absent from the nest tree (i.e., at the beginning of, or end of, the breeding season, either before the particular nest is in use or after the young have fledged from that nest).

☐ AM 9 - When performing prescribed burning within the drip line of the nest tree, rake leaves, vines, and woody debris from around the base of the tree to prevent fire from climbing the tree. When burning within a patch of forest containing the nest tree, take precautions to prevent crown fire.

Do you commit to following all recommended avoidance measures?

☐ YES – I certify that I have completed this form to the best of my ability, answered all questions completely and accurately, and committed to implementing all applicable avoidance measures.

_____ _____

(signature) (date)

U.S. Fish and Wildlife Service Determination: Based on your responses and commitment to implementing all applicable avoidance measures, the Service has determined that your proposed activities are unlikely to disturb nesting bald eagles.

☐ NO – I am unable to follow one or more of the avoidance measures recommended by this form.

Go to page 15 for further instruction.

TIMBER & FORESTRY

Timber Operation and Forestry Practices

AVOIDANCE MEASURES - Place a check mark next to each AM that you can commit to following. The Service recommends you follow these AMs to prevent your activities from disturbing nesting bald eagles.

☐ AM 10 – Do not perform clear-cutting or overstory tree removal within 330 feet (100 meters) of the nest at any time of the year.

☐ AM 11 - During the breeding season, do not perform timber harvesting, road construction, chain saw use, or yarding operations within 660 feet (200 meters) of the nest. Around alternate nests (including nests that were attended during the current breeding season but not used to raise young), you may reduce this distance to 330 feet (100 meters), provided the eggs laid in another nest within the nesting territory have hatched.

☐ AM 12 – Do not construct or operate log transfer facilities and in-water log storage areas within 330 feet (100 meters) of nests at any time of the year.

☐ AM 13 – Do not perform selective thinning, prescribed burning, or other similar silviculture practices for the enhancement or conservation of habitat within 660 feet (200 meters) of the nest during the breeding season. If there is no practicable alternative to scheduling prescribed burning during the breeding season, only conduct burns when adult eagles and young are absent from the nest tree (i.e., at the beginning of, or end of, the breeding season, either before the particular nest is active or after the young have fledged from that nest).

☐ AM 14 – When performing prescribed burning within the drip line of the nest tree, rake leaves, vines, and woody debris from around the base of the tree to prevent fire from climbing the tree. When burning within a patch of forest containing the nest tree, take precautions to prevent crown fire.

Do you commit to following all recommended avoidance measures?

☐ YES – I certify that I have completed this form to the best of my ability, answered all questions completely and accurately, and committed to implementing all applicable avoidance measures.

_____ _____

(signature) (date)

U.S. Fish and Wildlife Service Determination: Based on your responses and commitment to implementing all applicable avoidance measures, the Service has determined that your proposed activities are unlikely to disturb nesting bald eagles.

☐ NO – I am unable to follow one or more of the avoidance measures recommended by this form.

Go to page 15 for further instruction.

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AIRCRAFT OPERATION

Use of a Helicopter and Fixed-wing Aircraft

Is your activity similar to an ongoing or previous activity that coincided with the breeding season and that bald eagles tolerated?

Consider all of the following elements/factors in answering:

-duration	-time of season	-area/footprint
-frequency	-visibility	-magnitude
-time of day	-distance	-nature

☒ Yes → No avoidance measures recommended. Go to self-certification.

☐ No → Go to Avoidance Measures.

AVOIDANCE MEASURES - Place a check mark next to each AM that you can commit to following. The Service recommends you follow this AM to prevent your activities from disturbing nesting bald eagles.

☐ AM 15 - During the breeding season, do not fly within 1000 feet (305 meters) of bald eagle nests.

Do you commit to following all recommended avoidance measures?

☒ YES – I certify that I have completed this form to the best of my ability, answered all questions completely and accurately, and committed to implementing all applicable avoidance measures.

SMITH.JACQUELINE.C.1122828766 Digitally signed by SMITH.JACQUELINE.C.1122828766 Date: 2021.04.19 15:21:15 -04'00' 19APR2021

(signature) (date)

U.S. Fish and Wildlife Service Determination: Based on your responses and commitment to implementing all applicable avoidance measures, the Service has determined that your proposed activities are unlikely to disturb nesting bald eagles.

☐ NO – I am unable to follow one or more of the avoidance measures recommended by this form.

Go to page 15 for further instruction.

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LOUD NOISE

Blasting and Other Loud, Intermittent Noises (including Fireworks)

Is your activity similar to an ongoing or previous activity that coincided with the breeding season and that bald eagles tolerated?

Consider all of the following elements/factors in answering:

-duration	-time of day	-distance
-frequency	-time of season	-volume

☒ Yes → No avoidance measures recommended. Go to self-certification.

☐ No → Go to Avoidance Measures.

AVOIDANCE MEASURES - Place a check mark next to each AM that you can commit to following. The Service recommends you follow this AM to prevent your activities from disturbing nesting bald eagles.

☐ AM 16 - During the breeding season, do not perform blasting and other activities that produce extremely loud noises within 1/2 mile (800 meters) of in-use nests. This measure also applies to the use of fireworks classified by the Federal Department of Transportation as Class B explosives, which includes the larger fireworks intended for licensed public display.

Do you commit to following all recommended avoidance measures?

☒ YES – I certify that I have completed this form to the best of my ability, answered all questions completely and accurately, and committed to implementing all applicable avoidance measures.

SMITH.JACQUELINE.C.1122828766 Digitally signed by SMITH.JACQUELINE.C.1122828766 Date: 2021.04.19 15:21:39 -04'00' 19APR2021

(signature) (date)

U.S. Fish and Wildlife Service Determination: Based on your responses and commitment to implementing all applicable avoidance measures, the Service has determined that your proposed activities are unlikely to disturb nesting bald eagles.

☐ NO – I am unable to follow one or more of the avoidance measures recommended by this form.

Go to page 15 for further instruction.

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RECREATION

Recreational Activities

Is your activity similar to an ongoing or previous activity that coincided with the breeding season and that bald eagles tolerated?

Consider all of the following elements/factors in answering:

-duration	-time of season	-area/footprint
-frequency	-visibility	-magnitude
-time of day	-distance	-nature

☐ Yes → No avoidance measures recommended. Go to self-certification.

☐ No → Go to next question

Will your recreation occur during the breeding season?

☐ Yes → Go to Avoidance Measures.

☐ No → No avoidance measures recommended. Go to self-certification.

AVOIDANCE MEASURES – For each applicable recreational subcategory, place a check mark next to the AMs you can commit to following. The Service recommends you follow the applicable AMs to prevent your activities from disturbing nesting bald eagles.

Non-motorized recreation and human entry (including hiking, camping, fishing, hunting, canoeing)

☐ AM 17 - Stay at least 330 feet (100 meters) from the nest if you walk, bike, canoe, camp, fish, or hunt near an eagle nest during the breeding season and your activity will be visible or can be heard from the nest.

Off-road vehicle use (including snowmobiles)

☐ AM 18 - Stay at least 330 feet (100 meters) from the nest. In open areas, where there is increased visibility and exposure to noise, stay at least 660 feet (200 meters) from the nest.

RECREATION

Motorized watercraft use (including jet skis/personal watercraft)

☐ AM 19 - Do not operate jet skis (personal watercraft) or airboats within 330 feet (100 meters) of the nest.

☐ AM 20 - Avoid concentrations of noisy vessels (e.g. commercial fishing boats and tour boats) within 330 feet (100 meters) of the nest, except where eagles have demonstrated tolerance for such activity.

☐ AM 21 - For all motorized boat traffic within 330 feet (100 meters) of the nest, minimize trips and avoid stopping in the area, particularly where eagles are unaccustomed to boat traffic.

Do you commit to following all recommended avoidance measures?

☐ YES – I certify that I have completed this form to the best of my ability, answered all questions completely and accurately, and committed to implementing all applicable avoidance measures.

_____ _____

(signature) (date)

U.S. Fish and Wildlife Service Determination: Based on your responses and commitment to implementing all applicable avoidance measures, the Service has determined that your proposed activities are unlikely to disturb nesting bald eagles.

☐ NO – I am unable to follow one or more of the avoidance measures recommended by this form.

Go to page 15 for further instruction.

FURTHER GUIDANCE

-- SEEK FURTHER GUIDANCE --

You have indicated that you are unable to implement all the recommended avoidance measures. Without all avoidance measures, your activities may risk disturbing nesting bald eagles.

Consult with your regional eagle coordinator to determine the appropriate next steps. The Service will work with you to help develop alternate measures to avoid disturbance of nesting bald eagles. If there are no feasible alternate measures, the Service may advise that you obtain an eagle incidental take permit to relieve you of legal liability in the event that your activities unintentionally disturb nesting bald eagles.

Contact your regional eagle coordinator (Tom Wittig) for assistance at thomas_wittig@fws.gov

When emailing, please include in your subject line "[Your project name] – SCREENING FORM FURTHER GUIDANCE." In the body of your message, include

-a brief description of your project, including its location and when you plan to start;

-the activity category(s);

-the ID number(s) (e.g., AM 5) of the Avoidance Measure(s) you are unable to implement; and

-the nest location(s), if available.

To see the Service's eagle incidental take permit application form, go to

https://www.fws.gov/forms/3-200-71.pdf

For answers to Frequently Asked Questions on this form, go to

https://www.fws.gov/migratorybirds/pdf/policies-and-regulations/3-200-71FAQ.pdf

The Service advises you talk with your regional eagle coordinator before deciding to apply.

APPENDIX A

APPENDIX A

Bald Eagle Breeding Season by State

State	Breeding Season
VA	December 15 – July 15
DC	December 15 – July 15
WV	January 1 – June 30
MD	December 15 – June 30
DE	December 15 – June 30
PA	January 1 – July 31
NY	January 1 – September 30
NJ	January 1 – July 31
RI	January 1 – July 31
CT	January 1 – July 31
MA	January 1 – August 15
VT	February 1 – August 15
NH	February 1 – August 15
ME (coastal)	February 1 – August 15
ME (northern)	March 1 – August 30

APPENDIX B

APPENDIX B

State Mapping Resources

Connecticut

Contact state
Brian Hess, CT DEEP
Brian.Hess@ct.gov

Delaware

Contact state
Katie Kadlubar, Delaware Division of Fish & Wildlife
Kathryn.Kadlubar@delaware.gov

DC

Contact National Park Service
Mikaila Milton, NPS
mikaila_milton@nps.gov

Maine

https://www.arcgis.com/apps/webappviewer/index.html?id=796b7baa18de43b49f911fe82dc4a0f1

Maryland

https://marylandbirds.org/report-bald-eagle-nest/

Massachusetts

Contact state
Andrew Vitz, MassWildlife
Andrew.vitz@state.ma.us

New Hampshire

Contact state
https://www2.des.state.nh.us/nhb_datacheck/signin.aspx

New Jersey

Contact state
https://www.nj.gov/dep/parksandforests/natural/heritage/datareq.html

New York

Contact state
https://www.dec.ny.gov/animals/31181.html

Pennsylvania

https://fws.maps.arcgis.com/apps/webappviewer/index.html?id=87ac96536654495b9f4041d81f75d7a0

Rhode Island

Contact state
DEM.DFW@dem.ri.gov

Vermont

Contact state
https://vtfishandwildlife.com/conserve/development-review

Virginia

https://www.ccbbirds.org/maps/#eagles

West Virginia

Contact state
Rich Bailey, WVDNR
Richard.S.Bailey@wv.gov

Please note that maps are not exhaustive records of all nests within that state.

APPENDIX C

APPENDIX C

Guide to Nest Identification

Is it a bald eagle nest? Because bald eagle populations have grown so rapidly in recent years, not every bald eagle nest is registered to an online map or known to wildlife management agencies. As a result, project screening form users may occasionally have to make their own assessment of whether the nest near their project or activity is a bald eagle nest. Users should be cautious in making these determinations. Bald eagle nests can easily be confused with nests of other large birds such as osprey.

This guide will help landowners and project proponents assess whether a nest belongs to bald eagles or another species. It describes for readers the most commonly encountered large nests in the Northeast, with several reference figures for bald eagle nests, and provides tips for telling nest types apart. Any user who reads this guide and still feels uncertain about what type of nest they have encountered should contact their regional eagle coordinator for further guidance.

Common types of large nests.

Bald Eagle

The most notable aspect to a bald eagle nest is generally its size. Bald eagles build some of the largest nests in the world, with most nests around 5 feet in diameter and 3 feet in height (Fig. 1). Nests can grow well beyond these dimensions (Fig. 2), as bald eagles tend to repair and expand their nests each year and can use individual nests for decades. Bald eagle nests are mainly composed of large interwoven sticks. Nests will also have a soft interior bowl made up of materials such as hay, cornhusks, and grass clippings. However, this portion of the nest is rarely visible to human observers. The shape of bald eagle nests varies; they can take the general form of flat discs, inverted cones, cylinders (Fig. 2), or spheres (Fig. 3).

Bald eagles typically place their nests in prominent trees that sit above the surrounding forest canopy. These nest trees will often be on hillsides, lake and ocean shorelines, riverbanks, and forest edges. Nests are generally in the top third of a tree, below the crown, secured in a prominent fork off the main trunk (Fig 4.). Bald eagle nests can be in living deciduous (Fig. 3-4) and coniferous trees (Fig. 1), or dead trees (snags; Fig. 5). Within the Northeastern U.S., bald eagles use a wide range of tree types, including white pines, loblolly pines, tulip poplars, sycamores, oaks, and cottonwoods. Despite their common perception as an emblem of wilderness, bald eagles are also increasingly nesting on human-made structures such as electric transmission towers (Fig. 6) and communication towers.

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Osprey

Osprey build large stick nests that can look quite similar to bald eagle nests. In general, osprey nests are smaller, flatter, more disorganized, and more often composed of unnatural materials, such as bailing twine and plastic bags. Osprey also show a stronger preference than bald eagles for human made structures, regularly nesting on light polls, channel markers, and cell towers. When osprey do select a natural support for their nest, it tends to be the topmost part of dead trees, in contrast to bald eagles, which seek out slightly lower portions of trees.

The best clue to which species occupies a nest, osprey or bald eagles, is who shows up. Bald eagles arrive back at their nests earlier in the year than osprey, but by late spring, both species are usually attending their nests. At this time of year, watching a nest over a period of hours will generally reveal which species is using it. However, through fall and early winter, both species are usually away from their nests. During these seasons, the only immediate sources of information on nest will be the physical details described above and online mapping resources.

In addition to the state maps for bald eagles listed in Appendix C, Osprey Watch (http://www.osprey-watch.org/) provides a mapping database of osprey nest locations. As with the bald eagle mapping resources, this map is thorough, but does not represent all existing nests.

Red-Tailed Hawk/Red-Shouldered Hawk

Generally around 1.5 feet wide and 2 feet tall, nests of red-tailed hawks and red-shouldered hawks are less than one-half the size of bald eagle nests. The individual sticks in these hawk nests also tend to be smaller, with diameters of about 1-2 inches. Overall appearance of these nests can be slightly more frayed and chaotic than that of bald eagle nests. Like bald eagles, both hawk species show a tendency towards nesting in upper portions of prominent trees. Red-tailed hawks also share bald eagle's occasional preference for human made structures such as cell towers and transmission towers.

Common Raven

Common ravens construct stick nests that vary substantially in size, from 1.5 to 5 feet across and from little over 0.5 to 2 feet high. The sticks making up the main structure of these nests can be around 3 feet in length and 1 inch in diameter. Ravens place their nests in a variety of natural and developed settings. Raven nests are easily confused with bald eagle nests when located on cell towers, transmission towers, or in trees. When situated in trees, these nests are usually in the upper portion of the tree in a crotch of the main tree stem. The best means of telling raven and bald eagle nests apart are likely size and shape; raven nests are noted for occasionally being asymmetric, and even at their larger sizes, they still tend to be smaller than bald eagle nests.

APPENDIX C

Great Horned Owl

In addition to nesting in tree cavities, great horned owls also frequently use the former nests of other animals, including squirrels, ravens, crows, and herons. The size and nature of a great horned owl nest therefore depends on the nest's original creator. Red-tailed hawk may be the most common source of nests for great horned owls in the Northeast. However, great horned owls will also occasionally take over bald eagle nests.

Heron

Herons nest in colonies known as "rookeries" where many nests are present; individual heron nests are rare. Multiple nests can be present in one tree and some nests may be located relatively high up or far out on branches. Nest sites are usually near water. Heron nests are mainly composed of sticks, and are flat and broad, often resembling a thin platform. Nests used for several years may grow taller and wider. Heron nests can give off a general impression of messiness or flimsiness.

Squirrel

Squirrel nests can reach basketball size or larger. They are distinguished from bird nests mainly by their materials, which include leaves and other soft vegetation material (e.g., grasses), and very few sticks. They are usually round shaped, and often look messy.

Legal definitions and protections for eagle and migratory bird nests.

Eagle Nests

BGEPA protects eagle nests in same manner it protects eagles; they cannot be destroyed, possessed, or relocated without a permit from the Service, which the Service only provides under a limited set of circumstances. Regulation defines an eagle nest as "any assemblage of materials built, maintained, or used by bald eagles or golden eagles for the purpose of reproduction" (50 CFR 22.3). A nest is an eagle nest if it was built by or ever used by eagles, even if other species of birds played a role in the nest's history. For example, if osprey build a nest and eagles take that nest over, legally, the nest is an eagle nest. Alternatively, if great horned owls begin to use a nest originally built by eagles, that nest remains an eagle nest for as long as it exists. An eagle nest also retains protection regardless of where it was built, whether it was ever finished or successful, or when it was last used. Additionally, BGEPA's protections apply regardless of the nest's size andcondition.

Migratory Bird Nests

The Migratory Bird Treaty Act (MBTA) protects migratory bird nests in the many of the same ways that BGEPA protects eagle nests. Unless a permit is in place, migratory bird nests cannot be possessed or relocated at any time or intentionally destroyed while active. One notable difference between MBTA and BGEPA is MBTA's standard on inactive nests. If a migratory bird nest is inactive, meaning it does not contain viable eggs or chicks, it can be destroyed without a permit. (Note: the

APPENDIX C

terms 'active' and 'inactive' here are different from the 'in-use' and 'alternate' standards used for eagle nests [see Appendix E for definitions].) For more information, please read the Service's 2018 Nest Destruction Memo. Bird species protected under MBTA are listed under regulation at 50 CFR 10.13. Additional protections not described here apply to any migratory bird species listed under the Endangered Species Act. Tribal, state, and local laws may also place greater restrictions on the destruction of migratory bird nests.

APPENDIX C

Figure 1.

Figure 2.

APPENDIX C

Figure 3.

Figure 4.

APPENDIX C

Figure 5.

Figure 6.

APPENDIX D

APPENDIX D

Similar Activity Example Exercise

What is the purpose of this appendix? This appendix provides project screening form users with an example of how to assess the similarity between two activities. By reading through this example, landowners and project proponents can develop a better sense of what factors they should consider when answering the question of whether their activity is similar to an ongoing or previous activity tolerated by eagles.

In the example scenario, a proposed residential construction project is compared to previous farming activity. The example starts with an overview of the historic farming activity, nest, and proposed project; then goes through a full assessment, set up in table format; and finally closes with a summary of the determination and explanation of how that determination would influence completion of the form.

What is the scenario?

Previous/Existing Activities

The project site is a large agricultural field that was farmed nearly every year for the past two decades. Human activity at the site was limited to occasional operation of heavy farm equipment. The broader area out to one mile includes other agricultural fields and medium density residential and commercial development.

Nest Location & History

Five years ago, a pair of bald eagles constructed a nest in a cottonwood located in the hedgerow bordering the agricultural field. The pair were unsuccessful in their first year, but fledged young from the nest each of the following four years up to present. Workers observed that the pair did not respond to operation of farming equipment, but became vigilant whenever an equipment operator stepped outside their vehicle.

Project Narrative

The proposed project will convert portions of the existing agricultural field to a residential development with 30 single-family homes, which places it under the screening form's Construction and Development category. Construction will require extending water, sewage, and electrical utilities and adding a small network of residential streets. Preparing each lot will involve grading, home and driveway construction, and landscaping. Ten acres of property near the nest will be signed over as a conservation easement.

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Factor	Previous/Existing Activity: Farming	Proposed Activity: Construction	Similar?
NATURE	Heavy equipment preparing field, planting, and harvesting crop. Two-three workers, generally confined to closed cab tractors.	Twenty workers either in heavy equipment or on foot. Ground disturbance. Placement/extension of utilities. Landscaping. Construction of 20 homes.	No
HISTORY	Farming activity predated nesting and continued while eagles successfully fledged young from the nest. This success demonstrates the eagles tolerated the farming.	N/A	Yes
DISTANCE	Distance between farming activity and the nest tree was essentially 0 feet; the hedgerow in which the nest is located bounds the agricultural field.	Nearest lot boundary will be 400 feet from nest. Area between home and nest will be converted conservation easement and left in passive, natural state.	Yes
TIMING	Farming activity began in March and continued through October each year.	Proposed schedule is April through October.	Yes
DURATION	The field was generally worked for one to two days at time, from sunrise to sundown.	On days of construction activity, work will occur during standard business hours.	Yes
FREQUENCY	Intermittent. Farming occurred in stages (e.g., fertilizing, plowing, harvesting) and events were often separated by weeks or months.	Continuous. Work will occur most weekdays and occasionally on weekends.	No
NOISE	Farming equipment (e.g., tractor) generated loud noises within the range of 80 – 100 decibels.	Construction will not require blasting or pile driving. Construction equipment (e.g., backhoes) will generate loud noise within the range of 80 – 95 decibels.	Yes
VISBILITY	High. Because the field was flat and there was no vegetation other than the hedgerow, practically all farming activity was visible to the nest.	High. There will be no topography or vegetation screening view of construction. Visibility will only begin to lower once exterior walls are put up.	Yes

NE BAEA Project Screening Form (rev. 4/16/20) 26 U.S. Fish and Wildlife Service

APPENDIX D

Final Assessment & Conclusion

The proposed construction activity is different from the historic farming activity in general nature and frequency. Construction will require more workers and more equipment, operating at greater intensity and higher frequency. Because of these differences, the construction cannot be considered similar to the historic farming activity, and it cannot be assumed that the breeding pair will tolerate the activity. Avoidance measures will be necessary to reduce the likelihood of disturbing the nest.

Having made these conclusions, the form user would mark 'No' to the question on page 5 of whether the activity was similar to an ongoing or previous activity. Then, at the next question the user would mark 'Yes' because the project would be visible to nest over the open intervening space. At that point, the form would direct them to implement AMs 2, 4, and 5. The project design, as proposed, would not meet AM 2, the 660-foot buffer. The user's options then would be to revise the project to eliminate the portions within 660 feet of the nest and sign the self-certification, or check no on the commitment to follow all recommended AMs and seek further guidance.

APPENDIX E

APPENDIX E

Limitations of This Form

This project screening form is not a permit or authorization to disturb bald eagles. It does not free you from legal liability under BGEPA. Rather, this form provides instruction on how to minimize the legal risk of disturbing nesting bald eagles.

The effectiveness of this form depends on the accuracy and completeness of your answers and your compliance with the avoidance measures. Using this form inappropriately may put you at risk of disturbing nesting bald eagles and violating BGEPA.

This form's recommendations are specific to the Northeast and may not be effective outside this region. If your project is in another area of the U.S., do not use this form. Instead, consult with your regional eagle biologist or migratory bird permit office for guidance matched to your locality.

This form only relates to managing activities near bald eagle nests. It does not provide direction on how to avoid disturbing bald eagle communal roosts and concentration areas, which, compared to nest sites, have different biological significance to eagles and present different sets of concerns. If you believe your activities have any potential to affect a communal roost or concentration area, consult the Guidelines document for guidance.

Conditions such as the location and existence of nests and surrounding habitat are subject to change between years. For this reason, the Service recommends revisiting your determinations every breeding season after completing this form until your project is complete. The more time that passes between when you complete this form and when you end your activities, the more likely it is that conditions will change enough that your original determinations no longer apply.

This form only addresses nesting bald eagles. To identify other USFWS-managed resources and suggested conservation measures for your project, go to https://ecos.fws.gov/ipac/.

Wind energy developers seeking to address potential take of eagles should use this form in conjunction with the Service's Eagle Conservation Plan Guidance. Use of this form alone will not assure wind projects' compliance with BGEPA's protections on disturbance or other take.

Certain states and localities have their own laws, regulations, and guidelines for protecting bald eagles and their nests. Completing this form does not guarantee that you are also in compliance with these other standards and/or regulations. If you are unfamiliar with your state and local standards, consult with the appropriate agencies and authorities.

You are responsible for ensuring that your activities comply with all applicable Federal, tribal, State, and local laws and regulations. This form will only help you in your compliance with BGEPA and its protections on the nesting activity of bald eagles.

APPENDIX F

APPENDIX F

Glossary of Terms

Alternate nest – one of potentially several nests within a nesting territory that is not an in-use nest at the current time. When there is no in-use nest, all nests in the territory are alternate nests. Also sometimes referred to as an inactive nest (e.g., in the Service's 2009 Eagle Rule).

Communal roost – an area where eagles gather repeatedly in the course of a season and shelter overnight and sometimes during the day in the event of inclement weather.

Disturb – to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

In addition to immediate impacts, this definition also covers impacts that result from human-caused alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that injures an eagle or substantially interferes with normal breeding, feeding, or sheltering habits and causes, or is likely to cause, a loss of productivity or nest abandonment.

Eagle nest – any assemblage of materials built, maintained, or used by bald eagles or golden eagles for the purpose of reproduction.

Fledge – to leave the nest and begin flying. For bald eagles, this normally occurs at 10-12 weeks of age.

In-use nest – a bald or golden eagle nest characterized by the presence of one or more eggs, dependent young, or adult eagles on the nest in the past 10 days during the breeding season. Also sometimes referred to as an active nest.

Landscape buffer – a natural or human-made landscape feature that screens eagles from human activity (e.g., strip of trees, hill, cliff, berm, sound wall).

Nest abandonment – nest abandonment occurs when adult eagles desert or stop attending a nest and do not subsequently return and successfully raise young in that nest for the duration of a breeding season. Nest abandonment can be caused by altering habitat near a nest, even if the

alteration occurs prior to the breeding season. Whether the eagles migrate during the non-breeding season, or remain in the area throughout the non-breeding season, nest abandonment can occur at any point between the time the eagles return to the nesting site for the breeding season and the time when all progeny from the breeding season have dispersed.

Nesting territory – the area that contains one or more eagle nests within the home range of a mated pair of eagles, regardless of whether such nests were built by the current resident pair.

Northeast – Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Maryland, Delaware, Virginia, West Virginia, and the District of Columbia.

Project footprint – the area of land (and water) temporarily or permanently altered by a project.

Tolerate – the acceptance of specific human activities by eagles at the nest site. Demonstrated in the eagles' continued ability to successfully feed, breed, and shelter, and the general absence of stress or agitation in their behavior.

Appendix H
Essential Fish Habitat Documentation

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H.1 National Marine Fisheries Service Essential Fish Habitat Assessment Correspondence

DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
22347 CEDAR POINT ROAD UNIT 6
PATUXENT RIVER MARYLAND 20670-1161

7594
Ser: 043.21
17 March 2021

From: Executive Director, Data Analytics, Infrastructure and Technology Advancement Group
To: Mid-Atlantic Field Office Supervisor and EFH Coordinator, Greater Atlantic Regional Fisheries Office, Attn: Ms. Karen Greene

Subj: MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT CONSULTATION FOR NAVAL AIR STATION PATUXENT RIVER COMPLEX TESTING AND TRAINING ACTIVITIES

Encl: (1) Public Release Version of Section 3.4.7 of the 2021 PRC EIS (CD)

1. In accordance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the United States Navy (Navy) has prepared an Essential Fish Habitat (EFH) assessment for Naval Air Station Patuxent River Complex (PRC) proposed activities occurring in the Chesapeake Bay. The Proposed Action includes testing and training activities analyzed in the 1998 PRC Environmental Impact Statement (EIS) and subsequent Environmental Assessments. The Navy's assessment concludes that EFH may be adversely affected by the proposed activities and requests initiation of the MSA's EFH consultation process. The incidental effects of the proposed action do not include use of explosives.

2. The PRC EFH assessment is contained within the 2021 PRC EIS Section 3.4.7 (Magnuson-Stevens Fishery Conservation and Management Act – Essential Fish Habitat Assessment) and enclosed for your convenience. The classification-based approach to the assessment is very similar to that of the Phase III Atlantic Fleet Training and Testing Essential Fish Habitat Assessment (Final Version 12 February 2018) previously reviewed by your office.

3. We appreciate your continued support in helping the Navy meet its environmental responsibilities. You may contact Mrs. Crystal Ridgell (crystal.l.ridgell@navy.mil) should you have additional questions.

Amy J Markowich

AMY J. MARKOWICH
Executive Director
Naval Air Warfare Center Aircraft Division, DAiTA

Copy to: Chief of Naval Operations (N45)
Naval Sea Systems Command

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930-2276

June 15, 2021

Crystal Ridgell
Naval Air Warfare Center Aircraft Division
U.S. Department of the Navy
23013 Cedar Point Rd., Building 2118
Patuxent River, Maryland 20670-1161

RE: Draft Environmental Impact Statement for Testing and Training Activities in the Patuxent River Complex

Dear Ms. Ridgell:

We have reviewed the draft Environmental Impact Statement (DEIS) for the proposed Testing and Training Activities in the Patuxent River Complex. The United States Department of the Navy (Navy) Naval Air Warfare Center Aircraft Division (NAWCAD) is evaluating potential alterations to continuing military readiness activities currently undertaken in the Patuxent River Complex (PRC). The PRC is located at the confluence of the Patuxent River with the Chesapeake Bay and training areas encompass a large area of the mid-Bay region, including Bloodsworth Island. Three alternatives, including a No Action representing current activity levels, were evaluated to determine the potential effects of increasing testing and training on various environmental resources.

Current testing and training activities present a broad range of environmental impacts associated with the operation of aircraft and other land-based and water-based operations. The alternatives considered (i.e., Alternative 1 and Alternative 2) represent an increase in the frequency and/or duration of many of these activities, with the inclusion of a limited number of novel operations, notably testing and training of directed energy systems (e.g., lasers, microwaves). Those impacts most relevant to resources which we work to protect and enhance under the authority of the Magnuson Stevens Fisheries Conservation and Management Act (MSA) and the Fish and Wildlife Coordination Act (FWCA) include the discharge of Military Expended Materials (MEM; e.g., projectiles, debris), the potential operation of vessels in shallow waters, and the use of mid-frequency active sonar (MFAS). The Navy has identified a suite of avoidance and minimization approaches to offset impacts to biological resources, although no new measures are proposed for any of the action alternatives and none of the existing measures are specifically designated to avoid/minimize impacts to various federally managed species of fish, their prey, or their habitats. We offer the following information/guidance to further ensure that impacts to these species are minimized to the extent practicable.

Magnuson Stevens Conservation and Management Act (MSA)
The MSA requires federal agencies, such as the Navy, to consult with us on any action or proposed action authorized, funded, or undertaken by such agency that may adversely affect essential fish habitat (EFH) identified under the MSA. This process is guided by the requirements of our EFH regulation at 50 CFR 600.905, which mandates the preparation of EFH assessments and generally outlines each agency's obligations in the consultation process. In turn, we must provide recommendations to conserve EFH. These recommendations may include measures to avoid, minimize, mitigate, or otherwise offset adverse effects on EFH resulting from actions or proposed actions authorized, funded, or undertaken by that agency. Adverse effects to EFH may result from action occurring within EFH and include impacts to prey species and their habitat. The proposed deposition of MEM, operation of vessels in potentially shallow waters, and generation of MFAS will adversely affect EFH through the cumulative loss of habitat quality/quantity used by a number of federally managed species of fish including bluefish (*Pomatomus saltatrix*) and summer flounder (*Paralichthys dentatus*) which have EFH designated in the PRC.

Fish and Wildlife Coordination Act (FWCA)
The FWCA requires that all federal agencies consult with us when proposed actions might result in modifications to a natural stream or body of water. It also requires that they consider the effects that these projects would have on fish and wildlife and must also provide for the improvement of these resources. Under this authority, we work to protect, conserve and enhance species and habitats for a wide range of aquatic resources such as shellfish, diadromous species, and other commercially and recreationally important species that are not managed by the federal fishery management councils and do not have designated EFH.

Aquatic Resources

The study area contains EFH for seven species of federally managed fish, including black sea bass (*Centropristis striata*), scup (*Stenotomus chrysops*), summer flounder, and bluefish. The project area also presents a variety of important forage species for federally managed fish, including bay anchovy (*Anchoa mitchilli*), Atlantic menhaden (*Brevoortia tyrannus*), and spot (*Leiostomus xanthurus*). Many of these species are seasonally abundant in Chesapeake Bay, reaching highest densities during the warmer months and migrating to refugia lower in the system and in the Atlantic Ocean during winter months. Their abundance, duration of presence, and occupied habitats depends on a complex suite of environmental conditions. The Virginia Institute of Marine Sciences (VIMS) Multi-Species Research Group conducts monthly trawl surveys (see: https://www.vims.edu/research/departments/fisheries/programs/multispecies_fisheries_research/index.php) which can provide valuable insight to species presence and relative abundance at a given time of year.

The PRC also presents migratory, feeding, and resting habitat for anadromous fish such as alewife *(Alosa pseudoharengus)*, blueback herring *(A. aestivalis)* and American shad *(A. sapidissima)*, which use the mainstem Chesapeake Bay and its tributaries at various stages of their life histories. These species have complex life cycles where individuals spend most of their lives at sea then migrate great distances to return to freshwater rivers to spawn. American shad

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(stocks north of Cape Hatteras, N.C.), alewife, and blueback herring are believed to be repeat spawners, generally returning to their natal rivers to spawn (Collette and Klein-MacPhee 2002; Pess et al., 2014). They have also been documented to exhibit some degree of iteroparity (i.e., adults return to spawn multiple times throughout their life) in tributaries to the Chesapeake Bay (M. Ogburn, Smithsonian Environmental Research Center, pers. comm.).

Alosines are important forage for several species managed by the New England Fishery Management Council and the Mid-Atlantic Fishery Management Council as they provide trophic linkages between freshwater/estuarine and marine food webs. Buckel and Conover (1997) in Fahay et al. (1999) report that diet items of juvenile bluefish include *Alosa* species. Additionally, juvenile *Alosa* species have all been identified as prey species for summer flounder (*Paralichthys dentatus*) and windowpane flounder (*Scophthalmus aquosus*) in Steimle et al. (2000). As a result, actions that reduce the availability of prey species, either through direct harm or capture, or through adverse impacts to their spawning habitat may adversely impact federally managed fisheries and their EFH.

American shad, blueback herring, and alewife formerly supported the largest and most important commercial and recreational fisheries throughout their range, with fishing activities spanning across rivers (both fresh and saltwater), tributaries, estuaries, and the ocean. Commercial landings for these species have declined dramatically from historic highs (ASMFC 2018). The most recent American shad stock assessment report identified that American shad stocks are, in all likelihood, currently at all-time lows following a period of recent (i.e., within the past decade) coast-wide decline (ASMFC 2020). In several tributaries to the Chesapeake Bay, such as the Potomac River, the recent estimate of adult mortality was described as "unsustainable", indicating that there is a net loss of adults returning to the system to spawn each year. Throughout their range, American shad stocks do not appear to be recovering (ASMFC 2007). The 2007 stock assessment concluded that new protection and restoration actions needed to be identified and applied, which led to the development of Amendment 3 to the Interstate Fishery Management Plan for Shad and River Herring (American Shad Management). Amendment 3 identified significant threats to American shad, including spawning and nursery habitat degradation or blocked access to habitat, resulting from dam construction, increased erosion and sedimentation, and losses of wetland buffers. Protecting, restoring and enhancing American shad habitat, including spawning, nursery, rearing, production, and migration areas, are necessary for preventing further declines in American shad abundance, and restoring healthy, self-sustaining, robust, and productive American shad stocks to levels that will support the desired ecological, social, and economic functions and values of a restored Atlantic Coast American shad population (ASMFC 2010).

In the Mid-Atlantic, landings of alewife and blueback herring, collectively known as river herring, have declined since the mid-1960's and have remained very low in recent years (ASMFC 2017). The 2012 river herring benchmark stock assessment found that of the 52 stocks of alewife and blueback herring assessed, 23 were depleted relative to historic levels, one was increasing, and the status of 28 stocks could not be determined due to a lack of long-term data (ASMFC 2012). The 2017 stock assessment update indicates that river herring stocks remain depleted at near historic lows coast-wide. The "depleted" determination was used in 2012 and 2017 instead of "overfished" to indicate factors besides fishing have contributed to the decline of

these species, including habitat loss, habitat degradation and modification, and climate change (ASMFC 2017).

Because landing statistics and the number of fish observed on annual spawning runs indicate a drastic decline in alewife and blueback herring populations throughout much of their range since the mid-1960s, they have been designated as a Species of Concern by NOAA. Species of Concern are those about which we have concerns regarding their status and threats, but for which insufficient information is available to indicate a need to list the species under the Endangered Species Act (ESA). We wish to draw proactive attention and conservation actions to these species.

Adverse Effects to Aquatic Resources and Mitigation Measures

The continued release of MEM into estuarine waters of the Chesapeake Bay will add to those materials introduced by other anthropogenic pathways. The materials proposed to be released and not subsequently recovered will be composed of plastics, metals (e.g., lead, steel, copper, aluminum), and other novel materials (e.g., lithium-ion batteries). Many of these materials can adversely affect aquatic life through a variety of pathways including bioaccumulation of metals of other contaminants in organisms of higher trophic levels, such as commercially important piscivorous fish (e.g., bluefish). The degradation of fish habitat through the chronic introduction of these pollutants represents a major contributor to decreasing or impaired fish stocks (Hanson et al., 2003; Johnson et al., 2008) and should be avoided to the extent possible. The proposed alternatives in this DEIS include increases in the amount of MEM (e.g., defunct sonobuoys) released into estuarine waters without any commensurate increase in containment efforts or increases in the use of biodegradable materials.

Water-based activities such as vessel operation can result in adverse effects to sensitive aquatic habitats without proper attention to the depths and speeds at which vessels operate. One such habitat is submerged aquatic vegetation (SAV), which provides highly productive habitat for federally managed fish and their prey and is particularly vulnerable to human disturbance. SAV is also designated as a habitat area of particular concern (HAPC) for summer flounder. Vessel operations are among the most impactful anthropogenic activities on SAV if proper avoidance measures are not considered (see review by Sagerman et al., 2020). This would include avoiding operating vessels in shallow waters observed to support SAV. Shallow waters in the PRC (e.g., waters around Bloodsworth Island) support annually recurring SAV as indicated by mapping conducted by VIMS (see: https://mobjack.vims.edu/sav/savwabmap/). Similarly, the PRC contains oyster reef habitat which is mapped by Maryland Department of Natural Resources (see: https://dnr.maryland.gov/pages/Merlin.aspx). These designated resource areas should be considered during the development of testing and training programs and avoided to the extent practicable.

Underwater noise generated by MFAS may also result in adverse effects to various fish species. Our concerns about noise effects come from an increased awareness that high-intensity sounds have the potential to adversely impact aquatic vertebrates (Fletcher and Busnel, 1978; Kryter, 1984; Popper, 2003; Popper et al., 2004). Effects may include (a) lethal and non-lethal damage to body tissues, (b) physiological effects including changes in stress hormones, hearing capabilities,

or sensing and navigation abilities, or (c) changes in behavior (Popper et al., 2004). Species of the family Alosinae (e.g., American shad, alewife, blueback herring) are uniquely sensitive to mid- and high-frequency sound (Nestler et al., 1992; Mann et al., 2001; Higgs et al., 2004; Popper, 2008) and have been documented to exhibit behavioral responses (e.g., fleeing behavior) to comparable frequencies/intensities of sound proposed to be used for training and testing activities (Nestler et al., 1992; Mann et al., 2001). Underwater noise generated by MFAS may affect the migratory behavior of anadromous fish which likely result in chronic (i.e., annual) migratory delay. Furthermore, Kvadsheim and Sevalsen (2005) noted sound-induced mortality of Atlantic herring (*Clupea harengus*) from similar sonar activities and, while they noted high natural mortality of this forage fish, they recommended the use of moderate restrictions when high densities of this species were present. While we acknowledge that every incidence of MFAS use will not likely adversely affect these species, if they are deployed at frequent intervals during sensitive times of the year (e.g., during spring migration), they could have a significant cumulative impact on the ability of these stocks to successfully rebuild by chronically delaying these species during their migration. Considering the precarious status (i.e., "depleted") of Alosines in the Chesapeake Bay, avoidance and minimization measures (i.e., prioritizing MFAS activities outside of the migratory period) are needed to minimize adverse effects of this action.

Essential Fish Habitat Conservation Recommendations

As proposed, testing and training activities conducted at PRC associated with each of the considered alternatives in this DEIS will adversely affect federally managed species of fish and their prey. Pursuant to Section 305 (b) (4) (A) of the MSA, we offer the following EFH conservation recommendations be incorporated into the project, to the extent practicable.

- Prioritize training and testing activities that generate mid- to high-frequency in-water noise (e.g., MFAS) outside of the period in which sensitive anadromous species of fish (e.g., American shad) are likely to be migrating through PRC waters (February 15 - June 15, in any year).
- Develop a vessel operation plan that minimizes navigation in shallow waters that support mapped SAV or oyster reef habitats.
- Develop testing and training protocols that minimize the repeated unrecovered release of MEM (e.g., defunct sonobuoys) into estuarine waters.

We appreciate your consideration of these recommendations, and we acknowledge that there are limitations to the extent to which testing and training activities can be modified to fully avoid adverse impacts. Therefore, we are available to work with you as needed to develop plans that avoid/minimize impacts of potential stressors on NOAA trust resources managed under the MSA and FWCA.

Section 305 (b)(4)(B) of the MSA requires you to provide us with a detailed written response to these EFH conservation recommendations, including the measures adopted by you for avoiding, mitigating, or offsetting the impact of the project on EFH. In the case of a response that is inconsistent with our recommendations, Section 305 (b)(4)(B) of the MSA also indicates that you must explain your reasons for not following the recommendations. Included in such reasoning would be the scientific justification for any disagreements with us over the anticipated

effects of the proposed action and the measures needed to avoid, minimize, mitigate or offset such effect pursuant to 50 CFR 600.920 (k). Also, a distinct and further EFH consultation must be reinitiated pursuant to 50 CFR 600.920 G) if new information becomes available, or if the project is revised in such a manner that affects the basis for the above EFH conservation recommendations.

Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA)
Please note, these recommendations do not obviate compliance with any conditions specific to species protected under Section 7 of the ESA (e.g., sturgeons) or the MMPA (e.g., bottlenose dolphin) described in the UNMP or elsewhere. Please continue to work with Brian Hopper of our Protected Resources Division and Jacyln Daly at our Headquarters office as necessary to ensure adequate protection for these species.

Thank you for the opportunity to review and comment on this project. If you should have any questions regarding, please do not hesitate to contact Jonathan Watson in our Maryland field office at jonathan.watson@noaa.gov or (410) 295-3152.

Sincerely,

Louis A. Chiarella
Assistant Regional Administrator
for Habitat Conservation

cc: NAWCAD – A. Gray
NMFS PRD – B. Hopper
NMFS HQ – J. Daly
EPA – C. Traver
FWS – J. Slacum
MDNR – G. Golden
MAFMC –C. Moore
ASMFC-L. Havel
NEFMC –T. Nies

6

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DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
22347 CEDAR POINT ROAD UNIT 6
PATUXENT RIVER MARYLAND 20670-1161

7594
Ser: 118.21
12 August 2021

From: Executive Director, Data Analytics, Infrastructure and Technology Advancement Group
To: Assistant Regional Administrator for Habitat Conservation, United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office, 55 Great Republic Drive, Gloucester, MA 01930-2276, Attn: Louis A. Chiarella

Subj: NAVY TESTING AND TRAINING ACTIVITIES IN THE PATUXENT RIVER COMPLEX ESSENTIAL FISH HABITAT CONSULTATION UNDER THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

Thank you for the National Oceanic and Atmospheric Administration, National Marine Fisheries Services (NOAA Fisheries) review of the Patuxent River Complex (PRC) Draft Environmental Impact Statement (DEIS) and included Essential Fish Habitat (EFH) Assessment dated April 2021. The Navy received your letter dated June 15, 2021 containing EFH conservation recommendations pursuant to the Magnuson-Stevens Fishery Conservation and Management Act. This letter serves as the Navy's required 30-day written response to NOAA Fisheries and the Greater Atlantic Regional Fisheries Office pursuant to 16 United States Code 1855 (b)(4)(B). The Navy and NOAA Fisheries scheduled and then held a teleconference meeting on July 20, 2021 to discuss NOAA Fisheries' letter and conservation recommendations. The following responses are specific to NOAA Fisheries' comments and conservation recommendations described in the June 15 letter.

1. *EFH Conservation Recommendation: Prioritize training and testing activities that generate mid- to high-frequency in-water noise (e.g., mid-frequency active sonar [MFAS]) outside of the period in which sensitive anadromous species of fish (e.g., American shad) are likely to be migrating through PRC waters (February 15 - June 15, in any year).*

Under the preferred alternative (Alternative 2), the Navy would conduct up to 39 MFAS test events each year. This would equate to no more than 13 events during the identified four month shad migration season, assuming an even distribution of events across a given year. During these tests, a fraction (35 percent) would deploy active sonobuoys, and each sonobuoy would transmit sonar for a short period of time (up to

15 minutes). Applying another constraint on MFAS testing must be weighed against: 1) significant logistical considerations, 2) specific Chesapeake Bay conditions necessary to conduct realistic and effective testing, 3) sufficient proximity to allow for the staging of associated support equipment and offsite access, and 4) considerations regarding other species that are more common during summer and more sensitive to MFAS (e.g., dolphins). There are only limited areas of the PRC suitable to meet the testing requirements. In addition, anti-submarine warfare systems testing events have critical milestones to complete before incorporation into the Navy's arsenal and the Navy has a very limited ability to reschedule events to later times. These important considerations, combined with the analysis issues noted below, justify declining to follow this recommendation.

On scientific grounds, the Navy disagrees with the particular NOAA Fisheries conclusions made based on the references cited. References thus far support only constant, high frequency and high intensity pulses of noise can deter clupeids from entering intakes for a dam at very close ranges (specifically Nestler et al., 1992). A meaningful deterrence of herring migration from very infrequent and localized dipping sonar in the Chesapeake Bay channel is not supported by these references. NOAA Fisheries' conclusions would be more relevant if the proposed action were being conducted in river herring spawning areas, which it is not. Along broad migratory corridors between spawning and overwintering habitats, the likely rare occurrence of a species in a precarious status, with the rare occurrence of dipping sonar (close enough to have any meaningful effects) does not support further conservation measures on the very limited testing of dipping sonar in the Chesapeake Bay.

In conclusion, it is not operationally practical to make the recommended seasonal adjustment to tests involving mid- to high-frequency sound in the water. Furthermore, it is the Navy's opinion that based on the particular test event locations, duration, depths, frequency, and available science related to sound effects on migrating anadromous fish species, that the action will generate no more than minimal adverse effects to EFH.

2. *EFH Conservation Recommendation: Develop a vessel operation plan that minimizes navigation in shallow waters that support mapped submerged aquatic vegetation (SAV) or oyster reef habitats.*

The majority of vessel activity within the PRC is conducted by Atlantic Targets and Marine Operations (ATMO), with predominant vessel activity occurring over deeper

NAVY TESTING AND TRAINING ACTIVITIES IN THE PATUXENT RIVER COMPLEX ESSENTIAL FISH HABITAT CONSULTATION UNDER THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

Bay waters in support of range clearance and testing activities occurring in the Chesapeake Bay Water Range. ATMO, and other commands that may use the PRC, maintain training standards for their crew members who must be familiar with the United States Coast Guard basic seamanship and search and rescue procedures as well as proficient in the areas of vessel operation, visual lookout and vessel detection, and radar and marine radio equipment usage and calibration. Appropriate visual and radar surveillance tools and personal protective equipment are used by PRC boat crews to detect and avoid commercial and recreational vessels and prevent personnel injury.

As stated in the DEIS (Table 2.5-1, Standard Operating Procedures), Navy vessels are required to operate in accordance with applicable navigation rules. This includes operating at safe speeds while meeting mission requirements. Both vessels and unmanned maritime systems operate at such distances from shore to include allowances for sufficient depth and swell conditions. These water-based assets avoid contact with the seafloor to prevent collisions and vessel damage with limited exceptions such as amphibious vehicles or bottom crawlers operating in designated locations (e.g., vessel ramps). Navigation hazards that appear on nautical charts or appear visible on the surface, such as submerged wrecks, artificial oyster reefs, and obstructions (e.g., buoys, nearshore oyster reefs), are also avoided. Operations that do not necessarily avoid contact with the bottom and occur away from the aforementioned designated locations are minimally conducted, but can include the temporary placement of mine shapes for test events, and the occasional beaching of vessels on Bloodsworth Island. The vessel movements to Bloodsworth Island are done to support target placement and recovery (part of the Proposed Action) and to support the Integrated Natural Resources Management Plan and other conservation actions (e.g., species surveys) (not part of the Proposed Action).

The aforementioned standard operating procedures implemented primarily for vessel operation safety also serve to protect the environment, including those areas of the Bay hosting SAV (e.g., around Bloodsworth Island) and oyster reef habitats with the few noted exceptions. To address those exceptions in furtherance of NOAA Fisheries' conservation recommendations, the Navy will, to the extent practicable, avoid conducting vessel operations over known SAV beds and oyster reef habitats. To ensure that SAV and oyster reef habitats are considered during the test plan evaluation process, PRC natural resources managers will use the latest mapping data for SAV and oyster reef habitats, as depicted in the PRC DEIS Figures 3.4-1 and 3.3-3, respectively.

NAVY TESTING AND TRAINING ACTIVITIES IN THE PATUXENT RIVER COMPLEX ESSENTIAL FISH HABITAT CONSULTATION UNDER THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

3. *EFH Conservation Recommendation: Develop testing and training protocols that minimize the repeated unrecovered release of military expended materials (MEM) (e.g., defunct sonobuoys) into estuarine waters.*

To the extent that recommendation 3 refers to debris as a result of a testing or training activity, the Navy will remove associated debris to the extent practicable. Current recovery efforts include items that float or remain suspended in the upper water column (e.g., parachutes, target fragments) or items that sink that are considered reusable and/or non-expendable (e.g., torpedoes, missiles). The majority of military testing and training items (all inert or non-explosive) would be expended in the Chesapeake Bay Water Range at the established fixed targets long used by the military (i.e., Hooper Target since 1949 and Hannibal Target since 1969). The range occupies relatively deep water away from the mapped SAV beds and all oyster reefs that may be a hazard to navigation. The Naval Air Warfare Center Aircraft Division Sustainability Office conducts an environmental review of each PRC test plan, and during that process has an opportunity to evaluate, in advance, the feasibility of MEM recovery. On the day of the test, weather conditions and sea state will also play a role in the feasibility of MEM recovery.

Important considerations that weigh against applying additional measures include: 1) the close association between number of MEM used and data requirements for testing/training (i.e., MEM is only expended to the extent necessary to meet test data validation endpoints and to achieve crew proficiency), and 2) the potential impact of recovery efforts on subsequent mission requirements and on the habitat itself. The focus of testing and training in the PRC is on achieving aircraft performance requirements and pilot training and less on proficiency in the use of expended materials. This mission focus effectively minimizes the use of MEM in the PRC and supersedes the need for any additional protocols. These important considerations, combined with the technical analysis issues noted below, justify declining to follow the specifics of this recommendation.

Neither Hanson et al., (2003) nor Johnson et al., (2008) list MEM as a source of pollutants contributing to degradation of fish habitat. Whereas the PRC DEIS/EFH Assessment does conclude there would be additional pollutants introduced to the Bay environment with the preferred alternatives, the additions are not expected to result in a violation of any water or sediment quality standard for aquatic life protection. There is also some incidental value associated with MEM in terms of physical habitat structure, to the extent hard substrate remains above the sediment surface within an oxygenated environment long enough to be colonized by oysters. Whereas this is

NAVY TESTING AND TRAINING ACTIVITIES IN THE PATUXENT RIVER COMPLEX ESSENTIAL FISH HABITAT CONSULTATION UNDER THE MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

likely true in the Hannibal Target area, the other target areas are in much deeper, mud-bottomed waters that are seasonally hypoxic and relatively deprived of life.

We again thank you for your support of this critical proposed action. We also would like to reaffirm the Navy's commitment to working with your agency in support of our mutual goals. Our point of contact for the PRC EFH consultation is Ms. Crystal Ridgell who may be reached at 301-757-5282 or crystal.l.ridgell@navy.mil.

Amy J. Markowich

AMY J. MARKOWICH
Executive Director

Copy to: Chief of Naval Operations (N45)
Naval Sea Systems Command

Appendix I
Coastal Zone Management Act Documentation

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I.1 Coastal Consistency Determination for Maryland

DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
22347 CEDAR POINT ROAD UNIT 6
PATUXENT RIVER MARYLAND 20670-1161

7594
Ser: 046.21
25 March 2021

From: Executive Director, Data Analytics, Infrastructure and Technology Advancement Group
To: Coastal Policy Coordinator, Chesapeake and Coastal Services, Maryland Department of Natural Resources, 580 Taylor Avenue E-2, Annapolis, MD 21401, Attn: Mr. Joseph Abe

Subj: FEDERAL CONSISTENCY DETERMINATION FOR TESTING AND TRAINING ACTIVITIES IN THE PATUXENT RIVER COMPLEX

Encl: (1) Public Release Version of 2021 PRC EIS (CD)
(2) Federal Consistency Determination

1. In accordance with the Coastal Zone Management Act (16 United States Code § 1456(c) and 15 Code of Federal Regulations Part 930, Subpart C), the United States Department of the Navy (Navy) requests concurrence with its Federal Consistency Determination for proposed activities in the Patuxent River Complex (PRC) Study Area. The Navy previously analyzed the potential environmental impacts of its testing and training activities in the PRC in a *1998 Final Environmental Impact Statement (EIS) for Increased Flight and Related Operations in the Patuxent River Complex*. The Navy also conducted a Coastal Zone Management Act (CZMA) consultation for these activities in 1998. The Navy has begun the next phase of PRC planning and has analyzed the potential environmental impacts of proposed testing and training activities in the *Testing and Training Activities in the Patuxent River Complex Draft EIS* found at http://www.prceis.com.

2. Activities for this latest iteration of PRC planning are similar to what was described in the 1998 PRC EIS, with some activities increasing in scope and others decreasing. Some of the activities have also been reclassified or differ slightly from the previous consultation. In addition, some testing and training activities have been proposed to occur in other Study Area locations that were not included in the scope of the 1998 CZMA consultation.

3. The enclosed Draft PRC EIS and the project website (http://www.prceis.com) contain detailed information and analyses of potential impacts. The Navy reviewed the Maryland Coastal Zone Management Program in preparation of the enclosed Federal Consistency Determination. Based on the analyses, the Navy has determined that the Proposed Action within the PRC Study Area will be consistent to the maximum extent practicable with the policies of the Maryland Coastal Zone Management Program.

FEDERAL CONSISTENCY DETERMINATION FOR TESTING AND TRAINING ACTIVITIES IN THE PATUXENT RIVER COMPLEX

4. We request that the Maryland Department of the Environment provide its concurrence on our findings within 60 days of receipt of this letter. If a response has not been received by that time, concurrence with this finding will be presumed. My point of contact for this matter is Ms. Crystal Ridgell who may be reached at 301-757-5282 or crystal.l.ridgell@navy.mil.

Amy J Markowich

AMY J. MARKOWICH
Executive Director
Naval Air Warfare Center Aircraft Division, DAITA

Copy to: Commander, Navy Region Mid-Atlantic

FEDERAL CONSISTENCY DETERMINATION
TESTING AND TRAINING ACTIVITIES IN THE PATUXENT RIVER COMPLEX

INTRODUCTION

This document provides the State of Maryland with the United States (U.S.) Department of the Navy's (Navy) Consistency Determination under section 307(c)(1) of the Coastal Zone Management Act (CZMA) of 1972, as amended, and 15 Code of Federal Regulations [CFR] part 930, subpart C, for the proposed activities in the Patuxent River Complex (PRC) Study Area (Study Area).

The Navy analyzed the potential environmental impacts of all of its testing and training activities in Maryland, Virginia and Delaware in the *Final Environmental Impact Statement (EIS) for Increased Flight and Related Operations in the Patuxent River Complex, Patuxent River, Maryland* (December 1998), with the Record of Decision signed on May 17, 1999 (hereinafter referred to as the "1998 PRC EIS"). Concurrent with the development of the 1998 PRC EIS, the Navy also completed a Federal Consistency Determination on the same activities[1].

The 1998 PRC EIS served as the basis for the Navy's Federal Consistency Determinations for Operational Workload II, which was the Preferred Alternative. The activities analyzed in the current 2021 Draft PRC EIS are similar to what was described in the 1998 PRC EIS, with some activities increasing in scope and others decreasing. Some of the activities have also been reclassified or differ slightly from the previous Consistency Determination. In addition, some testing and training activities have been proposed in locations that were not included in the scope of the 1998 Federal Consistency Determination. This Federal Consistency Determination supplements the 1998 Consistency Determination to account for changes in the Navy's proposed testing and training activities necessary to meet mission needs.

As most of the activities proposed in the 2021 Draft EIS constitute a continuation of activities consulted on in the 1998 EIS, the potential effects to coastal resources are expected to be similar to those captured in the previous consultation. The Navy recognizes that, pursuant to 15 CFR part 930.31(e), activities already reviewed by the State of Maryland may be modified such that the potential effects to coastal resources may be substantially different than those previously reviewed. Although the Navy does not predict effects that are substantially different, the Navy is, as a matter of comity, electing to consult on changes to activities from the 1998 PRC EIS even when potential effects are expected to be the same or minimally different. In addition, the Navy is consulting on any new activities not included in the 1998 PRC EIS Federal Consistency Determination.

REGULATORY BACKGROUND INFORMATION

The CZMA, codified in 16 U.S. Code (U.S.C.) section 1451 et seq. established a comprehensive regulatory scheme for effective management, beneficial use, protection, and development of the coastal zone and its natural resources. CZMA encourages coastal states and provides a mechanism for them to develop, obtain federal approval for, and implement a broad-based coastal management program (CMP).

CZMA section 307 provides that federal agency activities shall be carried out in a manner, which is consistent to the maximum extent practicable with the enforceable policies of approved state

[1] Concurrence with the Navy's consistency determination for actions covered in the 1998 PRC EIS was received from Maryland, Virginia and Delaware.

management programs. Section 307 applies to federal agency activity in a state's coastal zone and also to federal agency activity outside the coastal zone, if the activity affects a land or water use in, or natural resources of, the coastal zone. Federal agency activity includes activity performed by a federal agency, approved by a federal agency, or for which a federal agency provides financial assistance. Such activity, whether direct, indirect, or cumulative, must be demonstrated to be consistent with the enforceable policies of the state's CMP, unless full consistency is otherwise prohibited by federal law (per 15 CFR part 930.32, "consistent to the maximum extent practicable"). The Navy's Proposed Action constitutes a direct federal action.

DESCRIPTION OF THE PROPOSED FEDERAL AGENCY ACTION

The Navy has prepared a Draft PRC EIS to assess the environmental impacts associated with the continued conduct of military research, development, test and evaluation (hereinafter referred to as "testing") and training activities in the PRC Study Area (Figure 1). These military readiness activities are generally consistent with those analyzed in the 1998 PRC EIS (completed in December 1998; Record of Decision signed May 17, 1999) and are representative of essential testing and training that the Navy has been conducting in the PRC Study Area for decades. The Navy's Preferred Alternative in the Draft PRC EIS, and the alternative subject to the following Federal Consistency Determination, is Alternative 2.

Proposed activities are broadly categorized as aircraft flight activities, ground-based activities, or surface vessel activities. As the Navy's premier aircraft test range, flight activities are the most frequent and foremost performed within the PRC. The Naval Air Warfare Center Aircraft Division (NAWCAD) Naval Test Wing Atlantic and other squadrons home-based at Naval Air Station (NAS) Patuxent River (referred to collectively as tenant squadrons) conduct the majority of aircraft flights. Transient aircraft, not stationed at NAS Patuxent River, also utilize PRC airspace but on a much less frequent basis. Aircraft flight activities are further described in Draft PRC EIS Section 2.1.1.1. Ground-based activities include those performed by aircraft on the ground that are related to aircraft flights or non-flight tests that are conducted in specialized ground test facilities and laboratories. Ground-based activities are further described in Draft PRC EIS Section 2.1.1.2. Surface vessel activities involve the use of the Chesapeake Bay Water Range and its fixed target areas. The safe use of the target areas is largely achieved by NAWCAD Atlantic Targets and Marine Operations Division range support boats. Range support boats account for the majority of surface activities conducted within PRC waters and provide the services required to safely accomplish a testing or training event. Surface vessel activities are further described in Draft PRC EIS Section 2.1.1.3. These flight, ground-based, and surface vessel activities are further described later in this Consistency Determination and in greater detail in the Draft PRC EIS.

PROJECT LOCATION

PRC is based at NAS Patuxent River, located in Southern Maryland approximately 60 miles southeast of Washington, D.C. The 1998 PRC EIS defined the PRC as NAS Patuxent River and Outlying Field Webster flight and ground test facilities and airfields along with the Atlantic Test Range restricted airspace, Chesapeake Bay Water Range, and fixed target areas. This 2021 Draft PRC EIS expands the PRC Study Area to include land, water, and airspace historically and currently used by NAWCAD that were not assessed in the previous 1998 PRC EIS. These include Bloodsworth Island Range, waters beneath the restricted airspace outside the Chesapeake Bay Water Range, and surrounding Federal Aviation Administration airspace including Helicopter Operating Areas and Chessie Air Traffic Control Assigned Airspace. The PRC Study Area components are shown in Figure 1.

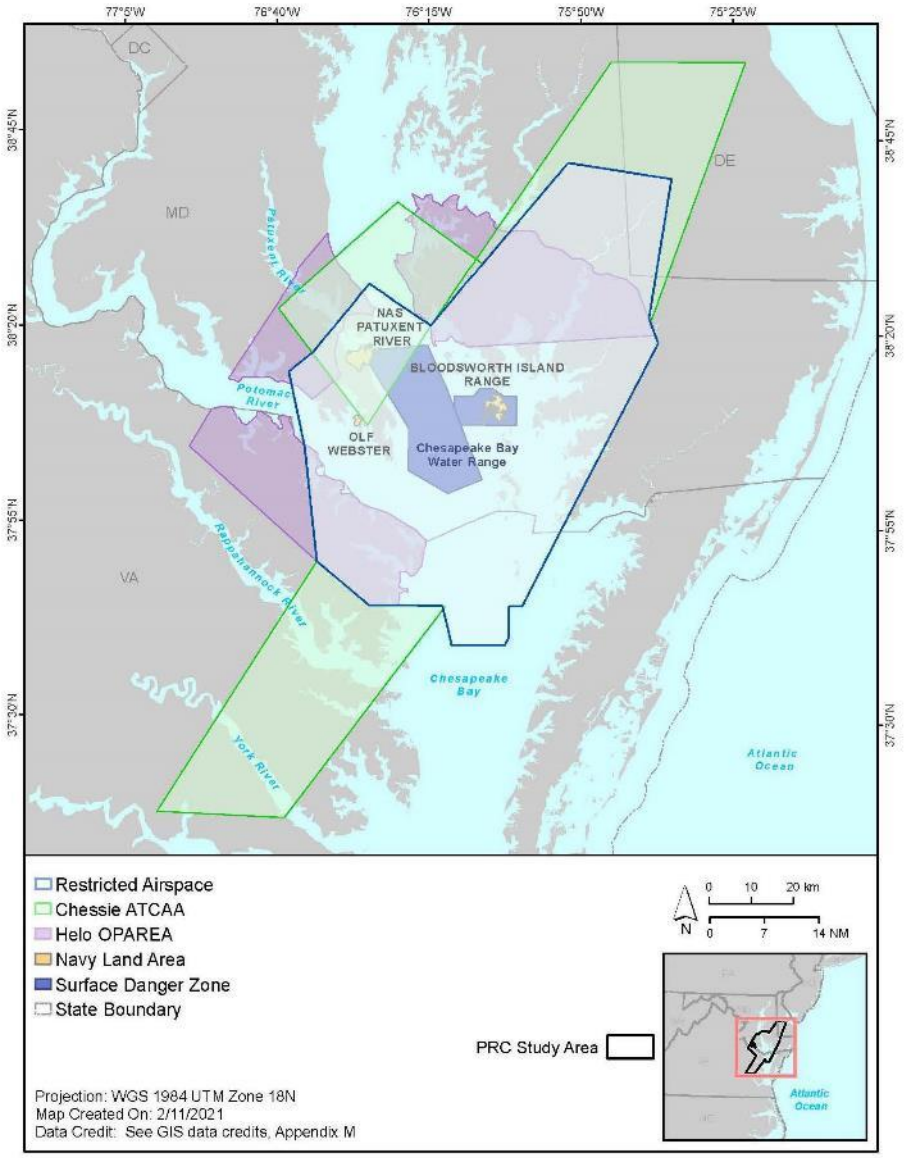

Figure 1 - Patuxent River Complex Study Area

Key: ATCAA = Air Traffic Control Assigned Airspace; OPAREA = Operating Area

To reflect the nature of Navy testing and training activities in the Study Area, the Navy identifies the locations of proposed activities. These activities and their locations are identified in Table 2.3-1 of Chapter 2 (Description of Proposed Action and Alternatives) of the Draft PRC EIS.

Testing and training activities would be conducted in areas appropriate for the type of activity based on operational and safety considerations. As noted and shown in Figure 1, the PRC Study Area spans across parts of the three states of Delaware, Virginia, and Maryland. To clarify which PRC testing and training activities occur within Maryland, the following is provided:

- All PRC testing and training activities which occur on land would occur in Maryland on the military installations of NAS Patuxent River and Outlying Field Webster.
- All PRC testing and training activities which occur on the water would occur in Maryland, primarily in the Chesapeake Bay Water Range and the waters offshore from NAS Patuxent River.
- Of the PRC testing and training activities which occur in special use airspace, approximately 90% would occur in the airspace over Maryland, and most of that restricted airspace is located over the Chesapeake Bay waters of Maryland.

Determination of Potential Effects

In accordance with 15 CFR part 930; subpart C, the Navy reviewed its Proposed Action and has determined that certain activities that will be conducted as part of the Proposed Action may have an effect on a coastal use or resource of the State of Maryland.

The Navy used a screening process to identify stressors[2] to environmental resources found in the PRC Study Area. Navy subject matter experts then studied the testing and training activities to identify specific stressors associated with each activity, which may have direct or indirect impacts on the environment. Not all stressors affect every resource, nor do all proposed Navy activities produce all stressors. Since the activities proposed are similar to the activities analyzed previously, the stressors considered are also similar. The analyses in the Draft PRC EIS were then used to determine if there would be effects to coastal zone resources.

Table 1 lists the environmental resources analyzed in the Draft PRC EIS and the stressors that could affect them. Details of the stressors associated with each of the proposed activities can be reviewed further in Section 3.0 (Introduction) of the Draft PRC EIS.

[2] Stressors are components of naval activities that could serve as stimuli or pose an opportunity to stress or otherwise affect different biological, physical, or human resources evaluated in the Draft EIS.

Table 1 - Stressors Analyzed in the Draft PRC EIS

Resource Areas	Potential Stressors						
	Acoustic	Physical Disturbance and Strike	Pollutants	Public Interaction	Energy	Entanglement	Ingestion
Ambient Airborne Noise	✓						
Air Quality			✓				
Water Quality and Sediments		✓	✓				
Biological Resources	✓	✓	✓		✓	✓	✓
Public Health and Safety	✓	✓		✓			
Land Use	✓						
Socioeconomics	✓			✓			
Environmental Justice	✓						
Cultural Resources	✓	✓					

Tables 2 and 3 list the annual operational tempo of proposed activities analyzed in the Draft PRC EIS by alternative (comparing the No Action Alternative and the Preferred Alternative under the 2021 Draft PRC EIS). Table 2 is organized by air activities (and air assets), land-based activities (and land-based assets), water-based activities (and water-based assets) according to the primary location in which they occur within the complex. The data categories include any new or expanded activities that were not included in the 1998 PRC EIS Consistency Determination and have the potential to affect coastal zone uses and resources as defined by the Maryland Coastal Zone Management Program.

Table 3 includes munitions, other military expended materials (MEM), and directed energy weapons systems by activity type for each of the alternatives. No explosive munitions are proposed under any alternative in the 2021 Draft PRC EIS.

Pursuant to guidance issued by the National Oceanographic and Atmospheric Administration, Navy activities that temporarily affect a coastal resource while that resource is outside of the coastal zone such that resource impacts are not felt within the coastal zone are not included. For Navy activities occurring outside the coastal zone, the likelihood that there will be an effect on resources of the coastal zone decreases with the distance of the activity from the coastal zone. An effect on a coastal resource has to be more than merely speculative, it must be reasonably foreseeable. Thus, even if certain activities have an effect on certain species, the distance of the activity from the coastal zone makes any effect to resources of the coastal zone highly speculative. The activities and locations where the activities typically occur are indicated in Tables 2 and 3. Testing and training activities would typically occur in portions of the PRC where they have historically occurred.

Table 2 - Annual PRC Operational Tempo per Alternative: Activities and Assets

Activity Name	*No Action Alternative*	*2021 Draft EIS Preferred Alternative (Alternative 2)*	*Location and Recovery Rate (as applicable)*
Air-Based Activities			
Aircraft Flight Activities (# of Flight Hours)	20,100	26,000	*PRC Airspace* – restricted areas – 80%; Helicopter Operating Areas – 20%
Supersonic Activities (# of Events)	247	198	*PRC Airspace* – restricted areas – 98% R-4008 above 30,000 feet; greater than 2% below 30,000 feet weapons separation testing only; Chessie Air Traffic Control Assigned Airspace – 1 to 3 events per year
Air-Based Assets			
Aerial (BQM) Targets (# of Targets)	3	6	*PRC Airspace* – launched from Armament Test Area; 100% recovered from CBWR
Unmanned Aerial Systems Targets[2] (# of Targets)	50	150	*PRC Airspace* – restricted areas – 65% over land areas; 35% over water areas (25% CBWR; 10% Bloodsworth Island Range Surface Danger Zone); 100% recovered from land; 40% recovered from water
Land-Based Activities			
Aircraft Ground-Based Activities (# of Hours)	3,693	4,729	*PRC Land Areas and Facilities* – installation airfields flight line, taxiways, tarmacs, and hanger aprons
Outdoor Static Engine Runs (# of Events/Hours)	92	101	*PRC Land Areas and Facilities* – Open-Air Engine Test Cell Facility
Weapons Compatibility & Gun Fire Tests (# of Events)	11 gunfire 14 compatibility	13 gunfire 17 compatibility	*PRC Land Areas and Facilities* – Armament Test Area
Land-Based Assets			
Ground Support Equipment (# of Hours)	47,894	58,763	*PRC Land Areas and Facilities* – on and around Installation airfields
Unmanned Ground Systems (# of Systems)	2	44	*PRC Land Areas and Facilities* – installations (primarily Outlying Field Webster; previously disturbed approved areas)
Water-Based Activities			
Anti-Submarine Warfare Systems Tests[2] (# of Events)	4 active 30 passive	39 active 35 passive	*PRC Water Areas* - sonar dip points

Table 2 - Annual PRC Operational Tempo per Alternative: Activities and Assets

Activity Name	*No Action Alternative*	*2021 Draft EIS Preferred Alternative (Alternative 2)*	*Location and Recovery Rate (as applicable)*
Mine Countermeasure Systems Tests[2] (# of Events)	22	26	*PRC Water Areas* – CBWR; installation surrounding waters
Water-Based Assets			
Vessels (# of Vessels)[1]	593	666	*PRC Water* Areas – CBWR – 85% to 90%; outside CBWR but still within PRC Study Area – 10% to 15%
Unmanned Maritime Systems (# of Systems)[3]	51	176	*PRC Water* Areas – primarily installation surrounding waters but also within the CBWR
Surface Targets (# of Targets)	476	539	*PRC Water* Areas – CBWR – 85% to 90%; Outside CBWR but still within PRC Study Area – 10% to 15%; mobile and stationary are 100% recovered; free floating or towed are 95% recovered
Subsurface Targets (# of Targets)	5	18	*PRC Water Areas* – CBWR; installation surrounding waters; 100% recovered

Key: CBWR = Chesapeake Bay Water Range; PRC = Patuxent River Complex.
Notes:
1. Includes one and two amphibious vehicles per alternative, respectively.
2. Associated aircraft flight hours are included in flight hour totals.
3. Includes one and two bottom crawlers or remotely operated vehicles per alternative, respectively; may rest or operate on seafloor bottom.

Table 3 - Annual PRC Operational Tempo per Alternative:
Number of Munitions, Other MEM, and Directed Energy Weapon Systems

Type	*No Action Alternative**	*2021 Draft EIS Preferred Alternative (Alternative 2)*	*Location and Recovery Rate (as applicable)*
Test Flights			
Torpedoes	37	41	*PRC Water Areas* – CBWR; 80% recovered
Missiles	4	46	*PRC Water Areas* – CBWR; 55% recovered
Bombs	194	297	*PRC Water Areas* – CBWR; 0% recovered
Mines (Mine Laying)	16	202	
Rockets[1]	385	587	
Rockets (Flechette Warhead)	33	51	
Small-Caliber Gun Ammunition[1]	26,197	42,670	
Medium-Caliber Gun Ammunition[1]	8,539	17,922	
Chaff (Canisters [pounds])	96 (431)	217 (977)	
Flares (Decoys)	320	281	
Flares (Illumination)	47	41	
Dye Markers	37	41	
Launchers/Pods	7	15	
Signal Cartridges/ Spotting Charges	12	13	
Passive Sonobuoys	122	134	
Miscellaneous Items (Mass Equivalents and Fuel Tanks)	1	1	
Search & Rescue Rafts and Kits	2	17	*PRC Water Areas* – CBWR; 100% recovered
Training Flights			
Bombs	2	3	*PRC Water Areas* – CBWR; 0% recovered
Chaff (Canisters [pounds])	25 (112)	54 (243)	
Flare (Illumination)	4	3	
Small-Caliber Gun Ammunition[1]	500	814	
Other Flights			
Marine Markers	22**	37	*PRC Water Areas* – CBWR – 50%; Patuxent River Seaplane Area – 50%; 0% recovered
Weapons Compatibility & Gun Fire Tests – Armament Test Area			
Chaff (# of Pounds)	81	94	Chaff are swept following events

Table 3 - Annual PRC Operational Tempo per Alternative:
Number of Munitions, Other MEM, and Directed Energy Weapon Systems

Type	*No Action Alternative**	*2021 Draft EIS Preferred Alternative (Alternative 2)*	*Location and Recovery Rate (as applicable)*
Cartridge Actuated Devices & Propellant Actuated Devices	513	593	100% recovered from ATA
Jet-Assisted Takeoff Bottles	6	12	*PRC Water Areas* – CBWR; 0% recovered
Rockets[1]	18	21	
Small-Caliber Gun Ammunition[1]	19,977	23,074	Expended into gun firing tunnel at ATA
Medium-Caliber Gun Ammunition[1]	2,430	2,807	
Surface and Subsurface Testing and Training			
Small-Caliber Gun Ammunition[1]	9,403	15,278	PRC Water Areas – CBWR; 0% recovered
Medium-Caliber Gun Ammunition[1]	422	943	
Mine Countermeasure Systems Tests			
Airborne Mine Neutralization System Neutralizers	2	5	*PRC Water Areas* – CBWR; 0% recovered
Anti-Submarine Warfare Systems Tests			
Active Sonobuoys	0	26	*PRC Water Areas* – sonar dip points; scuttled following events
Directed Energy Weapons Tests			
High-Energy Laser (# of Days)	0	50	*PRC Airspace, Land Areas, and Water Areas* – where hazard pattern can be contained within range and/or installation boundary and exclusive use airspace can be provided
High-Power Microwave (# of Days)	0	120	

Key: ATA = Armament Test Area; CBWR = Chesapeake Bay Water Range; DE = directed energy; MEM = military expended materials; PRC = Patuxent River Complex.

Notes:

1. Denotes live-fired non-explosive munition.

* No Action Alternative represents a 10-year average tempo (FY 2008-FY2017)

** Marine markers are 100% expended in the CBWR for No Action Alternative.

Assessment of Applicability of Policies of the Maryland Coastal Zone Management Program

The Maryland Coastal Zone Management Program is based on a network of agencies implementing a number of policies meant to protect and enhance the state's natural and economic resources. The Navy reviewed each of Maryland's enforceable policies and determined that ten are applicable to the Proposed Action. Table 4 presents the policies that the Navy has determined not to be applicable to the Navy's Proposed Action. Policies in Table 4 are not addressed further.

Table 4 - Enforceable Policies of Maryland's Coastal Area Management Program Not Applicable to the Proposed Action

Enforceable Policy	*Reason Policy is Not Applicable*
Core Policy 3. The unique ecological, geological, scenic, and contemplative aspects of State wild lands shall not be affected in a manner that would jeopardize the future use and enjoyment of those lands as wild.	The Proposed Action will not impact wild lands.
Core Policy 5. Any water appropriation must be reasonable in relation to the anticipated level of use and may not have an unreasonable adverse impact on water resources or other users of the waters of the State.	The Proposed Action does not require a groundwater appropriation or permit.
Core Policy 6. The natural character and scenic value of a river or waterway must be given full consideration before the development of any water or related land resources including construction of improvements, diversions, roadways, crossings, or channelization.	The Proposed Action does not involve development activities on rivers or waterways.
Core Policy 7. A dam or other structure that impedes the natural flow of a scenic or wild river may not be constructed, operated, or maintained, and channelization may not be undertaken	The Proposed Action does not include dam or structure development.
Core Policy 8. Permanent structures that do not have a clear environmental benefit are prohibited east of the dune line along the Atlantic Coast.	The Proposed Action does not include development of permanent structures.
Core Policy 9. Activities which will adversely affect the integrity and natural character of Assateague Island will be inconsistent with the State's Coastal Management Program, and will be prohibited.	The Proposed Action does not include activities that would affect Assateague Island and is not a prohibited activity as defined here.
Core Policy 10. An opportunity for a public hearing shall be provided for projects in non-tidal waters that dredge, fill, bulkhead, or change the shoreline; construct or reconstruct a dam; or create a waterway, except in emergency situations.	The Proposed Action does not include projects in non-tidal waters that will dredge, fill, bulkhead, or change the shoreline; construct or reconstruct a dam; or create a waterway.
Core Policy 11. Soil erosion shall be prevented to preserve natural resources and wildlife; control floods; prevent impairment of dams and reservoirs; maintain the navigability of rivers and harbors; protect the tax base, the public lands, and the health, safety and general welfare of the people of the State, and to enhance their living environment.	The Proposed Action does not include land-based projects and will not include soil erosion.
Core Policy 12. Controlled hazardous substances may not be stored, treated, dumped, discharged, abandoned, or otherwise disposed anywhere other than a permitted controlled hazardous substance facility or a facility that provides an equivalent level of environmental protection.	The Proposed Action does not include storing, treating, dumping, discharging, abandoning, or disposing controlled hazardous substances.
Core Policy 13. A person may not introduce in the Port of Baltimore any hazardous materials, unless the cargo is properly classed, described, packaged, marked, labeled, placarded, and approved for highway, rail, or water transportation.	The Proposed Action does not involve bringing cargo into the Port of Baltimore.

Enforceable Policy	*Reason Policy is Not Applicable*
Core Policy 14. Operations on the Outer Continental Shelf must be conducted in a safe manner by well trained personnel using technology, precautions, and techniques sufficient to prevent or minimize the likelihood of blowouts, loss of well control, fires, spillages, physical obstruction to other users of the waters or subsoil and seabed, or other occurrences which may cause damage to the environment or property, or which may endanger life or health.	The Proposed Action does not include oil and gas operations on the Outer Continental Shelf.
Water Quality Policy 3. The discharge of any pollutant, which will accumulate to toxic amounts during the expected life of aquatic organisms or produce deleterious behavioral effects on aquatic organisms is prohibited.	The Proposed Action does not involve effluent discharge as defined here.
Water Quality Policy 4. Before constructing, installing, modifying, extending, or altering an outlet or establishment that could cause or increase the discharge of pollutants into the waters of the State, the proponent must hold a discharge permit issued by the Department of the Environment or provide an equivalent level of water quality protection.	The Proposed Action does not include activities such as constructing, installing, modifying, extending, or altering an outlet or establishment.
Water Quality Policy 5. The use of best available technology is required for all permitted discharges into State waters	The Proposed Action does not include discharges as defined here.
Water Quality Policy 6. Thermal discharges shall be controlled so that the temperature outside the mixing zone (50 feet radially from the point of discharge) meets the applicable water quality criteria or discharges comply with the thermal mixing zone criteria.	The Proposed Action does not include thermal discharges.
Water Quality Policy 7. Pesticides shall be stored in an area located at least 50 feet from any water well or stored in secondary containment approved by the Department of the Environment.	The Proposed Action does not include pesticide use.
Water Quality Policy 8. Any development or redevelopment of land for residential, commercial, industrial, or institutional purposes shall use small-scale non-structural stormwater management practices and site planning that mimics natural hydrologic conditions, to the maximum extent practicable.	The Proposed Action does not include land-based development.
Water Quality Policy 9. Unless otherwise permitted, used oil may not be dumped into sewers, drainage systems, or any waters of the State or onto any public or private land.	The Proposed Action does not include dumping of oil.
Water Quality Policy 10. If material being dumped into Maryland waters or waters off Maryland's coastline has demonstrated actual toxicity or potential for being toxic, the discharger must perform biological or chemical monitoring to test for toxicity in the water.	The Proposed Action does not include dumping of toxic materials into Maryland waters.
Water Quality Policy 11. Public meetings and citizen education shall be encouraged as a necessary function of water quality regulation.	This policy is directed at a regulating body of the state.
Flood Hazard Policy 1. Projects in coastal tidal and non-tidal flood plains which would create additional flooding upstream or downstream, or which would have an adverse impact upon water quality or other environmental factors, are contrary to State policy.	The Proposed Action does not include relevant projects in coastal tidal or non-tidal flood plains which would impact flooding or water quality in the floodplain.

Enforceable Policy	*Reason Policy is Not Applicable*
Flood Hazard Policy 2. The following policies apply to projects in non-tidal waters and non-tidal floodplains, but not non-tidal wetlands. Proposed floodplain encroachments, except for roadways, culverts, and bridges, shall be designed to provide a minimum of 1 foot of freeboard above the elevation of the 100-year frequency flood event. In addition, the elevation of the lowest floor of all new or substantially improved residential, commercial, or industrial structures shall also be at least 1 foot above the elevation of the 100-year frequency flood event. Proposed unlined earth channels may not change the tractive force associated with the 2-year and the 10-year frequency flood events, by more than 10 percent, throughout their length unless it can be demonstrated that the stream channel will remain stable. Proposed lined channels may not change the tractive force associated with the 2-year and the 10-year frequency flood events, by more than 10 percent, at their downstream terminus unless it can be demonstrated that the stream channel will remain stable. Category II, III, or IV dams may not be built or allowed to impound water in any location where a failure is likely to result in the loss of human life or severe damage to streets, major roads, public utilities, or other high value property. Projects that increase the risk of flooding to other property owners are generally prohibited, unless the area subject to additional risk of flooding is purchased, placed in designated flood easement, or protected by other means acceptable to the Maryland Department of the Environment. The construction or substantial improvement of any residential, commercial, or industrial structures in the 100-year frequency floodplain and below the water surface elevation of the 100-year frequency flood may not be permitted. Minor maintenance and repair may be permitted. The modifications of existing structures for flood-proofing purposes may be permitted. Flood-proofing modifications shall be designed and constructed in accordance with specifications approved by the Maryland Department of the Environment. Channelization shall be the least favored flood control technique. Multiple purpose use shall be preferred over single purpose use, the proposed project shall achieve the purposes intended, and, at a minimum, project shall provide for a 50 percent reduction of the average annual flood damages.	The Proposed Action does not include relevant projects in coastal tidal and non-tidal flood plains.
Flood Hazard Policy 3. Development may not increase the downstream peak discharge for the 100-year frequency storm event in the following watersheds and all their tributaries: Gwynns Falls in Baltimore City and Baltimore County; and Jones Falls in Baltimore City and Baltimore County.	The Proposed Action does not include development activities.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 2. New facilities in the Critical Area shall not interfere with historic waterfowl concentration and staging areas.	The Proposed Action does not involve new facilities.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 3. Physical alterations to streams in the Critical Area shall not affect the movement of fish.	The Proposed Action does not involve physical alteration of streams.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 4. The installation or introduction of concrete riprap or other artificial surfaces onto the bottom of natural streams in the Critical Area is prohibited unless water quality and fisheries habitat will be improved.	The Proposed Action does not involve installation of rip rap or artificial surfaces in streams.

Enforceable Policy	*Reason Policy is Not Applicable*
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 5. The construction or placement of dams or other structures in the Critical Area that would interfere with or prevent the movement of spawning fish or larval forms in streams is prohibited.	The Proposed Action does not involve placement of dams or other structures in the Critical Area.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 6. Development may not cross or affect a stream in the Critical Area, unless there is no feasible alternative and the design and construction of the development prevents increases in flood frequency and severity that are attributable to development; retains tree canopy and maintains stream water temperature within normal variation; provides a natural substrate for affected streambeds; and minimizes adverse water quality and quantity impacts of stormwater.	The Proposed Action does not involve development.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 7. The construction, repair, or maintenance activities associated with bridges or other stream crossings or with utilities and roads, which involve disturbance within the buffer or which occur in stream are prohibited between March 1 and May 15.	The Proposed Action does not involve bridges or stream crossings.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 8. Roads, bridges, or utilities may not be constructed in any areas designated to protect habitat, including buffers, in the Critical Area, unless there is no feasible alternative and the road, bridge, or utility is located, designed, constructed, and maintained in a manner that maximizes erosion protection; minimizes negative impacts to wildlife, aquatic life, and their habitats; and maintains hydrologic processes and water quality.	The Proposed Action does not involve construction of road, bridges, or utilities.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 9. In the Critical Area, a minimum 100-foot vegetated buffer shall be maintained landward from the mean high water line of tidal waters, the edge of each bank of tributary streams, and the upland boundary of tidal wetlands. The buffer shall be expanded in sensitive areas in accordance with standards adopted by the Critical Area Commission. The buffer is not required for agricultural drainage ditches if the adjacent agricultural land has in place best management practices that protect water quality. The buffer is not required if existing patterns of development prevent the buffer from protecting ecological quality and functions, in which case, alternative means of protecting ecological quality and functions are required.	The Proposed Action does not involve land-based activities that would require a buffer.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 10. Disturbance to a buffer in the Critical Area is only authorized for a shore erosion control measure, new development, or redevelopment that is: water-dependent; meets a recognized private right or public need; minimizes the adverse effects on water quality and fish, plant, and wildlife habitat; and, insofar as possible, locates nonwater-dependent structures or operations associated with water-dependent projects or activities outside the buffer. Mitigation of impacts to the buffer and a buffer management plan must be developed in accordance with standards adopted by the Critical Area Commission when a development or redevelopment activity occurs within the buffer.	The Proposed Action does not involve land-based activities that would disturb buffers.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 11. If a development or redevelopment activity occurs on a lot or parcel that includes a buffer or if issuance of a permit, variance, or approval would disturb the buffer, the proponents of that activity must develop a buffer management plan that clearly indicates that all applicable planting standards developed by the Critical Area Commission will be met and that appropriate measures are in place for the long-term protection and maintenance of the buffer.	The Proposed Action does not involve development or redevelopment.

Enforceable Policy	*Reason Policy is Not Applicable*
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 12. Public beaches or other public water-oriented recreation or education areas including, but not limited to, publicly owned boat launching and docking facilities and fishing piers may be permitted in the buffer in portions of the Critical Area not designated as intensely developed areas only if adequate sanitary facilities exist; service facilities are, to the extent possible, located outside the Buffer; permeable surfaces are used to the extent practicable, if no degradation of ground water would result; and disturbance to natural vegetation is minimized.	The Proposed Action does not involve development.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 13. Water-dependent research facilities or activities may be permitted in the buffer, if nonwater-dependent structures or facilities associated with these projects are, to the extent possible, located outside the buffer.	The Proposed Action does not involve development.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 14. Industrial and port-related facilities may only be sited in the portions of areas of intense development that are exempted from buffer designation.	The Proposed Action does not involve industrial or port-related facilities.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 15. Agricultural activities are permitted in the buffer, if, as a minimum best management practice, a 25-foot vegetated filter strip measured landward from the mean high water line of tidal waters or tributary streams (excluding drainage ditches), or from the edge of tidal wetlands, whichever is further inland, is established in trees with a dense ground cover or a thick sod of grass.	The Proposed Action does not involve agricultural activities.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 16. The feeding or watering of livestock is not permitted within 50 feet of the mean high water line of tidal waters and tributaries.	The Proposed Action does not involve livestock.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 17. In the Critical Area, the creation of new agricultural lands shall not be accomplished by diking, draining, or filling of nontidal wetlands; by clearing of forests or woodland on soils with a slope greater than 15 percent or on soils with a "K" value greater than 0.35 and slope greater than 5 percent; by clearing that will adversely affect water quality or will destroy plant and wildlife habitat; or by clearing existing natural vegetation within the 100-foot buffer.	The Proposed Action does not involve agricultural activities.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 18. Agricultural activity permitted within the Critical Area shall use best management practices in accordance with a soil conservation and water quality plan approved or reviewed by the local soil conservation district.	The Proposed Action does not involve agricultural activities.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 19. Cutting or clearing of trees within the buffer is prohibited except that commercial harvesting of trees by selection or by the clearcutting of loblolly pine and tulip poplar may be permitted to within 50 feet of the landward edge of the mean high water line of tidal waters and perennial tributary streams, or the edge of tidal wetlands if the buffer is not subject to additional habitat protection. Commercial harvests must be in compliance with a buffer management plan that is prepared by a registered professional forester and is approved by the Department of Natural Resources.	The Proposed Action does not involve cutting or clearing trees.

Enforceable Policy	*Reason Policy is Not Applicable*
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 20. Commercial tree harvesting in the buffer may not involve the creation of logging roads and skid trails within the buffer and must avoid disturbing stream banks and shorelines as well as include replanting or allowing regeneration of the areas disturbed or cut in a manner that assures the availability of cover and breeding sites for wildlife and reestablishes the wildlife corridor function of the buffer.	The Proposed Action does not involve tree harvesting.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 21. Solid or hazardous waste collection or disposal facilities and sanitary landfills are not permitted in the Critical Area unless no environmentally acceptable alternative exists outside the Critical Area, and these facilities are needed in order to correct an existing water quality or wastewater management problem.	The Proposed Action does not involve waste collection or disposal.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 22. All available measures must be taken to protect the Critical Area from all sources of pollution from surface mining operations, including but not limited to sedimentation and siltation, chemical and petrochemical use and spillage, and storage or disposal of wastes, dusts, and spoils.	The Proposed Action does not involve surface mining.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 23. In the Critical Area, mining must be conducted in a way that allows the reclamation of the site as soon as possible and to the extent possible.	The Proposed Action does not involve mining.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 24. Sand and gravel operations shall not occur within 100 feet of the mean high water line of tidal waters or the edge of streams or in areas with scientific value, important natural resources such as threatened and endangered species, rare assemblages of species, or highly erodible soils. Sand and gravel operations also may not occur where the use of renewable resource lands would result in the substantial loss of forest and agricultural productivity for 25 years or more or would result in a degrading of water quality or a loss of vital habitat.	The Proposed Action does not involve sand and gravel operations.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 25. Wash plants including ponds, spoil piles, and equipment may not be located in the 100-foot buffer.	The Proposed Action does not involve wash plants.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 26. A soil erosion and sedimentation control plan shall be required whenever development within the Critical Area will involve any clearing, grading, transporting, or other form of disturbance to land by the movement of earth. This plan shall be appropriately designed to reduce adverse water quality impacts.	The Proposed Action does not involve development.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 27. All stormwater storage facilities shall be designed with sufficient capacity to eliminate all runoff caused by the development in excess of that which would have come from the site if it were in its predevelopment state.	The Proposed Action does not involve stormwater storage facilities.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 28. Intense development should be directed outside the Critical Area. Future intense development activities, when proposed in the Critical Area, shall be directed towards the intensely developed areas.	The Proposed Action does not involve development.

Enforceable Policy	*Reason Policy is Not Applicable*
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 29. The following development activities and facilities are not permitted in the Critical Area except in intensely developed areas and only after the activity or facility has demonstrated that there will be a net improvement in water quality to the adjacent body of water. Nonmaritime heavy industry Transportation facilities and utility transmission facilities, except those necessary to serve permitted uses, or where regional or interstate facilities must cross tidal waters Permanent sludge handling, storage, and disposal facilities, other than those associated with wastewater treatment facilities. However, agricultural or horticultural use of sludge when applied by an approved method at approved application rates may be permitted in the Critical Area, but not in the 100-foot Buffer.	The Proposed Action does not involve development.
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 30. The following policies apply in those areas of the Critical Area that are determined to be areas of intense development. To the extent possible, fish, wildlife, and plant habitats should be conserved. Development and redevelopment shall improve the quality of runoff from developed areas that enters the Chesapeake or Atlantic Coastal Bays or their tributary streams. At the time of development or redevelopment, appropriate actions must be taken to reduce stormwater pollution by 10%. Retrofitting measures are encouraged to address existing water quality and water quantity problems from stormwater. Development activities may cross or affect a stream only if there is no feasible alternative, and those activities must be constructed to prevent increases in flood frequency and severity attributable to development, retain tree canopy, maintain stream water temperatures within normal variation, and provide a natural substrate for affected streambeds. If practicable, permeable areas shall be established in vegetation. Areas of public access to the shoreline, such as foot paths, scenic drives, and other public recreational facilities, shall be maintained and, if possible, are encouraged to be established. Ports and industries which use water for transportation and derive economic benefits from shore access shall be located near existing port facilities or in areas identified by local jurisdictions for planned future port facility development and use if this use will provide significant economic benefit to the State or local jurisdiction. To the extent practicable, development shall be clustered to reduce lot coverage and maximize areas of natural vegetation. Development shall minimize the destruction of forest and woodland vegetation.	The Proposed Action does not involve land-based activities in areas of intense development.

Enforceable Policy	*Reason Policy is Not Applicable*
The Chesapeake and Atlantic Coastal Bays Critical Area Policy 31. The following policies apply in those portions of the Critical Area that are not areas of intense development. Development shall maintain, and if possible, improve the quality of runoff and ground water entering the Chesapeake and Coastal Bays. To the extent practicable, development shall maintain existing levels of natural habitat. All development sites shall incorporate a wildlife corridor system that connects undeveloped vegetated tracts onsite with undeveloped vegetated tracts offsite. All forests that are cleared or developed shall be replaced on not less than an equal area basis. If there are no forests on a proposed development site, the site shall be planted to provide a forest or developed woodland cover of at least 15 percent. Development on slopes equal to or greater than 15 percent, as measured before development, shall be prohibited unless the project is the only effective way to maintain the slope and is consistent with other policies. To the extent practicable, development shall be clustered to reduce lot coverage and maximize areas of natural vegetation. Lot coverage is limited to 15 percent of the site.	The Proposed Action does not include development activities.
Tidal Wetlands Policy 1. Any action which alters the natural character in, on, or over tidal wetlands; tidal marshes; and tidal waters of Chesapeake Bay and its tributaries, the coastal bays adjacent to Maryland's coastal barrier islands, and the Atlantic Ocean shall avoid dredging and filling, be water dependent, and provide appropriate mitigation for any necessary and unavoidable adverse impacts on these areas or the resources associated with these areas. MDE (B2) COMAR 26.24.01.01, COMAR 26.24.02.01, .03; COMAR 26.24.05.01.	The Proposed Action does not involve the alteration of tidal wetlands or the dredging or filling of a tidal wetland.
Non-Tidal Wetlands Policy 1. Removal, excavation, grading, dredging, dumping, or discharging of, or filling a non-tidal wetland with materials of any kind, including the driving of piles and placing of obstructions; changing existing drainage characteristics, sedimentation patterns, flow patterns, or flood retention characteristics; disturbing the water level or water table; or removing or destroying plant life that would alter the character of a non-tidal wetland is prohibited.	The Proposed Action does not involve removal, excavation, grading, dredging, dumping, or discharging of, or filling a non-tidal wetland with materials of any kind.
Forest Policies 1-6. Six forest policies identify measures established to ensure responsible forestry practices, preservation of existing forests, and timber plantings necessary to offset impacts from harvesting existing timber.	The Proposed Action does not involve forestry activities or impacts to forests.
Historical and Archaeological Sites Policy 3. Neither human remains nor funerary objects may be removed from a burial site or cemetery, unless permission is granted by the local State's Attorney. Funerary objects may not be willfully destroyed, damaged, or defaced.	The Proposed Action does not involve removal of human remains or funerary objects.
Living Aquatic Resources Policy 2. Fisheries shall be sustainably harvested.	The Proposed Action does not involve harvesting fish.
Living Aquatic Resources Policy 3. Any land or water resource acquired by the State to protect, propagate, or manage fish shall not be damaged.	The Proposed Action will not impact fish ponds or hatcheries.
Living Aquatic Resources Policy 4. No activity will be permitted that impedes or prevents the free passage of any finfish, migratory or resident, up or down stream.	The Proposed Action does not involve stream obstructions.

Enforceable Policy	*Reason Policy is Not Applicable*
Living Aquatic Resources Policy 5. All in-stream construction in non-tidal waters is prohibited from October through April, inclusive, for natural trout waters and from March through May, inclusive, for recreational trout waters. In addition, the construction of proposed projects, which may adversely affect anadromous fish spawning areas, shall be prohibited in non-tidal waters from March 15 through June 15, inclusive.	The Proposed Action does not involve in-stream construction.
Living Aquatic Resources Policy 6. Riparian forest buffers adjacent to waters that are suitable for the growth and propagation of self-sustaining trout populations shall be retained whenever possible.	The Proposed Action will not impact riparian forest buffers.
Living Aquatic Resources Policy 7. Projects in or adjacent to non-tidal waters shall not adversely affect aquatic or terrestrial habitat unless there is no reasonable alternative and mitigation is provided.	The Proposed Action will not impact non-tidal waters.
Living Aquatic Resources Policy 8. The harvest, cutting, or other removal or eradication of submerged aquatic vegetation may only occur in a strip up to 60 feet wide surrounding a pier, dock, ramp, utility crossing, or boat slip to point of ingress in a marina, otherwise the activity must receive the approval of the Department of Natural Resources. No chemical may be used for this purpose, and the timing and method of the activity shall minimize the adverse impact on water quality and on the growth and proliferation of fish and aquatic grasses.	The Proposed Action does not involve harvest, cutting, or other removal or eradication of submerged aquatic vegetation.
Living Aquatic Resources Policy 10. A person, other than the leaseholder, may not willfully and without authority catch oysters on any aquaculture or submerged land lease area, or willfully destroy or transfer oysters on this land in any manner.	The Proposed Action does not involve catching oysters.
Living Aquatic Resources Policy 11. An organism into which genetic material from another organism has been experimentally transferred so that the host acquires the genetic traits of the transferred genes may not be introduced into State waters.	The Proposed Action does not involve introducing organisms.
Living Aquatic Resources Policy 12. Vectors for the introduction of nonnative aquatic organisms must be appropriately controlled to prevent adverse impacts on aquatic ecosystems.	The Proposed Action does not involve introducing organisms.
Living Aquatic Resources Policy 13. Except as authorized by federal law, any live snakehead fish or viable eggs of snakehead fish of the Family Channidae may not be imported, transported, or introduced into the State.	The Proposed Action does not involve importing species.
Living Aquatic Resources Policy 14. Nonnative oysters may not be introduced into State waters.	The Proposed Action does not involve introducing species.
Mineral Extraction Policies 1-35. 35 policies are identified which limit the environmental, cultural, scenic, or recreational impacts that might occur as a result of mineral extraction activities.	The Proposed Action does not include any activities that involve mineral extraction.
Electrical Generation and Transmission Policies 1-5. Five policies are identified which limit the environmental, cultural, scenic, or recreational impacts that might occur as result of the construction of power plants and transmission lines. In addition, the construction of these facilities and appurtenances must consider ongoing operational costs post-construction and the impacts of overhead power lines on navigational interests.	The Proposed Action does not include any activities that involve electrical generation and transmission.
Tidal Shore Erosion Control Policies 1-7. Seven policies are identified which dictate the appropriate composition and type of fill material for shoreline erosion control structures along with best management practices to ensure stability of the structures.	The Proposed Action does not include tidal shore erosion control projects.

Enforceable Policy	*Reason Policy is Not Applicable*
Oil and Natural Gas Facilities Policies 1-6. Six policies are identified which detail standard practices targeted at preventing oil spills, providing financial assurances in case of spills, and limiting the transport of accidentally spilled oil into state waters.	The Proposed Action does not include oil and natural gas facilities.
Dredging and Disposal of Dredged Material Policies 1-13. 13 policies are identified which detail recommended protocols for designing dredging projects, time of year restrictions to avoid impacts to protected species and shellfish beds, and to properly reuse or dispose of dredged material.	The Proposed Action does not include dredging and disposal of dredged material.
Navigation Policy 1. Navigational access projects shall when possible be designed to use piers to reach deep waters rather than dredging.	The Proposed Action does not include navigational access projects.
Navigation Policy 2. Navigational access channels to serve individual or small groups of riparian landowners shall be designed to prevent unnecessary channels. A central access channel with short spur channels shall be considered over separate access channels for each landowner.	The Proposed Action does not include navigational access projects.
Navigation Policy 3. Navigational access channels shall be designed to minimize alteration of tidal wetlands and underwater topography.	The Proposed Action does not include navigational access projects.
Navigation Policy 4. New or expanded facilities for the mooring, docking, or storing of more than ten vessels on tidal navigable waters shall be located on waters with strong flushing characteristics and may not be located in areas where the natural depth is 4.5 feet or less at mean low water, and any of the following will be adversely affected: aquatic vegetation, productive macroinvertebrate communities, shellfish beds, fish spawning or nursery areas, rare, threatened, or endangered species, species in need of conservation, or historic waterfowl staging areas. Expansion of existing facilities is favored over new development.	The Proposed Action does not include new or expanded facilities for the mooring, docking, or storing of vessels.
Navigation Policy 5. The location of buoys for the mooring of boats shall not be located in designated private or public shellfish areas, cable-crossing areas, navigational channels, in other places in where general navigation would be impeded or obstructed, or public ship anchorage. The location of mooring buoys should not obstruct the riparian access of adjacent property owners or hinder the orderly access to or use of the waterways by the general public.	The Proposed Action does not include locating buoys for mooring boats.
Transportation Policies 1-5. Five policies are identified which seek to ensure public involvement in transportation project planning; consider social, environmental, and economic impacts of transportation projects; integrate consideration of different modes of transportation in order to ensure a unified regional transit system; and optimize access to and use of transportation facilities by pedestrians and bicycle riders.	The Proposed Action does not include transportation facilities projects or transportation development.
Agriculture Policies 1-5. Five policies are identified which seek to limit the amount of soil introduced into Maryland waters without proper planning; ensure implementation of best management practices to protect non-tidal wetlands and to limit livestock access to surface water; ensure utilization of chemical fertilizers, sludge, and animal manure in a manner that minimizes impacts on water quality; and to responsibly manage agricultural drainages.	The Proposed Action does not include agricultural or land management practices.
Development Policies 1-12. Twelve policies are identified with the general intent of minimizing erosion and sedimentation, to maintain water quality in surface and subsurface waters (including drinking water), to locate planned developments near existing or planned transit systems, and to protect community character and population centers.	The Proposed Action does not include any development or land-based projects.

Enforceable Policy	*Reason Policy is Not Applicable*
Sewage Treatment Policies 1-24. Twenty four policies are identified with the intent of protecting the quality of State waters from sewage discharges/treatment facilities for ecological and human health purposes.	These policies are specific to agricultural and silvicultural nonpoint source pollution, onsite sewage disposal systems, and underground storage tanks, which are not part of the Proposed Action.

Analysis of Enforceable Policies Applicable to the Proposed Action

The following policies of the Maryland Coastal Zone Management Program are applicable to the Proposed Action. The analysis of the policies below is only for those parts of the policies that are relevant to the Proposed Action. Furthermore, the analysis of each policy takes into consideration the Memorandum of Understanding between the State of Maryland and the U.S. Department of Defense (DoD), signed May 8, 2013. This agreement outlines protocols for treatment of certain issues dealing with compliance with the CZMA in Maryland.

Core Policy 1

It is State policy to maintain the degree of purity of the air necessary to protect the health, general welfare, and property of the people of the State. Maryland Department of the Environment (MDE) (C9) Maryland Code Annotated, Environment Article §§ 2-102 through 103.

Consistency Analysis

The proposed activities have the potential to result in minimal effects on air quality in the coastal zone from the use of non-explosive munition, surface vessel and aircraft activities. Aircraft and surface vessel emissions and byproducts of munitions could introduce contaminants into the air. Aircraft often conduct activities at altitudes that would not affect air quality in the coastal zone. Analysis in the Draft PRC EIS Section 3.2.3 (Environmental Consequences - Air Quality) concluded that changes in criteria air pollutant concentrations may be detectable but would not lead to a violation of air quality standards.

The Navy will be fully consistent with this policy.

Core Policy 2

The environment shall be free from noise which may jeopardize health, general welfare, or property, or which degrades the quality of life. MDE (C9) Code of Maryland Regulations (COMAR) 26.02.03.02, Environmental Noise Standards.

Consistency Analysis

The proposed activities have the potential to create noise in the coastal zone. Activities involving multiple or low-flying aircraft, multiple or nearshore vessels, and use of non-explosive munitions would generate noise of varying levels that have the potential to affect coastal zone uses and resources.

As written in Article II (Specific Maryland Enforceable Coastal Policies for the Purpose of Federal Consistency Determinations) Section 2.10 (General Policies: Core Policies – Noise) of the Memorandum of Understanding Between the State of Maryland and the U.S. DoD signed May 8, 2013, an agreement was entered to discount the noise of aircraft pertaining to this policy as stated below:

> "The DoD will demonstrate consistency with this Policy for new activities having a reasonably foreseeable effect on the Coastal Zone, other than aircraft operations. Compliance with internal

DoD and military service component noise abatement policies will be sufficient to demonstrate consistency with this Policy for such projects."

As the Memorandum of Understanding removes the requirement to analyze aircraft noise in this coastal consistency analysis, the discussions and findings presented below are those related to noise associated with surface vessel activities along with noise from the use of non-explosive munitions.

Section 3.7.3.3 (Socioeconomics, Alternative 2 [Preferred Alternative] Potential Impacts) of the Draft PRC EIS concluded that while noise interference could decrease public enjoyment of recreational activities, these disturbances would occur on a temporary basis when PRC vessel activities occur in support of testing and training. Since Navy activities in the Chesapeake Bay Water Range involving weapons firing would only occur when the Navy can confirm the area is clear of commercial and recreational boaters and other nonparticipants, there is a lessened likelihood that these activities involving vessel movements and non-explosive munitions would disturb the public. Furthermore, potential impacts to public health and safety are lessened by the Navy's standard operating procedures. The scheduling of testing and training activities is done in a manner in which interactions with commercial and recreational vessels and aircraft are avoided.

The Navy will be fully consistent with this policy.

Core Policy 4

The safety, order, and natural beauty of State parks and forests, State reserves, scenic preserves, parkways, historical monuments and recreational area shall be preserved. Maryland Department of Natural Resources (DNR) (B1) Maryland Code Annotated, Natural Resources Article § 5-209.

Consistency Analysis

On the occasions when the Navy plans activities that could conflict with public uses, the range is cleared prior to activities commencing. In this regard, the Navy adheres to standard operating procedures including procedures for range clearance and de-conflicting air and sea Space (See PRC EIS Table 2.5-1 Standard Operating Procedures). Activities occurring in the coastal zone would typically be of short duration (hours) and would only temporarily limit access to localized areas of the coastal zone to ensure public safety.

No State parks, forests, State reserves, scenic preserves, parkways, or historical monuments would be affected by the proposed activities.

The Navy will be fully consistent with this policy.

Historical and Archaeological Sites Policies 1 and 2

Unless permission is granted by the Maryland Historical Trust, activities that excavate, remove, destroy, injure, deface, or disturb submerged archaeological historic property, cave features, or archeological sites are generally prohibited. Maryland Department of Planning (C8) Maryland Code Annotated, State Finance and Procurement Article §§ 5A-341 through 343 and 333.

Consistency Analysis

The Navy routinely avoids locations of known obstructions, including submerged historic and cultural resources such as historic shipwrecks. Analysis in Section 3.9 (Cultural Resources) of the Draft PRC EIS concluded that testing and training activities with the potential to cause adverse effects to underwater

cultural resources would be same as described in the 1998 PRC EIS. There are four non-target underwater cultural resources potentially eligible for the National Register of Historic Places (NRHP) in the Chesapeake Bay Water Range where vessel/target anchoring would occur and non-explosive munitions would be released and fall to the bay bottom. They include a World War II aircraft wreck (XF8F-1 Bearcat), Buoy 72A wreck, Cedar Point Schooner, and Cedar Point Barge. Although non-explosive MEM may potentially physically come in contact with in-water cultural resources such as shipwrecks, most non-explosive MEM are expended in the Chesapeake Bay Water Range and are focused around the munition concentration areas where there are no known cultural resources. Additionally, targets would not be placed in areas of in-water cultural resources, and therefore, continued use of the PRC Study Area would not affect underwater cultural resources that are potentially eligible for the NRHP. The Navy will consult with Maryland's State Historic Preservation Office to ensure compliance with Section 106 of the National Historic Preservation Act. If unrecorded submerged historic resources are discovered later, the Navy will reopen consultation.

Additionally, as written in Article II (Specific Maryland Enforceable Coastal Policies for the Purpose of Federal Consistency Determinations) Section 2.08 (Coastal Resources: Historical and Archaeological Sites) of the Memorandum of Understanding Between the State of Maryland and the U.S. DoD signed 8 May, 2013, an agreement was entered to state the following:

> "The DoD will continue to use procedures in accordance with the requirements of the National Historic Preservation Act that are consistent with Maryland's Historical Preservation Program. Maryland agrees that meeting the consultation requirement under the National Historic Preservation Act is sufficient to demonstrate consistency with Policies relating to historic preservation."

The Navy will be fully consistent with these policies.

Living Aquatic Resources Policy 1

Unless authorized by an Incidental Take Permit, no one may take a State-listed endangered or threatened species of fish or wildlife. DNR (A4) Maryland Code Annotated, Natural Resources Article §§ 4-2A-01 through 09; Maryland Code Annotated, Natural Resources Article §§ 10-2A-01 through 09.

Consistency Analysis

Navy activities must be conducted in accordance with applicable permits and authorizations granted under the federal Endangered Species Act (ESA) (16 U.S.C. section 1536) and Marine Mammal Protection Act (MMPA) (16 U.S.C. section 1371). Given established avoidance and mitigation measures described in the Draft PRC EIS Section 3.10 (Summary of Potential Impacts to Resources and Impact Avoidance and Minimization), the combined stressors of the Preferred Alternative will not result in the unintentional taking of one or more individual marine mammals that would require a take authorization pursuant to section 101(a)(5)(A) of the MMPA. No permits are required under the MMPA for this action. Pursuant to the ESA, the Navy is informally consulting with the U.S. Fish and Wildlife Service (USFWS) and formally consulting with the National Marine Fisheries Service (NMFS) with respect to species under their respective jurisdictions.

Thus, the Navy is consistent with this policy with respect to species also regulated by the ESA and MMPA. To the extent that state policies attempt to regulate the take of marine mammals protected by the MMPA, those policies are preempted by MMPA section 9(a), which explicitly prohibits any state from enforcing any law or regulation regarding the take of marine mammals. Additionally, the ESA does

not contain a waiver of sovereign immunity, so states may not directly regulate federal activity via state laws protecting certain species. Furthermore, CZMA does not in and of itself authorize the application of state permit requirements to federal agencies. Based on the foregoing, the discussions below are provided for resources other than marine mammals.

Considering the aforementioned discussion regarding sovereign immunity and preemption, this Maryland CMP policy applies to state-listed or non-marine mammal species. Only those species upon which Navy activities may have a reasonably foreseeable effect should be considered with regard to this consultation.

There are 11 state-listed threatened or endangered plant species documented within the PRC installation boundaries. Of the state-listed threatened or endangered invertebrate species that may occur in the PRC Study Area, only the frosted elfin (*Incisalia irusirus*) (a butterfly) has actually been documented on PRC installations. The Proposed Action would have no effect on state-listed plant or invertebrate species.

The Navy has Integrated Natural Resources Management Plans (INRMPs) that cover NAS Patuxent River, Outlying Field Webster, and the Bloodsworth Island Range. The NAS Patuxent River Conservation Director is primarily responsible for implementing the INRMPs and coordinating with other personnel on the installation. The plans are reviewed in coordination with the U.S. Fish and Wildlife Service (USFWS) and the Maryland Department of Natural Resources (MDNR). Each year, the INRMPs and the projects contained within are reviewed and rated against established Navy metrics by the natural resources (NR) staff and State and Federal wildlife agencies.

There are no state-listed threatened or endangered fish species that are not also federally listed in the estuarine environment of the PRC Study Area, but there are some common state-managed species with commercial and/or recreational value (e.g., striped bass [*Morone saxatilus*], Atlantic menhaden [*Brevoortia tyrannus*], weakfish [*Cynoscion regalis*], Atlantic croaker [*Micropogonias undulatus*], spot [*Leiostomus xanthurus*], red drum [*Sciaenops ocellatus*], black drum [*Pogonias cromis*]).

State-listed amphibian species with the potential to be present in the PRC Study Area include the barking tree frog (*Hyla gratiosa*), eastern narrow-mouthed toad (*Gastrophryne carolinensis*), and the eastern tiger salamander (*Ambystoma tigrinum tigrinum*). Of these species, the eastern narrow-mouthed toad is confirmed present on NAS Patuxent River. None of the terrestrial reptiles and amphibians at this time have a federal ESA designation. There are no federally listed or state-listed terrestrial or freshwater mammals in the PRC Study Area.

The Navy testing and training activities under the Proposed Action would not result in purposeful take of state-listed species. Incidental take of state-listed species is not intended; however, it is not discountable. Due to the doctrine of Federal Sovereignty, the Navy is not obligated to obtain Maryland Incidental Take Permits. However, the Navy is consulting with the USFWS and NMFS regarding federally listed species (many of which are the same as the Maryland-listed species). Any best management practices or mitigations required or volunteered as a result of these consultations to reduce impacts would also apply to Maryland-listed species.

The Navy would reduce impacts to wildlife through adherence to standard operating procedures and mitigation measures. See PRC EIS Section 2.5 (Standard Operating Procedures included in the Proposed Action), specifically Table 2.5-1 Standard Operating Procedures; and Section 3.10 (Summary of Potential

Impacts to Resources and Impact Avoidance and Minimization), specifically Table 3.10-1 Impact Avoidance and Minimization Measures.

Based on the principles of sovereign immunity and preemption discussed earlier, the Navy will be consistent to the maximum extent practicable with Living Aquatic Resources Policy 1.

Living Aquatic Resources Policy 9

Natural oyster bars in the Chesapeake Bay shall not be destroyed, damaged, or injured.

Consistency Analysis

Navy testing and training activities in the PRC Study Area involve certain stressors which have the potential to affect natural oyster bars, including acoustic, physical disturbance and strike, pollutants, and ingestion stressors. Estuarine invertebrates including shellfish bed species (e.g., oysters, mussels) may detect low-frequency sounds generated by the proposed activities (e.g., weapons firing noise, sonic booms). Whereas responses of shellfish bed species to noise are not well documented, the highest intensity underwater noises they may experience could result in temporary shell closure, particular around Hannibal Target with weapons firing and supersonic weapons separation testing. Shellfish bed larvae looking for substrate may also prematurely settle in response to mid-frequency sonar sounds, but there are many factors weighing against any meaningful response. In either case, the exposure to potential acoustic stressors would be highly infrequent and localized. Other sources of underwater sounds, such as subsonic aircraft and vessel noise, are even less impactful on shellfish beds because they rise and fall slowly at lower intensities.

Impacts to shellfish bed essential fish habitat would be insignificant as they are highly unlikely to rise to the level of measurable impacts. Because impacts, if any, are expected to be minor and limited, no long-term consequences for the population of shellfish bed species present in the PRC Study Area are expected.

As with bottom substrates, physical disturbances and strikes of hard biotic habitat features by vessels or in-water devices would cause damage to the vessel and are avoided when possible. Natural oyster reefs are vulnerable to physical disturbance that may not be avoided using standard operating procedures; and the habitat could be damaged or disturbed during vessel operation without significant damage to a vessel. Whereas habitat areas set aside for restoration are often marked or located below navigation clearance, natural beds may not be visible and avoidable from the perspective of surface observers on a moving vessel. Whereas these shallow-water habitats would likely be avoided when transiting along established navigation corridors, they may not be avoidable during operation outside of established navigation channels.

The mostly intertidal oysters located very close to shore in the PRC Study Area are relatively unaffected by the unlikely event of vessel scarring or disturbance due to their location and hard/more resilient nature. Vessel scarring has also not been implicated in the primary stressors on oyster habitat: overharvesting and disease are far more pressing issues. Natural oyster or mussel habitats not marked as obstructions may be adversely impacted if vessel operations call for "nosing up" on a shoreline, but the vessels would be moving slower on approach and should be able to avoid structures that could damage the vessel. The oyster beds/reefs mapped in the study area are located relatively close to shore

and a measureable adverse impact from transiting is therefore not expected. Submerged oyster and mussel beds associated with obstructions in the PRC Study Area should be relatively unaffected by vessel scarring or disturbance due to general avoidance of vessel damage and the absence of obstructions classified as dangerously "awash" or covered/uncovered with the tides.

Oysters, comprising most shellfish beds in the PRC Study Area, are filter-feeding organisms capable of collecting suspended material pieces that are very small or microscopic. For shellfish bed essential fish habitat, the only MEM of ingestible size for shellfish beds (other than microplastics) is microscopic fragments released as larger expended material degrades; chaff fibers were discounted as an impact on biological resources. The analysis regarding filter-feeding invertebrates in general supports a minimal and temporary adverse effect on shellfish bed essential fish habitat from ingestion stressors associated with the proposed activities; shellfish bed invertebrates may be affected by ingestible MEM fragments, but no population-level effects are anticipated.

The Navy will be consistent to the maximum extent practicable with Living Aquatic Resources Policy 9.

Navigation Policy 6

Vessels operated on State waters should not exceed a noise level of 90 A-weighted decibels (dBA). DNR (A1); COMAR 08.18.03.03.

Consistency Analysis

The proposed activities require that vessels transit the Maryland coastal zone. Vessels transiting through or conducting testing and training activities in the coastal zone have the potential to exceed a noise level of 90 dBA. Although this state law does not apply to federal public vessels, noise levels greater than 90 dBA could be generated by the propulsion of Navy vessels when in Maryland's waters. Proposed activities generating high levels of noise would be of short duration (hours). Analysis in the Draft PRC EIS Section 3.0.2.3.1.2 (Vessels and Other Water-Based Assets) describes vessel noise and noise generated in connection with other water-based assets in detail. Airborne noise generated by Navy vessel operations is similar to noise levels generated by civilian vessels, which operate regularly in the same water areas. Airborne vessel sound levels depend on vessel size and speed, but typically range from 59 to 73 decibels reference sound pressure 20 microPascals (dB re 20 µPa) at locations on the deck of the boat.

The Navy will be consistent to the maximum extent practicable with this policy.

Water Quality Policy 1

No one may add, introduce, leak, spill, or emit any liquid, gaseous, solid, or other substance that will pollute any waters of the State without State authorization. MDE (A5) Maryland Code Annotated, Environmental Article §§ 4-402, 9-101, 9-322.

Consistency Analysis

The proposed activities have the potential to impact water quality. Impacts could result from munitions use, and use of MEM. The proposed activities have the potential to impact water quality through the introduction of MEM constituents into the aquatic environment. Contaminants would remain near the release site and dilute within a short period of time, and would have no long-term effects on water quality. Analysis in Section 3.3 (Water Resources and Sediments) of the Draft PRC EIS concluded that the

Proposed Action would result in minor, localized, and short-term increases in turbidity associated with resuspended sediments from physical disturbances to bottom sediments. These physical disturbances could occur from initial impact and recovery of munitions and other MEM from the Bay floor as well as from anchor deployments and similar activities. In addition, proposed testing and training activities would result in a minor potential for releases of MEM constituents, but these releases are not expected to exceed water quality criteria or sediment guidelines. Pollutant stressors would not adversely affect designated beneficial use or pose unacceptable risks to human health or the environment.

The Navy will be fully consistent with this policy.

Water Quality Policy 2

All waters of the State shall be protected for water contact recreation, fish, and other aquatic life and wildlife. Shellfish harvesting and recreational trout waters and waters worthy of protection because of their unspoiled character shall receive additional protection. MDE (A1); COMAR 26.08.02.02.

Consistency Analysis

As discussed above in the analysis of Water Quality Policy 1, the Proposed Action would not violate federal water quality standards and any minor and temporary changes to water quality would not have indirect impacts on biological resources such as aquatic species or associated recreational pursuits.

The Navy will be fully consistent with this policy.

The Chesapeake and Atlantic Coastal Bays Critical Area Policy 1

Colonial water bird nesting sites in the Critical Area may not be disturbed during breeding season. CAC (C9) COMAR 27.01.09.04.

Consistency Analysis

There are no known rookeries at present on either NAS Patuxent River, Outlying Field Webster, or Naval Recreation Center Solomons. However, there are several colonial water bird nesting sites within the Critical Area portions of PRC Study Area (on Chesapeake Bay islands). These include a mixed heronry on Bloodsworth Island where Great Blue Herons, but also some Black-crowned Night-herons and Yellow-crowned Night-herons gather during breeding season. In past decades, the heronry also hosted Great Egrets, Snowy Egrets, Cattle Egrets, Little Blue Herons, Tricolored Herons, Green Herons, and Glossy Ibises. Additionally, there is a large nesting colony on Adam Island for Brown Pelicans, Double-crested Cormorants, Great Black-backed Gulls, and Herring Gulls. The Navy manages these properties in accordance with the INRMP for the Naval Air Station Patuxent River Complex, Bloodsworth Island Range, Maryland. The INRMP is prepared and reviewed in coordination with the U.S. Department of the Interior, Fish and Wildlife Service, and Maryland Department of Natural Resources.

The Navy continues to voluntarily cease land impact operations at Bloodsworth Island Range, including the dropping of live or non-explosive ordnance. The proposed testing and training activities which could have the potential to disturb the colonial water bird nesting sites (from noise) are those overflights by performed by military aircraft. Aircraft testing and training is conducted in the special use airspace overlying Bloodsworth Island Range. Range operations can include: aircraft performance evaluation tests, propulsion systems tests, aircrew system tests, mission system tests, electronic warfare, and flight crew proficiency tests. However, under existing mitigation measures implemented by the Atlantic Test Ranges Sustainability Office, potential impacts to colonial bird nesting sites are minimized. These

measures include noise awareness briefings to educate aircrews of noise sensitive locations, and test plan environmental reviews. Additionally, heron sites are shown on INRMP maps and the depicted typical aircraft flight patterns avoid direct overhead flights of the heron sites.

The Navy will be consistent to the maximum extent practicable with this policy.

CONCLUSION

The Navy has reviewed Maryland's Coastal Zone Management Program and determined that ten policies are applicable to the Proposed Action, as analyzed above. As described in Table 4, all other policies do not apply to the proposed activities.

The Navy reviewed its proposed activities for how and to what degree the activities in or near the coastal zone could affect Maryland's coastal uses and resources. Potential impacts could result from activities occurring in the PRC Study Area. The Navy would reduce unavoidable impacts from proposed activities on coastal zone uses and resources by adhering to standard operating procedures (PRC EIS Table 2.5-1 Standard Operating Procedures) and implementing environmental mitigation measures (Table 3.10-1 of the Draft PRC EIS). Analysis in Chapter 3 (Affected Environment and Environmental Consequences) of the Draft PRC EIS addresses potential impacts on environmental resources in greater detail.

The Navy will be consistent to the maximum extent practicable with the policies of the Maryland Coastal Zone Management Program.

From: Joseph Abe -DNR-
To: Gray, Alexis T CIV USN (USA)
Cc: Heather Nelson -MDE-
Subject: [Non-DoD Source] Consistency Concurrence RE Continued Testing and Training Activities at NAS Patuxent River
Date: Thursday, September 30, 2021 9:59:30 PM

Hi Alexis:

Thanks for your patience. As you know, this was a very large report to review. On behalf of Heather Nelson (MD Federal Consistency Coordinator), I am responding to your request for concurrence regarding:

Continued Testing and Training Activities in the Patuxent River Complex, NAS Patuxent River, Navy Naval Air Warfare Center Aircraft Division - http://www.prceis.com/

Based on our review of the information provided (including the draft EIS and federal consistency determination), the Maryland Coastal Zone Management Program (MD CZMP) concurs that the above project is consistent to the maximum extent practicable with MD CZMP enforceable policies. Thank you for preparing such a detailed analysis of potential impacts and the thorough discussion of measures used to mitigate those impacts.

Best Regards and Stay Safe,
--

MD Logo.png

dnr.maryland.gov

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I.2 Coastal Consistency Determination for Virginia

DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
22347 CEDAR POINT ROAD UNIT 6
PATUXENT RIVER MARYLAND 20670-1161

7594
Ser: 047.21
22 March 2021

From: Executive Director, Data Analytics, Infrastructure and Technology Advancement Group
To: Virginia Coastal Zone Management Program, Department of Environmental Quality, P.O. Box 1105, Richmond, VA, 23218, Attn: Ms. Bettina Rayfield

Subj: FEDERAL CONSISTENCY DETERMINATION FOR TESTING AND TRAINING ACTIVITIES IN THE PATUXENT RIVER COMPLEX

Encl: (1) Public Release Version of 2021 PRC EIS (CD)
(2) Federal Consistency Determination

1. In accordance with the Coastal Zone Management Act (16 United States Code § 1456(c) and 15 Code of Federal Regulations Part 930, Subpart C), the United States Department of the Navy (Navy) requests concurrence with its Federal Consistency Determination for proposed activities in the Patuxent River Complex (PRC) Study Area. The Navy previously analyzed the potential environmental impacts of its testing and training activities in the PRC in a 1998 *Final Environmental Impact Statement (EIS) for Increased Flight and Related Operations in the Patuxent River Complex*. The Navy also conducted a Coastal Zone Management Act (CZMA) consultation for these activities in 1998. The Navy has begun the next phase of PRC planning and has analyzed the potential environmental impacts of proposed testing and training activities in the *Testing and Training Activities in the Patuxent River Complex Draft EIS* found at http://www.prceis.com.

2. Activities for this latest iteration of PRC planning are similar to what was described in the 1998 PRC EIS, with some activities increasing in scope and others decreasing. Some of the activities have also been reclassified or differ slightly from the previous consultation. In addition, some testing and training activities have been proposed to occur in other Study Area locations that were not included in the scope of the 1998 CZMA consultation.

3. The enclosed Draft PRC EIS and the project website (http://www.prceis.com) contain detailed information and analyses of potential impacts. The Navy reviewed the Virginia Coastal Zone Management Program in preparation of the enclosed Federal Consistency Determination. Based on the analyses, the Navy has determined that the Proposed Action

FEDERAL CONSISTENCY DETERMINATION FOR TESTING AND TRAINING ACTIVITIES IN THE PATUXENT RIVER COMPLEX

within the PRC Study Area will be consistent to the maximum extent practicable with the policies of the Virginia Coastal Zone Management Program.

4. We request that the Virginia Department of Environmental Quality provide its concurrence on our findings within 60 days of receipt of this letter. If a response has not been received by that time, concurrence with this finding will be presumed. My point of contact for this matter is Ms. Crystal Ridgell who may be reached at 301-757-5282 or crystal.l.ridgell@navy.mil.

Amy J Markowich

AMY J. MARKOWICH
Executive Director
Naval Air Warfare Center Aircraft Division, DAiTA

Copy to: Commander, Navy Region Mid-Atlantic

FEDERAL CONSISTENCY DETERMINATION
TESTING AND TRAINING ACTIVITIES IN THE PATUXENT RIVER COMPLEX

Introduction

This document provides the Commonwealth of Virginia with the United States (U.S.) Department of the Navy's (Navy) Consistency Determination under section 307(c)(1) of the Coastal Zone Management Act (CZMA) of 1972, as amended, and 15 Code of Federal Regulations [CFR] part 930, subpart C, for the proposed activities in the Patuxent River Complex (PRC) Study Area (Study Area).

The Navy analyzed the potential environmental impacts of all of its testing and training activities in Maryland, Virginia and Delaware in the *Final Environmental Impact Statement (EIS) for Increased Flight and Related Operations in the Patuxent River Complex, Patuxent River, Maryland* (December 1998), with the Record of Decision signed on May 17, 1999 (hereinafter referred to as the "1998 PRC EIS"). Concurrent with the development of the 1998 PRC EIS, the Navy also completed a Federal Consistency Determination on the same activities[1].

The 1998 PRC EIS served as the basis for the Navy's Federal Consistency Determinations for Operational Workload II, which was the Preferred Alternative. The activities analyzed in the current 2021 Draft PRC EIS are similar to what was described in the 1998 PRC EIS, with some activities increasing in scope and others decreasing. Some of the activities have also been reclassified or differ slightly from the previous Consistency Determination. In addition, some testing and training activities have been proposed in locations that were not included in the scope of the 1998 Federal Consistency Determination. This Federal Consistency Determination supplements the 1998 Consistency Determination to account for changes in the Navy's proposed testing and training activities necessary to meet mission needs.

As most of the activities proposed in the 2021 Draft EIS constitute a continuation of activities consulted on in the 1998 EIS, the potential effects to coastal resources are expected to be similar to those captured in the previous consultation. The Navy recognizes that, pursuant to 15 CFR part 930.31(e), activities already reviewed by the Commonwealth of Virginia may be modified such that the potential effects to coastal resources may be substantially different than those previously reviewed. Although the Navy does not predict effects that are substantially different, the Navy is, as a matter of comity, electing to consult on changes to activities from the 1998 PRC EIS even when potential effects are expected to be the same or minimally different. In addition, the Navy is consulting on any new activities not included in the 1998 PRC EIS Federal Consistency Determination.

The Navy is submitting a separate Federal Consistency Determination to the Maryland Department of the Environment for effects to Maryland coastal uses and resources. The Navy is submitting a separate Coastal Consistency Negative Determination to the Delaware Department of Natural Resources and Environmental Control. The proposed activities in Delaware will not have any reasonably foreseeable effects on Delaware's coastal uses or resources and is therefore consistent with the enforceable policies of the Delaware Coastal Management Program.

[1] Concurrence with the Navy's consistency determination for actions covered in the 1998 PRC EIS was received from Maryland, Virginia and Delaware.

Regulatory Background Information

The CZMA, codified in 16 U.S. Code (U.S.C.) section 1451 et seq. established a comprehensive regulatory scheme for effective management, beneficial use, protection, and development of the coastal zone and its natural resources. CZMA encourages coastal states and provides a mechanism for them to develop, obtain federal approval for, and implement a broad-based coastal management program (CMP).

CZMA section 307 provides that federal agency activities shall be carried out in a manner, which is consistent to the maximum extent practicable with the enforceable policies of approved state management programs. Section 307 applies to federal agency activity in a state's coastal zone and also to federal agency activity outside the coastal zone, if the activity affects a land or water use in or natural resources of the coastal zone. Federal agency activity includes activity performed by a federal agency, approved by a federal agency, or for which a federal agency provides financial assistance. Such activity, whether direct, indirect, or cumulative, must be demonstrated to be consistent with the enforceable policies of the state's CMP, unless full consistency is otherwise prohibited by federal law (per 15 CFR part 930.32, "consistent to the maximum extent practicable"). The Navy's Proposed Action constitutes a direct federal action.

Description of the Proposed Federal Agency Action

The Navy has prepared a Draft PRC EIS to assess the environmental impacts associated with the continued conduct of military research, development, test and evaluation (hereinafter referred to as "testing") and training activities in the PRC Study Area (Figure 1). The Navy's Preferred Alternative in the Draft EIS, and the alternative subject to the following Federal Consistency Determination, is Alternative 2. Proposed activities are broadly categorized as aircraft flight activities, ground-based activities, or surface vessel activities. As the Navy's premier aircraft test range, flight activities are the most frequent and foremost performed within the PRC. The Naval Air Warfare Center Aircraft Division (NAWCAD) Naval Test Wing Atlantic and other squadrons home-based at Naval Air Station (NAS) Patuxent River (referred to collectively as tenant squadrons) conduct the majority of aircraft flights. Transient aircraft, not stationed at NAS Patuxent River, also utilize PRC airspace but on a much less frequent basis. Aircraft flight activities are further described in Draft PRC EIS Section 2.1.1.1. Ground-based activities include those performed by aircraft on the ground that are related to aircraft flights or non-flight tests that are conducted in specialized ground test facilities and laboratories at NAS Patuxent River in Maryland. Ground-based activities are further described in Draft PRC EIS Section 2.1.1.2. Surface vessel activities involve the use of the Chesapeake Bay Water Range and its fixed target areas, also located in Maryland. The safe use of the target areas is largely achieved by NAWCAD Atlantic Targets and Marine Operations Division range support boats. Range support boats account for the majority of surface activities conducted within PRC waters and provide the services required to safely accomplish a testing or training event. Surface vessel activities are further described in Draft PRC EIS Section 2.1.1.3.

It is important to note that of the PRC testing and training activities, only aircraft flights are planned to occur over Virginia's designated Coastal Zone. The Navy considered all actions occurring outside of the Virginia coastal zone (e.g., in neighboring Maryland), and none of those activities (i.e., ground based activities at NAS Patuxent River and Outlying Field Webster; and water-based activities occurring in the

Chesapeake Bay Water Range in Maryland and points further north in the bay offshore from NAS Patuxent River) were considered to have a reasonably foreseeable effect on Virginia's coastal uses or resources.

Aircraft flight activities are further described in Tables 1 and 2 of this consistency determination and in detail in Chapter 2 of the Draft PRC EIS. Of the flight activities included in the Proposed Action, only a small fraction occur in the airspace over Virginia's coastal zone. Approximately 90% of all flight activities occur over Maryland. Aircraft overflights in Virginia's coastal zone include those by fixed wing and rotary wing aircraft. Sound generated during aircraft overflights are the focus of this CCD in terms of reasonable foreseeable effects on Virginia's coastal uses or resources.

Project Location

The PRC is based at NAS Patuxent River, located in Southern Maryland approximately 60 miles southeast of Washington, D.C. The 1998 PRC EIS defined the PRC as NAS Patuxent River and Outlying Field Webster flight and ground test facilities and airfields along with the Atlantic Test Ranges (ATR) restricted airspace, Chesapeake Bay Water Range, and fixed target areas. This 2021 Draft PRC EIS expands the PRC Study Area to include land, water, and airspace historically and currently used by NAWCAD that were not assessed in the previous 1998 PRC EIS. These include Bloodsworth Island Range, waters beneath the restricted airspace outside the Chesapeake Bay Water Range, and surrounding Federal Aviation Administration (FAA) airspace including Helicopter Operating Areas (Helo OPAREAs) and Chessie Air Traffic Control Assigned Airspace (ATCAA). The PRC Study Area components are shown in Figure 1.

NOTE: Of the Study Area components shown on Figure 1, only portions of the ATR restricted airspace, Helo OPAREAs, and the Chessie ATCAA overlay Virginia's designated Coastal Zone.

These areas are further described on the following pages.

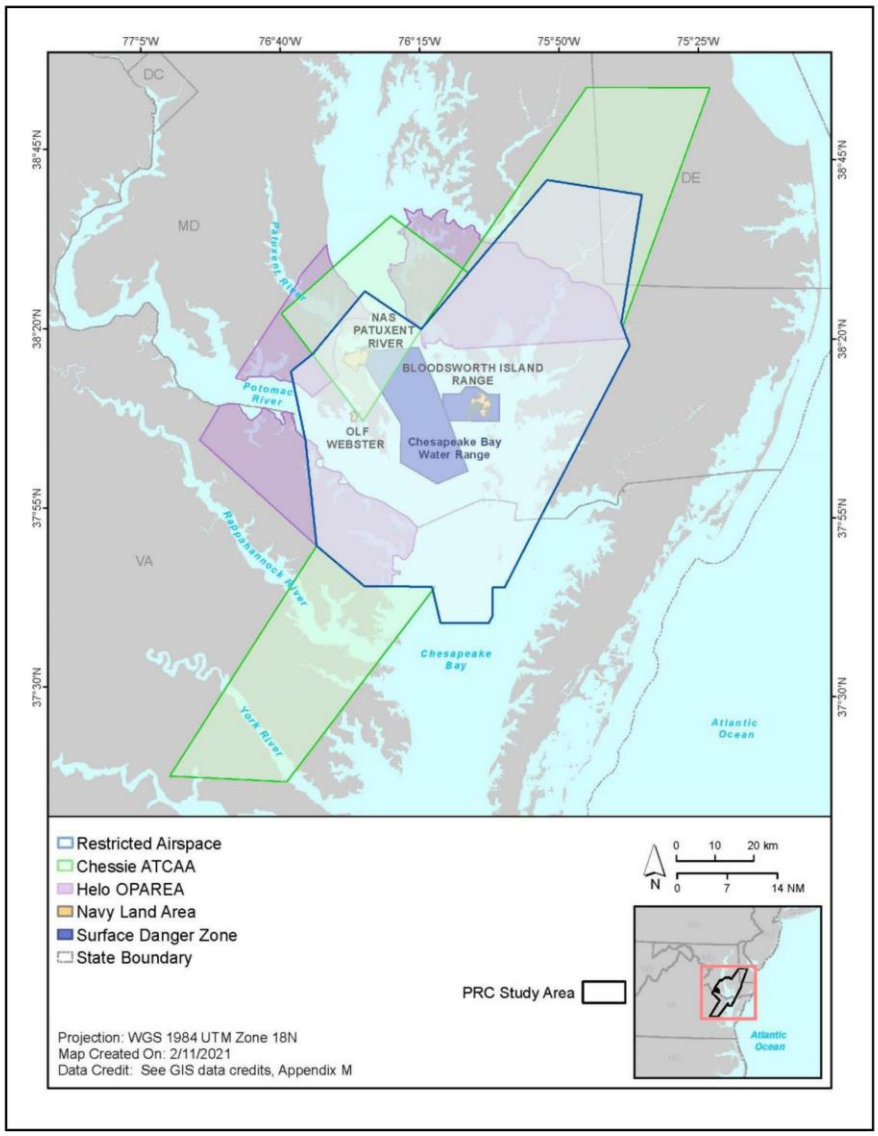

Figure 1 - PRC Study Area

Key: ATCAA = Air Traffic Control Assigned Airspace; OPAREA = Operating Area

To reflect the nature of Navy testing and training activities in the Study Area, the Navy identified the locations of proposed activities. These activities and their locations are identified in Table 2.3-1 of Chapter 2 (Description of Proposed Action and Alternatives) of the Draft EIS. Testing and training activities would be conducted in areas appropriate for the type of activity based on operational and safety considerations.

PRC Airspace

The FAA regulates and promotes safety of navigation for civil and military aircraft in U.S. airspace. Special Use Airspace (SUA) is designated by the FAA where activities must be confined because of their nature, where limitations are imposed upon aircraft that are not a part of those activities, or both. SUA is primarily established for military flight operations and may be used for commercial or general aviation when not reserved for military use. The proposed action does not involve any changes to the boundaries or dimensions of existing SUA.

Restricted airspace is a type of SUA within which the flight of aircraft, while not entirely prohibited, is subject to restriction. Restricted airspace is designated where operations are hazardous to nonparticipating aircraft and, when active; the nonparticipating aircraft are prohibited from entering unless the operator (or pilot) has advance permission from the controlling or using agency. For ATR restricted airspace, the FAA is the controlling agency that delegates permission to NAS Patuxent River Air Traffic Control (ATC) as the using agency. Figure 2 shows the PRC special use and shared airspace where the Navy conducts testing and training.

Restricted Airspace

ATR restricted airspace overlies approximately 2,352 square miles (1,800 square nautical miles) of Southern Maryland, the Eastern Shore of Maryland, the Northern Neck of Virginia, and southwest Delaware. Approximately 50 percent of the airspace is over the waters of the middle Chesapeake Bay while the remaining 50 percent is over land. The airspace comprises six restricted areas with a vertical extent spanning from surface level up to 85,000 feet with some overlapping in altitude. The specific restricted airspace units overlying Virginia are portions of R-4005, R-4006, R-4008, and R-6609. The Navy requests and receives permission from the FAA to use the restricted airspace daily. During the time the airspace is in use (i.e., activated), the ATR military radar unit, Baywatch, provides restricted area containment surveillance under the supervision of NAS Patuxent River ATC. Restricted airspace is typically activated between 7:00 a.m. to 11:00 p.m. on weekdays and 8:00 a.m. to 6:00 p.m. on weekends. When not activated, the airspace is released back to FAA for command and control and may be used for commercial or general aviation.

Helicopter Operating Areas

Adjacent to PRC restricted airspace are FAA Class E airspaces referred to in the *NAS Patuxent River Air Operations Manual* as the East, West, and South Helo OPAREAs. These areas are located over portions of the Eastern Shore of Maryland, Southern Maryland, and the Northern Neck of Virginia, respectively, with perimeters bound by the extent of the NAS Patuxent River Terminal Radar Approach Control and other geographic features. The one Helo OPAREA overlying Virginia is the South Helo OPAREA. Although

called Helo OPAREAs for airspace management purposes, they are shared with private and commuter aircraft and used by Navy rotary wing as well as small, fixed-wing propeller aircraft to conduct lower altitude operations that do not require restricted airspace.

Chessie Air Traffic Control Assigned Airspace

Chessie ATCAA is a type of SUA that is part of the national FAA Class A airspace structure. The ATCAA was assigned to and developed exclusively for NAS Patuxent River ATC to provide air traffic segregation between Navy aircraft testing within this FAA airspace and other air traffic flying under instrument flight rules. Contiguous with PRC restricted airspace, Chessie is subdivided into A, B, and C, with Chessie A and B altitudes ranging 27,000 to 41,000 feet and Chessie C 18,000 to 50,000 feet. The one Chessie ATCAA overlying Virginia is Chessie B. The airspace accommodates flight tests that do not fit within the confines of the restricted airspace due to specific altitude and headings required to maximize tracking time and test points at supersonic speeds. Use of the ATCAA is infrequent and scheduling must be coordinated with the Washington Air Route Traffic Control Center.

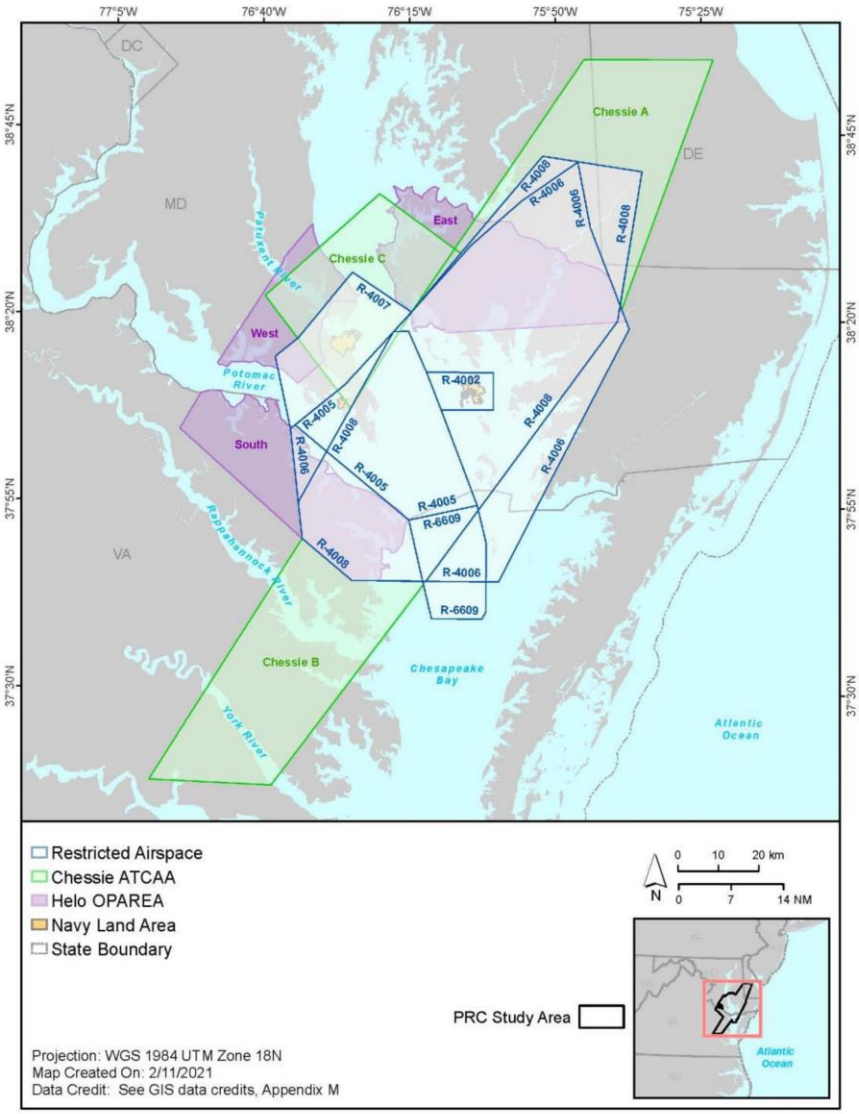

Figure 2 - PRC Airspace

Key: ATCAA = Air Traffic Control Assigned Airspace; OPAREA = Operating Area

DETERMINATION OF POTENTIAL EFFECTS

In accordance with 15 CFR part 930; subpart C, the Navy reviewed its Proposed Action and has determined that certain activities that will be conducted as part of the Proposed Action (i.e., flight activities) may have an effect on a coastal use or resource of the Commonwealth of Virginia. As set forth in the consistency analysis section of this determination, for Virginia, potential direct or indirect effects are limited to effects on wildlife related to airborne noise associated with aircraft overflight activities. Flight activities are further described below.

Aircraft Flight Activities

As previously mentioned, flight activities are the most frequent and foremost performed activity that occurs within the PRC. The NAWCAD Naval Test Wing Atlantic and other squadrons home-based at NAS Patuxent River conduct the majority of aircraft flights. Transient aircraft, not stationed at NAS Patuxent River, also utilize PRC airspace but on a much less frequent basis.

Flight activities occur daily and may involve the full spectrum of manned and unmanned, fixed- and rotary-wing aircraft. All aircraft flights originating or terminating in the PRC or utilizing PRC airspace are part of the Proposed Action. Aircraft flights include test flights, training flights, or other flights depending on the type of flight activity.

Table 1 provides a brief description of aircraft flight activities. Note that only overflights of the Virginia Coastal Zone would occur. There would be no landing practice or munitions or other military expended material (MEM) expenditures in Virginia as part of the Proposed Action. Table 2 provides the annual aircraft flight operational tempos of the alternatives that are included in the EIS. Note that only a small subset of aircraft flight activities shown in Table 2 would occur above the Virginia Coastal Zone.

Table 1 - Aircraft Flight Activities

Activity Name	*Activity Description*
	Test Flights
Air Vehicle Tests	Expose the airframe and aircrew to the full operational limits of altitude, speed, load factor, gross weight, environmental conditions, and operational situations experienced during Fleet operations. Tests include aeromechanics (including weapons compatibility and separation tests), air vehicle subsystems, structural tests, and crew systems. May involve the release of non-explosive munitions or other MEM. MEM will not be released in Virginia.
Carrier and Shipboard Suitability Tests	Evaluate aircraft compatibility with ship-based takeoff, approach, recovery equipment, and landing using special ground-based facilities designed to simulate a shipboard environment (e.g., TC-7 steam catapult, MK-7 arresting gear, and short takeoff vertical landing facility). Tests include fixed-wing, rotary-wing, and ships' air traffic and control and landing systems certification tests.

Table 1 - Aircraft Flight Activities (Continued)

Activity Name	*Activity Description*
	Test Flights
Mission Systems Tests	Evaluate the performance and operability of subsystems (e.g., electronics) that are integrated into cockpit displays and fire control systems of modern military aircraft (and ships). Both the operational functionality of the system (or subsystem) and interoperability with the aircraft and its systems are verified. Tests include communication (including lasers), navigation, information warfare, computers, armament control, sensors, electromagnetic environmental effects, laser designators and rangefinders, and ship and shore-based systems. Do not typically but may involve the release of non-explosive munitions or other MEM. MEM would not be released in Virginia
Electronic Warfare Tests	Evaluate U.S. military electronic combat systems against a wide variety of threat simulations, surrogates, and actual systems that represent real world threat scenarios. Tests include electronic attack (including directed energy and cyberwarfare), electronic protection, electronic warfare support, and radar cross section and infrared signature measurement. May involve the release of non-explosive munitions or other MEM related to electronic countermeasures (e.g., chaff, flares). MEM would not be released in Virginia.
Operational Tests	VX-1 operational aircraft test and evaluate airborne anti-submarine warfare and maritime anti-surface warfare weapon systems, airborne strategic weapons systems, as well as support systems, equipment, and materials.
	Training Flights
Aircrew Proficiency Flights*	Performed to maintain the flying skills of pilots and aircrew personnel.
Field Carrier Landing Practice*	Performed on a runway equipped to simulate an aircraft carrier flight deck to familiarize pilots with carrier landings. Flown in close proximity to the airfield and below 3,000 feet.
United States Naval Test Pilot School Flights	Train experienced pilots in the processes and techniques of aircraft systems test and evaluation to be aircraft test pilots.
Transient Training Flights	Train transient aircrew in unit level skills such as aircrew proficiency, field carrier landing practice, electronic warfare, weapons integration and separation, simulated air-to-air combat, and other tactical training tasks. May involve the release of non-explosive munitions or other MEM. MEM would not be released in Virginia.
	Other Flights
Support Flights	Naval Test Wing Atlantic aircraft provide support needed to successfully accomplish a testing or training event. Flights include in-flight refueling, safety/photo chase, logistics, cooperative target and threat simulation, range surveillance, or other unique services.
Cross-Country Flights	Flown to transport equipment, material, and/or personnel to and from the air station in support of testing, training, or base-keeping operations.
Functional Check Flights	Conducted to determine whether the airframe, propulsion, accessories, and equipment are functioning in accordance with predetermined standards when subjected to the intended operating environment.
Mission of State Flights	Unmanned aerial systems (e.g., MQ-4 Triton) perform post-hurricane surveillance involving high-altitude and meteorological surveys in support of post-disaster relief efforts.

Table 1 - Aircraft Flight Activities (Continued)

	Other Flights
Search and Rescue Flights	Search and rescue helicopters (MH-60) locate and recover military or civilian personnel injured or lost during a testing, training, or non-military event. May involve the release of marine markers as surface reference points to locate/mark survivors.
Strategic Communications Flights	VQ-4 aircraft (E-6B) conduct operational patrols to provide airborne command posts and strategic communications relays.
Scientific Development Flights	VXS-1 aircraft execute airborne science and technology projects such as bathymetry, electronic countermeasures, gravity mapping, and radar development.

Key: MEM = military expended materials; U.S. = United States.
Note: * = May also be performed by transients.

Table 2 - Annual PRC Aircraft Flight Operational Tempo per Alternative

Activity Name	*Baseline No Action Alternative*	*Proposed Action Alternative 1*	*Proposed Action Alternative 2*	*Location*
Air-Based Activities (Annual)				
Aircraft Flight Activities (# of Flight Hours)	20,100	23,400	26,000	*PRC Airspace* – restricted areas – 80%; Helo Operating Areas – 20%
Supersonic Activities (# of Events)	247	180	198	*PRC Airspace* – restricted areas – 98% R-4008 above 30,000 ft; >2% below 30,000 ft weapons separation testing only; Chessie Air Traffic Control Assigned Airspace – 1 to 3 events per year

Key: > = greater than; CBWR = Chesapeake Bay Water Range; ft = feet; Helo = Helicopter; PRC = Patuxent River Complex.

For a description of all proposed testing and training activities occurring throughout the entire PRC, see Chapter 2 of the *Testing and Training Activities in the Patuxent River Complex Draft EIS* available at www.PRCEIS.com.

Assessment of Applicability of Policies of the Virginia Coastal Zone Management Program and Consistency Analysis

The Navy reviewed each of Virginia's enforceable policies and determined applicability to the Proposed Action. As shown in Table 3 below, 11 of the 12 enforceable policies are not applicable to the Proposed Action. One enforceable policy is relevant and the consistency analysis for that policy is set forth after Table 3.

Table 3 - Enforceable Policy and Reasoning for Non-Applicability

Enforceable Policy	*Policy Text*	*Reason Policy is Not Applicable*
Tidal and Non-Tidal Wetlands § 28.2-1301 and -1308 and §§ 62.1-44.15:20 and -44.15:21	It is the policy of this Commonwealth to preserve the tidal wetlands, to prevent their despoliation and destruction, and to accommodate necessary economic development in a manner consistent with wetlands preservation. It is the policy of the Commonwealth to avoid or minimize the loss of tidal wetlands and the adverse ecological effects of all permitted activities. It is the Commonwealth's policy that non-tidal surface waters, including wetlands and streams, shall be protected. Development shall only be permitted in a manner consistent with the protection of wetland acreage and function and stream function. Impacts to wetlands and streams shall be avoided or minimized to the maximum extent practicable.	The proposed aircraft flight activities in Virginia do not have any effect on tidal or non-tidal wetlands.
Subaqueous Lands § 28.2-1200, -1203, -1204 and -1205	All decisions affecting subaqueous lands shall be guided by the Commonwealth's General Policy to conserve, develop, and utilize its natural resources, its public lands, and its historical sites and buildings and to protect its atmosphere, lands, and waters from pollution, impairment, or destruction, for the benefit, enjoyment, and general welfare of the people of the Commonwealth.	The proposed aircraft flight activities in Virginia do not have any effect on subaqueous lands, such as dredging, aquaculture, placement of wharves, bulkheads, or fill.
Dunes and Beaches §§ 28.2-1401 and -1408	It is the policy of the Commonwealth to preserve and protect coastal primary sand dunes and beaches, to prevent their despoliation and destruction, and whenever practical, to accommodate necessary economic development in a manner consistent with the protection of such features.	The proposed aircraft flight activities in Virginia would not involve any alteration of or construction upon coastal primary sand dunes and beaches.

Enforceable Policy	*Policy Text*	*Reason Policy is Not Applicable*
Chesapeake Bay Preservation Area §§28.2-104.1, 52.1-44. §15:24, -44.15:51, -44.15:67, -44.15:68, -44.15:69, -44.15:73, -44.15:74, and -44.15:78	It is the policy of the Commonwealth to protect and improve the water quality of the Chesapeake Bay, its tributaries, and other state waters by minimizing the effect of human activity upon these waters. To that end, the Commonwealth will ensure that land use and development performance criteria and standards are implemented in Chesapeake Bay Preservation Areas, which if improperly used or developed may result in substantial damage to the water quality of the Chesapeake Bay and its tributaries.	The proposed aircraft flight activities in Virginia do not involve any land use or development in Chesapeake Bay Preservation Areas.
Marine Fisheries §§ 28.2-101, -201, -203, -203.1, -225, -551, -600, -601, -603, -618, and -1103, -1203	It is the policy of the Commonwealth to conserve and promote the seafood and marine resources of the Commonwealth, including fish, shellfish and marine organisms, and manage the fisheries to maximize food production and recreational opportunities within the Commonwealth's territorial waters.	The proposed aircraft flight activities in Virginia do not effect marine resources. The action does not involve any of the following: overfishing; effects on Blue crab stock; effects on spawning stock, nursery areas and habitat; encroachment on oyster beds; propagation of oysters; nor encroachment on a lawful use and occupation of previously leased ground.
Plant Pests and Noxious Weeds § 3.2-700 and -703; § 3.2-712 and -804;	Once the Board of Agriculture and Consumer Services or the Commissioner of Agriculture and Consumer Services has established a quarantine for a pest, no person shall move any regulated article described in the quarantine or the pest against which the quarantine is established within, from, into, or through the Commonwealth in violation of the quarantine. No person shall sell, barter, offer for sale, move, transport, deliver, ship, or offer to ship into or within the Commonwealth any plant pests in any living stage, unless such plant pests are not injurious, are generally present already, or are for scientific purposes subject to specified safeguards. No person shall move, transport, deliver, ship, or offer for shipment into or within the Commonwealth any noxious weed, or part thereof, unless such noxious weed is generally present already or it is for scientific purposes subject to prescribed standards.	The proposed flight activities in Virginia do not involve the movement or transport of plant pests or noxious weeds.
Commonwealth Lands § 29.1-532 § 29.1-103(10) § 29.1-554 §§ 5-30-70 and -220	Various policies for Commonwealth Lands under management by: *Virginia Department of Game and Inland Fisheries* -Dams and Fish Passage	The proposed aircraft flight activities in Virginia do not have any effect on Commonwealth lands managed by the Virginia Department of Game and Inland

Enforceable Policy	*Policy Text*	*Reason Policy is Not Applicable*
§§ 5-30-240 to -250 § 5-30-422 §§ 5-30-190, -290, and -330	-Back Bay -Damage to Boundary Enclosures and Entry to Refuges -Protection of Aquatic and Terrestrial Habitats Used or Owned by DGIF *Virginia Department of Conservation and Recreation* -Fire Prevention -Hunting and Fishing in State Parks -Feeding Wildlife in State Parks Prohibited -Boating and Vehicles in State Parks	Fisheries or Virginia Department of Conservation and Recreation.
Point Source Air Pollution § 10-1.1308	It is the policy of the Commonwealth, after observing the effects of air pollution, to abate, control, and prohibit air pollution throughout the Commonwealth. Additional specific policies are provided for asphalt paving operations, open burning, fugitive dust emissions, and state operating permits used to limit emissions of stationary sources contributing to a violation of any air quality standard.	The proposed aircraft flight activities in Virginia would not include installation or operation of a stationary emissions source, asphalt paving, open burning, or fugitive dust generation. No air permitting would be required.
Point Source Water Pollution § 62.1-44.2	It is the policy of the Commonwealth to protect existing high quality state waters and restore all other state waters to such condition of quality that any such waters will permit all reasonable public uses and will support the propagation and growth of all aquatic life, including game fish, which might reasonably be expected to inhabit them; safeguard the clean waters of the Commonwealth from pollution; prevent any increase in pollution; reduce existing pollution; promote and encourage the reclamation and reuse of wastewater in a manner protective of the environment and public health; and promote water resource conservation, management and distribution, and encourage water consumption reduction in order to provide for the health, safety, and welfare of the present and future citizens of the Commonwealth.	The proposed aircraft flight activities in Virginia would not result in new point source pollutant discharges, or effect water quality in Virginia.
Nonpoint Source Water Pollution § 62.1-44.15:25, 62.1-44.15:52	It is the policy of the Commonwealth to control stormwater runoff to protect the quality and quantity of state waters from the potential harm of unmanaged stormwater; to control soil erosion and sediment deposition in order to prevent unreasonable degradation of properties, stream	The proposed aircraft flight activities in Virginia would not have any effect on stormwater runoff, soil erosion, or nonpoint source water pollution.

Enforceable Policy	*Policy Text*	*Reason Policy is Not Applicable*
	channels, state waters, and other natural resources; and to otherwise act to control nonpoint source water pollution to ensure the general health, safety, and welfare of the citizens of the Commonwealth.	
Shoreline Sanitation § 32.1-12 and -164	It is the policy of the Commonwealth for sewage to be disposed of in a safe and sanitary manner that protects the public health and welfare and the environment	The proposed aircraft flight activities in Virginia would not involve any sewage disposal or discharge.

ANALYSIS OF ENFORCEABLE POLICIES APPLICABLE TO THE PROPOSED ACTION

The following policy of the Virginia Coastal Zone Management Program is partly applicable to the Proposed Action.

Enforceable Policy - Wildlife and Inland Fisheries

See Va. Code Ann. §§ 29.1-501, -564, -566, -567, and -568; 4 Va. Admin. Code §§ 15-20-130 and -140

Parts of the policy are not applicable and the reasons for non-applicability include:

- The proposed activities would not involve the administration of drugs to any vertebrate wildlife;
- The proposed activities would not involve the import, possession, sale or liberation of any predatory, undesirable, or non-indigenous species;
- The proposed activities in Virginia would not involve the import, export, taking, pursuit, killing or possessing of any fish or wildlife, or stock of any species of fish.

Consistency Analysis

Virginia's enforceable policy states in part that no person shall harass, harm, hunt, shoot, wound, kill, trap, capture, possess, collect, transport, sell or offer to sell, or attempt to do so, any species of fish or wildlife listed as threatened or endangered by the Board of Game and inland Fisheries. Species designated as threatened or endangered by Virginia Board of Game and Inland Fisheries are likely occur in the Virginia portions of the PRC Study Area where aircraft overflights occur. Aircraft overflights produce noise that might incidentally harass special status species (e.g., cause a startle reaction), however, these events would be temporary, infrequent, and would not result in adverse effects.

Regarding compliance with the federal Endangered Species Act (ESA) and species under the jurisdiction of the U.S. Fish and Wildlife Service, the Navy has determined that acoustic stressors associated with the proposed activities may affect, but would not likely adversely affect the eastern black rail, northeastern beach tiger beetle, puritan tiger beetle, red knot, and West Indian manatee. Acoustic stressors associated with the proposed activities would have no effect on the Northern long-eared bat. With the

release of the Draft PRC EIS, the Navy is consulting with the U.S. Fish and Wildlife Service under ESA Section 7.

Regarding compliance with the federal ESA and species under the jurisdiction of the National Marine Fisheries Service, the Navy has determined that acoustic stressors associated with the proposed activities may affect, but would not likely adversely affect the Atlantic sturgeon (Carolina DPS, Chesapeake Bay DPS, New York Bight DPS), green sea turtle, Kemp's Ridley sea turtle, leatherback sea turtle, loggerhead sea turtle, and shortnose sturgeon. With the release of the Draft PRC EIS, the Navy is consulting with the National Marine Fisheries Service under ESA Section 7.

The Navy is consistent with this policy with respect to species also regulated by the ESA. The ESA does not contain a waiver of sovereign immunity, so states may not directly regulate federal activity via state laws protecting certain species. Furthermore, CZMA does not in and of itself authorize the application of state permit requirements to federal agencies.

Aircraft overflights would have no negative effects on the Commonwealth's fish and wildlife conservation efforts. Therefore, the Proposed Action would be consistent to the maximum extent practicable with this policy. Potential effects to fish and wildlife are fully analyzed in the Draft PRC EIS.

Conclusion

The Navy has determined that the proposed federal agency action in airspace overlying Virginia (aircraft overflights) may affect certain natural resources of the Commonwealth of Virginia's coastal zone pursuant to the CZMA. However, the Navy will implement the Proposed Action in a manner that is consistent to the maximum extent practicable with the applicable enforceable policies of the Virginia CZMP.

COMMONWEALTH of VIRGINIA

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June 9, 2021

Ms. Crystal Ridgell
U.S. Department of the Navy
Sent via email: crystal.l.ridgell@navy.mil

RE: U.S. Department of the Navy, Draft Environmental Impact Statement: Testing and Training Activities in the Patuxent River Complex (DEQ 21-056F).

Dear Ms. Ridgell:

The Commonwealth of Virginia has completed its review of the draft environmental impact statement (DEIS) for the above-referenced project. The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of federal environmental documents prepared pursuant to the National Environmental Policy Act (NEPA) and responding to appropriate federal officials on behalf of the Commonwealth. DEQ will respond to the associated federal consistency determination for the project under DEQ #21-069F. The following agencies joined in this review:

Department of Environmental Quality
Department of Conservation and Recreation
Department of Wildlife Resources
Marine Resources Commission

The Virginia Department of Aviation, Department of Historic Resources, Northern Neck Planning District Commission, Middle Peninsula Planning District Commission and Hampton Roads Planning District Commission also were invited to comment.

PROJECT DESCRIPTION

The U.S. Department of the Navy prepared a DEIS to assess the potential environmental consequences associated with continued military testing and training activities within the Patuxent River Complex (PRC). The PRC is based at the Naval Air Station Patuxent River, Maryland, and the study area includes portions of Maryland,

Virginia and Delaware. The Navy is considering two action alternatives and a no action alternative. Under Alternative 1, the Navy would continue the existing testing and training activities within the PRC but with higher annual flight hours as well as adjustments to current aircraft, non-explosive munitions numbers, and support systems. Under Alternative 2, the Navy would conduct the same types of activities as under Alternative 1 but with an increased annual number of flight hours as well as other adjustments. This alternative is based on the maximum potential annual level of operations and is the Preferred Alternative. In Virginia, only aircraft flights would occur, primarily over Charles City County, Gloucester County, James City County and York County as well as adjacent rivers and tributaries in Virginia. Approximately 90% of all flight activities would occur over Maryland. Flight activities would occur daily and may involve manned and unmanned, fixed and rotary-wing aircraft. Several types of test and training flights may involve the release of non-explosive munitions or military expended materials and new directed energy technologies.

NEPA CONCLUSION

Provided activities are performed in accordance with the recommendations which follow in the Environmental Impacts and Mitigation section of this report, the proposal described in the EIS is unlikely to have significant effects on ambient air quality, water quality, wetlands, wildlife resources, forest resources, historic resources, and solid and hazardous wastes. It is unlikely to adversely affect species of animals, plants or insects listed by state agencies as rare, threatened, or endangered.

ENVIRONMENTAL IMPACTS AND MITIGATION

1. Air Quality. The DEIS (pages 3.2-19 through 3.2-21) states that under the preferred alternative, the increase in aircraft emissions and annual emissions from non-explosive munitions and other military expended materials would be small and would not contribute to any air quality violations.

1(a) Agency Jurisdiction. The DEQ Air Division, on behalf of the State Air Pollution Control Board, is responsible for developing regulations that implement Virginia's Air Pollution Control Law (Virginia Code §10.1-1300 *et seq.*). DEQ is charged with carrying out mandates of the state law and related regulations as well as Virginia's federal obligations under the Clean Air Act as amended in 1990. The objective is to protect and enhance public health and quality of life through control and mitigation of air pollution. The division ensures the safety and quality of air in Virginia by monitoring and analyzing air quality data, regulating sources of air pollution, and working with local, state and federal agencies to plan and implement strategies to protect Virginia's air quality. The appropriate DEQ regional office is directly responsible for the issuance of necessary permits to construct and operate all stationary sources in the region as well as monitoring emissions from these sources for compliance. As a part of this mandate,

environmental impact reviews (EIRs) of projects to be undertaken in the state are also reviewed. In the case of certain projects, additional evaluation and demonstration must be made under the general conformity provisions of state and federal law.

The Air Division regulates emissions of air pollutants from industries and facilities and implements programs designed to ensure that Virginia meets national air quality standards. The most common regulations associated with construction projects are:

- Open burning: 9VAC5-130 *et seq.*
- Fugitive dust control: 9VAC5-50-60 *et seq.*
- Permits for fuel-burning equipment: 9VAC5-80-1100 *et seq.*

1(b) Ozone Attainment Status. According to the DEQ Air Division, the project site is located in an ozone attainment area.

2. Natural Heritage Resources. The DEIS (pages 3.4-110 to 3.4-112) summarizes the potential impacts of stressors from the preferred alternative on aerial, terrestrial and aquatic environments. While terrestrial vegetation may by damaged by directed energy weapon systems testing, the DEIS states that generally the stressors would either not affect the environment or be insignificant.

2(a) Agency Jurisdiction.

2(a)(i) The Virginia Department of Conservation and Recreation's (DCR) Division of Natural Heritage (DNH): DNH's mission is conserving Virginia's biodiversity through inventory, protection and stewardship. The Virginia Natural Area Preserves Act (Virginia Code §10.1-209 through 217), authorized DCR to maintain a statewide database for conservation planning and project review, protect land for the conservation of biodiversity, and to protect and ecologically manage the natural heritage resources of Virginia (the habitats of rare, threatened and endangered species, significant natural communities, geologic sites, and other natural features).

2(a)(ii) The Virginia Department of Agriculture and Consumer Services (VDACS): The Endangered Plant and Insect Species Act of 1979 (Virginia Code Chapter 39 §3.1-1020 through 1030) authorizes VDACS to conserve, protect and manage endangered and threatened species of plants and insects. Under a Memorandum of Agreement established between VDACS and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species.

2(b) Agency Findings – Natural Heritage Resources. The Biotics Data System documents the presence of natural heritage resources within the project boundary,

including a 100-foot buffer. However, due to the scope of the activity, DCR does not anticipate that this project will adversely impact these natural heritage resources. The Bush Mill Stream Natural Area Preserve (NAP), Dameron Marsh NAP, and Hughlett Point NAP have been documented within 100 feet of the project site. However, due to the scope of the activity proposed, DCR does not anticipate any negative impacts to the natural area preserves and associated natural heritage resources.

2(c) Agency Findings – State Natural Area Preserves. There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

2(d) Agency Findings – Endangered Plant and Insect Species. The current activity will not affect any documented state-listed plants or insects.

2(e) Agency Recommendations. Contact the DCR DNH and resubmit project information if the scope of the project changes and/or six months has passed before it is utilized.

3. Wildlife and Marine Fisheries. The DEIS (pages 3.4-110 to 3.4-112) summarizes the potential impacts of stressors, including acoustic aircraft noise and physical disturbances such as strikes, on estuarine and freshwater animals as well as birds. The DEIS states that generally the stressors would be infrequent and temporary and would not result in long-term impacts.

3(a) Agency Jurisdiction. The Virginia DWR, as the Commonwealth's wildlife and freshwater fish management agency, exercises enforcement and regulatory jurisdiction over wildlife and freshwater fish, including state- or federally-listed endangered or threatened species, but excluding listed insects (Virginia Code, Title 29.1). DWR is a consulting agency under the U.S. Fish and Wildlife Coordination Act (16 U.S. Code §661 *et seq.*) and provides environmental analysis of projects or permit applications coordinated through DEQ and several other state and federal agencies. DWR determines likely impacts upon fish and wildlife resources and habitat, and recommends appropriate measures to avoid, reduce or compensate for those impacts. For more information, see the DWR website at www.dwr.virginia.gov.

The Virginia Marine Resources Commission (VMRC) implements policies that affect saltwater fisheries, recreational and commercial, in Virginia's tidal waters. VMRC also monitors Virginia's finfish and shellfish fisheries and provides this information for management purposes.

3(b) Agency Findings. DWR has no comments on the DEIS. VMRC states that it does not anticipate adverse impacts to fisheries or shellfish.

Testing and Training, Patuxent River Complex
DEQ 21-056F
Page 5

REGULATORY AND COORDINATION NEEDS

1. Natural Heritage Resources. Contact the DCR DNH (Robbie.Rhur@dcr.virginia.gov) and resubmit project information if the scope of the project changes and/or six months has passed before it is utilized.

Thank you for the opportunity to comment on this DEIS. If you have questions, please do not hesitate to call me at (804) 698-4204 or Julia Wellman at (804) 698-4326.

Sincerely,

Bettina Rayfield, Manager
Environmental Impact Review and Long Range Priorities Program

Enclosures

ec: Amy Ewing, DWR
Robbie Rhur, DCR
Roger Kirchen, DHR
Tiffany Birge, VMRC
Russell Harrington, DOAV
Lewie Lawrence, MPPDC
Ben McFarlane, HRPDC
Jerry Davis, NNPDC

COMMONWEALTH of VIRGINIA

Marine Resources Commission
380 Fenwick Road
Bldg 96
Fort Monroe, VA 23651-1064

Matthew J. Strickler
Secretary of Natural Resources

Steven G. Bowman
Commissioner

May 26, 2021

Department of Environmental Quality
Office of Environmental Impact Review
Attn: Julia Wellman
1111 East Main Street
Richmond, Virginia 23219

Re: Final Environmental Impact Statement and Federal Consistency Determination - Navy Testing & Training Activities in the Patuxent River Complex, DEQ #21-056F

Dear Ms. Wellman,

This will respond to the request for comments regarding the Federal Consistency Determination for the Navy Testing & Training Activities in the Patuxent River Complex (PRC) project (DEQ #21-056F), prepared by the U.S. Department of the Navy. Specifically, the Navy is proposing a continuance of existing aircraft flight activities, ground-based activities, and surface vessel activities. These testing and training activities in the PRC Study Area are proposed to either increase or decrease in scope, have been reclassified, or have been proposed in different locations compared to the 1998 Federal Consistency Determination. The project is located within the Chesapeake Bay and associated rivers and tributaries throughout coastal Virginia.

Please be advised that the Virginia Marine Resources Commission (VMRC) pursuant to Chapters 12, 13, and 14 of Title 28.2 of the Code of Virginia administers permits required for submerged lands, tidal wetlands, and beaches and dunes. Additionally, the VMRC administers the enforceable policies of fisheries management, subaqueous lands, tidal wetlands, and coastal primary sand dunes and beaches, which comprise some of Virginia's Coastal Zone Management Program. VMRC staff has reviewed the submittal and offers the following comments:

Fisheries and Shellfish: No adverse impacts expected to fisheries or shellfish.

Submerged Lands: No adverse impacts expected to State-owned submerged lands.

Tidal Wetlands: No adverse impacts expected to tidal wetlands.

Beaches and Coastal Primary Sand Dunes: No adverse impacts expected to coastal primary sand dunes and beaches.

As such, this project has no foreseeable impact on the VMRC's enforceable policies. As proposed, we have no objection to the consistency findings provided by the applicant. Should the proposed project

change, a new review by this agency may be required relative to these jurisdictional areas.

Please contact me at 757-247-2251 or by email at randy.owen@mrc.virginia.gov if you have questions. Thank you for the opportunity to comment.

Sincerely,

Randy Owen
Deputy Chief, Habitat Management Division

RDO/tlb
HM

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR PROGRAM COORDINATION

ENVIRONMENTAL REVIEW COMMENTS APPLICABLE TO AIR QUALITY

TO: Julia Wellman

We thank **OEIR** for providing DEQ-AIR an opportunity to review the following project:

Document Type: Final Environmental Impact Statement/Federal Consistency Determination
Project Sponsor: U.S. Department of the Navy
Project Title: Testing and Training Activities in the Patuxent River Complex
Project Number: DEQ #21-056F

Accordingly, I am providing following comments for consideration.

PROJECT LOCATION: **X OZONE ATTAINMENT AREA**

REGULATORY REQUIREMENTSMAY BE APPLICABLE TO: ☐ CONSTRUCTION ☐ OPERATION

STATE AIR POLLUTION CONTROL BOARD REGULATIONS THAT MAY APPLY:

1. ☐ 9 VAC 5-40-5200 C & 9 VAC 5-40-5220 E – STAGE I
2. ☐ 9 VAC 5-45-760 et seq. – Asphalt Paving operations
3. **X** **9 VAC 5-130 et seq. – Open Burning**
4. **X** **9 VAC 5-50-60 et seq. Fugitive Dust Emissions**
5. ☐ 9 VAC 5-50-130 et seq. - Odorous Emissions; Applicable to_____
6. ☐ 9 VAC 5-60-300 et seq. – Standards of Performance for Toxic Pollutants
7. ☐ 9 VAC 5-50-400 Subpart_____, Standards of Performance for New Stationary Sources, designates standards of performance for the_____
8. ☐ 9 VAC 5-80-1100 et seq. of the regulations – Permits for Stationary Sources
9. ☐ 9 VAC 5-80-1605 et seq. Of the regulations – Major or Modified Sources located in PSD areas. This rule may be applicable to the _____
10. ☐ 9 VAC 5-80-2000 et seq. of the regulations – New and modified sources located in non-attainment areas
11. ☐ 9 VAC 5-80-800 et seq. Of the regulations – State Operating Permits. This rule may be applicable to _____

COMMENTS SPECIFIC TO THE PROJECT:

(Kotur S. Narasimhan)
Office of Air Data Analysis **DATE: May 6, 2021**

Matthew J. Strickler
Secretary of Natural Resources

Clyde E. Cristman
Director

Rochelle Altholz
Deputy Director of Administration and Finance

Russell W. Baxter
Deputy Director of Dam Safety & Floodplain Management and Soil & Water Conservation

Nathan Burrell
Deputy Director of Government and Community Relations

Thomas L. Smith
Deputy Director of Operations

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

MEMORANDUM

DATE: May 24, 2021

TO: Julia Wellman, DEQ

FROM: Roberta Rhur, Environmental Impact Review Coordinator

SUBJECT: DEQ 21-056F, Testing and Training Activities in the Patuxent River Complex FEIS

Division of Natural Heritage

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

Biotics documents the presence of natural heritage resources within the project boundary including a 100ft buffer. However, due to the scope of the activity we do not anticipate that this project will adversely impact these natural heritage resources.

The Bush Mill Stream Natural Area Preserve (NAP), Dameron Marsh NAP, and Hughlett Point NAP have been documented within 100' of the project site. However, due to the scope of the activity proposed, DCR does not anticipate any negative impacts to the natural area preserves and associated natural heritage resources.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

New and updated information is continually added to Biotics. Please re-submit project information and map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

The Virginia Department of Wildlife Resources (VDWR) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from https://vafwis.dgif.virginia.gov/fwis/ or contact Ernie Aschenbach at 804-367-2733 or

600 East Main Street, 24th Floor | Richmond, Virginia 23219 | 804-786-6124

State Parks • Soil and Water Conservation • Outdoor Recreation Planning
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation

Ernie.Aschenbach@dwr.virginia.gov. Documented occurrences of state and federally listed animals are located within the submitted project boundary including a 100-foot buffer. Therefore, DCR recommends coordination with the US Fish and Wildlife Service (USFWS) and the VDWR to ensure compliance with protected species legislation.

Division of Dam Safety and Floodplain Management

Floodplain Management Program:
The National Flood Insurance Program (NFIP) is administered by the Federal Emergency Management Agency (FEMA), and communities who elect to participate in this voluntary program manage and enforce the program on the local level through that community's local floodplain ordinance. Each local floodplain ordinance must comply with the minimum standards of the NFIP, outlined in 44 CFR 60.3; however, local communities may adopt more restrictive requirements in their local floodplain ordinance, such as regulating the 0.2% annual chance flood zone (Shaded X Zone).

All development within a Special Flood Hazard Area (SFHA), as shown on the locality's Flood Insurance Rate Map (FIRM), must be permitted and comply with the requirements of the local floodplain ordinance.

State Agency Projects Only
Executive Order 45, signed by Governor Northam and effective on November 15, 2019, establishes mandatory standards for development of state-owned properties in Flood-Prone Areas, which include Special Flood Hazard Areas, Shaded X Zones, and the Sea Level Rise Inundation Area. These standards shall apply to all state agencies.

1. Development in Special Flood Hazard Areas and Shaded X Zones
    A. All development, including buildings, on state-owned property shall comply with the locally-adopted floodplain management ordinance of the community in which the state-owned property is located and any flood-related standards identified in the Virginia Uniform Statewide Building Code.
    B. If any state-owned property is located in a community that does not participate in the NFIP, all development, including buildings, on such state-owned property shall comply with the NFIP requirements as defined in 44 CFR §§ 60.3, 60.4, and 60.5 and any flood-related standards identified in the Virginia Uniform Statewide Building Code.
        (1) These projects shall be submitted to the Department of General Services (DGS), for review and approval.
        (2) DGS shall not approve any project until the State NFIP Coordinator has reviewed and approved the application for NFIP compliance.
        (3) DGS shall provide a written determination on project requests to the applicant and the State NFIP Coordinator. The State NFIP Coordinator shall maintain all documentation associated with the project in perpetuity.
    C. No new state-owned buildings, or buildings constructed on state-owned property, shall be constructed, reconstructed, purchased, or acquired by the Commonwealth within a Special Flood Hazard Area or Shaded X Zone in any community unless a variance is granted by the Director of DGS, as outlined in this Order.

The following definitions are from Executive Order 45:

Development for NFIP purposes is defined in 44 CFR § 59.1 as "Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials."

The Special Flood Hazard Area may also be referred to as the 1% annual chance floodplain or the 100-year floodplain, as identified on the effective Flood Insurance Rate Map and Flood Insurance Study. This includes the following flood zones: A, AO, AH, AE, A99, AR, AR/AE, AR/AO, AR/AH, AR/A, VO, VE, or V.

The Shaded X Zone may also be referred to as the 0.2% annual chance floodplain or the 500-year floodplain, as identified on the effective Flood Insurance Rate Map and Flood Insurance Study.

The Sea Level Rise Inundation Area referenced in this Order shall be mapped based on the National Oceanic and Atmospheric Administration Intermediate-High scenario curve for 2100, last updated in 2017, and is intended to denote the maximum inland boundary of anticipated sea level rise.

"State agency" shall mean all entities in the executive branch, including agencies, offices, authorities, commissions, departments, and all institutions of higher education.

"Reconstructed" means a building that has been substantially damaged or substantially improved, as defined by the NFIP and the Virginia Uniform Statewide Building Code.

Federal Agency Projects Only
Projects conducted by federal agencies within the SFHA must comply with federal Executive Order 11988: Floodplain Management.

DCR's Floodplain Management Program does not have regulatory authority for projects in the SFHA. The applicant/developer must contact the local floodplain administrator for an official floodplain determination and comply with the community's local floodplain ordinance, including receiving a local permit. Failure to comply with the local floodplain ordinance could result in enforcement action from the locality. For state projects, DCR recommends that compliance documentation be provided prior to the project being funded. For federal projects, the applicant/developer is encouraged reach out to the local floodplain administrator and comply with the community's local floodplain ordinance.

To find flood zone information, use the Virginia Flood Risk Information System (VFRIS): www.dcr.virginia.gov/vfris

To find community NFIP participation and local floodplain administrator contact information, use DCR's Local Floodplain Management Directory: www.dcr.virginia.gov/dam-safety-and-floodplains/floodplain-directory

The remaining DCR divisions have no comments regarding the scope of this project. Thank you for the opportunity to comment.

CC: Troy Andersen, USFWS
Amy Ewing, VDWR

Commonwealth of Virginia

Wellman, Julia <julia.wellman@deq.virginia.gov>

ESSLog# 41279_21-056F_Patuxent River Testing_DWR_AME20210528

1 message

Ewing, Amy <amy.ewing@dwr.virginia.gov> Fri, May 28, 2021 at 11:08 AM
To: Julia Wellman <julia.wellman@deq.virginia.gov>

Julia,
We have reviewed the FCD prepared for ongoing testing and training activities at Patuxent River Navy Complex in Maryland, airspace of which encroaches into Virgina.

We find this project to be consistent with the Wildlife and Inland Fisheries and Commonwealth Lands Enforceable Policies of the Coastal Zone Management Program.

Thanks, Amy

Amy Martin Ewing
Environmental Services Biologist
Manager, Wildlife Information
she/her/hers
P 804.367.2211
Department of Wildlife Resources
CONSERVE. CONNECT. PROTECT.
A 7870 Villa Park Drive, P.O. Box 90778, Henrico, VA 23228
www.VirginiaWildlife.gov

I.3 Negative Determination for Delaware

DCMP Fed Con Form v.2.0

Delaware Department of Natural Resources and Environmental Control
Delaware Coastal Management Program

Initial Review: _____
Updated On: _____
Complete: _____
Official Use Only

Coastal Zone Management Act Federal Consistency Form

This document provides the Delaware Coastal Management Program (DCMP) with a Federal Consistency Determination or Certification for activities regulated under the Coastal Zone Management Act of 1972, as amended, and NOAA's Federal Consistency Regulations, 15 C.F.R. Part 930. Federal agencies and other applicants for federal consistency are not required to use this form; it is provided to applicants to facilitate the submission of a Consistency Determination or Consistency Certification. In addition, federal agencies and applicants are only required to provide the information required by NOAA's Federal Consistency Regulations.

Project/Activity Name:	Navy Testing and Training Activities in the Patuxent River Complex

I. Federal Agency or Non-Federal Applicant Contact Information:

Contact Name/Title: Crystal Ridgell / Environmental Scientist

Federal Agency Contractor Name (if applicable): _____

Federal Agency: Naval Air Warfare Center, Aircraft Division
(either the federal agency proposing an action or the federal agency issuing a federal license/permit or financial assistance to a non-federal applicant)

Mailing Address: 23013 Cedar Point Road, Building 2118

City: Patuxent River State: MD Zip Code: 20670

E-mail: Crystal.L.Ridgell@navy.mil Telephone #: (301) 757-5282

II. Federal Consistency Category:

- (●) Federal Activity or Development Project (15 C.F.R. Part 930, Subpart C)
- ( ) Outer Continental Shelf Activity (15 C.F.R. Part 930, Subpart E)
- ( ) Federal Financial Assistance (15 C.F.R. Part 930, Subpart F)
- ( ) Federal License or Permit Activity (15 C.F.R. Part 930, Subpart D)
- ( ) Federal License or Permit Activity which occurs wholly in another state (interstate consistency activities identified in DCMP's Policy document)

III. Detailed Project Description (attach additional sheets if necessary):

The Proposed Action is to continue conducting military testing and training activities within the Patuxent River Complex (PRC) to meet current and projected military readiness requirements. The PRC is primarily located in Maryland, but portions of special use airspace extend over portions of Virginia and Delaware. Proposed activities in Delaware are limited to high altitude testing and training flights. These flights would occur in existing special use airspace units (i.e., R-4008 [25,000 ft to 85,000 ft] and the Chessie Air Traffic Control Assigned Airspace Unit A [27,000 ft to 41,000 ft]). See attached Figure. Use of the Chessie ATCAA is infrequent and scheduling is coordinated with the Washington Air Route Traffic Control Center. Based on low use frequency and high altitude, proposed aircraft flight activity is not expected to affect Delaware coastal uses or resources, as set forth in Sections IV and V below.

1

DCMP Fed Con Form v.2.0

IV. General Analysis of Coastal Effects (attach additional sheets if necessary):

The proposed federal activity will not have any reasonably foreseeable effects on a Delaware coastal use or resource.

V. Detailed Analysis of Consistency with DCMP Enforceable Policies (attach additional sheets if necessary)**:**

Policy 5.1: Wetlands Management

The proposed action does not include construction or landscape modification activity that may encroach upon wetlands. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.2: Beach Management

The proposed action does not include construction of facilities, operation of vehicles on beaches, or restrictions to public beaches. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.3: Coastal Waters Management (includes wells, water supply, and stormwater management. Attach additional sheets if necessary)

The proposed action does not include actions that take place in or affect coastal waters and water resources of Delaware. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.4: Subaqueous Land and Coastal Strip Management

The proposed action does not include actions that take place in submerged lands or tidelands of Delaware. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.5: Public Lands Management

The proposed action does not include operations restricting public access to Delaware state lands. Therefore, the provisions under this policy are not applicable to the proposed action.

2

DCMP Fed Con Form v.2.0

Policy 5.6: Natural Lands Management

The proposed action consists of utilizing airspace for overflights of aircraft. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.7: Flood Hazard Areas Management

The proposed action will not take place in area identified by the Federal Emergency Management Act (FEMA) as a Flood Hazard Area. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.8: Port of Wilmington

The proposed action will have no actions that take place near or interfere with operations of the Port of Wilmington. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.9: Woodlands and Agricultural Lands Management

The proposed action will not involve the removal of trees or take place in agricultural lands. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.10: Historic and Cultural Areas Management

The proposed action will not have an adverse effect on historic properties in Delaware. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.11: Living Resources

The proposed action will not have an adverse environmental effect on living resources of Delaware. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.12 Mineral Resources Management

The proposed action will not include extraction and production of minerals. Therefore, the provisions under this policy are not applicable to the proposed action.

3

DCMP Fed Con Form v.2.0

Policy 5.13: State Owned Coastal Recreation and Conservation

The proposed action will not include altering of state owned lands where natural condition or present state of use would maintain or enhance the conservation of natural, cultural, or historic resources of Delaware. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.14: Public Trust Doctrine

The proposed action will not have an effect on the public's right of navigation and fishery on streams where the tide ebbs and flows. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.15: Energy Facilities

The proposed action will not include development or modification of energy facilities. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.16: Public Investment

The proposed action will not impact items that pertain to the public's investment interest. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.17: Recreation and Tourism

The proposed action does not include an impact to recreation and tourism of resources in Delaware. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.18: National Defense and Aerospace Facilities

The proposed action does not include siting of National Defense and Aerospace Facilities. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.19: Transportation Facilities

The proposed action does not include development or expansion of any transportation facilities. Therefore, the provisions under this policy are not applicable to the proposed action.

4

DCMP Fed Con Form v.2.0

Policy 5.20: Air Quality Management

The proposed action does not establish or operate an air source in the State of Delaware. Aircraft traversing Delaware airspace will emit pollutants, however it will be at an altitude where pollutants would be dispersed and would not mix with or affect ground-level air quality. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.21: Water Supply Management

The proposed action does not include impacts to the state's water supply management. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.22: Waste Disposal Management

The proposed action does not include impacts to the state's waste disposal management. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.23: Development

The proposed action does not include development of new facilities or construction of infrastructure in the project area. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.24: Pollution Prevention

The proposed action does not include generation of wastes. Therefore, the provisions under this policy are not applicable to the proposed action.

Policy 5.25: Coastal Management Coordination

The proposed action is a federal action. Therefore, the provisions under this policy are not applicable to the proposed action. In compliance with the National Environmental Policy Act, the Navy will provide state, federal, and other interested parties an opportunity to review and comment on the proposed action.

VI. JPP and RAS Review (Check all that apply)**:**

Has the project been reviewed in a monthly Joint Permit Processing and/or Regulatory Advisory Service meeting?

☐ JPP ☐ RAS ■ None

*If yes, provide the date of the meeting(s): _____

5

DCMP Fed Con Form v.2.0

VII. Statement of Certification/Determination and Signature (Check one and sign below)**:**

☐ **FEDERAL AGENCY CONSISTENCY DETERMINATION.** Based upon the information, data, and analysis included herein, the federal agency, or its contracted agent, listed in (I) above, finds that this proposed activity is consistent to the maximum extent practicable with the enforceable policies of the Delaware Coastal Management Program.

OR

☒ **FEDERAL AGENCY NEGATIVE DETERMINATION.** Based upon the information, data, and analysis included herein, the federal agency, or its contracted agent, listed in (I) above, finds that this proposed activity will not have any reasonably foreseeable effects on Delaware's coastal uses or resources (Negative Determination) and is therefore consistent with the enforceable policies of the Delaware Coastal Management Program.

OR

☐ **NON-FEDERAL APPLICANT'S CONSISTENCY CERTIFICATION.** Based upon the information, data, and analysis included herein, the non-federal applicant for a federal license or permit, or state or local government agency applying for federal funding, listed in (I) above, finds that this proposed activity complies with the enforceable policies of the Delaware Coastal Management Program and will be conducted in a manner consistent with such program.

Signature:	MARKOWICH.AMY.J.1232247904 Digitally signed by MARKOWICH.AMY.J.1232247904 Date: 2021.03.25 09:06:33 -04'00'		
Printed Name:	Amy J. Markowich	Date:	03/25/2021

Pursuant to 15 C.F.R. Part 930, the Delaware Coastal Management Program must provide its concurrence with or objection to this consistency determination or consistency certification in accordance with the deadlines listed below. Concurrence will be presumed if the state's response is not received within the allowable timeframe.

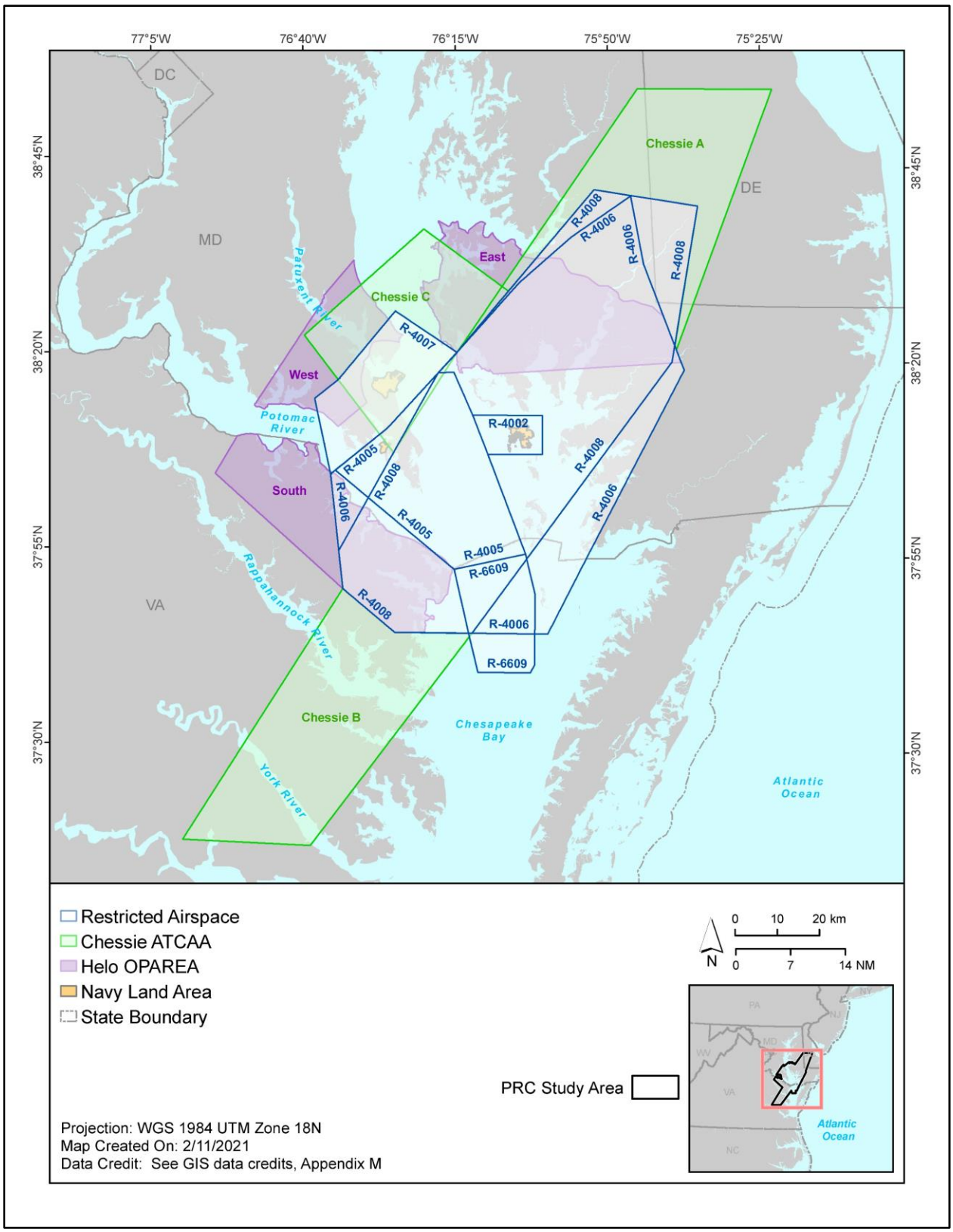
Federal Consistency Review Deadlines:

Federal Activity or Development Project (15 C.F.R. Part 930, Subpart C)	60 days with option to extend an additional 15 days or stay review (15 C.F.R. § 930.41)
Federal License or Permit (15 C.F.R. Part 930, Subpart D)	Six months, with a status letter at three months. The six month review period can be stayed by mutual agreement. (15 C.F.R. § 930.63)
Outer Continental Shelf Activity (15 C.F.R. Part 930, Subpart E)	Six months, with a status letter at three months. If three month status letter not issued, then concurrence presumed. The six month review period can be stayed by mutual agreement. (15 C.F.R. § 930.78)
Federal Financial Assistance to State or Local Governments (15 C.F.R. Part 930, Subpart F)	State Clearinghouse schedule

OFFICIAL USE ONLY:

Reviewed By:	Fed Con ID:	Date Received:
Public notice dates: to	Comments Received: ☐ NO ☐ YES *[attach comments]*	
Decision type: *(objections or conditions attach details)*	_ Decision Date:	

6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West
South
Chessie B
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R-4005
R-4006
R-4008
R-6609
Patuxent River
Potomac River
Rappahannock River
York River
Chesapeake Bay
Atlantic Ocean
Restricted Airspace
Chessie ATCAA
Helo OPAREA
Navy Land Area
State Boundary
PRC Study Area
N
0 10 20 km
0 7 14 NM
Projection: WGS 1984 UTM Zone 18N
Map Created On: 2/11/2021
Data Credit: See GIS data credits, Appendix M

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
DIVISION OF CLIMATE, COASTAL & ENERGY
STATE STREET COMMONS
100 W. WATER STREET, SUITE 7B
DOVER, DELAWARE 19904

DELAWARE COASTAL MANAGEMENT PROGRAM

PHONE
(302) 739-9283

May 12, 2021

Crystal Ridgell
Naval Air Warfare Center, Aircraft Division
23013 Cedar Point Road, Building 2118
Patuxent River, MD 20670

RE: Delaware Coastal Management Program — Federal Consistency Negative Determination for Department of Navy Patuxent River Complex (FC 2021.0059)

Dear Ms. Ridgell,

The Delaware Coastal Management Program (DCMP) of the Delaware Department of Natural Resources and Environmental Control (DNREC) has completed its review of the above referenced project. This letter is in response to the federal consistency negative determination received by this office on May 3, 2021, submitted by you on behalf of the United States Navy.

PROPOSED ACTION

The United States Navy is proposing to continue conducting military testing and training activities within the Patuxent River Complex (PRC) to meet current and projected military readiness requirements. The PRC is primarily located in Maryland, but portions of special use airspace extend over portions of Virginia and Delaware. Proposed activities in Delaware are limited to high altitude testing and training flights.

The United States Navy has determined there will not be coastal effects as a result of this activity.

FEDERAL CONSISTENCY UNDER THE COASTAL ZONE MANAGEMENT ACT

Pursuant to the Coastal Zone Management Act (CZMA) of 1972, as amended, each federal agency activity within or outside the coastal zone that can have reasonably foreseeable effects on any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved state management programs. The National Oceanic and Atmospheric Administration (NOAA) is required to review and approve a proposed state management program for it to become effective.

Under the CZMA implementing regulations, Federal Consistency with Approved Coastal Management Programs (15 CFR 930), subpart C, if a federal agency determines that there will not be coastal effects, then the federal agency shall provide the state agencies with a negative determination for a federal agency activity, which has been identified by a state on a list or through case-by-case monitoring, is the same or similar to other activities for which a negative determination has been issued in the past, or for which the federal agency undertook a thorough analysis of coastal effects. A negative determination may be submitted to state agencies in any written form so long as it contains a brief description of the activity, the activity's location and the basis for the federal agency's determination that the activity will not affect any coastal use or resource.

PUBLIC PARTICIPATION

In accordance with 15 CFR §930.35(e), state agencies are not required to provide public notice of the receipt of a negative determination or the resolution of an objection to a negative determination, unless a federal agency submits a consistency determination pursuant to 15 CFR §930.34.

FEDERAL CONSISTENCY ANALYSIS

The DNREC DCMP coordinates the review of consistency determinations with agencies administering the enforceable and advisory policies of the program.

CONCURRENCE

Based on its review and pursuant to 15 CFR 930, the DCMP concurs that the project as proposed would result in no coastal effects.

Pursuant to 15 CFR 930.46, the United States Navy shall notify the DCMP of any proposed modifications to activities after receiving a decision from the DCMP. Modifications will be subject to supplemental federal consistency review if effects to any coastal use or resource will be substantially different than originally described.

Please be advised that this federal consistency review does not negate the need for other authorizations that may be required.

Thank you for the opportunity to review and respond to your federal consistency negative determination. If you have any questions, please contact me or Mike Snyder of my staff at (302) 739-9283.

Sincerely,

Kimberly B. Cole, Administrator
Delaware Coastal Management Program

KBC/ms
cc: File FC 2021.0059

Appendix J
National Historic Preservation Act Documentation

Table of Contents

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J.1 Maryland Historical Trust Correspondence

DEPARTMENT OF THE NAVY

NAVAL AIR STATION
22268 CEDAR POINT ROAD
PATUXENT RIVER, MARYLAND 20670-1154

5090
Ser N45/308
March 3, 2021

Ms. Beth Cole
State Historic Preservation Office
Maryland Historical Trust
100 Community Place
Crownsville, MD 21032-2023

Dear Ms. Cole:

SUBJECT: PATUXENT RIVER COMPLEX (PRC) TESTING AND TRAINING, RENEWAL OF SECTION 106 CONSULTATION

The purpose of this letter is to renew Section 106 consultation, per the National Historic Preservation Act of 1966, for a Department of the Navy (Navy) undertaking of continued testing and training in the Patuxent River Complex (PRC), St. Mary's County, Maryland. The Navy is preparing an updated Environmental Impact Statement (EIS) to evaluate the potential effects of increasing aircraft flight, ground-based, and surface/subsurface activities within the PRC Study Area.

Project Description. The Proposed Action is to continue conducting military testing and training activities within the PRC to meet current and projected military readiness requirements. This action includes testing and training activities analyzed in the 1998 PRC EIS and subsequent Environmental Assessments, as well as adjustments to current testing and training activities required to support projected Navy military readiness requirements into the foreseeable future and in the event of increased global conflict. The EIS consolidates the testing and training activities analyzed in these previous documents and addresses the following adjustments to current testing and training:

- Additional aircraft flight hours and adjustments in aircraft mix (e.g., increased unmanned aerial system [UAS] platforms).
- Additional use of non-explosive munitions and other military expended materials (MEM).
- Additional surface vessel and subsurface vehicle traffic in PRC waters.
- Adjustments in the types of mission systems being integrated and tested in aircraft and surface and subsurface platforms (e.g., anti-submarine warfare [ASW] and mine countermeasure [MCM] systems).
- Expanded use of the Patuxent River Seaplane Area.

5090
Ser N45/308
March 3, 2021

- Addition of active sonobuoy testing in conjunction with helicopter dipping sonar tests.
- Testing of new technologies to address new and emerging threats (e.g., directed energy weapons systems).

The 1998 PRC EIS defined the PRC as Naval Air Station (NAS) Patuxent River and Outlying Field Webster flight and ground test facilities and airfields along with the Atlantic Test Ranges restricted airspace, Chesapeake Bay Water Range, and fixed target areas. This Proposed Action expands the PRC Study Area to include land, water, and airspace historically and currently used by the Navy that were not assessed in the previous EIS. These include Bloodsworth Island Range, waters beneath the restricted airspace outside the Chesapeake Bay Water Range, and surrounding Federal Aviation Administration airspace including Helicopter Operating Areas (Helo OPAREAs) and Chessie Air Traffic Control Assigned Airspace.

Area of Potential Effect. The Navy has defined the Area of Potential Effect (APE) to include the entire PRC and the visible view shed surrounding the complex. Maps of the PRC and the APE are enclosed.

Identified Historic Properties - Archaeological Sites. For all the Proposed Action alternatives, no ground-disturbing activities will occur in soils not previously disturbed. Therefore, land-based archaeological resources will not be affected by the undertaking. In addition, there are no identified traditional cultural properties or sacred sites at any of the installations under NAS Patuxent River jurisdiction that are in the APE.

The only possible disturbance to archaeological sites may come from non-explosive MEM which may disturb in-water cultural resources such as shipwrecks. However, most MEM in the Chesapeake Bay Water Range will be focused around current munition concentration areas (Enclosure 2, Chesapeake Bay Water Range Munition Concentration Areas). These areas have been targeted through the decades, and it is very unlikely that any intact deposits would still survive today. While none of the underwater cultural resources in the Chesapeake Bay Water Range are determined to be eligible for the National Register of Historic Places (NRHP), they have yet to be evaluated. As targets will not be placed near recorded sites, this undertaking will not impact underwater cultural resources that may be eligible for the NRHP.

Underwater Cultural Resources within the Chesapeake Bay Water Range

Site Number	*Type*	*Description*	*NRHP Status*
18ST847	Aircraft Wreck	WWII aircraft wreck, XF8F-1 Bearcat	Not Evaluated
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18ST869	Shipwreck	NAS Patuxent River Target Barge	Not Evaluated

2

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Ser N45/308
March 3, 2021

18ST870	Shipwreck	NAS Target West Buoy Wreck	Not Evaluated
18DO494	Shipwreck	Buoy 72A wreck	Not Evaluated
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Sources: (Maryland Historical Trust, 2019)
Key: N/A = not available; NAS = Naval Air Station; NRHP = National Register of Historic Places; WWII = World War II.

Identified Historic Properties - Architectural Resources. The APE touches six counties of Maryland, in which 117 properties are listed or eligible for inclusion to the NHRP located within the APE. While the APE is quite broad, few will notice the impacts caused by the proposed increased activity. As the undertaking does not include construction or demolition, the most severe impact to the built environment would be noise. The results of our noise and vibration studies lead us to believe the overpressures generated by supersonic overflight will be well below established damage thresholds to sites and structures. Therefore, subsonic noise and sonic booms associated with continuation of existing testing and training activities will not be of sufficient magnitude to impact historic properties under the airspace.

High or irregular noise levels can undermine the quality of life at a historic property and interfere with learning. The current baseline noise levels beneath the PRC Study Area airspace are between less than 35 A-weighted sound level (dBA) and 52.9 dBA. Under Alternative 1, subsonic noise levels would increase by between 0.5 dBA to 1.8 dBA, with the greatest increase in the West Helo OPAREA, from 44.3 dBA to 46.1 dBA in PRC airspace areas. With Alternative 2, increased aircraft testing and training activities would be incrementally higher than Alternative 1, and noise levels would increase over existing conditions by between 1 dBA to 2.3 dBA, with the greatest increase in the West Helo OPAREA from 44.3 dBA to 46.6 dBA. For most people, changes in A-weighted noise levels of less than 2 dBA would not be noticeable.

Finding of Effect: The Proposed Action alternatives do not involve impacts related to construction or demolition. The only new impact to the built environment would be related to aircraft noise. The incremental increase in overflights over any of the historic resources would be infrequent and of short duration, resulting in a fleeting and minor change to the historic setting. We find that the minimal increase in visual or audible elements would not diminish the integrity of the properties' historical attributes or alter the characteristics that qualify them for inclusion in the NRHP. Therefore, we find that all alternatives in the proposed undertaking will have a no adverse effect on historical properties.

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5090
Ser N45/308
March 3, 2021

If you have any questions, please contact Craig Lukezic, Cultural Resources Program Manager, by telephone at (301) 757-4774 or by email at craig.lukezic@navy.mil.

Sincerely,

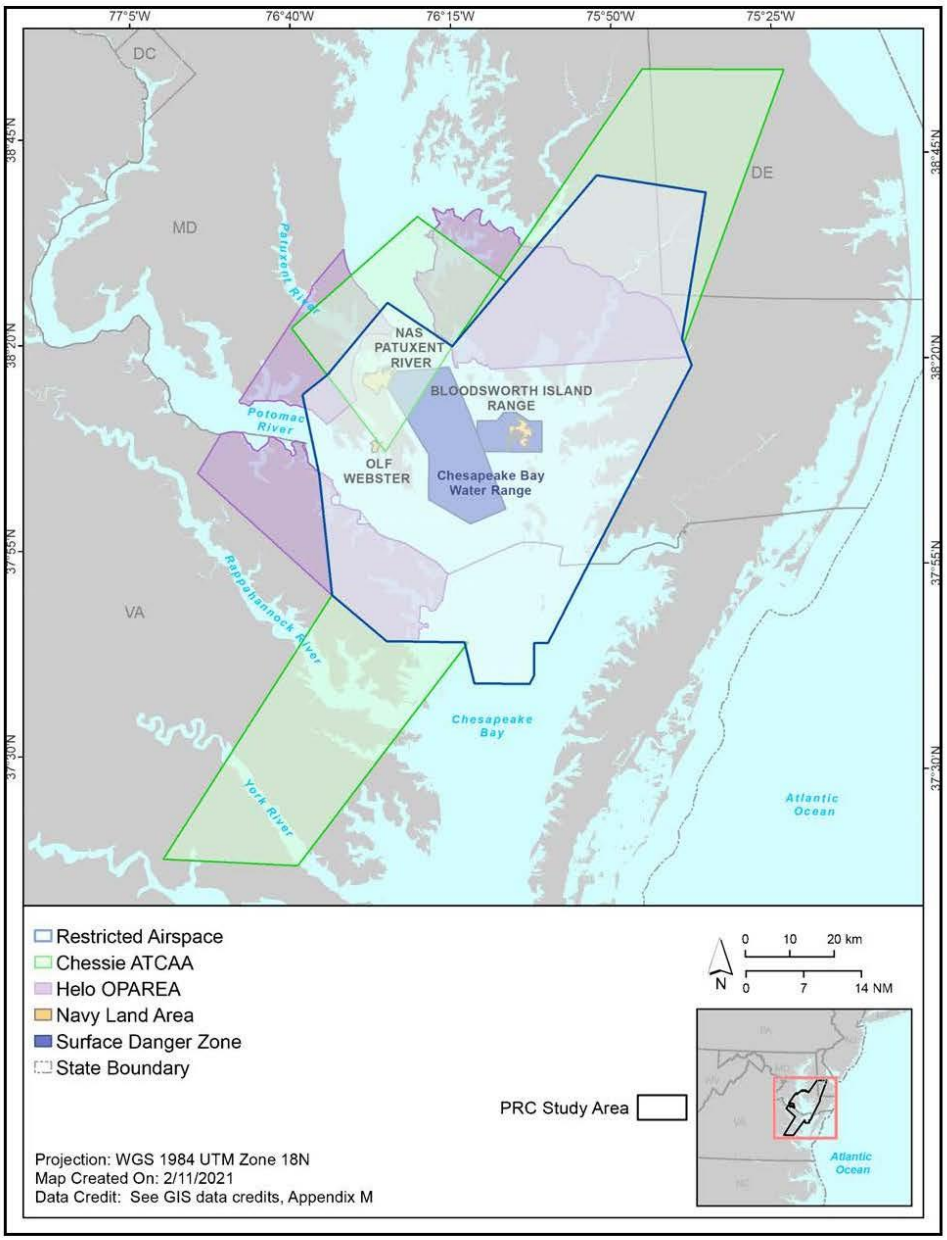
MCDANIEL.LANCE.E.1204352972 Digitally signed by MCDANIEL.LANCE.E.1204352972 Date: 2021.03.03 13:08:55 -05'00'

L. E. McDANIEL
Installation Environmental Director
By direction
of the Commanding Officer

Enclosures: 1. Location Map and Area of Potential Effect
2. Chesapeake Bay Water Range Munition Concentration Areas

4

Enclosure 1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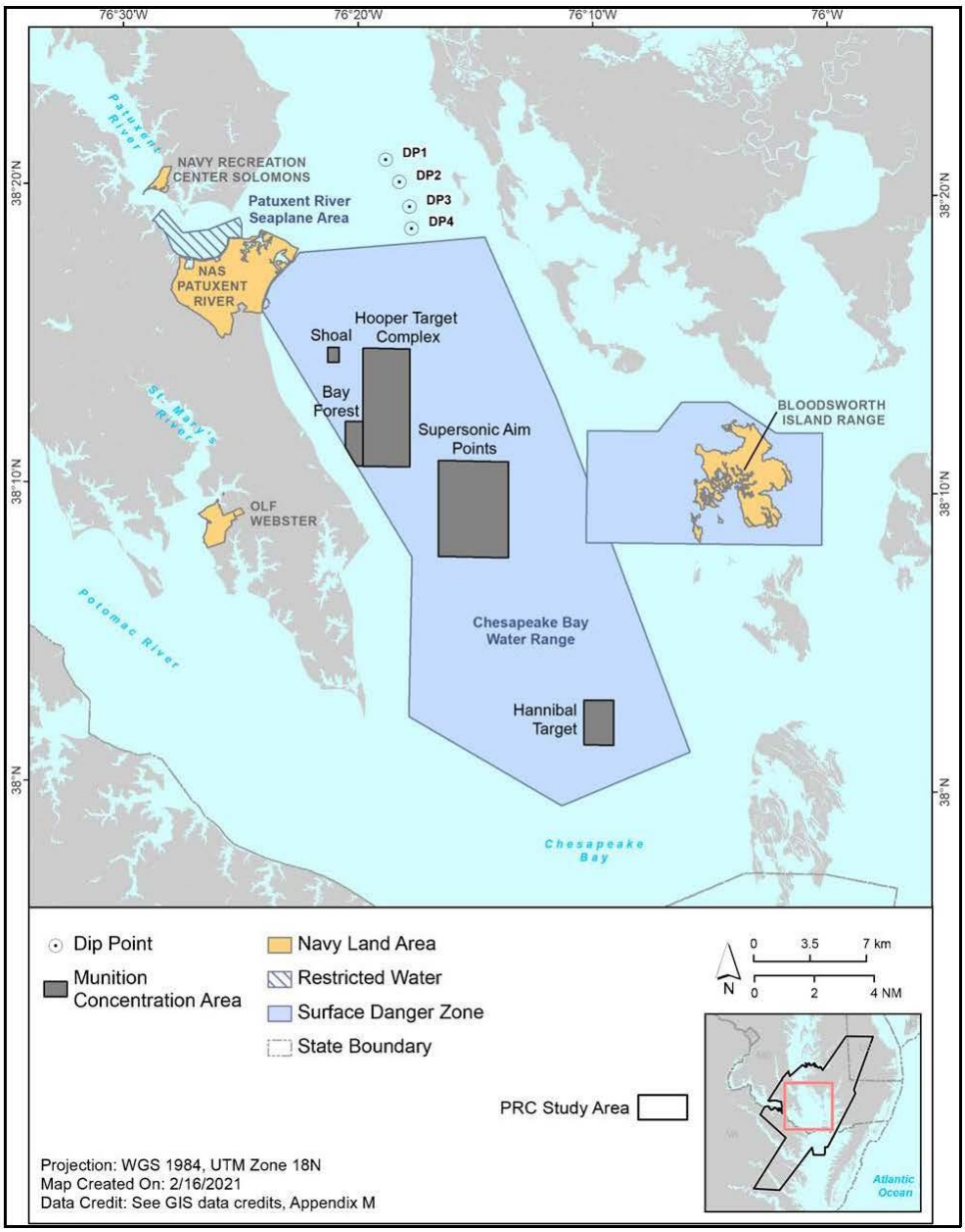
Map Created On: 2/11/2021
Data Credit: See GIS data credits, Appendix M

Enclosure 2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Patuxent River
NAVY RECREATION CENTER SOLOMONS
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NAS PATUXENT RIVER
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DP2
DP3
DP4
Hooper Target Complex
Shoal
Bay Forest
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Atlantic Ocean
Projection: WGS 1984, UTM Zone 18N
Map Created On: 2/16/2021
Data Credit: See GIS data credits, Appendix M

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BY:_____

DEPARTMENT OF THE NAVY

NAVAL AIR STATION
22268 CEDAR POINT ROAD
PATUXENT RIVER, MARYLAND 20670-1154

5090
Ser N45/308
March 3, 2021

Ms. Beth Cole
State Historic Preservation Office
Maryland Historical Trust
100 Community Place
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The Maryland Historical Trust has determined that this undertaking will have no adverse effect on historic properties.

Date 4/1/21

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Sincerely,

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L. E. McDANIEL
Installation Environmental Director
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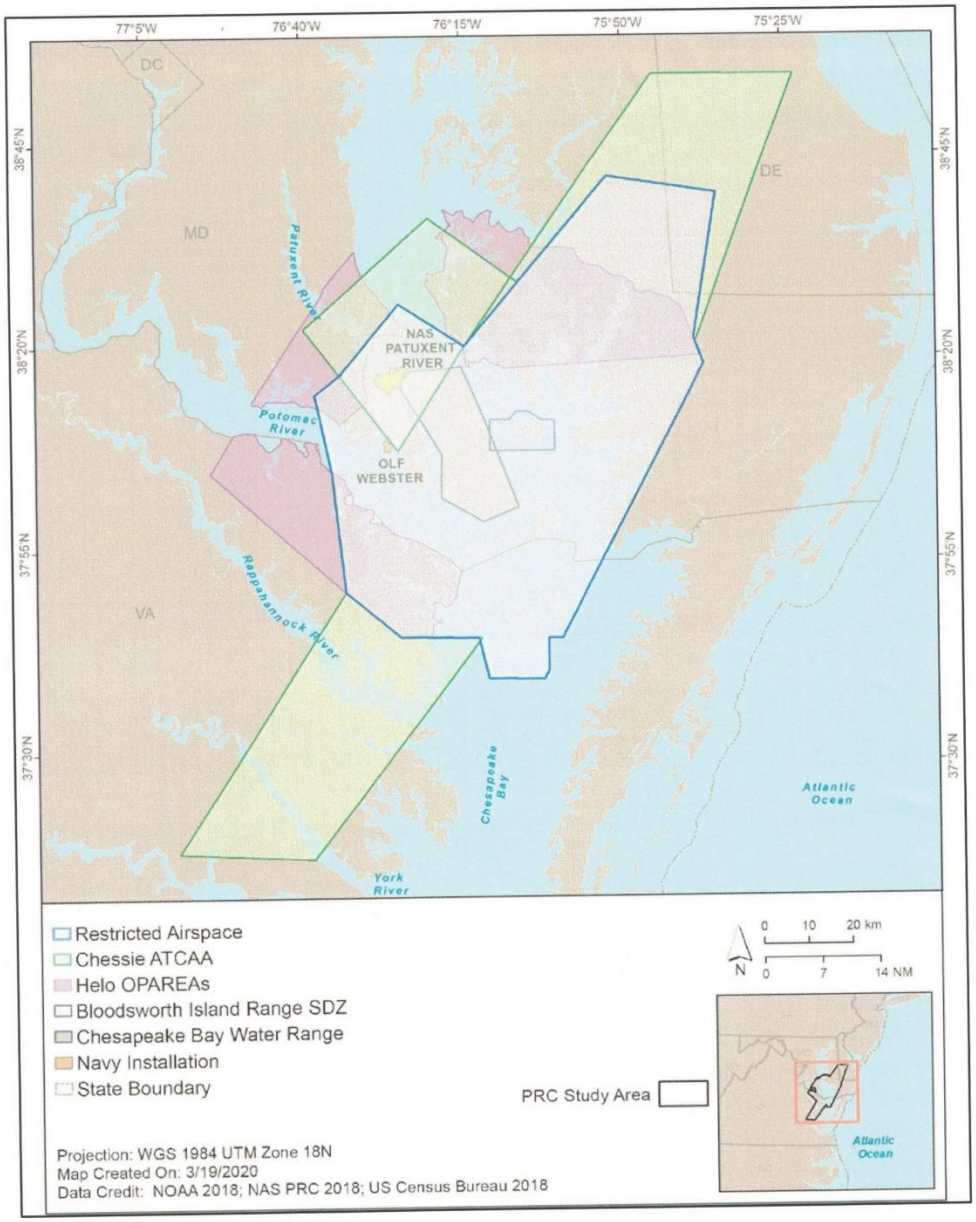
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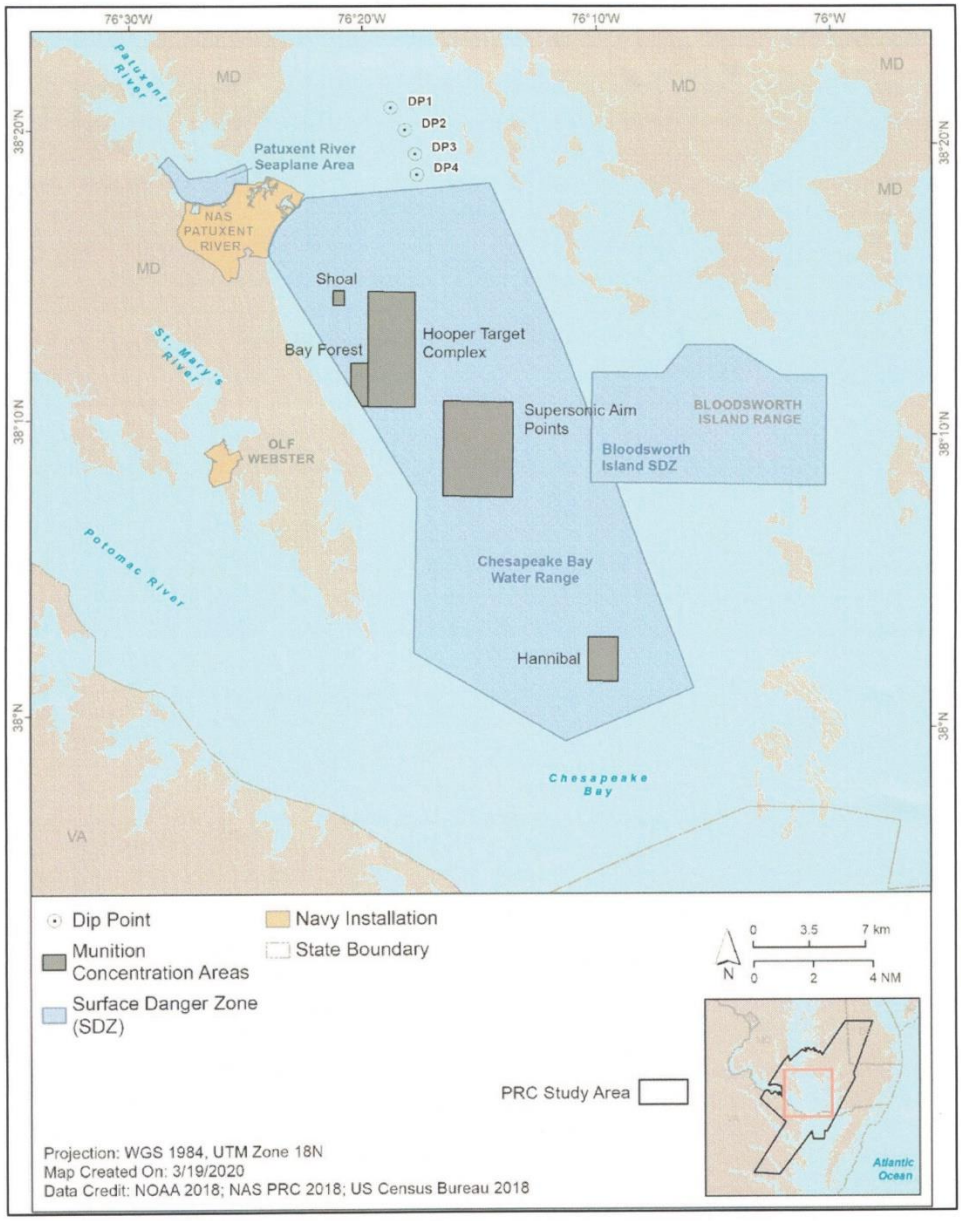
Data Credit: NOAA 2018; NAS PRC 2018; US Census Bureau 2018

Enclosure (1)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Enclosure (2)

J.2 Virginia Department of Historic Resources Correspondence

DEPARTMENT OF THE NAVY

NAVAL AIR STATION
22268 CEDAR POINT ROAD
PATUXENT RIVER, MARYLAND 20670-1154

5090
Ser N45/308
March 3, 2021

Ms. Rodger Kirchen
Director, Division of Review and Compliance
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221

Dear Mr. Kirchen:
SUBJECT: PATUXENT RIVER COMPLEX (PRC) TESTING AND TRAINING, RENEWAL OF SECTION 106 CONSULTATION

The purpose of this letter is to renew Section 106 consultation, per the National Historic Preservation Act of 1966, for a Department of the Navy (Navy) undertaking of continued testing and training in the Patuxent River Complex (PRC), St. Mary's County, Maryland. The Navy is preparing an updated Environmental Impact Statement (EIS) to evaluate the potential effects of increasing aircraft flight, ground-based, and surface/subsurface activities within the PRC Study Area.

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N/A	Shipwreck	Hannibal (former direct-impact target)	Not Evaluated
N/A	Shipwreck	American Mariner (current direct-impact target)	Not Evaluated
18ST869	Shipwreck	NAS Patuxent River Target Barge	Not Evaluated
18ST870	Shipwreck	NAS Target West Buoy Wreck	Not Evaluated

2

5090
Ser N45/310
March 3, 2021

18DO494	Shipwreck	Buoy 72A wreck	Not Evaluated
18ST892	Shipwreck	Cedar Point Schooner	Not Evaluated
18ST893	Shipwreck	Cedar Point Barge	Not Evaluated

Sources: (Maryland Historical Trust, 2019)
Key: N/A = not available; NAS = Naval Air Station; NRHP = National Register of Historic Places; WWII = World War II.

Identified Historic Properties - Architectural Resources. The APE touches six counties of Maryland, in which 117 properties are listed or eligible for inclusion to the NHRP located within the APE. While the APE is quite broad, few will notice the impacts caused by the proposed increased activity. As the undertaking does not include construction or demolition, the most severe impact to the built environment would be noise. The results of our noise and vibration studies lead us to believe the overpressures generated by supersonic overflight will be well below established damage thresholds to sites and structures. Therefore, subsonic noise and sonic booms associated with continuation of existing testing and training activities will not be of sufficient magnitude to impact historic properties under the airspace.

High or irregular noise levels can undermine the quality of life at a historic property and interfere with learning. The current baseline noise levels beneath the PRC Study Area airspace are between less than 35 A-weighted sound level (dBA) and 52.9 dBA. Under Alternative 1, subsonic noise levels would increase by between 0.5 dBA to 1.8 dBA, with the greatest increase in the West Helo OPAREA, from 44.3 dBA to 46.1 dBA in PRC airspace areas. With Alternative 2, increased aircraft testing and training activities would be incrementally higher than Alternative 1, and noise levels would increase over existing conditions by between 1 dBA to 2.3 dBA, with the greatest increase in the West Helo OPAREA from 44.3 dBA to 46.6 dBA. For most people, changes in A-weighted noise levels of less than 2 dBA would not be noticeable.

Finding of Effect: The Proposed Action alternatives do not involve impacts related to construction or demolition. The only new impact to the built environment would be related to aircraft noise. The incremental increase in overflights over any of the historic resources would be infrequent and of short duration, resulting in a fleeting and minor change to the historic setting. We find that the minimal increase in visual or audible elements would not diminish the integrity of the properties' historical attributes or alter the characteristics that qualify them for inclusion in the NRHP. Therefore, we find that all alternatives in the proposed undertaking will have a no adverse effect on historical properties.

3

5090
Ser N45/310
March 3, 2021

If you have any questions, please contact Craig Lukezic, Cultural Resources Program Manager, by telephone at (301) 757-4774 or by email at craig.lukezic@navy.mil.

Sincerely,

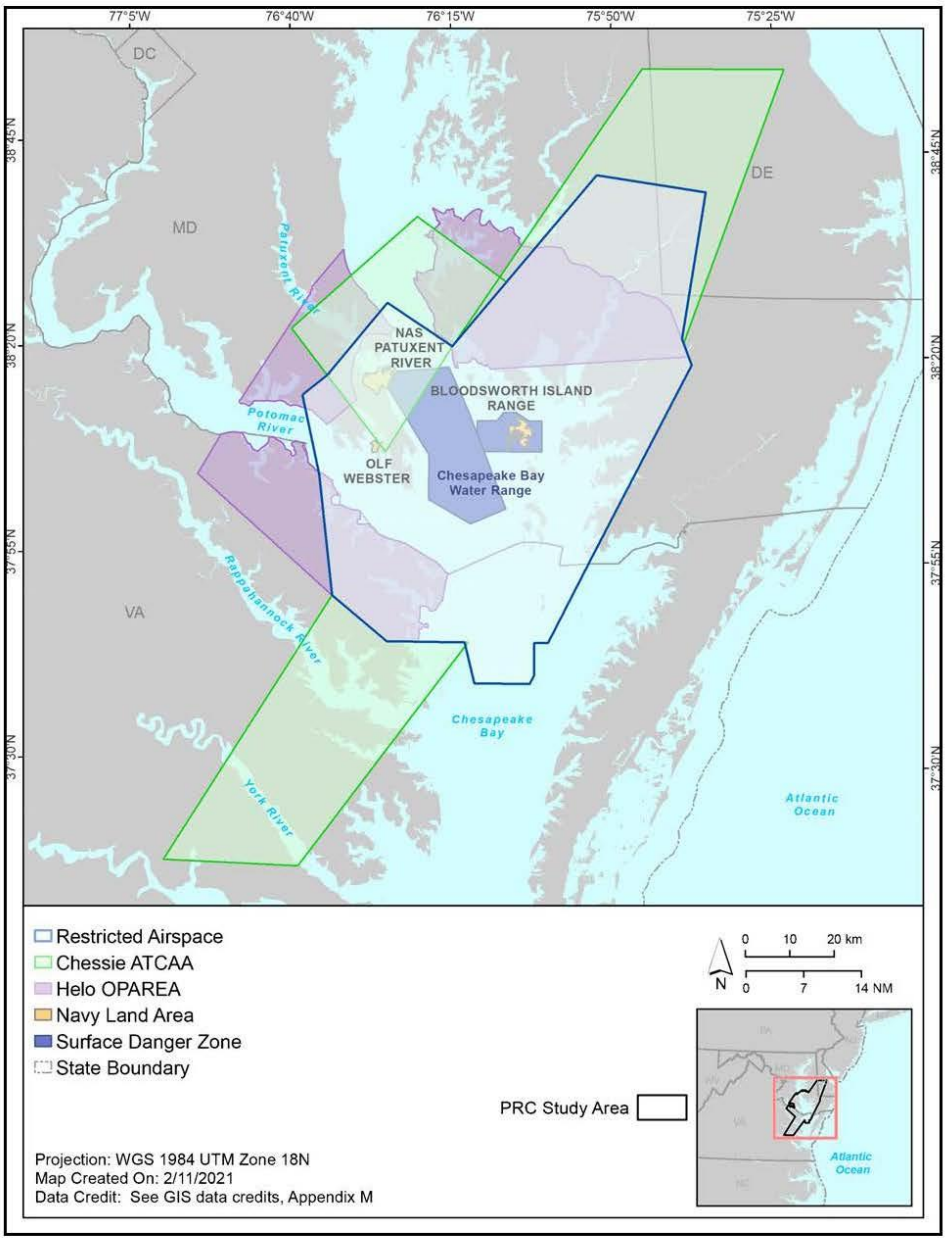
MCDANIEL.LANCE.E.1204352972 Digitally signed by MCDANIEL.LANCE.E.1204352972 Date: 2021.03.03 13:10:05 -05'00'

L. E. McDANIEL
Installation Environmental Director
By direction
of the Commanding Officer

Enclosures: 1. Location Map and Area of Potential Effect
2. Chesapeake Bay Water Range Munition Concentration Areas

4

Enclosure 1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Patuxent River
Potomac River
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York River
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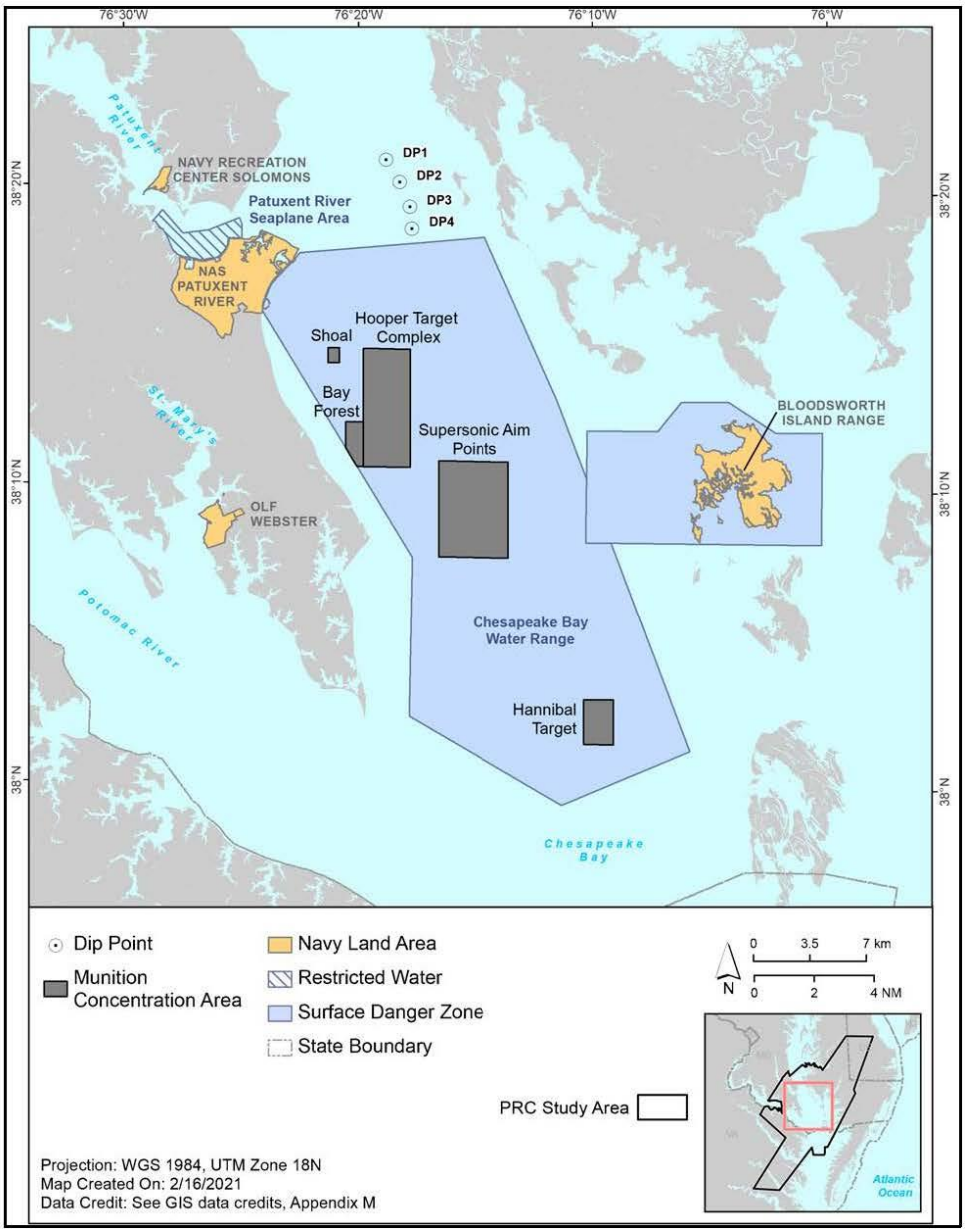
Restricted Airspace
Chessie ATCAA
Helo OPAREA
Navy Land Area
Surface Danger Zone
State Boundary
PRC Study Area
N
0 10 20 km
0 7 14 NM
Projection: WGS 1984 UTM Zone 18N
Map Created On: 2/11/2021
Data Credit: See GIS data credits, Appendix M

Enclosure 2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Patuxent River
NAVY RECREATION CENTER SOLOMONS
Patuxent River Seaplane Area
NAS PATUXENT RIVER
DP1
DP2
DP3
DP4
Hooper Target Complex
Shoal
Bay Forest
Supersonic Aim Points
St. Mary's River
OLF WEBSTER
BLOODSWORTH ISLAND RANGE
Potomac River
Chesapeake Bay Water Range
Hannibal Target
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Dip Point
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Surface Danger Zone
State Boundary
PRC Study Area
N
0 3.5 7 km
0 2 4 NM
Atlantic Ocean
Projection: WGS 1984, UTM Zone 18N
Map Created On: 2/16/2021
Data Credit: See GIS data credits, Appendix M

COMMONWEALTH of VIRGINIA

Department of Historic Resources

Matt Strickler
Secretary of Natural Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
www.dhr.virginia.gov

MEMORANDUM

DATE: 9 June 2021 **DHR File #** 2021-0140

TO: Mr. L.E. McDaniel
NAVY

FROM: Marc E. Holma, Architectural Historian (804) 482-6090
Review and Compliance Division

PROJECT: Patuxent River Complex Testing and Training
St. Mary's County, Maryland

____ This project will have an effect on historic resources. Based on the information provided, the effect will not be adverse.

____ This project will have an adverse effect on historic properties. Further consultation with DHR is needed under Section 106 of the NHPA.

____ Additional information is needed before we will be able to determine the effect of the project on historic resources. **Please see below.**

__X__ No further identification efforts are warranted. No historic properties will be affected by the project. Should unidentified historic properties be discovered during implementation of the project, please notify DHR.

____ We have previously reviewed this project. Attached is a copy of our correspondence.

___ Other (Please see comments below)

COMMENTS:

Administrative Services
10 Courthouse Ave.
Petersburg, VA 23803
Tel: (804) 862-6408
Fax: (804) 862-6196

Eastern Region Office
2801 Kensington Avenue
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

Western Region Office
962 Kime Lane
Salem, VA 24153
Tel: (540) 387-5443
Fax: (540) 387-5446

Northern Region Office
5357 Main Street
PO Box 519
Stephens City, VA 22655
Tel: (540) 868-7029
Fax: (540) 868-7033

J.3 Delaware Division of Historical and Cultural Affairs Correspondence

DEPARTMENT OF THE NAVY

NAVAL AIR STATION
22268 CEDAR POINT ROAD
PATUXENT RIVER, MARYLAND 20670-1154

5090
Ser N45/308
March 3, 2021

Ms. Gwyneth Davis
State Historic Preservation Office
Division of Historical and Cultural Affairs
21 The Green
Dover, DE 19901

Dear Ms. Davis:

SUBJECT: PATUXENT RIVER COMPLEX (PRC) TESTING AND TRAINING, RENEWAL OF SECTION 106 CONSULTATION

The purpose of this letter is to renew Section 106 consultation, per the National Historic Preservation Act of 1966, for a Department of the Navy (Navy) undertaking of continued testing and training in the Patuxent River Complex (PRC), St. Mary's County, Maryland. The Navy is preparing an updated Environmental Impact Statement (EIS) to evaluate the potential effects of increasing aircraft flight, ground-based, and surface/subsurface activities within the PRC Study Area.

Project Description. The Proposed Action is to continue conducting military testing and training activities within the PRC to meet current and projected military readiness requirements. This action includes testing and training activities analyzed in the 1998 PRC EIS and subsequent Environmental Assessments, as well as adjustments to current testing and training activities required to support projected Navy military readiness requirements into the foreseeable future and in the event of increased global conflict. The EIS consolidates the testing and training activities analyzed in these previous documents and addresses the following adjustments to current testing and training:

- Additional aircraft flight hours and adjustments in aircraft mix (e.g., increased unmanned aerial system [UAS] platforms).
- Additional use of non-explosive munitions and other military expended materials (MEM).
- Additional surface vessel and subsurface vehicle traffic in PRC waters.
- Adjustments in the types of mission systems being integrated and tested in aircraft and surface and subsurface platforms (e.g., anti-submarine warfare [ASW] and mine countermeasure [MCM] systems).
- Expanded use of the Patuxent River Seaplane Area.

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Ser N45/ 009
March 3, 2021

- Addition of active sonobuoy testing in conjunction with helicopter dipping sonar tests.
- Testing of new technologies to address new and emerging threats (e.g., directed energy weapons systems).

The 1998 PRC EIS defined the PRC as Naval Air Station (NAS) Patuxent River and Outlying Field Webster flight and ground test facilities and airfields along with the Atlantic Test Ranges restricted airspace, Chesapeake Bay Water Range, and fixed target areas. This Proposed Action expands the PRC Study Area to include land, water, and airspace historically and currently used by the Navy that were not assessed in the previous EIS. These include Bloodsworth Island Range, waters beneath the restricted airspace outside the Chesapeake Bay Water Range, and surrounding Federal Aviation Administration airspace including Helicopter Operating Areas (Helo OPAREAs) and Chessie Air Traffic Control Assigned Airspace.

Area of Potential Effect. The Navy has defined the Area of Potential Effect (APE) to include the entire PRC and the visible view shed surrounding the complex. Maps of the PRC and the APE are enclosed.

Identified Historic Properties - Archaeological Sites. For all the Proposed Action alternatives, no ground-disturbing activities will occur in soils not previously disturbed. Therefore, land-based archaeological resources will not be affected by the undertaking. In addition, there are no identified traditional cultural properties or sacred sites at any of the installations under NAS Patuxent River jurisdiction that are in the APE.

The only possible disturbance to archaeological sites may come from non-explosive MEM which may disturb in-water cultural resources such as shipwrecks. However, most MEM in the Chesapeake Bay Water Range will be focused around current munition concentration areas (Enclosure 2, Chesapeake Bay Water Range Munition Concentration Areas). These areas have been targeted through the decades, and it is very unlikely that any intact deposits would still survive today. While none of the underwater cultural resources in the Chesapeake Bay Water Range are determined to be eligible for the National Register of Historic Places (NRHP), they have yet to be evaluated. As targets will not be placed near recorded sites, this undertaking will not impact underwater cultural resources that may be eligible for the NRHP.

Underwater Cultural Resources within the Chesapeake Bay Water Range

Site Number	*Type*	*Description*	*NRHP Status*
18ST847	Aircraft Wreck	WWII aircraft wreck, XF8F-1 Bearcat	Not Evaluated
N/A	Shipwreck	Hannibal (former direct-impact target)	Not Evaluated
N/A	Shipwreck	American Mariner (current direct-impact target)	Not Evaluated
18ST869	Shipwreck	NAS Patuxent River Target Barge	Not Evaluated

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Ser N45/ 009
March 3, 2021

18ST870	Shipwreck	NAS Target West Buoy Wreck	Not Evaluated
18DO494	Shipwreck	Buoy 72A wreck	Not Evaluated
18ST892	Shipwreck	Cedar Point Schooner	Not Evaluated
18ST893	Shipwreck	Cedar Point Barge	Not Evaluated

Sources: (Maryland Historical Trust, 2019)
Key: N/A = not available; NAS = Naval Air Station; NRHP = National Register of Historic Places; WWII = World War II.

Identified Historic Properties - Architectural Resources. The APE touches six counties of Maryland, in which 117 properties are listed or eligible for inclusion to the NHRP located within the APE. While the APE is quite broad, few will notice the impacts caused by the proposed increased activity. As the undertaking does not include construction or demolition, the most severe impact to the built environment would be noise. The results of our noise and vibration studies lead us to believe the overpressures generated by supersonic overflight will be well below established damage thresholds to sites and structures. Therefore, subsonic noise and sonic booms associated with continuation of existing testing and training activities will not be of sufficient magnitude to impact historic properties under the airspace.

High or irregular noise levels can undermine the quality of life at a historic property and interfere with learning. The current baseline noise levels beneath the PRC Study Area airspace are between less than 35 A-weighted sound level (dBA) and 52.9 dBA. Under Alternative 1, subsonic noise levels would increase by between 0.5 dBA to 1.8 dBA, with the greatest increase in the West Helo OPAREA, from 44.3 dBA to 46.1 dBA in PRC airspace areas. With Alternative 2, increased aircraft testing and training activities would be incrementally higher than Alternative 1, and noise levels would increase over existing conditions by between 1 dBA to 2.3 dBA, with the greatest increase in the West Helo OPAREA from 44.3 dBA to 46.6 dBA. For most people, changes in A-weighted noise levels of less than 2 dBA would not be noticeable.

Finding of Effect: The Proposed Action alternatives do not involve impacts related to construction or demolition. The only new impact to the built environment would be related to aircraft noise. The incremental increase in overflights over any of the historic resources would be infrequent and of short duration, resulting in a fleeting and minor change to the historic setting. We find that the minimal increase in visual or audible elements would not diminish the integrity of the properties' historical attributes or alter the characteristics that qualify them for inclusion in the NRHP. Therefore, we find that all alternatives in the proposed undertaking will have a no adverse effect on historical properties.

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5090
Ser N45/ 009
March 3, 2021

If you have any questions, please contact Craig Lukezic, Cultural Resources Program Manager, by telephone at (301) 757-4774 or by email at craig.lukezic@navy.mil.

Sincerely,

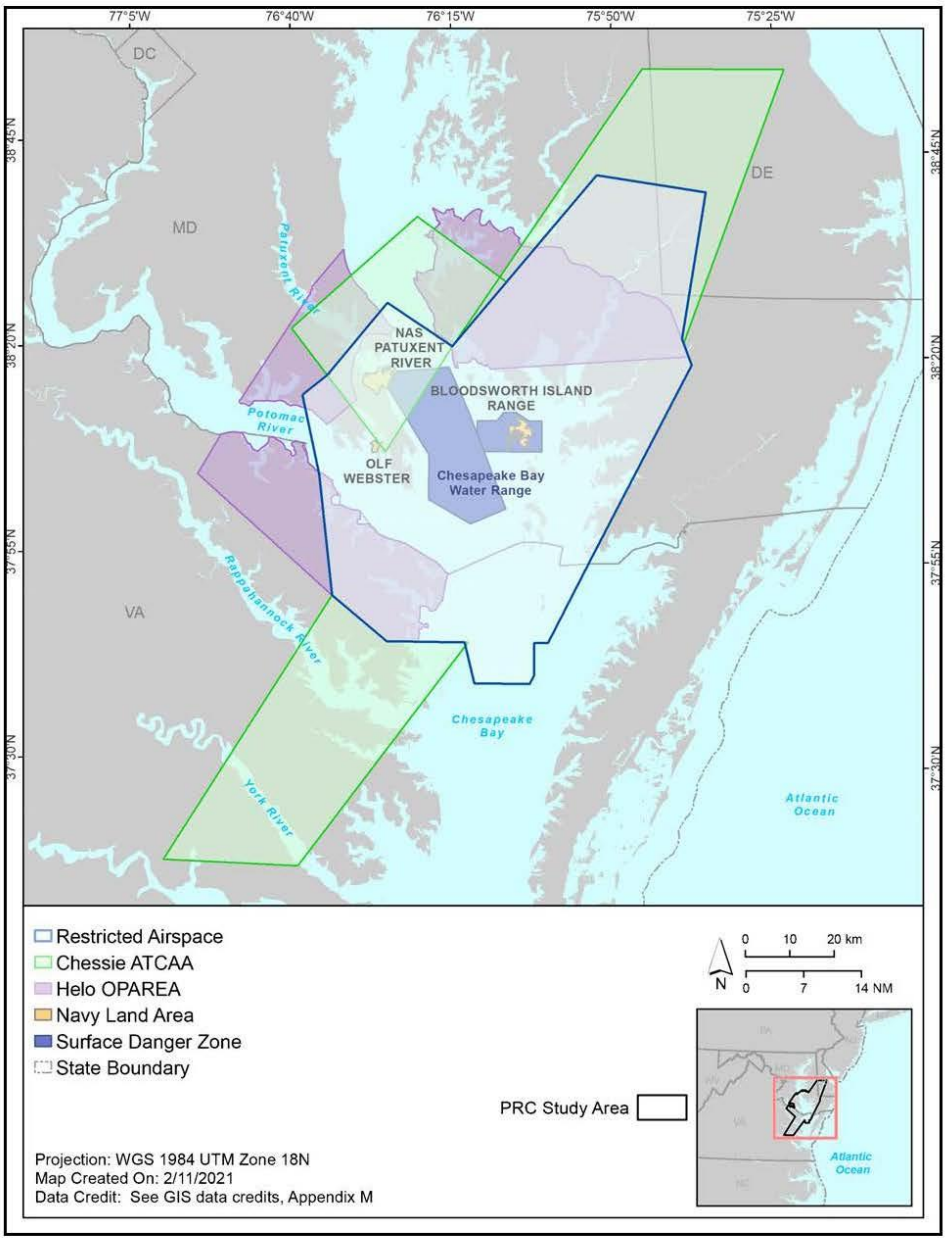
MCDANIEL.LANCE.E.1204352972 Digitally signed by MCDANIEL.LANCE.E.1204352972 Date: 2021.03.03 13:07:55 -05'00'

L. E. McDANIEL
Installation Environmental Director
By direction
of the Commanding Officer

Enclosures: 1. Location Map and Area of Potential Effect
2. Chesapeake Bay Water Range Munition Concentration Areas

4

Enclosure 1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Patuxent River
Potomac River
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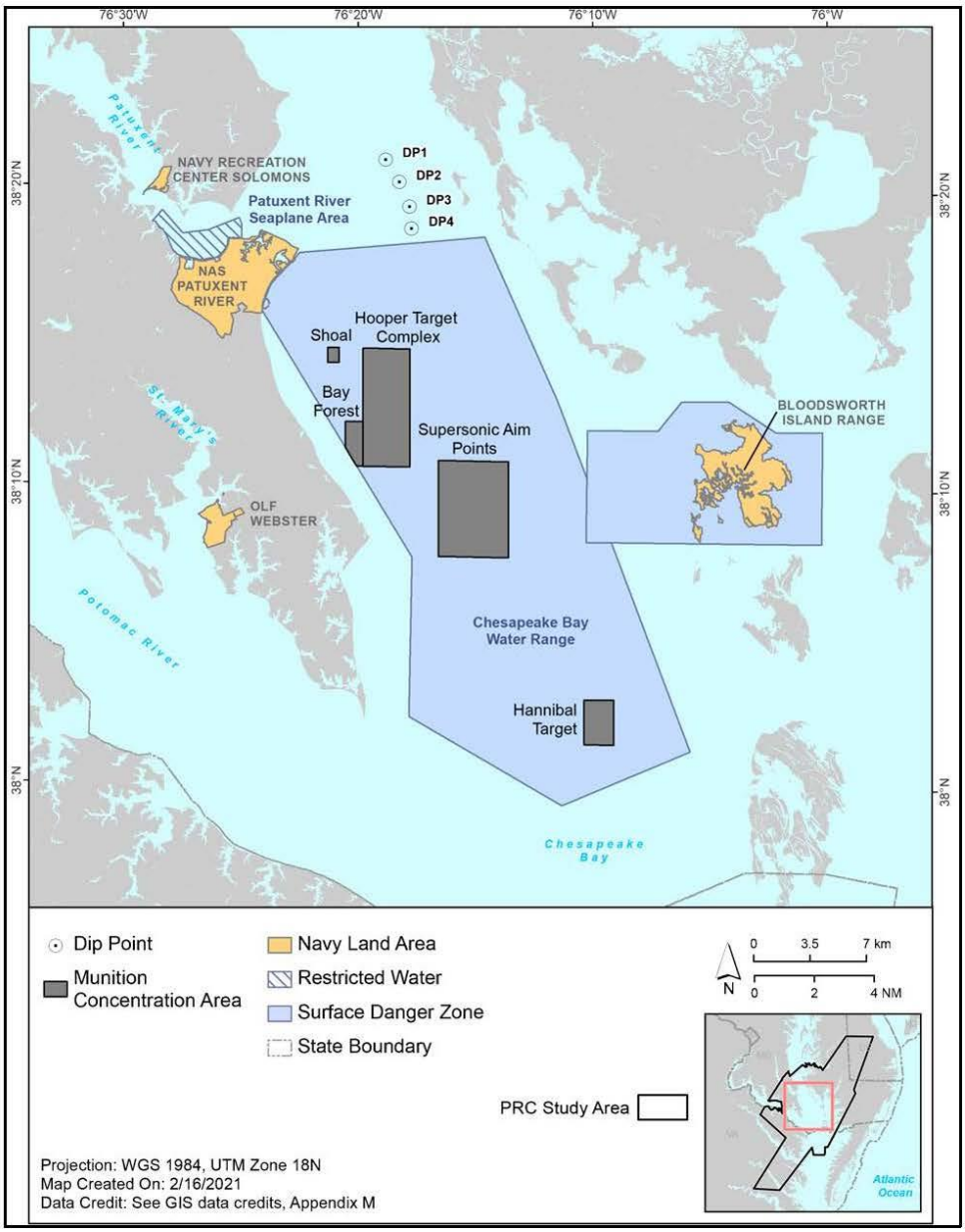
Navy Land Area
Surface Danger Zone
State Boundary
PRC Study Area
N
0 10 20 km
0 7 14 NM
Projection: WGS 1984 UTM Zone 18N
Map Created On: 2/11/2021
Data Credit: See GIS data credits, Appendix M

Enclosure 2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Patuxent River
NAVY RECREATION CENTER SOLOMONS
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State Boundary
PRC Study Area
N
0 3.5 7 km
0 2 4 NM
Atlantic Ocean
Projection: WGS 1984, UTM Zone 18N
Map Created On: 2/16/2021
Data Credit: See GIS data credits, Appendix M

HCA
DELAWARE HISTORICAL & CULTURAL AFFAIRS

Delaware Division of Historical & Cultural Affairs
21 The Green, Dover, Delaware 19901
Tel. (302) 736-7400 | Fax. (302) 739-5660
history.delaware.gov

July 8, 2021

Craig Lukezic
Cultural Resource Manager
Environmental Division
22445 Peary Road, Bldg. 504
Naval Air Station
Patuxent River, MD 20670-1700
301-757-4799 voice
Via Email: craig.lukezic@navy.mil

Subject: **Patuxent River Complex (PRC) Testing and Training, St. Mary's County, Maryland**
SHPO ER# 2021.03.09.02

Dear Mr. Lukezic:

Thank you for your letter and information regarding renewal of Section 106 consultation, per the National Historic Preservation Act of 1966, for a Department of the Navy (Navy) undertaking of continued testing and training in the Patuxent River Complex (PRC), St. Mary's County, Maryland.

According to the materials submitted the Navy proposes to continue conducting military testing and training activities within the PRC to meet current and projected military readiness requirements. This action includes testing and training activities analyzed in the 1998 PRC EIS and subsequent Environmental Assessments, as well as adjustments to current testing and training activities required to support projected Navy military readiness requirements into the foreseeable future and in the event of increased global conflict.

A review of this site in conjunction with all the submitted materials has determined that this undertaking will have **No Adverse Effect** on any onsite and/or abutting historic properties in the area. If you require further information or have any questions, please contact me at 302-736-7433 or at kara.briggs@delaware.gov.

Sincerely,

Kara A. Briggs
Architectural Historian

c: Gwen Davis, Deputy SHPO, Division of Historical & Cultural Affairs
Stephanie Soder, Archaeologist, Division of Historical & Cultural Affairs

Appendix K
Tribal Government to Government Documentation

Table of Contents

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K.1 Tribal Entities that Received the Scoping Notification Letter

K.1.1 Federally Recognized Tribal Distribution List

Title	*First Name*	*Last Name*	*Title*	*Tribal Entity*	*Address*	*City*	*State*
Dr.	Wenonah G.	Haire	THPO	Catawba Indian Tribe	1536 Tom Steven Rd	Rock Hill	SC
Principal Chief	Bill John	Baker	THPO	Cherokee Nation	PO Box 948	Tahlequah	OK
Chief	Stephen	Adkins	Chief	Chickahominy Indian Tribe	7240 Adkins Rd	Charles City	VA
Ms.	Deborah	Dotson	President	Delaware Nation	P.O. Box 825	Anadarko	OK
Chief	Chester	Brooks	Chief	Delaware Tribe of Indians	5100 Tuxedo Blvd	Bartlesville	OK
Mr.	Russell Townsend, THPO	Townsend	THPO	Eastern Band of Cherokee Indians	Qualla Boundary Reservation PO Box 455	Cherokee	NC
Chief	Gene W.	Adkins	Chief	Eastern Chickahominy	3120 Mount PleasantRd	Providence Forge	VA
Chief	Glenna	Wallace	Chief	Eastern Shawnee Tribe of Oklahoma	PO Box 350	Seneca	MO
Chief	Dean	Branham	Chief	Monacan Nation	104 Walnut Place	Lynchburg	VA
Principal Chief	James	Floyd	Principal Chief	Muscogee (Creek) Nation	PO Box 580	Okmulgee	OK
Chief	Lee	Lockamy	Chief	Nansemond Indian Nation	1001 Pembroke Ln	Suffolk	VA
Chief	Robert	Gray	Chief	Pamunkey Indian Tribe	1054 Pocahontas Trail	Joseph King mayor	VA
Chief	G. Anne	Richardson	Chief	Rappahannock Tribe	5036 Indian Neck Rd	Indian Neck	VA
Chief	William	Fisher	Chief	Seneca-Cayuga Nation	PO Box 453220	Grove	OK
Mr.	Bryan	Printup		Tuscarora Nation	5226 Walmore Rd	Lewiston	NY
Chief	Joe	Bunch	Chief	United Keetoowah Band of Cherokee Indians in Oklahoma	P.O. Box 746	Tahlequah	OK
Chief	W. Frank	Adams	Chief	Upper Mattaponi Tribe	5932 East River Rd	King William	VA

K.1.2 Non-Federally Recognized Tribal Distribution List

Title	*First Name*	*Last Name*	*Title*	*Tribal Entity*	*Address*	*City*	*State*
Tribal Chair	Francis	Gray	Tribal Chair	Piscataway Conoy Tribe	PO Box 638	Bryans Road	MD
Chief	Billy (RedWing)	Tayac	Chief	Piscataway Indian Nation	P.O. Box 312	Port Tobacco	MD

K.2 Scoping Notification Letter

DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
22347 CEDAR POINT ROAD, UNIT 6
PATUXENT RIVER, MARYLAND 20670-1161

5090
Ser 000000A/047
February 7, 2019

Dear Sir or Madam:

The Department of the Navy is in the beginning stages of preparing an Environmental Impact Statement to address the continued conduct of military research, development, test, and evaluation (hereinafter referred to as "testing"), and training operations within the Patuxent River Complex (PRC) Study Area to meet current and projected military readiness requirements.

The Navy's Proposed Action includes testing and training operations analyzed in the increased flight and related operations in the PRC Final Environmental Impact Statement from December 1998 and subsequent environmental assessments, as well as adjustments in testing and training activities from current types and tempos required to support projected Navy military readiness requirements into the foreseeable future.

The purpose of the proposed action is to provide Sailors and Marines with equipment and technology that operates effectively and safely to support current and projected future military readiness requirements. The need for the proposed action is to maintain military readiness of naval forces capable of winning wars; deterring aggression; and maintaining freedom of the seas, now and into the future, consistent with Title 10, Section 5062, of the United States Code.

An essential part of the process is public involvement. The Navy is requesting your comments on the proposed action, alternatives, and resources to be considered during preparation of the PRC EIS. There are multiple ways to get involved:

a. Visit the website www.prceis.com to learn about the project, review materials, join the mailing list, and/or submit comments.

b. Attend a Scoping Meeting. A series of open-house style public meetings will be held.

Date	Time	Location
March 4, 2019	1600 - 1900	Light of Christ Anglican Church 9500 Northumberland Highway Heathsville, VA 22473
March 5, 2019	1600 - 1900	Southern Maryland Higher Education Center Building 1 Multi-Purpose Room 44219 Airport Road California, MD 20619

Date	Time	Location
March 6, 2019	1600 - 1900	University of Maryland, Eastern Shore Richard A. Henson Center Ballroom 30690 University Boulevard South Princess Anne, MD 21853
March 7, 2019	1600 - 1900	St. Paul's United Methodist Church Parish Hall 205 Maryland Avenue Cambridge, Maryland 21613

c. Provide Comments. Comments may be provided at public scoping meetings, by mail, and/or through the EIS website. Mailed comments must be postmarked no later than April 1, 2019 and mailed to:

Naval Air Warfare Center Aircraft Division
NAVAIR Ranges Sustainability Office
ATTN: EIS Project Manager
23013 Cedar Point Road
Patuxent River, MD, 20670

We appreciate your time and interest and look forward to hearing from you. My point of contact for this matter is the Naval Air Warfare Center Aircraft Division Range Sustainability Office, which may be reached via phone at (301) 342-9902.

Sincerely,

John S. Lemmon
Rear Admiral, United States Navy

Enclosure: 1. PRC EIS Project Description and Study Area Map

2

PATUXENT RIVER COMPLEX (PRC) TESTING AND TRAINING

ENVIRONMENTAL IMPACT STATEMENT (EIS)

PROJECT DESCRIPTION AND STUDY AREA MAP

PRC Testing and Training EIS Proposed Action and Alternatives:

The Department of the Navy (Navy) proposes to continue conducting military Research, Development, Test and Evaluation (hereinafter referred to as "testing") and training activities within the Patuxent River Complex (PRC) Study Area to meet current and projected military readiness requirements. The Navy's Proposed Action includes testing and training activities that have been conducted within the PRC for decades and are consistent with those analyzed in the *Increased Flight and Related Operations in the Patuxent River Complex Final Environmental Impact Statement* (December 1998) and subsequent Environmental Assessments (EAs), plus adjustments to current testing and training activities in the PRC that include aircraft, aircraft systems and nonexplosive weapons required to support projected Navy military readiness requirements into the foreseeable future. The Navy will evaluate in the new EIS the potential environmental impacts on environmental resources from testing and training activities associated with a range of alternatives to the proposed action, including a No Action and action alternatives.

Environmental Analysis:

Resource areas that will be addressed include, but are not limited to: biological resources (including aquatic and terrestrial protected species); water resources and sediments; air quality; airborne noise; cultural resources; socioeconomics; land use; public health and safety; hazardous material and waste; and environmental justice.

PRC Testing and Training EIS Study Area:

The PRC is one of our nation's Major Range and Test Facility Base (MRTFB) assets that provides the flight and ground test facilities, airfields, and instrumented range as well as the airspace and water space critical to supporting NAWCAD's mission of testing aircraft, aircraft systems and nonexplosive weapons so that Sailors and Marines have aircraft and equipment that will operate safely and effectively. Naval Air Warfare Center Aircraft Division (NAWCAD), the Navy's action proponent for activities in the PRC, is based at Naval Air Station (NAS) Patuxent River, Maryland approximately 60 miles southeast of Washington, D.C. Navy land and facilities, in the PRC, also include nearby Outlying Landing Field (OLF) Webster in St. Inigoes, Maryland and the Bloodsworth Island Range, in the Chesapeake Bay.

The PRC Testing and Training EIS will assess the potential environmental impacts from aircraft testing and training activities conducted in the PRC Study Area (Figure 1). The geographic scope of the PRC Study Area includes the military restricted airspace and surrounding shared Visual Flight Rule (VFR) airspace that is within NAS Patuxent River's Air Traffic Control (ATC) approach control and the Class A airspace, Chessie ATC Assigned Airspace (ATCAA), as well as the underlying Chesapeake Bay Navy water range (including fixed targets, aim points and recovery areas for high value assets), the southern end of the Potomac and Patuxent Rivers, and lands in Maryland, Virginia, and Delaware.

Enclosure (1)

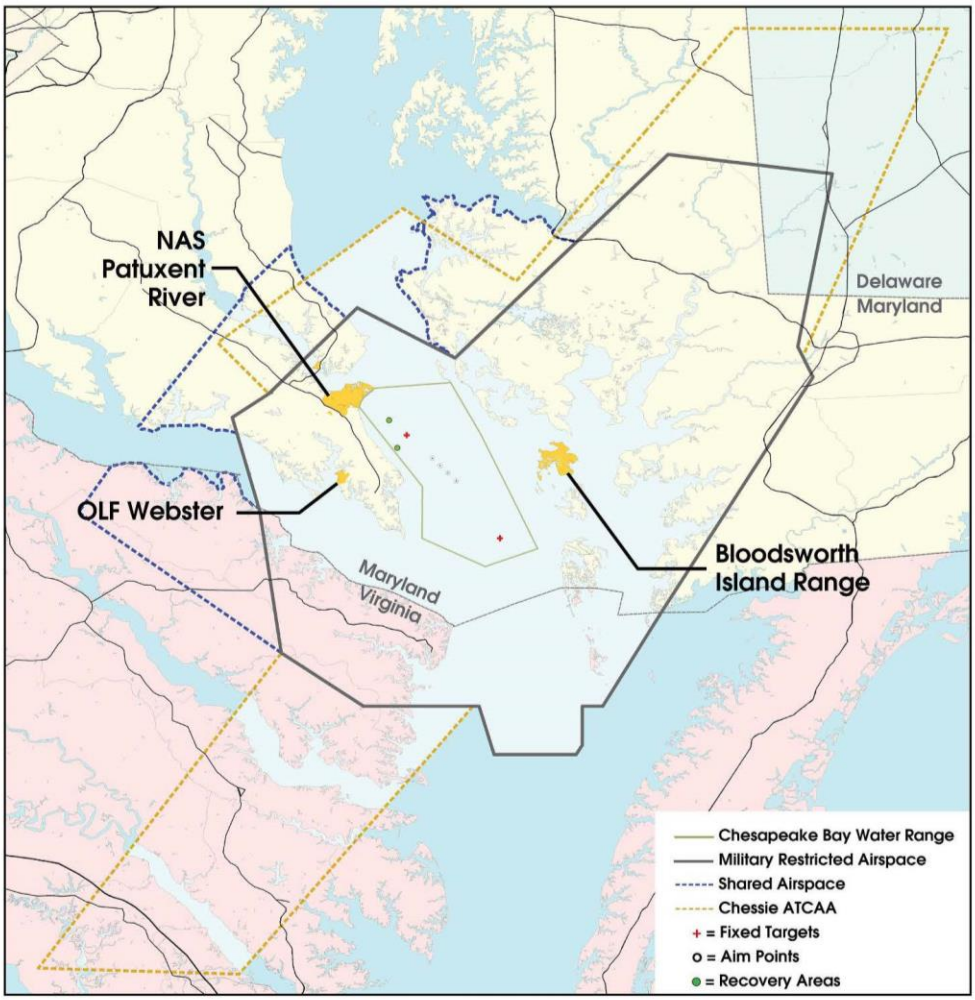

Figure 1: Patuxent River Complex (PRC) Testing and Training Environmental Impact Statement (EIS) Study Area

Enclosure (1)

K.3 Correspondence Received from Tribal Entities

2019 NASPAX EIS Public Comment Information

SO Rep's Name	Christian Johnson*	
Answer Machine Call	☐ Yes	x☐ No
Date/time of call	Date:3/4/2019	Time: 12:15 a.m./p.m.
Caller's Name	Last name Elizabeth	First name: Toombs
Did caller identify as an Elected Official or media?	☐ Yes, Name of Official: x☐ No Committee being represented:	
Caller's Organization		
Caller's Phone #	Phone #: [redacted] Best time to call: (C) (H) (W)	
Mailing address	Street address or P/O Box: City: State: Zip code: County:	
Email address	[redacted]	
Request a return call?	☐ Yes	☐ No
Denote the general nature of call and comment	☐ Concern for possible outcomes ☐ More information wanted ☐ Upset, Angry, Hostile ☐ Positive Call ⊘☐ Other	

Reason for call: Write as much detail as possible what the caller states. If applicable, encourage the caller to formally make a comment via the website or by mailing in comments. Scoping Period: NOI published Feb 15 Comments must be sent COB April 1 Inform the caller of the EIS website. www.PRCEIS.com Address for written comments: Naval Air Warfare Center Aircraft Division Attn: EIS Project Manager NAVAIR Ranges Sustainability Office Atlantic Test Ranges, Building 2118 23013 Cedar Point Road Patuxent River, MD 20670-1183	Ms. Toombs wanted to let the EIS team know that the EIS project is outside the area of interest of the Cherokee Nation and they are not interested in receiving any further material through the mail. Ms. Toombs did not want to submit an official written comment through the website but said she could email directly if need be. **An online search lists Ms. Toombs title as follows:** Special Projects Officer Cherokee Nation Tribal Historic Preservation Office

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Appendix L
Public Involvement

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List of Figures

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L.1 Published Notice of Intent

Federal Register / Vol. 84, No. 32 / Friday, February 15, 2019 / Notices 4457

be treated as public documents and will be made available for public inspection, including, but not limited to, being posted on the RFPB's website.

Dated: February 12, 2019.

Shelly E. Finke,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2019–02538 Filed 2–14–19; 8:45 am]

BILLING CODE 5001–06–P

DEPARTMENT OF DEFENSE

Department of the Navy

Notice of Intent To Prepare an Environmental Impact Statement for Patuxent River Complex Testing and Training and To Announce Public Scoping Meetings

AGENCY: Department of the Navy, DoD.

ACTION: Notice.

SUMMARY: Pursuant to section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as implemented by the Council on Environmental Quality, the Department of the Navy (Navy) announces its intent to prepare an Environmental Impact Statement (EIS) for Research, Development, Test and Evaluation (hereinafter referred to as "testing") and training activities within the Patuxent River Complex (PRC), Naval Air Station Patuxent River, MD. The proposed action is to continue conducting military testing and training activities within the PRC to meet current and projected military readiness requirements. The proposed action includes testing and training activities analyzed in the Naval Air Systems Command, Naval Air Warfare Center Aircraft Division (NAWCAD) December 1998 PRC Final EIS and subsequent Environmental Assessments, plus adjustments to current testing and training activities required to support projected Navy military readiness requirements into the foreseeable future.

DATES: The 45-day public scoping comment period begins February 15, 2019 and ends April 1, 2019. Public scoping meetings will be held on March 4, 5, 6 and 7, 2019. All public comments are due by April 1, 2019.

ADDRESSES: The meetings will be held at the following locations:

1. March 4, 2019, 4:00 p.m. to 7:00 p.m., Light of Christ Anglican Church, 9500 Northumberland Highway, Heathsville, VA 22473–0609.

2. March 5, 2019, 4:00 p.m. to 7:00 p.m., Southern Maryland Higher Education Center, Building 1 Multi-Purpose Room, 44219 Airport Road, California, MD 20619–2010.

3. March 6, 2019, 4:00 p.m. to 7:00 p.m., University of Maryland, Eastern Shore, Richard A. Henson Center Ballroom, 30690 University Blvd. S, Princess Anne, MD 21853–1295.

4. March 7, 2019, 4:00 p.m. to 7:00 p.m., St. Paul's United Methodist Church, Parish Hall, 205 Maryland Avenue, Cambridge, MD 21613–1924.

The Navy invites public comments on the scope of the analysis, including potential environmental issues and viable alternatives to be considered during the development of the Draft EIS. Comments may be provided at the public scoping meetings, by mail, and through the EIS website at: *http://www.prceis.com.* Comments must be postmarked or received online by April 1, 2019. Mailed comments must be sent to the address in the **FOR FURTHER INFORMATION CONTACT** section for consideration in the Draft EIS preparation.

The scoping meetings will consist of informal, open house sessions with informational poster stations staffed by Navy representatives. Meeting details will be announced in local area newspapers. Additional information on the public scoping meetings will be available on the EIS website at: *http://www.prceis.com.*

FOR FURTHER INFORMATION CONTACT: Naval Air Warfare Center Aircraft Division Range Sustainability Office, Atlantic Test Range, Building 2118, 23013 Cedar Point Road, Patuxent River, MD 20670–1183, Attn: Ms. Crystal Ridgell, EIS Project Manager, 301–342–9902 or project website: *http://www.prceis.com.*

SUPPLEMENTARY INFORMATION: NAWCAD is the Navy's action proponent for activities in the PRC, and is based at Naval Air Station (NAS) Patuxent River, Maryland approximately 60 miles southeast of Washington, DC. The PRC is a Major Range and Test Facility Base with the mission of testing Navy and Marine Corps aircraft, aircraft systems, and inert weapons in the military restricted and surrounding airspace that overlies the middle Chesapeake Bay water range, the southern end of the Potomac and Patuxent Rivers, as well as lands in Maryland, Virginia, and Delaware. The PRC is critical to supporting NAWCAD's mission to deliver high quality, affordable aircraft products and services in support of Navy and Marine Corps military readiness. Navy pilots also conduct training flights within the PRC.

The proposed action is to continue conducting military testing and training activities within the PRC to meet current and projected military readiness requirements. The proposed action includes testing and training activities analyzed in the 1998 PRC Final EIS and subsequent environmental assessments, as well as adjustments to current testing and training activities to support projected Navy readiness requirements into the foreseeable future.

The purpose of the proposed action is to provide Sailors and Marines with equipment and technology that operates effectively and safely to support current and projected future military readiness requirements.

The need for the proposed action is to maintain military readiness of naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas, now and into the future, consistent with Title 10, Section 5062, of the United States Code.

The Navy will evaluate the potential environmental impacts from a No Action Alternative and action alternatives, and will analyze potential impacts on environmental resources from activities included in the alternatives. These environmental resources include, but are not limited to: Biological resources (*e.g.*, aquatic and terrestrial protected species); water resources and sediments; air quality; airborne noise; cultural resources; socioeconomics; land use; public health and safety; hazardous material and waste; and environmental justice.

The scoping process is helpful in identifying public concerns and local issues to be considered during the development of the Draft EIS. Federal, state, and local agencies; federally recognized tribes; and interested persons are encouraged to provide substantive comments to the Navy on environmental resources and issue areas of concern that the commenter believes the Navy should consider. All comments, provided orally or in writing at the scoping meetings, submitted via the EIS website, or mailed, will be taken into consideration during the development of the Draft EIS.

Dated: February 15, 2019.

M.S. Werner,

Commander, Judge Advocate General's Corps, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. 2019–02325 Filed 2–14–19; 8:45 am]

BILLING CODE 3810–FF–P

L.2 Scoping Material

L.2.1 Scoping Notification Letter and Distribution

Table L-1 Entities that Received the Scoping Notification Letter

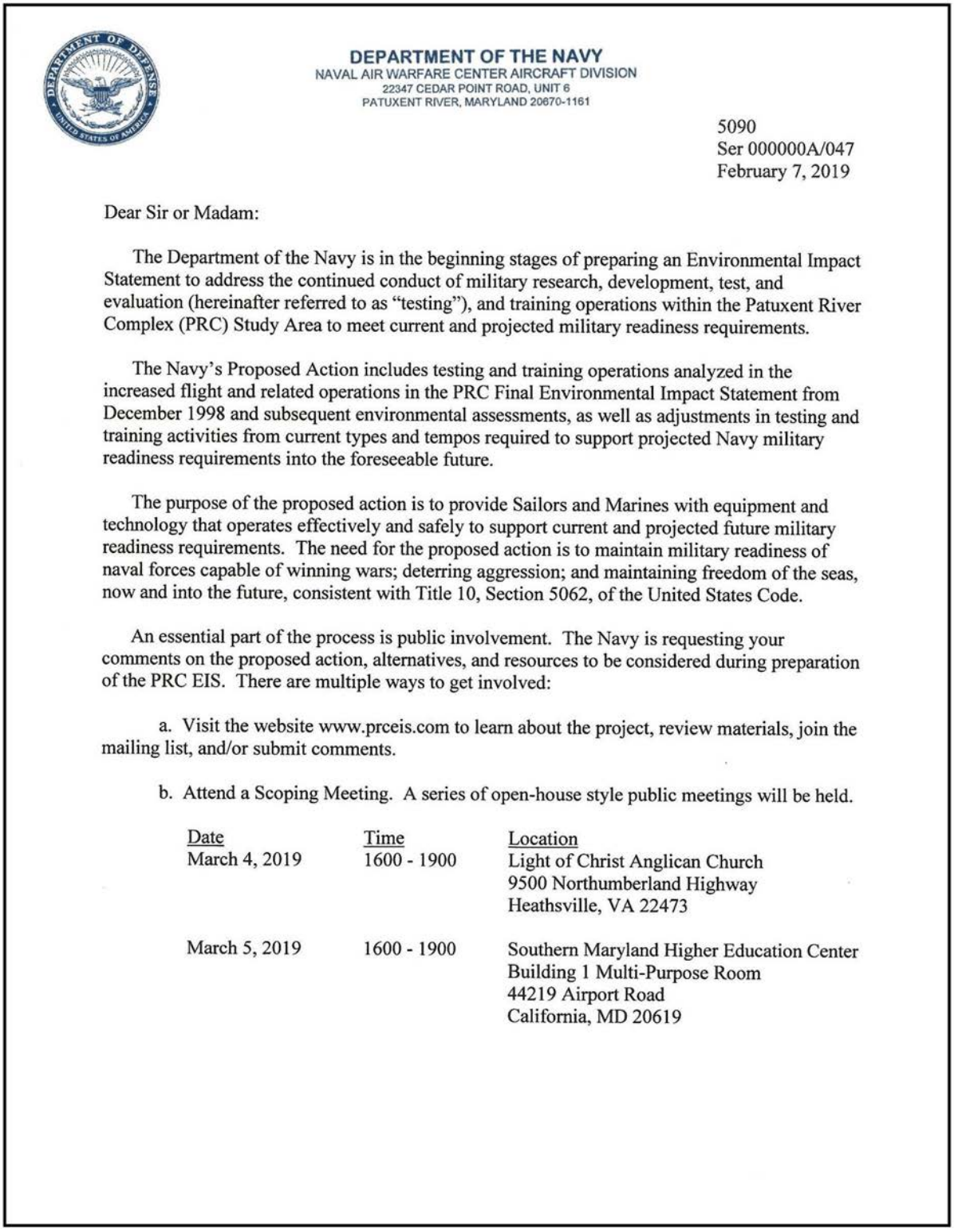
Federal Elected Officials	***State Elected Officials***
U.S. Senators (Maryland, Delaware, and Virginia)	Office of the Governor (Maryland, Delaware, and Virginia)
U.S. Representatives (Maryland, Delaware, and Virginia)	Maryland House of Delegates
	Virginia House of Delegates
	Delaware House of Representatives
	Senate of Delaware
	Senate of Maryland
	Virginia Senate
Federal Agencies	***State Agencies***
Federal Aviation Administration Eastern Region	Maryland Department of the Environment
National Marine Fisheries Service Greater Atlantic Region	Maryland Historical Trust
U.S. Fish and Wildlife Service Chesapeake Bay Field Office	Delaware Department of Natural Resources and Environmental Control
Chesapeake Marshlands National Wildlife Refuge Complex	Delaware Division of Historical and Cultural Affairs
Harriet Tubman Underground Railroad National Historical Park	Virginia Department of Aviation
	Virginia Department of Conservation and Recreation
U.S. Coast Guard Sector Baltimore	Virginia Department of Environmental Quality
	Virginia Department of Historic Resources
	Virginia Department of Game and Inland Fisheries
Federally Recognized Tribes	***Local Officials***
Catawba Indian Tribe	Cambridge City Council
Cherokee Nation	Crisfield City Council
Chickahominy Indian Tribe	Federalsburg Town Council
Delaware Nation	Hurlock Town Council
Delaware Tribe of Indians	Leonardtown Town Council
Eastern Band of Cherokee Indians	Mardela Springs Town Board
Eastern Chickahominy	Town of Montross
Eastern Shawnee Tribe of Oklahoma	Princess Anne Town Council
Monacan Nation	Salisbury City Council
Muscogee (Creek) Nation	Seaford City Council
Nansemond Indian Nation	Sharptown Town Commission
Pamunkey Indian Tribe	Vienna Town Council
Rappahannock Tribe	Accomack Board of Supervisors
Seneca-Cayuga Nation	Calvert County Commission
Tuscarora Nation	County Commissioners of Caroline County
United Keetoowah Band of Cherokee Indians in Oklahoma	Dorchester County Council
	Lancaster County Board of Supervisors

Table L-1 Entities that Received the Scoping Notification Letter

Upper Mattaponi Tribe	Northumberland Board of Supervisors
Non-Federally Recognized Tribes	Richmond County Board of Supervisors
Piscataway Conoy Tribe	Somerset County Commission
Piscataway Indian Nation	St. Mary's County Commission
Other Local Entities	Sussex County Council
Dominion Energy Cove Point Liquid Natural Gas Terminal	Westmoreland Board of Supervisors
	Wicomico County Commission
Chesapeake Biological Laboratory	Northern Neck Planning District Commission
Smith Island United	Tri-County Council for Southern Maryland
	Midshore Regional Council
	Tri-County Council for the Lower Eastern Shore

Key: U.S. = United States.

Figure L-1 Stakeholder Scoping Notification Letter



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
22347 CEDAR POINT ROAD, UNIT 6
PATUXENT RIVER, MARYLAND 20670-1161

5090
Ser 000000A/047
February 7, 2019

Dear Sir or Madam:

The Department of the Navy is in the beginning stages of preparing an Environmental Impact Statement to address the continued conduct of military research, development, test, and evaluation (hereinafter referred to as "testing"), and training operations within the Patuxent River Complex (PRC) Study Area to meet current and projected military readiness requirements.

The Navy's Proposed Action includes testing and training operations analyzed in the increased flight and related operations in the PRC Final Environmental Impact Statement from December 1998 and subsequent environmental assessments, as well as adjustments in testing and training activities from current types and tempos required to support projected Navy military readiness requirements into the foreseeable future.

The purpose of the proposed action is to provide Sailors and Marines with equipment and technology that operates effectively and safely to support current and projected future military readiness requirements. The need for the proposed action is to maintain military readiness of naval forces capable of winning wars; deterring aggression; and maintaining freedom of the seas, now and into the future, consistent with Title 10, Section 5062, of the United States Code.

An essential part of the process is public involvement. The Navy is requesting your comments on the proposed action, alternatives, and resources to be considered during preparation of the PRC EIS. There are multiple ways to get involved:

a. Visit the website www.prceis.com to learn about the project, review materials, join the mailing list, and/or submit comments.

b. Attend a Scoping Meeting. A series of open-house style public meetings will be held.

Date	Time	Location
March 4, 2019	1600 - 1900	Light of Christ Anglican Church 9500 Northumberland Highway Heathsville, VA 22473
March 5, 2019	1600 - 1900	Southern Maryland Higher Education Center Building 1 Multi-Purpose Room 44219 Airport Road California, MD 20619

Date	Time	Location
March 6, 2019	1600 - 1900	University of Maryland, Eastern Shore Richard A. Henson Center Ballroom 30690 University Boulevard South Princess Anne, MD 21853
March 7, 2019	1600 - 1900	St. Paul's United Methodist Church Parish Hall 205 Maryland Avenue Cambridge, Maryland 21613

c. Provide Comments. Comments may be provided at public scoping meetings, by mail, and/or through the EIS website. Mailed comments must be postmarked no later than April 1, 2019 and mailed to:

Naval Air Warfare Center Aircraft Division
NAVAIR Ranges Sustainability Office
ATTN: EIS Project Manager
23013 Cedar Point Road
Patuxent River, MD, 20670

We appreciate your time and interest and look forward to hearing from you. My point of contact for this matter is the Naval Air Warfare Center Aircraft Division Range Sustainability Office, which may be reached via phone at (301) 342-9902.

Sincerely,

John S. Lemmon
Rear Admiral, United States Navy

Enclosure: 1. PRC EIS Project Description and Study Area Map

2

PATUXENT RIVER COMPLEX (PRC) TESTING AND TRAINING

ENVIRONMENTAL IMPACT STATEMENT (EIS)

PROJECT DESCRIPTION AND STUDY AREA MAP

PRC Testing and Training EIS Proposed Action and Alternatives:

The Department of the Navy (Navy) proposes to continue conducting military Research, Development, Test and Evaluation (hereinafter referred to as "testing") and training activities within the Patuxent River Complex (PRC) Study Area to meet current and projected military readiness requirements. The Navy's Proposed Action includes testing and training activities that have been conducted within the PRC for decades and are consistent with those analyzed in the *Increased Flight and Related Operations in the Patuxent River Complex Final Environmental Impact Statement* (December 1998) and subsequent Environmental Assessments (EAs), plus adjustments to current testing and training activities in the PRC that include aircraft, aircraft systems and nonexplosive weapons required to support projected Navy military readiness requirements into the foreseeable future. The Navy will evaluate in the new EIS the potential environmental impacts on environmental resources from testing and training activities associated with a range of alternatives to the proposed action, including a No Action and action alternatives.

Environmental Analysis:

Resource areas that will be addressed include, but are not limited to: biological resources (including aquatic and terrestrial protected species); water resources and sediments; air quality; airborne noise; cultural resources; socioeconomics; land use; public health and safety; hazardous material and waste; and environmental justice.

PRC Testing and Training EIS Study Area:

The PRC is one of our nation's Major Range and Test Facility Base (MRTFB) assets that provides the flight and ground test facilities, airfields, and instrumented range as well as the airspace and water space critical to supporting NAWCAD's mission of testing aircraft, aircraft systems and nonexplosive weapons so that Sailors and Marines have aircraft and equipment that will operate safely and effectively. Naval Air Warfare Center Aircraft Division (NAWCAD), the Navy's action proponent for activities in the PRC, is based at Naval Air Station (NAS) Patuxent River, Maryland approximately 60 miles southeast of Washington, D.C. Navy land and facilities, in the PRC, also include nearby Outlying Landing Field (OLF) Webster in St. Inigoes, Maryland and the Bloodsworth Island Range, in the Chesapeake Bay.

The PRC Testing and Training EIS will assess the potential environmental impacts from aircraft testing and training activities conducted in the PRC Study Area (Figure 1). The geographic scope of the PRC Study Area includes the military restricted airspace and surrounding shared Visual Flight Rule (VFR) airspace that is within NAS Patuxent River's Air Traffic Control (ATC) approach control and the Class A airspace, Chessie ATC Assigned Airspace (ATCAA), as well as the underlying Chesapeake Bay Navy water range (including fixed targets, aim points and recovery areas for high value assets), the southern end of the Potomac and Patuxent Rivers, and lands in Maryland, Virginia, and Delaware.

Enclosure (1)

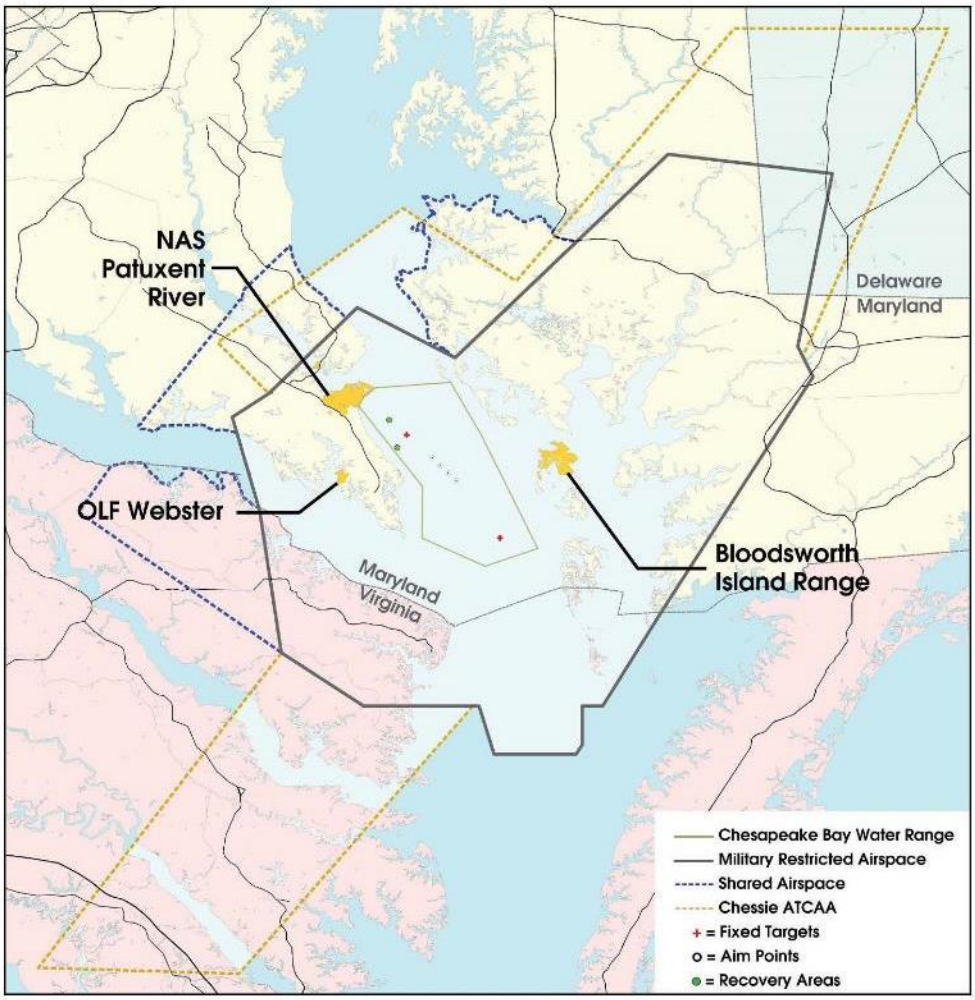


Figure 1: Patuxent River Complex (PRC) Testing and Training Environmental Impact Statement (EIS) Study Area

Enclosure (1)

L.2.2 Scoping Meeting Postcard Mailers

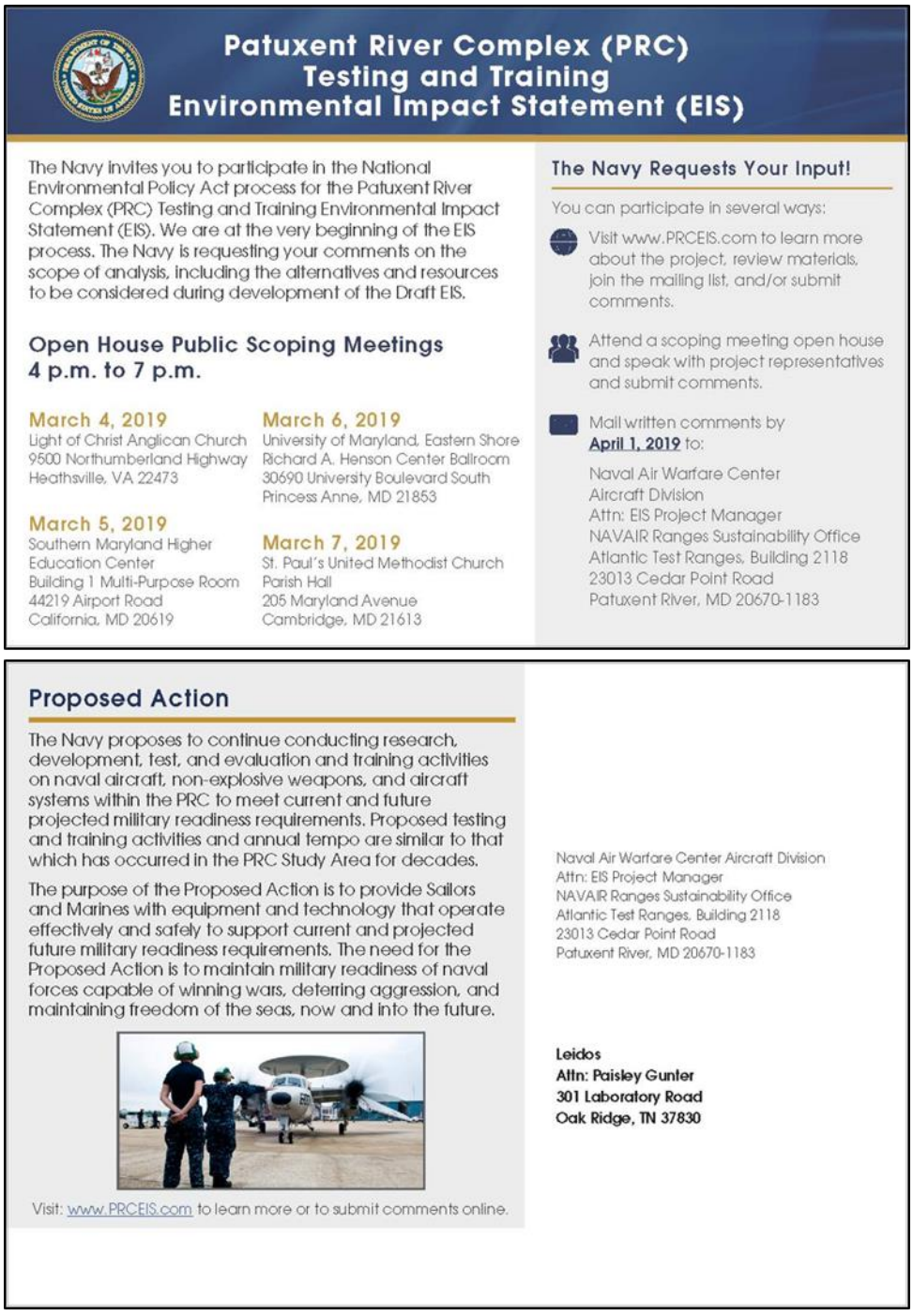


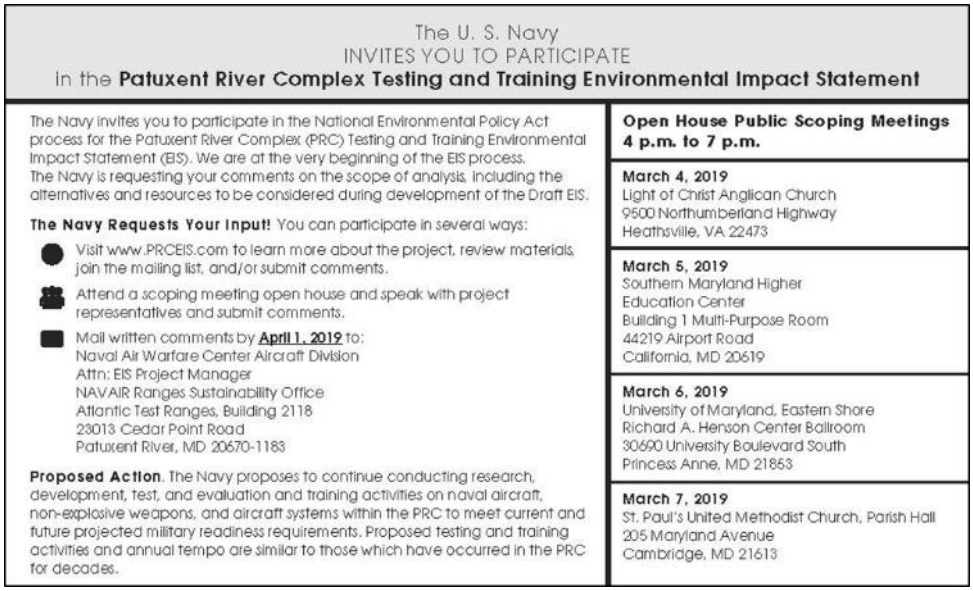
Figure L-2 Postcard Mailer (Front and Back)

L.2.3 Scoping Meeting Newspaper Advertisement

Table L-2 Newspaper Publications of NOI and Scoping Meetings

Newspaper	*Coverage*	*Publication Dates*
Northern Neck News	Northern Neck, VA	February 20, 27, 2019
Crisfield-Somerset Times	Somerset County, MD, and Tangier Island, VA	February 20, 27, 2019
Calvert Recorder	Calvert County, MD	February 20, 22, 27, 2019 March 1, 2019
The Tester	NAS Patuxent River	February 21, 28, 2019
The Enterprise	St. Mary's County, MD	February 15, 20, 22, 2019 March 1, 2019
BayNet	St. Mary's County, MD (electronic only)	Week of February 25, 2019
The Daily Times	Eastern Shore, MD	February 15, 16, 17, 2019 March 5, 2019
Dorchester Star	Eastern Shore, MD	February 22, 2019 March 1, 2019

Key: MD = Maryland; NAS = Naval Air Station; NOI = Notice of Intent; VA = Virginia.



The U. S. Navy
INVITES YOU TO PARTICIPATE
In the **Patuxent River Complex Testing and Training Environmental Impact Statement**

The Navy invites you to participate in the National Environmental Policy Act process for the Patuxent River Complex (PRC) Testing and Training Environmental Impact Statement (EIS). We are at the very beginning of the EIS process. The Navy is requesting your comments on the scope of analysis, including the alternatives and resources to be considered during development of the Draft EIS.

The Navy Requests Your Input! You can participate in several ways:

- Visit www.PRCEIS.com to learn more about the project, review materials, join the mailing list, and/or submit comments.
- Attend a scoping meeting open house and speak with project representatives and submit comments.
- Mail written comments by **April 1, 2019** to:
  Naval Air Warfare Center Aircraft Division
  Attn: EIS Project Manager
  NAVAIR Ranges Sustainability Office
  Atlantic Test Ranges, Building 2118
  23013 Cedar Point Road
  Patuxent River, MD 20670-1183

Proposed Action. The Navy proposes to continue conducting research, development, test, and evaluation and training activities on naval aircraft, non-explosive weapons, and aircraft systems within the PRC to meet current and future projected military readiness requirements. Proposed testing and training activities and annual tempo are similar to those which have occurred in the PRC for decades.

Open House Public Scoping Meetings
4 p.m. to 7 p.m.

March 4, 2019
Light of Christ Anglican Church
9500 Northumberland Highway
Heathsville, VA 22473

March 5, 2019
Southern Maryland Higher Education Center
Building 1 Multi-Purpose Room
44219 Airport Road
California, MD 20619

March 6, 2019
University of Maryland, Eastern Shore
Richard A. Henson Center Ballroom
30690 University Boulevard South
Princess Anne, MD 21853

March 7, 2019
St. Paul's United Methodist Church, Parish Hall
205 Maryland Avenue
Cambridge, MD 21613

Figure L-3 Example Newspaper Advertisement

L.2.4 Scoping Press Release

NEWS RELEASE

NAVAL AIR STATION PATUXENT RIVER
PUBLIC AFFAIRS OFFICE
DESK: 301-757-3343
MOBILE: 301-247-8872

RELEASE #190301 **March 1, 2019**

Navy to Hold Public Meetings March 4 to March 7 Regarding Patuxent River Testing and Training Environmental Impact Statement

PATUXENT RIVER NAVAL AIR STATION, MD – The U.S. Navy is holding a series of public meetings between March 4 and 7 regarding the Patuxent River Complex Testing and Training Environmental Impact Statement, or EIS.

This EIS will assess community and environmental impacts from continued military testing and training activities within the Patuxent River Complex. It will include testing and training activities addressed in the 1998 EIS and subsequent Environmental Assessments, current and projected military readiness requirements, and new technology, science, policy, and regulations that warrant new analysis.

The opening step in a multi-year process, these meetings will consist of informal, open-house sessions with informational poster stations staffed by U.S. Navy representatives. They will help the U.S. Navy to identify areas of public interest that should be considered in the preparation of the EIS, including resources to be studied, potential environmental issues and viable alternatives.

Open-House Public Scoping Meetings
All meetings will be held 4 p.m. to 7 p.m.

March 4, 2019
Light of Christ Anglican Church
9500 Northumberland Highway
Heathsville, VA 22473

March 5, 2019
Southern Maryland Higher
Education Center
Building 1 Multi-Purpose Room
44219 Airport Road
California, MD 20619

March 6, 2019
University of Maryland, Eastern Shore
Richard A. Henson Center Ballroom
30690 University Boulevard South
Princess Anne, MD 21853

March 7, 2019
St. Paul's United Methodist Church, Parish Hall
205 Maryland Avenue
Cambridge, MD 21613

The Patuxent River Complex includes Naval Air Station Patuxent River, Webster Outlying Field, Bloodsworth Island Range, and the water and airspace where the Navy conducts aircraft testing and training in Maryland, Virginia, and Delaware.

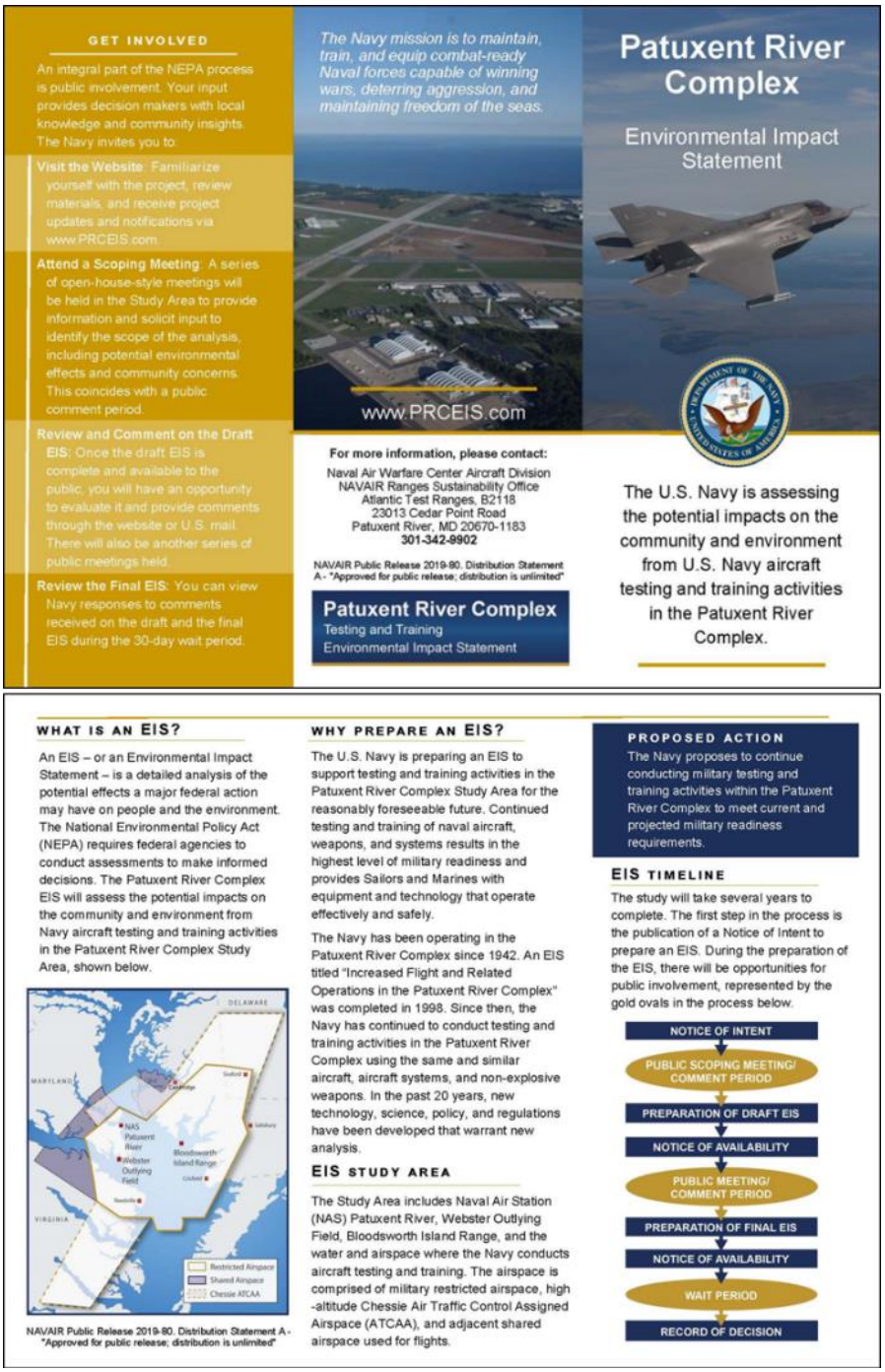
Written comments are being accepted until April 1, 2019, through U.S. mail, the EIS website at www.PRCEIS.com or at any of the public meetings.

If you have questions about the meetings or would like more information, please visit www.PRCEIS.com or contact the NAVAIR Ranges Sustainability Office at (301) 342-9902.

– 30 –

Figure L-4 Public Scoping News Release

L.2.5 Post-NOI Brochure



GET INVOLVED

An integral part of the NEPA process is public involvement. Your input provides decision makers with local knowledge and community insights. The Navy invites you to:

Visit the Website: Familiarize yourself with the project, review materials, and receive project updates and notifications via www.PRCEIS.com.

Attend a Scoping Meeting: A series of open-house-style meetings will be held in the Study Area to provide information and solicit input to identify the scope of the analysis, including potential environmental effects and community concerns. This coincides with a public comment period.

Review and Comment on the Draft EIS: Once the draft EIS is complete and available to the public, you will have an opportunity to evaluate it and provide comments through the website or U.S. mail. There will also be another series of public meetings held.

Review the Final EIS: You can view Navy responses to comments received on the draft and the final EIS during the 30-day wait period.

The Navy mission is to maintain, train, and equip combat-ready Naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas.

www.PRCEIS.com

For more information, please contact:

Naval Air Warfare Center Aircraft Division
NAVAIR Ranges Sustainability Office
Atlantic Test Ranges, B2118
23013 Cedar Point Road
Patuxent River, MD 20670-1183
301-342-9902

NAVAIR Public Release 2019-80. Distribution Statement A - "Approved for public release; distribution is unlimited"

Patuxent River Complex
Testing and Training
Environmental Impact Statement

Patuxent River Complex

Environmental Impact Statement

The U.S. Navy is assessing the potential impacts on the community and environment from U.S. Navy aircraft testing and training activities in the Patuxent River Complex.

WHAT IS AN EIS?

An EIS – or an Environmental Impact Statement – is a detailed analysis of the potential effects a major federal action may have on people and the environment. The National Environmental Policy Act (NEPA) requires federal agencies to conduct assessments to make informed decisions. The Patuxent River Complex EIS will assess the potential impacts on the community and environment from Navy aircraft testing and training activities in the Patuxent River Complex Study Area, shown below.

NAVAIR Public Release 2019-80. Distribution Statement A - "Approved for public release; distribution is unlimited"

WHY PREPARE AN EIS?

The U.S. Navy is preparing an EIS to support testing and training activities in the Patuxent River Complex Study Area for the reasonably foreseeable future. Continued testing and training of naval aircraft, weapons, and systems results in the highest level of military readiness and provides Sailors and Marines with equipment and technology that operate effectively and safely.

The Navy has been operating in the Patuxent River Complex since 1942. An EIS titled "Increased Flight and Related Operations in the Patuxent River Complex" was completed in 1998. Since then, the Navy has continued to conduct testing and training activities in the Patuxent River Complex using the same and similar aircraft, aircraft systems, and non-explosive weapons. In the past 20 years, new technology, science, policy, and regulations have been developed that warrant new analysis.

EIS STUDY AREA

The Study Area includes Naval Air Station (NAS) Patuxent River, Webster Outlying Field, Bloodsworth Island Range, and the water and airspace where the Navy conducts aircraft testing and training. The airspace is comprised of military restricted airspace, high-altitude Chessie Air Traffic Control Assigned Airspace (ATCAA), and adjacent shared airspace used for flights.

PROPOSED ACTION

The Navy proposes to continue conducting military testing and training activities within the Patuxent River Complex to meet current and projected military readiness requirements.

EIS TIMELINE

The study will take several years to complete. The first step in the process is the publication of a Notice of Intent to prepare an EIS. During the preparation of the EIS, there will be opportunities for public involvement, represented by the gold ovals in the process below.

NOTICE OF INTENT
PUBLIC SCOPING MEETING/ COMMENT PERIOD
PREPARATION OF DRAFT EIS
NOTICE OF AVAILABILITY
PUBLIC MEETING/ COMMENT PERIOD
PREPARATION OF FINAL EIS
NOTICE OF AVAILABILITY
WAIT PERIOD
RECORD OF DECISION

Figure L-5 Post-NOI Brochure

L.2.6 Scoping Factsheet Booklet and Comment Guide

Patuxent River Complex
Testing and Training Environmental Impact Statement

Public Scoping Meeting Guide

Open House Public Scoping Meeting Schedule

DATE	LOCATION	TIME
March 4, 2019	Light of Christ Anglican Church 9500 Northumberland Highway Heathsville, VA 22473	4:00 - 7:00 pm
March 5, 2019	Southern Maryland Higher Education Center Building 1 Multi-Purpose Room 44219 Airport Road California, MD 20619	4:00 - 7:00 pm
March 6, 2019	University of Maryland, Eastern Shore Richard A. Henson Center Ballroom 30690 University Boulevard South Princess Anne, MD 21853	4:00 - 7:00 pm
March 7, 2019	St. Paul's United Methodist Church, Parish Hall 205 Maryland Avenue Cambridge, MD 21613	4:00 - 7:00 pm

Please Check In!

Scoping is your opportunity to provide comments to help us focus our analysis.
Please visit the project website at www.PRCEIS.com

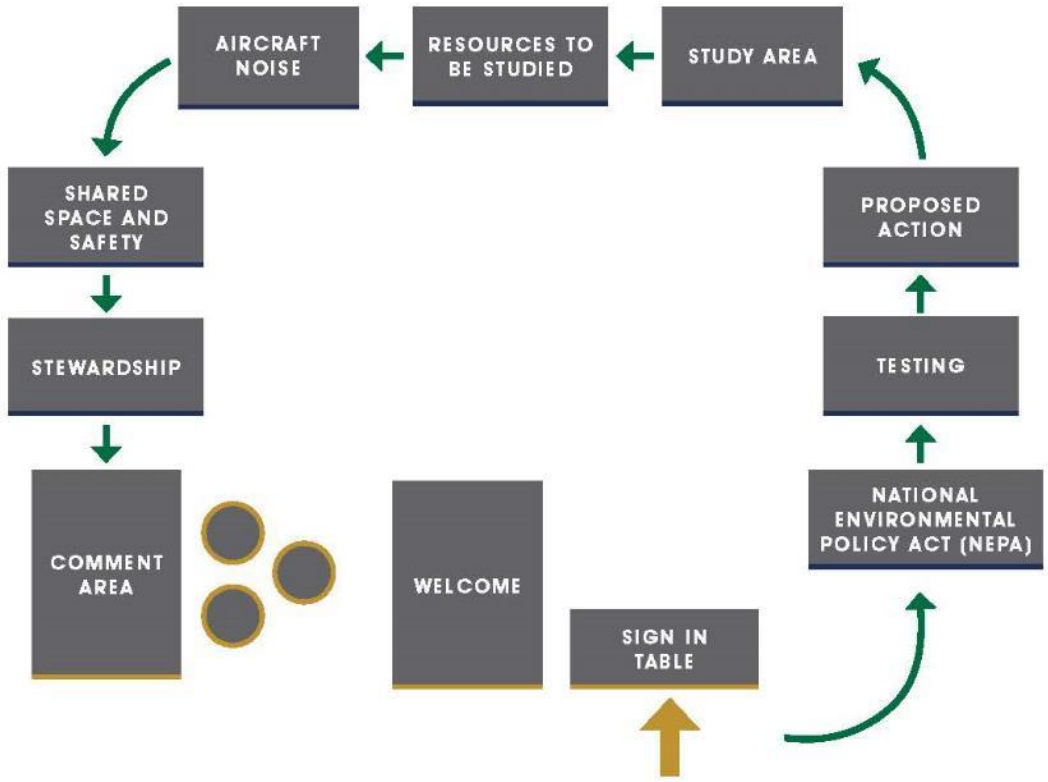
If you have questions or would like more information about the PRC EIS process, please contact NAVAIR Ranges Sustainability Office at (301) 342-9902. Note, comments will not be accepted via the telephone.

Please visit the project website at www.PRCEIS.com

Welcome

Welcome to the U.S. Navy's public meetings for the Patuxent River Complex (PRC) Testing and Training Environmental Impact Statement (EIS). The Navy is preparing an EIS to assess the potential impacts on the community and environment from conducting ongoing and new research, development, acquisition, testing, and evaluation ("testing") and training activities in the PRC.

The public meetings are open-house format. Please take your time to review the displays, talk to project staff, and provide comments. We are in the early stages of the EIS process and appreciate your time and interest.



Please visit the project website at www.PRCEIS.com

NEPA

What is NEPA?

The National Environmental Policy Act (NEPA) of 1969 is environmental legislation that requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. Citizens are invited to participate in the process.

The Navy invites you to participate in the Environmental Impact Statement process.

What is an EIS?

An Environmental Impact Statement (EIS) is a detailed public document providing an assessment of the potential effects a major federal action may have on the human, natural, and cultural environment.
An EIS:

- Is a report prepared by a multidisciplinary team
- Considers alternative ways to accomplish the proposed action
- Includes an evaluation of existing resources
- Assesses the impact of the proposed action and alternatives on the environment
- Evaluates best management practices and mitigation measures to reduce environmental impacts

A typical EIS contains the following sections:

1. Introduction and Purpose and Need – project objectives and why the proposed action is needed
2. Proposed Action and Alternatives – what the Navy wants to do and alternatives that can meet their needs
3. Affected Environment – description of the existing environment or baseline conditions
4. Environmental Consequences – analysis of affected environmental resource areas associated with implementation of each alternative
5. Cumulative Impacts – effects of the proposed action considered along with other projects occurring in the same area
6. Mitigation Measures – best management practices and measures that could lessen environmental impacts

*Gold ovals represent public involvement opportunities

Please visit the project website at www.PRCEIS.com

What is Scoping?

Scoping occurs at the beginning of the NEPA process to help understand community-specific concerns regarding the scope of analysis. It encourages the participation of other federal, state, and local agencies, as well as citizens. Scoping helps determine what should be studied in the EIS and alternatives to be analyzed.

Get Involved

There are several opportunities where your participation is encouraged. The schedule highlights in gold the steps where you can get involved. During the scoping step, engaging the public in an early and open process helps identify, define, and prioritize resources to be evaluated in the Draft EIS. Once the Draft EIS is released, the Navy invites citizens to review and comment on the analysis. The release of the Draft EIS and the opening of the Draft EIS comment period will be announced in newspapers, and additional public meetings will be held to receive comments on the report. The Navy then prepares a Final EIS, considering the comments received on the Draft EIS. Once the Final EIS is complete, a Notice of Availability is published in the *Federal Register* and local newspapers. This is followed by a 30-day wait period. The final decision will then be published in the *Federal Register* as a Record of Decision.

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TESTING

Testing ensures that aircraft, systems, and equipment meet the needs of our Sailors and Marines.

Importance of the Patuxent River Complex (PRC)

The PRC is a national asset for aircraft testing and training for all branches of the U.S. military. Testing at the PRC has been occurring since 1943. All types of Navy and Marine Corps aircraft are tested in the PRC. The PRC is unique in that it provides the facilities, military restricted airspace, instrumentation, and people with the technical expertise to support aircraft, aviation systems, and non-explosive weapons integration testing. All Navy aircraft, systems, and equipment must be tested to ensure proper functioning before delivery to the U.S. military for use. Testing activities conducted in the PRC are important for maintaining readiness. Research and development of new technologies by the U.S. Department of Defense occurs continually to ensure that the U.S. military can counter new and emerging threats.

Proposed Navy testing and training activities are similar to the types of activities that have been occurring in the PRC for decades.

What is Testing?

Testing at the PRC includes: aircraft, aviation systems, non-explosive weapons, and their ability to operate on aircraft carriers and other ships. Testing explores the capabilities of aircraft and equipment at various speeds, altitudes, maneuvers, and weapons configurations, using systematic methods to work safely from the known towards the unknown.

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- **Test Activities** – testing activities include:
  - Air Vehicle Testing – tests during flights to expose the airframe and aircrew to varying altitude, speed, load factor, weight, and other conditions
  - Carrier and Shipboard Suitability Testing – tests conducted in ground-based facilities designed to simulate a ship
  - Mission Systems Testing – tests to evaluate the performance and operability of electronic, computer, communications, and control systems including, black boxes, avionics, and aircraft electronics
  - Electronic Warfare Testing – tests to evaluate electronic systems designed to interrupt enemy electronic systems
  - Weapons Integration Testing – tests to evaluate the integration of non-explosive weapons with aircraft and associated systems
- **Training Activities** – training of Naval Air Station Patuxent River and other military aircrew
  - U.S. Navy Test Pilot School training for new test pilots
  - Aircrew proficiency and Field Carrier Landing Practice
  - Air Force, Army, and National Guard training in support of national defense
- **Support Activities** – aircraft flights and surface vessels that provide support to testing or training missions
- **Ground Activities** – ground-based activities related to aircraft flight activities. Examples include: aircraft pre- and post-flight checks, ground taxiing, and static engine tests

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What is the Navy Proposing?

The Navy conducts testing and training on aircraft and weapons to ensure service members are equipped to be successful in their mission of national defense.

Proposed Action

The Navy proposes to continue conducting military testing and training activities within the Patuxent River Complex (PRC) to meet current and projected military readiness requirements.

U.S. Sailors and Marines:

- Protect and defend the United States against enemies
- Protect rights to move freely on the oceans
- Provide humanitarian assistance

Purpose

To provide Sailors and Marines with equipment and technology that operate effectively and safely to support current and projected future military readiness requirements

Need

To meet the Navy's requirement to maintain military readiness of naval forces to win wars, deter aggression, and maintain freedom of the seas, now and into the future

Alternatives

The Navy is developing a range of alternatives that take into consideration the Navy's operational needs for the foreseeable future as well as public input received during scoping.

Considerations in Developing Alternatives

- Continued testing and training during all seasons, day and night, in the PRC
- Annual capacity to meet current and future military readiness requirements
- Annual capacity to meet emergent military readiness requirements in response to increased global conflict

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The proposed action includes testing and training activities analyzed in the 1998 PRC Final Environmental Impact Statement (EIS) and subsequent Environmental Assessments, as well as adjustments in testing and training activities from current types and tempos required to support projected Navy military readiness requirements into the foreseeable future.

Updated environmental impact analysis is warranted due to changes in:

Technology: The EIS will address new aircraft, test activities, and changes in the number of non-explosive weapons. All aircraft, non-explosive weapons, and test activities are very similar to those conducted and used for the past 20 years.

Environment: The EIS will address the natural and cultural resources of the PRC Study Area. The PRC Study Area (a map is provided on the Study Area fact sheet) includes supporting land areas (Naval Air Station Patuxent River, Outlying Landing Field Webster, and the Bloodsworth Island Range), water areas (e.g., Chesapeake Bay, lower Potomac, St. Mary's, and lower Patuxent Rivers), airspace, and Atlantic Test Ranges assets (e.g., fixed targets, aim points, recovery areas, and instrumentation sites).

Science: The EIS will use the best available science. Since 1998, there have been changes in the natural and cultural resources within the PRC that are documented in new published scientific studies. New methodologies and studies will be used to update the analysis of potential environmental impacts from ongoing and proposed testing and training activities.

Navy Policy and Regulations: The EIS will use the most current standards for conducting environmental impact analysis, incorporate multiple Navy National Environmental Policy Act (NEPA) documents into a single EIS document, and address new environmental regulatory requirements (e.g., new protected species).

The Navy invites you to provide input on what to consider in the development of the alternatives to be evaluated in the EIS.

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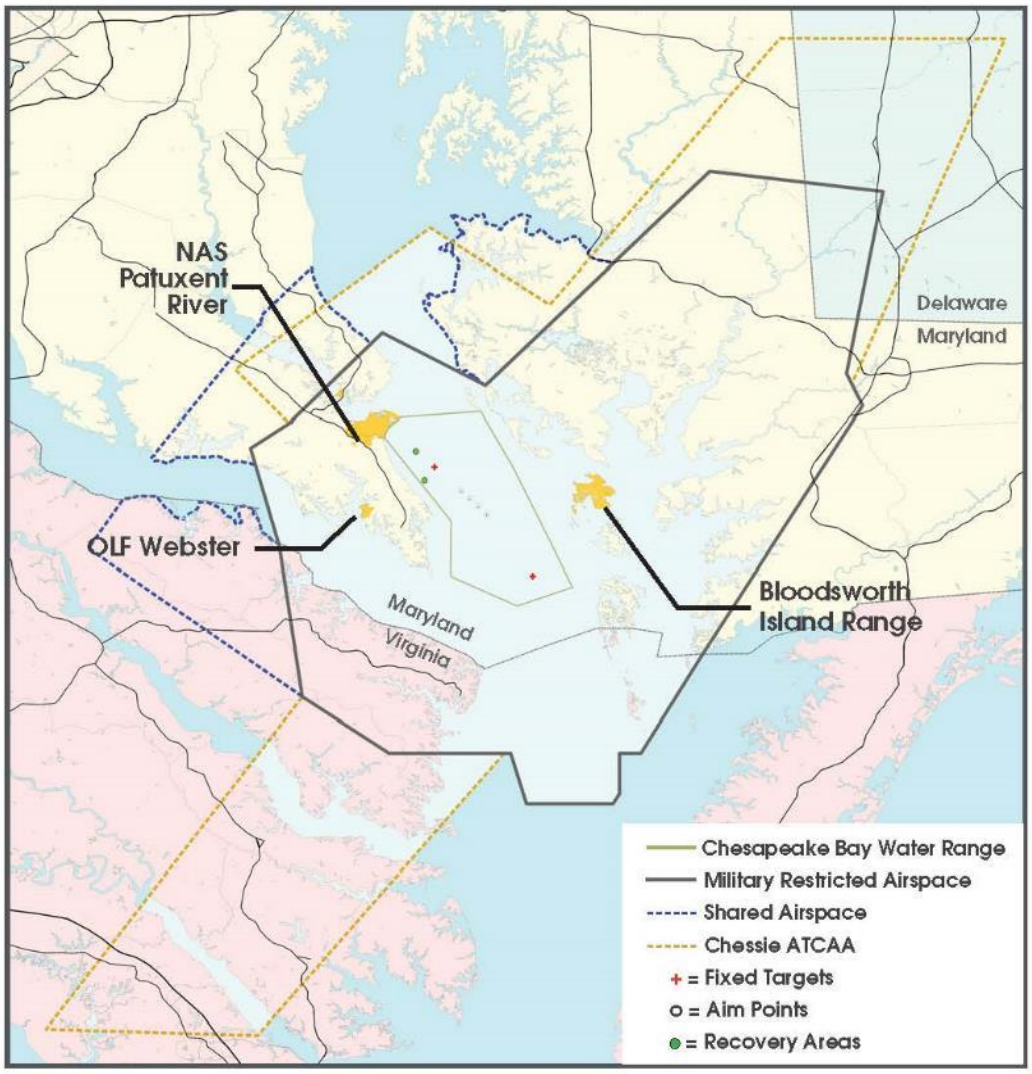
Study Area

The Study Area is presented in the map below.



NAS -Naval Air Station
OLF - Outlying Landing Field
ATCAA - Air Traffic Control Assigned Airspace

Please visit the project website at www.PRCEIS.com

Land Areas

- **Naval Air Station (NAS) Patuxent River:** Covers 6,304 acres in St. Mary's County, and contains the main airfield, two runways, control tower, and the majority of aircraft and aircraft systems testing facilities.
- **Outlying Landing Field (OLF) Webster:** An annex to NAS Patuxent River, OLF Webster covers 852 acres along the eastern shore of the St. Mary's River, with St. Inigoes Creek and Molls Cove forming the northern boundary, and is primarily used for unmanned aircraft research, development, testing, and evaluation.
- **Bloodsworth Island Range:** The range covers 4,738 acres, located 25 miles southeast of NAS Patuxent River in the Chesapeake Bay. The Navy conducts aviation-related testing activities within the military restricted airspace that overlies the Bloodsworth Island Range.

Water Areas

- **Chesapeake Bay Water Range:** Located in the middle Chesapeake Bay between the mouth of the Patuxent River and the mouth of the Potomac River, this Range supports aircraft testing and training activities, including the release of non-explosive weapons to ensure safe release from aircraft.
- **Patuxent River Seaplane Area:** A designated area historically used for seaplane takeoffs and landings.
- **Potomac and St. Mary's Rivers surrounding OLF Webster:** These waters are used for non-impact testing activities, including aircraft overflights, surface vessels, and unmanned underwater vehicles.

Airspace

- **Military Restricted Airspace:** Designated airspace that provides a safe and controlled area for aircraft testing and evaluation.
- **Adjacent Shared Airspace:** Adjacent airspace shared by other users, including private and commercial aircraft.
- **Chessie Air Traffic Control Assigned Airspace (ATCAA):** High-altitude airspace that can be assigned to the military to accommodate flight activities that require additional space beyond the boundaries of the military restricted airspace.

Atlantic Test Ranges (ATR) Assets

- **Fixed Targets, Aim Points, and Recovery Areas:** Used as reference points for non-explosive weapons and mission systems.
- **Instrumentation Sites:** ATR is a fully instrumented range with shore-based radars, telemetry, optical, and communications systems.

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What resources will be studied in the Environmental Impact Statement?

The Navy will be studying potential impacts on the following representative resource areas within the Patuxent River Complex (PRC). The scoping process helps to identify which resources will be studied.

Resource Area	
Airspace and Airfield Activities	• Aircraft testing and evaluation in military restricted airspace • Use of adjacent shared airspace • Flight activities in high-altitude airspace • Number of aircraft flight hours
Noise	• Types and sources of noise • Sensitive receptors
Public Health and Safety	• Flight safety • Bird/Animal aircraft strike hazard • Range safety • Hazardous materials and wastes
Shared Space	• Land use compatibility • Recreation • Environmental justice
Air Quality	• Air emissions from aircraft maintenance, testing, and training • Greenhouse gases
Biological Resources	• Terrestrial vegetation and wildlife • Marine resources • Protected species • Essential fish habitat
Water Resources and Sediments	• Surface waters, including the Chesapeake Bay • Wetlands • Sediments
Cultural Resources	• Archaeological resources • Architectural resources • Traditional cultural properties

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Aircraft Noise

Aircraft flying in the Patuxent River Complex (PRC) generate noise, and the Navy is preparing a noise assessment as part of this Environmental Impact Statement (EIS).

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air or water, and are sensed by the human ear. Sound is all around us. The perception and evaluation of sound involves three basic physical characteristics:

- **Intensity –** the acoustic energy, which is expressed in terms of sound pressure, in decibels (dB)
- **Frequency –** the number of cycles per second the air vibrates, in hertz
- **Duration –** the length of time the sound can be detected

What is Noise?

Noise is considered to be unwanted sound that interferes with normal activities or otherwise diminishes the quality of the environment.

The response of different individuals to similar noise events is diverse and is influenced by many factors including: the type of noise, interference with activity, time of day, how long the noise lasts, how many times it occurs, background or ambient noise levels, previous experiences within the community, and individual sensitivity to noise.

Aircraft noise is the predominant noise source at the PRC. Noise is generated from testing and training activities at Naval Air Station (NAS) Patuxent River and Outlying Landing Field (OLF) Webster and in the water and airspace.

How is Noise Assessed?

The U.S. Environmental Protection Agency (EPA), Federal Aviation Administration (FAA), and Department of Defense (DoD) use the Day-Night Average Sound Level (DNL) as the primary metric to measure long-term community noise exposure and assess noise impacts on the natural and human environment.

DNL represents the average sound energy of events over a 24-hour period, with a 10-dB adjustment added to nighttime activities (10:00 p.m. to 7:00 a.m.). This 10-dB adjustment accounts for the added intrusiveness of noise when background noise levels are low and noise-sensitive activities such as sleep take place. DNL is depicted as noise contours, a continuous line around a noise source (e.g., 65 dB DNL, 70 dB DNL), connecting points of equal noise levels. DNL takes into account the factors that influence the perception of noise by people (loudness, number and duration of events, and time of day) and includes them in one metric that is used to identify land uses that are compatible with specific noise levels.

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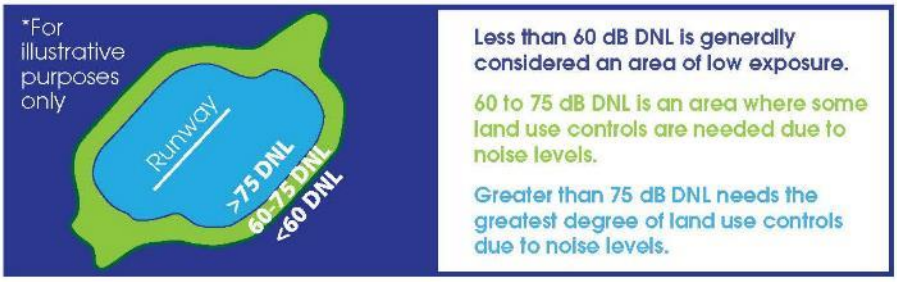

Supplemental metrics are used to assess specific types of noise impacts, such as interference with sleep, speech, and classroom learning.

This EIS will include a comprehensive noise study of the PRC. The study will use the latest approved DoD environmental noise computer models to quantify and assess noise at the airfields and in the water and airspace for the baseline conditions and the operational alternatives. The following noise metrics will be included in the PRC noise study:

A-Weighted Day-Night Average Sound Level (ADNL)	• Used for evaluating community response to aircraft noise and land use compatibility • 24-hour cumulative noise metric • 10 dB added to events occurring between 10 p.m. and 7 a.m. to account for nighttime noise disturbance • A-weighted dB levels are used to represent human hearing frequency
C-Weighted DNL (CDNL)	• Used to describe sonic boom and impulsive noise • C-weighted dB levels best describe noise that can be felt as well as heard
A-Weighted Monthly Onset Rate DNL (Ldnmr)	• Used for evaluating community response to aircraft noise and land use compatibility • A monthly average calculated based on the number of daily flights and the number of flying days in a month with the highest tempo
A-Weighted Sound Exposure Level (SEL)	• Used to compare relative noise levels of various flights • Used to estimate the potential for sleep disturbance • Noise exposure of a single event (e.g., flyover) as if it occurs in 1 second
Maximum A-Weighted Sound Level (Lmax)	• Used to estimate the potential for task interference and classroom interruptions • Maximum sound level that humans can hear during an overflight event
Unweighted Peak Sound Level (dBP)	• Used to estimate the likelihood of complaints associated with large-arms firing • Highest instantaneous sound level generated by weapon firing

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How is Noise Modeled?

The DoD uses environmental noise models to predict and compare noise levels of current conditions and future operational alternatives. Noise model input includes aircraft types, number of activities, flight tracks, engine power settings, aircraft speed, terrain, temperature, and relative humidity. Engine maintenance testing is also included in the models. The output of noise models is presented on land use maps in the form of noise contours.

Noise Management:

The Navy has a comprehensive noise management program for the PRC including:

- Noise response system with a toll-free noise hotline to report noise disturbances
- Annual aircrew awareness briefings
  "Be Safe, Be Smart, and Be Sensitive"
- Sonic boom monitors throughout the PRC
- Noise management instructions to reduce noise impacts
- Monitoring and tracking of activities
- Community noise advisories
- Real estate disclosure clause to notify prospective buyers of potential impacts from nearby military installations
- Noise zones to promote compatible development

Noise Hotline 866-819-9028

Please visit the project website at www.PRCEIS.com

Shared Space and Safety

The water and airspace within the Patuxent River Complex (PRC) are used by many people for commercial and recreational purposes. The Navy shares the water and airspace with the community and recognizes the importance of public access.

The Navy ensures public safety during testing and training activities by:

- Making sure any watermen or recreational users are clear of impact areas and targets before testing begins
- Canceling or delaying activities if public or personnel safety is a concern
- Communicating via radio to local watermen and recreational users of the location, date, and time of range closures
- Implementing temporary access restrictions to testing and training areas
- Designating restricted airspace for multiple, high-speed, military aircraft
- Limiting the number of aircraft within restricted airspace
- Using a Military Radar Unit, named BayWatch, for surveillance when the restricted area is activated

Communication is Key
The Navy uses marine very high frequency (VHF) Channels 81 and 82

Thorough environmental and safety reviews are conducted for all tests.

The Navy conducts diverse testing and training in the PRC.

Some access restrictions must occur for public safety.

The safety measures implemented before and during testing and training, along with the cooperation of the public, commercial, and recreational users of the air and sea spaces, enable safe testing and training.

PUBLIC NOTIFICATION

Noise advisories are posted to inform the public of dates and times when noise-generating activities are scheduled.

Temporary access limitations (usually lasting several hours) can occur during testing and training activities for the safety of commercial and recreational users.

Please visit the project website at www.PRCEIS.com

Stewardship

Programs

The Navy's stewardship programs contribute to both the success of the mission and the protection of the Chesapeake Bay for future generations.

Naval Air Station (NAS) Patuxent River manages robust community service and environmental stewardship programs. Multiple partnerships with the private sector and government agencies have been successful in advancing environmental compliance, conservation, and education.

Initiatives include:

- Wildlife habitat protection and enhancement
- Rare, threatened, and endangered species monitoring
- Archaeological surveys and site protection
- Marine mammal surveillance
- Overflight restrictions to minimize wildlife disturbance

For example, the Navy works with the College of William and Mary to study bald eagle nesting success on NAS Patuxent River (top right) and archaeologists have excavated a test pit showing a brick foundation dating to the 1800s (bottom right).

NAS Patuxent River did the first test flight of the Green Hornet, a bio-fueled F/A-18 jet.

Partnering

- The Navy partners with nonprofit organizations and local, state, and federal agencies to manage lands for uses such as agriculture, recreation, and natural habitat. Over 8,000 acres of land have been protected as conservation areas or easements.
- NAS Patuxent River partners with the University of Maryland to develop creative solutions to protect native terrapin (top right). Natural resource experts found that prime terrapin nesting sites overlapped with an established helicopter landing zone. Working with the pilots, an acceptable alternative landing zone site was identified. Through an agricultural outlease, farmers cleared excess vegetation on the new site, and a terrapin exclusion fence was installed.
- Navy experts built heron nesting platforms at Bloodsworth Island Range (bottom right).
- The Navy participates in the North American Waterfowl Management Plan along with the U.S. Fish and Wildlife Service and Maryland Department of Natural Resources.

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How to Provide Comments:

Complete a comment form tonight and place it in the comment box.

By mail:
Naval Air Warfare Center Aircraft Division
Attn: EIS Project Manager
NAVAIR Ranges Sustainability Office
Atlantic Test Ranges, Building 2118
23013 Cedar Point Road
Patuxent River, MD 20670-1183

Electronically via the project website:
www.PRCEIS.com

If you have questions or would like more information about the PRC EIS process, please contact the NAVAIR Ranges Sustainability Office at (301) 342-9902. Note, comments will not be accepted via the telephone.

Please visit the project website at www.PRCEIS.com

NOTES:

Please visit the project website at www.PRCEIS.com

We are in the early stages of the EIS process and appreciate your time and interest.

Please visit the project website at www.PRCEIS.com

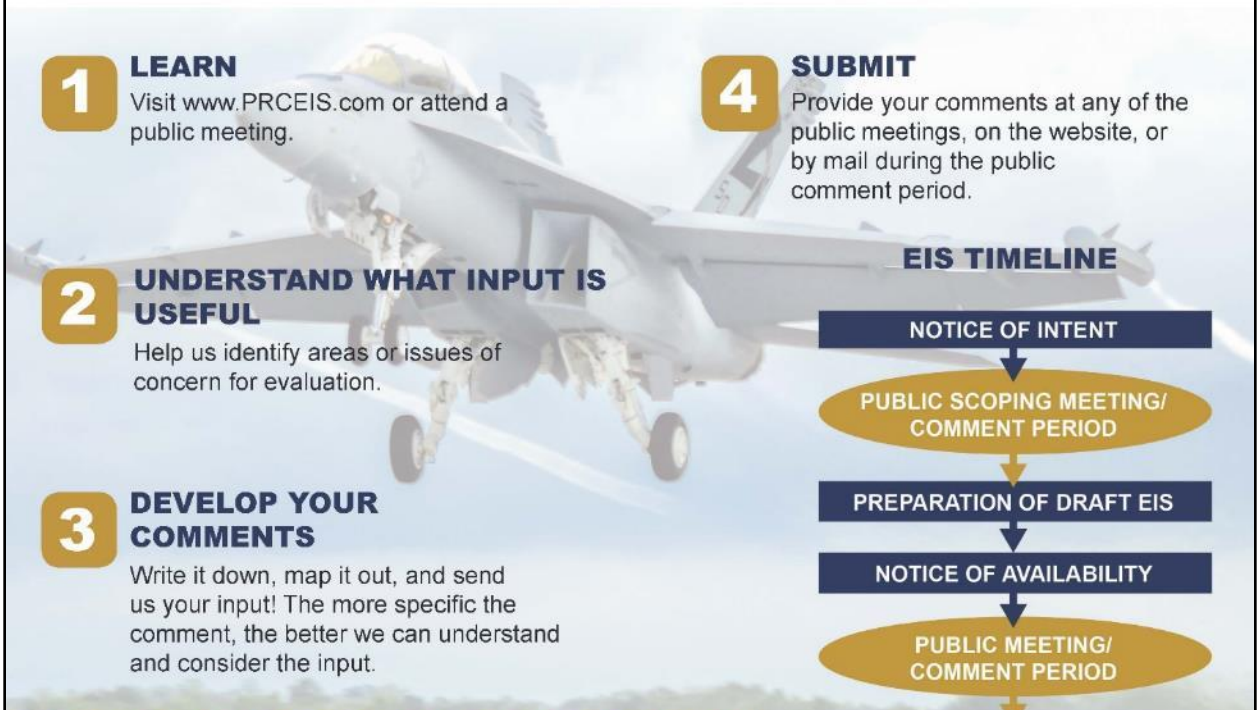
A GUIDE
TO PROVIDING COMMENTS

Patuxent River Complex Testing and Training Environmental Impact Statement (EIS)

The Navy is hosting a series of public meetings to provide information on the Patuxent River Complex EIS, which coincide with a public comment period. The Navy is asking stakeholders to help identify areas or issues of concern for evaluation.

Your input is important to us and provides decision makers with local knowledge and community insight.

This is your opportunity to provide input on what will be studied and considered before the analysis begins.



1 LEARN
Visit www.PRCEIS.com or attend a public meeting.

2 UNDERSTAND WHAT INPUT IS USEFUL
Help us identify areas or issues of concern for evaluation.

3 DEVELOP YOUR COMMENTS
Write it down, map it out, and send us your input! The more specific the comment, the better we can understand and consider the input.

4 SUBMIT
Provide your comments at any of the public meetings, on the website, or by mail during the public comment period.

EIS TIMELINE

- NOTICE OF INTENT
- PUBLIC SCOPING MEETING/ COMMENT PERIOD
- PREPARATION OF DRAFT EIS
- NOTICE OF AVAILABILITY
- PUBLIC MEETING/ COMMENT PERIOD
- PREPARATION OF FINAL EIS
- NOTICE OF AVAILABILITY
- WAIT PERIOD
- RECORD OF DECISION

Place Stamp Here

Naval Air Warfare Center Aircraft Division
Attn: EIS Project Manager
NAVAIR Ranges Sustainability Office
Atlantic Test Ranges, Building 2118
23013 Cedar Point Road
Patuxent River, MD 20670-1183

www.PRCEIS.com

HOW TO LEARN MORE
and Submit Comments

VISIT THE EIS WEBSITE

Familiarize yourself with the project, review materials, and sign up to receive project updates and notifications at www.PRCEIS.com.

ATTEND A PUBLIC MEETING

Public meetings will be an open-house format to facilitate one-on-one conversations and to provide information. To find a meeting near you, please visit www.PRCEIS.com.

SUBMIT YOUR COMMENTS

1 ONLINE

Follow the instructions at www.PRCEIS.com.

2 BY MAIL

Submit your written comments via U.S. mail; you can fill out, detach, and mail the post card below.

3 PUBLIC MEETINGS

Comment forms will be available for your use at the public meetings.

MAIL COMMENTS

Mail comments to:

Naval Air Warfare Center Aircraft Division
Attn: EIS Project Manager
NAVAIR Ranges Sustainability Office
Atlantic Test Ranges, Building 2118
23013 Cedar Point Road
Patuxent River, MD 20670-1183

FOR MORE INFORMATION

For more information on the Patuxent River Complex EIS, please contact:

Naval Air Warfare Center Aircraft Division
NAVAIR Ranges Sustainability Office
301-342-9902

PUBLIC COMMENTS WILL BE ACCEPTED FROM 15 FEBRUARY TO 1 APRIL 2019.

www.PRCEIS.com

L.2.7 Scoping Comment Summary

Table L-3 Summary of Comments Received During the Scoping Period

Comment Method	*Code*	*Summary*
Comment Forms		
Comment Form	Noise	Would like an app to inform the community about aircraft operations.
Comment Form	Airspace, Stewardship	Shared airspace with general aviation, stewardship (County partnership to buy Shannon Farm), and wants to be a good neighbor (Cedar Cove).
Comment Form	Shared Space	Recommends a fact sheet for new boat registrations and fishing/crabbing/oysters to make people aware of the water restricted areas.
Comment Form	General	Presentations were informational and interesting.
Comment Form	General	Add to mailing list. Very informative presentations.
Letters		
Letter	Water	No comments since the Patuxent River Complex (PRC) is outside of area of Tidewater, Virginia, localities that are subject to the Chesapeake Bay Preservation Area Designation and Management Regulations. Regulations do not apply.
Letter	Cultural Resources	The Department of Historic Resources believes that the proposed undertaking has the potential to affect historic properties listed in or eligible for listing in the National Register of Historic Places. Please continue to consult with the Department of Historic Resources on the undertaking pursuant to the National Environmental Policy Act and Section 106 of the National Historic Preservation Act.
Letter	Purpose and Need	The purpose or objective of the proposal should be defined in relationship to the need of the action. Need should identify and describe underlying deficiency, facts and analyses supporting the deficiency, and context.
	Alternatives	The Environmental Impact Statement (EIS) should have clear comparison of alternatives text, rationale for selection of the preferred alternative, and reasons alternatives were eliminated.
	Land Use	The EIS should contain the type and acreage of land or water impacted and include a description of the permits, laws, and regulations.
	Water Resources	The EIS should address water quality including surface water, groundwater, drinking water, stormwater management, wastewater management, wetlands, oceans and watersheds. Identify all water bodies including target locations that may be impacted by the Navy's operations. Also address submerged aquatic vegetation, Chesapeake Bay Protection and Restoration, and the Chesapeake Bay watershed.
	Biological (Threatened and Endangered Species)	The EIS should provide a description of terrestrial, wildlife, and aquatic species. Include threatened or endangered species and critical habitat. Describe the potential project impacts to these species as well as mitigation measures to minimize/avoid impacts. The most recent state and federal threatened and

Table L-3 Summary of Comments Received During the Scoping Period, Continued

Comment Method	*Code*	*Summary*
		endangered species coordination letters should be appended to the EIS. In addition, appropriate state and federal agencies should be contacted annually.
	Marine Mammal Protection Act	The EIS should discuss testing/training operations impact on marine life. Monitoring of activities and impacts on marine life should be tracked and coordinated with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Include USFWS and NMFS on the Distribution List.
	Essential Fish Habitat	Proposed Action should not involve the alteration of essential fish habitats or reduce the productive capacity of any fish stock. Operations should not alter essential fish habitats. Coordinate with the National Oceanic and Atmospheric Administration (NOAA) on possible impacts to fish habitats and include NOAA in the Distribution List.
	Environmental Justice	Environmental Justice analysis to include maps with Census tracts and/or block groups and meaningful public outreach. Include the methodology and outreach efforts. Use EJSCREEN.
	Human Health	In the EIS, discuss the human health risks associated with operations at the PRC including contaminants.
	Executive Order 13045, Children's Health	The EIS should address Executive Order (EO) 13045. Environmental health and safety risks are defined as "risks to health or to safety that are attributable to products or substances that the child is likely to come in contact with or ingest".
	Leadership in Energy and Environmental Design	If the Proposed Action would require renovation of existing facilities and construction of new facilities, the Navy should consider Leadership in Energy and Environmental Design in project planning.
	Distribution List	Include the distribution list in the EIS.
	Cultural Resources	Consult with the Maryland State Historic Preservation Officer (SHPO) to identify historic properties/districts, etc. that may potentially be affected and to seek ways to resolve potential adverse effects. Include a description of the affected sites and potential impacts, Military Operating Area, and include correspondence. Coordination with the Maryland Historic Trust is recommended.
	EO 13693, Planning for Federal Sustainability in the Next Decade	Note: this EO has been revoked. Include in the EIS how the Navy will reduce energy use and costs, increase efficiency, and build resiliency into project design.
	Cumulative Impacts	The EIS should assess cumulative and indirect (secondary) impacts specific to resources. Use a trend analysis for resources that may be adversely affected by the proposed alternatives. Manage and link proposed projects to overall water quality and habitat on a sub-basin and sub watershed

Table L-3 Summary of Comments Received During the Scoping Period, Continued

Comment Method	*Code*	*Summary*
		basis, as well as allow for a full evaluation of community impacts that need to be evaluated.
	Hazardous Waste	Discuss if a Hazardous Waste Management Plan and a Hazardous Waste Minimization Plan are in place. Identify known hazardous materials, legacy chemical warfare materials, biological warfare materials, radiological materials, munitions and explosives of concern (MEC) as well as asbestos-containing materials (ACM), lead-based paint (LBP), and oil and other hazardous materials located within the study area. The status of the materials should be discussed as well as alternative remedial methods described in addition to providing a detailed plan for proper disposal.
	Noise	The EIS should discuss noise impacts. Describe health problems related to noise including stress-related illnesses, high blood pressure, speech interference, hearing loss, sleep disruption, and lost productivity.
	Socio-economics	The EIS should discuss the socioeconomic and cultural status of those within and/or affected by the Proposed Action, including the number of people, employees and/or jobs impacted as a result of the Navy's operations. The EIS should address the decrease or increase of people/employees /jobs in relation to its effect on tax base, local housing, job markets, schools, utilities, businesses, etc.
	Traffic and Transportation	If the Proposed Action will have no impacts on traffic and transportation, please indicate this and state why in the EIS.
	Water - Wetlands	Wetlands present on, or within the study area should be delineated according to the 1987 Federal Manual. Impacts to wetlands should be avoided or minimized whenever possible. The total size of the wetlands should be provided, in addition to the size of wetlands in the study area and size of the direct impact. The EIS must analyze the size and functional values of all impacted wetlands and develop a mitigation plan for their protection.
	Water – Stormwater and Sedimentation	The Energy Independence and Security Act (EISA) requires federal agencies to reduce stormwater runoff from development projects to protect water resources. Discuss the Navy's operations in relation to sediment impact (specific to target locations, sensitive areas, Chesapeake Bay, etc.).
	Physiography	The physical and natural resources of the project area should be described in the EIS including physiographic provinces, topography, climate and geologic setting. Soils should be mapped.
	Biological Resources	The EIS should provide a complete description of the terrestrial habitat resources in the study area. Complete species lists for mammals, birds, amphibians, reptiles, and plants present in the study area should be provided. The composition and characteristics of each community type should be summarized, and the functions and total acreage indicated. Discuss potential

Table L-3 Summary of Comments Received During the Scoping Period, Continued

Comment Method	*Code*	*Summary*
		impacts to these communities as a result the Navy's operations and possible mitigation measures to minimize/avoid impacts.
	Air Quality	Conduct a General Conformity rule analysis. Evaluate both temporary and National Ambient Air Quality Standards impacts.
Letter	Noise and Health	Noise and heath, vibration from ground testing, fumes, noise monitor, and mitigation measures.
Web		
Web	General, Coastal Consistency Determination (CCD)	Department of Environmental Quality does not participate in scoping but lists other agencies that may provide comments, CCD submission, and database assistance (GIS, GEMS, DHR, DCR, DGIF, and EPA sites).
Web	Airspace, Noise	Please consider the community surrounding the Tappahannock-Essex county, Virginia airport (KXSA). It is requested that you completely eliminate or, at the very least, minimize KXSA as a training destination for your aircraft. Particularly your helicopter aircraft and osprey, fixed winged aircraft. Our community is constantly abused by helicopter/osprey aircraft from multiple locations and the citizens here are beginning to feel negatively towards our military because of it.
Web	Airspace, Noise	Supports keeping fighting Airmen trained. However, lives in rural Dunnsville, Virginia, close to the Tappahannock Airport that the folks here did not want. No problem with your Ospreys using this airport during the day but nighttime activities need to stop. There are other areas for your fly boys to train nearby such as AP Hill and the West Point airport. This is not an airport set up for this kind of training. I hope you will respect our wishes and night train somewhere else.
Web	Health and Safety	Safety hazard to boaters: 4 poles in the Chesapeake Bay near the Naval Ranges Theodolite Radar Station in Dameron, Maryland. Also at the Radar Station an underground large stiff black rubber piece of tubing extends 20 to 30 feet out onto the beach and directly into the Chesapeake Bay. Request removal.
Web	General – Public Involvement	Is there a way to obtain minutes from the scoping meeting held at the Higher Education Center on Airport Road on March 5?
Web	Airspace	Shared airspace between St. Mary's County Airport and Naval Air Station Patuxent River. There seems to be some ambiguity.
Web	General and Stewardship (Land Use)	Requests word searchable EIS, section that describes differences between 1998 and current EIS, more information on land preservation initiatives.
Web	General	Support for Navy testing and training. Lives on the Little Wicomico in Northumberland County near Smith Point. Naval aircraft pass overhead almost every day. They usually look to be F-18s, but they're so high and fast that it's hard to tell for sure. Very rarely is there a sonic boom, certainly nothing objectionable. I for one am happy to have the Navy training and testing as much as it needs to do so. When America needs

Table L-3 Summary of Comments Received During the Scoping Period, Continued

Comment Method	*Code*	*Summary*
		those aerial warfighters it will need them badly and want them to be highly trained. Go Navy.
Web	Proposed Action and Health and Safety	Tank removal near Bloodsworth Island Range–hazard to navigation thus needing an exclusion zone.
Web	Land Use – CCD	No comments; Delaware Coastal Management Program.
Web	Land Use and Cultural Resources	List National Park Service resources that are located in the project vicinity designed since the previous EIS: Captain John Smith Chesapeake National Historic Trail, Star Spangled Banner Trail, Potomac Heritage National Scenic Trail, and Harriet Tubman Underground Railroad National Historic Park.
Web	Land Use and Cultural Resources	Attachment to National Park Service letter: Foundation Document Potomac Heritage National Scenic Trail, October 2014.
Web	Biological Resources, Noise	Tracking and modeling of dolphin distribution in and around the Chesapeake Bay. Not just an occasional visitor. Requests that the noise effects on bottlenose dolphins be assessed.
Web	Biological Resources: Natural Heritage Resources, State Threatened/ Endangered	Natural Area Preserves (Bush Mill, Dameron Marsh, Hickory Hollow, and Hughlett Point) are located within 2 miles; however, Virginia Department of Conservation and Recreation does not anticipate impacts to these areas. The Proposed Action will not affect any documented state-listed plants and insects.
Email		
Email	Biological	The USFWS does not have scoping comments but will be able to assist in identifying fish and wildlife resources.
Phone		
Phone	General	Media had questions about the Notice of Intent.
Phone	Airspace	Received a question from the Aircraft Owners & Pilots Association (AOPA) asking if the PRC EIS would result in an expansion of military airspace. He will communicate to AOPA that no airspace expansion is planned and all activities will continue in existing military airspace.
Phone	Public Involvement	Received postcard in the mail. Asked if he could share the information about the scoping meetings with the community and if the community could attend the meetings.
Phone	Public Involvement, Noise	Had trouble with the web site comment feature and could not find a phone number. Said that it has been quiet lately and requested the Public Affairs Office web site with the noise advisories.
Phone	Public Involvement	Enterprise (newspaper). Information on the format of the public meetings (e.g., provide testimony).

Table L-3 Summary of Comments Received During the Scoping Period, Continued

Comment Method	*Code*	*Summary*
Phone	Cultural resources	Project is outside of Cherokee Nation and they do not want to receive further information.
Phone	Public Involvement	Wanted additional copies of the scoping meeting brochures.
Phone	Public Involvement	Wanted someone from the Navy to attend a Civic Association meeting on April 8, 2019, and give a brief overview of the EIS.
Phone	Tanks	Wanted to know the number of tanks near Bloodsworth Island Range.

L.3 Draft EIS Notification

L.3.1 General Distribution Letter (with Enclosure)

DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
22347 CEDAR POINT ROAD, UNIT 6
PATUXENT RIVER, MARYLAND 20670-1161

April 29, 2021

Dear Sir or Madam:

The Department of the Navy (Navy) has prepared and filed a draft Environmental Impact Statement (EIS) for Testing and Training Activities in the Patuxent River Complex (PRC) with the United States Environmental Protection Agency, pursuant to the National Environmental Policy Act of 1969, as implemented by the Council on Environmental Quality. The draft EIS evaluates the potential environmental effects of continuing to conduct military research, development, test, and evaluation (also referred to as "testing") and training activities within the PRC. These activities include those analyzed in the December 1998 PRC EIS and subsequent environmental assessments, as well as adjustments to current testing and training activities required to support projected Navy readiness requirements into the foreseeable future.

An essential part of the EIS process is public involvement. The PRC draft EIS is available for review and comment during a 45 day public comment period that begins April 30, 2021, and ends June 15, 2021. Due to current Federal and State guidance on social distancing, travel, and public event restrictions in response to Coronavirus Disease 2019, the Navy is holding virtual public meetings, consisting of a presentation and a question and answer session, to discuss the proposed action and the draft environmental analysis.

There are multiple ways to get involved:

Visit the Project Website. To learn about the project, review materials, join the mailing list, and/or submit comments, visit www.prceis.com.

Attend a Virtual Public Meeting. Visit the project website to view and attend the virtual public meetings, to be held on Tuesday, May 18, 2021 and Wednesday, May 19, 2021. If you would like to submit questions for discussion during the virtual public meetings, complete the form available at www.prceis.com between May 10 – May 17, 2021.

Review the Draft EIS. The PRC draft EIS is available for electronic viewing or download at www.prceis.com. Copies of the draft EIS are also available for public review at the following libraries: St. Mary's County Library, Lexington Park Branch; St. Mary's County Library, Charlotte Hall Branch; Calvert Library, Southern Branch; Dorchester County Central Library; Somerset County Library, Princess Anne Branch; Lancaster Community Library; and Northumberland Public Library. A compact disc of the draft EIS can be made available upon request by calling (301) 342-9902.

Provide Comments. Written comments may be submitted by mail or electronically via the project website during the 45 day public comment period. Federal, state, and local agencies and officials, and other interested organizations and individuals are encouraged to provide comments on the PRC draft EIS during the public comment period. Mailed comments must be postmarked no later than June 15, 2021, to be considered in the Final EIS.

Comments can be mailed to:

Naval Air Warfare Center Aircraft Division
Attn: PRC EIS Project Manager
23013 Cedar Point Road, Building 2118
Patuxent River, MD 20670-1183

We appreciate your time and interest and look forward to hearing from you. My point of contact for this matter is the Naval Air Warfare Center Aircraft Division Sustainability Office at (301) 342-9902.

Sincerely,

JOHN S. LEMMON
Rear Admiral, U.S. Navy

Enclosure
(1) Patuxent River Complex Environmental Study Project Description and Study Area Map

2

Patuxent River Complex Environment Impact Study Project Description and Study Area Map

Background. The Navy's action proponent is Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), the Navy's primary testing, engineering, and fleet support activity for naval aircraft, engines, avionics, and aircraft support systems. NAVAIRWARCENACDIV is responsible for scheduling and conducting military readiness activities within the Patuxent River Complex (PRC). The PRC is based at Naval Air Station (NAS) Patuxent River, located in Maryland approximately 60 miles southeast of Washington, D.C.

Purpose and Need. The purpose of the proposed action described in the draft EIS is to provide Sailors and Marines with equipment and technology that operate effectively and safely to support current and projected future military readiness requirements. The need for the proposed action is to maintain military readiness of naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas, now and into the future, consistent with Title 10 United States Code section 8062.

Proposed Action and Alternatives

The Navy proposes to continue conducting testing and training activities within the PRC to meet current and future projected military readiness requirements. These proposed activities are consistent with those analyzed in the 1998 PRC EIS and are representative of the types of testing and training the Navy has been conducting in the PRC for decades.

A no action alternative and two action alternatives were evaluated in the draft EIS. The no action alternative represents current activity levels for the PRC based on 10 years of recorded data. Alternatives 1 and 2 provide adjustments to current activity levels projected to meet future military readiness requirements at typical levels and at maximum levels during times of increased global conflict, respectively. Alternatives 1 and 2 also include adjustments to enhance certain current tenant squadron activities identified to meet future requirements and add the testing of directed energy weapons technologies to address new and emerging threats. Alternative 2 is the Navy's preferred alternative.

Study Area. The PRC EIS Study Area includes military restricted and surrounding airspace that overlies portions of Maryland, Virginia, and Delaware, as well as land areas and water areas where the Navy conducts testing and training activities (see Figure 1). PRC airspace includes the Atlantic Test Ranges Restricted Airspace, Helicopter Operating Areas, and Chessie Air Traffic Control Assigned Airspace. PRC land areas include NAS Patuxent River, Webster Outlying Field, and the Bloodsworth

Enclosure (1)

Island Range. Finally, PRC water areas include the Chesapeake Bay Water Range and portions of the lower Patuxent, Potomac, and St. Mary's Rivers.

Environmental Analysis. The Navy conducted a comprehensive analysis of potential impacts on resource areas in the PRC Draft EIS including: ambient air noise; air quality; water resources and sediments; biological resources (including aerial, aquatic, and terrestrial species); public health and safety; land use; socioeconomics; cultural resources; and environmental justice. A summary of the findings can be found in the public meeting materials posted on the project website, www.prceis.com, and more details are available in the PRC draft EIS.

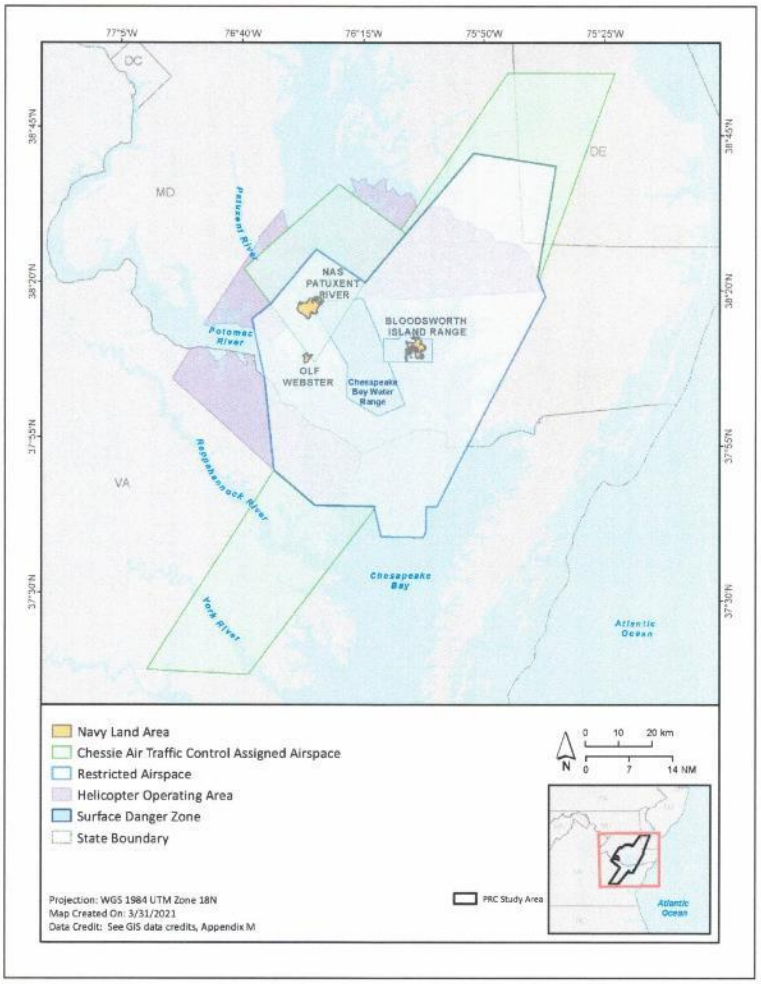


FIGURE 1: PRC EIS STUDY AREA MAP

2 Enclosure (1)

L.3.2 Stakeholder Distribution List for Draft EIS

The Honorable Beth Carozza
The Honorable Adelaide Eckardt
The Honorable Arthur Ellis
The Honorable Stephen Hershey
The Honorable Ryan McDougle
The Honorable Michael A. Jackson
The Honorable Brian Prettyjohn
The Honorable Bryant L. Richardson
The Honorable James Rosapepe
The Honorable Richard Stuart
The Honorable Christopher Adams
The Honorable Carl Anderton
The Honorable Steven Arentz
The Honorable Timothy D. Dukes
The Honorable Mark Fisher
The Honorable Jefferson Ghrist
The Honorable Wayne Hartman
The Honorable Rachel Jones
The Honorable Jay Jacobs
The Honorable John Mautz
The Honorable Charles Otto
The Honorable Edith Patterson
The Honorable Elizabeth Proctor
The Honorable Margaret Ransone
The Honorable Sheree Sample-Hughes
The Honorable Daniel B. Short
The Honorable C. T. Wilson
The Honorable Larry Dodd
The Honorable Darryl Fisher
The Honorable James Guy
The Honorable Ron Wolff
The Honorable Richard Haynie
The Honorable Craig Mathies
The Honorable William Lee
The Honorable Larry Porter
The Honorable F. Sanders
The Honorable Earl Hance
The Honorable Michael Vincent
The Honorable James McFarlane
The Honorable Daniel Burris
The Honorable Jacob Day
The Honorable Barry Dize
The Honorable David Genshaw
The Honorable P. Douglas Gosnell
The Honorable Garland Hayward
The Honorable Michael Henry
The Honorable Terry Cosgrove
The Honorable Andrew Bradshaw
The Honorable Kimberly Jahnigen Abner
The Honorable Stanford Robinson
Chief W. Frank Adams
Chief Stephen Adkins
Chief Gerald Stewart
Chief Kenneth Branham
Chief Chester Brooks
The Honorable Deborah Dotson
Chief Sarah Channing
Chief David Hill
Chief Robert Gray
Dr. Wenonah G. Haire
Chief Samuel Bass
Chief Leo Henry
Chief G. Anne Richardson
Chief Glenna Wallace
Chief Jesse Swann
Chief William Tayac
Mr. Jerry Davis
Mr. John Hartline
Mr. Gregory Padgham
Mr. Walter Chase
Dr. Thomas Miller
Mr. Eddie Somers
Mr. Mark Flynn
Ms. Deanna Mitchell
Mr. Andrew Brooks
Ms. Marcia Pradines
Captain Joseph Loring
Mr. James Golden
Mr. Patrick J. Emory
Mr. Jason Bulluck
Mr. Ray Fernald
Mr. Mark Eberle
Dorchester County Council
Dominion Energy Cove Point LNG Terminal

L.3.3 Postcards Announcing Draft EIS Availability and Virtual Public Meetings

PATUXENT RIVER COMPLEX
Testing and Training Activities
Draft Environmental Impact Statement

The Navy invites you to participate in the Patuxent River Complex (PRC) Testing and Training Activities Draft Environmental Impact Statement (EIS) process. Copies of the Draft EIS are available on the project website, www.PRCEIS.com, and at several local libraries. To learn more about the study attend a virtual public meeting or visit the project website.

Virtual Public Meetings

Tuesday, May 18, 2021
6 PM to 7 PM EDT

Wednesday, May 19, 2021
12 PM to 1 PM EDT

Visit www.PRCEIS.com for meeting information and to access the link to the virtual public meetings. Submit questions for discussion at the virtual public meetings between **May 10 and May 17, 2021** by completing the form at www.PRCEIS.com.

The Navy Requests Your Input!

Comments may be submitted electronically via www.PRCEIS.com or by mail **by June 15, 2021.**

Mail comments to:
Naval Air Warfare Center Aircraft Division
Range Sustainability Office
Atlantic Ranges and Targets Department
Attn: EIS Project Manager
23013 Cedar Point Road, Building 2118
Patuxent River, MD 20670-1183

www.PRCEIS.com

About

The Draft EIS evaluates the potential environmental effects of continuing to conduct military research, development, test and evaluation (also referred to as "testing") and training activities within the Patuxent River Complex in order to maintain military readiness.

The Navy conducted a comprehensive analysis of potential impacts on resource areas including noise, biological and cultural resources, air and water quality, public health and safety, socioeconomics, land use, and environmental justice. **The study area includes portions of Maryland, Virginia, and Delaware.**

More details of the analysis and findings can be found at www.PRCEIS.com and in the Draft EIS.

Naval Air Warfare Center Aircraft Division
Range Sustainability Office
Atlantic Ranges and Targets Department
23013 Cedar Point Road, Building 2118
Patuxent River, MD 20670-1183

Name
Address
City, State, Zip

L.3.4 Notice of Availability of the Draft EIS Published in the Federal Register

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scientific and technical committees. Agency officials developed the "Confidential Financial Disclosure Form for Special Government Employees Serving on Federal Advisory Committees at the U.S. Environmental Protection Agency," also referred to as Form 3110–48, for greater inclusion of information to discover any potential conflicts of interest as recommended by the Government Accountability Office.

Form Numbers: EPA Form 3110–48.

Respondents/affected entities: Entities potentially affected by this action are approximately 325 candidates for membership as SGEs on EPA federal advisory committees. SGEs are required to file a confidential financial disclosure report (Form 3110–48) when first appointed to serve on EPA advisory committees, and then annually thereafter. Committee members may also be required to update the confidential form before each meeting while they serve as SGEs.

Respondent's obligation to respond: Required to serve as an SGE on an EPA federal advisory committee (5 CFR 2634.903).

Estimated number of respondents: 325 (total).

Frequency of response: Once and annually.

Total estimated burden: 325 hours per year (annually). Burden is defined at 5 CFR 1320.03(b).

Total estimated cost: $35,880 (per year), includes $0 annualized capital or operation & maintenance costs.

Changes in the Estimates: There is a decrease of 175 hours in the total estimated respondent burden compared with the ICR currently approved by OMB. This change is due to a decrease in the estimated number of respondents (from 500 to 325).

Courtney Kerwin,

Director, Regulatory Support Division.

[FR Doc. 2021–09018 Filed 4–29–21; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[ER–FRL–9056–3]

Environmental Impact Statements; Notice of Availability

Responsible Agency: Office of Federal Activities, General Information 202–564–5632 or *https://www.epa.gov/nepa.*

Weekly receipt of Environmental Impact Statements (EIS) Filed April 19, 2021 10 a.m. EST Through April 26, 2021 10 a.m. EST Pursuant to 40 CFR 1506.9.

Notice: Section 309(a) of the Clean Air Act requires that EPA make public its comments on EISs issued by other Federal agencies. EPA's comment letters on EISs are available at: *https://cdxnodengn.epa.gov/cdx-enepa-public/action/eis/search.*

EIS No. 20210043, Final, FRA, OR, Oregon Passenger Rail Tier 1 Final Environmental Impact Statement/ Combined Record of Decision for the Oregon Portion of the Pacific Northwest Rail Corridor (Portland to Eugene), Contact: Lydia Kachadoorian 781–227–0778. Under 23 U.S.C. 139(n)(2), FRA has issued a single document that consists of a final environmental impact statement and record of decision. Therefore, the 30-day wait/review period under NEPA does not apply to this action

EIS No. 20210044, Draft, USN, MD, Testing and Training Activities in the Patuxent River Complex, Comment Period Ends: 06/15/2021, Contact: Crystal Ridgell 301–757–5282.

EIS No. 20210045, Draft, USFWS, OR, Draft Bighorn Sheep Management Plan Environmental Impact Statement, Comment Period Ends: 06/14/2021, Contact: Shannon Ludwig 541–947–3315.

EIS No. 20210046, Final, USACE, CA, Phase 3 Reclamation District 17 Levee Seepage Repair Project, Review Period Ends: 06/01/2021, Contact: Tanis Toland 916–557–6717.

Dated: April 27, 2021.

Cindy S. Barger,

Director, NEPA Compliance Division, Office of Federal Activities.

[FR Doc. 2021–09062 Filed 4–29–21; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OARM–2016–0762; FRL–10023–15–OMS]

Information Collection Request Submitted to OMB for Review and Approval; Comment Request; General Administrative Requirements for Assistance Programs (Renewal)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency (EPA) has submitted an information collection request (ICR), General Administrative Requirements for Assistance Programs (EPA ICR Number 0938.22, OMB Control Number 2030–0020) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act. This is a proposed extension of the ICR, which is currently approved through April 30, 2021. In addition, this ICR includes EPA's Disadvantaged Business Enterprise (DBE) Program as a result of the relocation of the DBE Program from the Office of Small and Disadvantaged Business Utilization to the Office of Grants and Debarment. The information collection activities for the DBE Program were previously covered under OMB Control Number 2090–0030. Public comments were previously requested via the **Federal Register** on November 6, 2020 during a 60-day comment period. This notice allows for an additional 30 days for public comments. A fuller description of the ICR is given below, including its estimated burden and cost to the public. An Agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

DATES: Additional comments may be submitted on or before June 1, 2021.

ADDRESSES: Submit your comments to EPA, referencing Docket ID No. EPA–HQ–OARM–2016–0762, online using *www.regulations.gov* (our preferred method), by email to *docket_oms@epa.gov*, or by mail to: EPA Docket Center, Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave. NW, Washington, DC 20460. EPA's policy is that all comments received will be included in the public docket without change including any personal information provided, unless the comment includes profanity, threats, information claimed to be Confidential Business Information (CBI), or other information whose disclosure is restricted by statute.

Submit written comments and recommendations to OMB for the proposed information collection within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting "Currently under 30-day Review—Open for Public Comments" or by using the search function.

FOR FURTHER INFORMATION CONTACT: Elizabeth January, Office of Grants and Debarment, National Policy, Training and Compliance Division, Mail Code: 3903R, Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460; telephone number: (617) 918–8655; fax number: (202) 565–2470; email address: *January.Elizabeth@epa.gov.*

SUPPLEMENTARY INFORMATION: Supporting documents, which explain

L.3.5 Notice of Virtual Public Meetings of the Draft EIS Published in the Federal Register

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5. If authorized, could be carried out by the USACE.

• Whether following the USACE Chief's Report process or Section 7001 of WRRDA 2014, a proposal for a project or a project modification would need a current decision document to provide updated information on the scope of the potential project and demonstrate a clear Federal interest. This determination would include an assessment of whether the proposal is:

—Technically sound, economically viable and environmentally acceptable.

—Compliant with environmental and other laws including but not limited to National Environmental Policy Act, Endangered Species Act, Coastal Zone Management Act, and the National Historic Preservation Act.

—Compliant with statutes and regulations related to water resources development including various water resources provisions related to the authorized cost of projects, level of detail, separable elements, fish and wildlife mitigation, project justification, matters to be addressed in planning, and the 1958 Water Supply Act.

Environmental infrastructure proposals are an exception to the criteria. To be included in the table within the Annual Report the proposal must be a modification to a project that was authorized pursuant to Section 219 of WRDA 1992, as amended or must identify a programmatic modification to an environmental infrastructure assistance program and it has not been included in any previous annual report.

Feasibility study proposals submitted by non-Federal interests are for study authorization only. If Congressional authorization of a feasibility study results from inclusion in the Annual Report, it is anticipated that such authorization would be for the study, not for construction. Once a decision document is completed in accordance with Executive Branch policies and procedures, the Secretary will determine whether to recommend the project for authorization.

All USACE water resources development projects must meet certain requirements before proceeding to construction. These requirements include: (1) That the project is authorized for construction by Congress; (2) that the Secretary, or other appropriate official, has approved a current decision document; and, (3) that the funds for project construction have been appropriated and are available.

Section 902 of WRDA 1986, as amended, (33 U.S.C. 2280) establishes a maximum authorized cost for projects (902 limit). A Post Authorization Change Report (PACR) is required to be completed to support potential modifications, updates to project costs, and an increase to the 902 limit. Authority to undertake a 902 study is inherent in the project authority, so no additional authority is required to proceed with the study. Since these PACRs support project modifications, they may be considered for inclusion in the Annual Report if a report's recommendation requires Congressional authorization.

The Secretary shall include in the Annual Report to Congress on Future Water Resources Development a certification stating that each feasibility report, proposed feasibility study, and proposed modification to an authorized water resources development project, feasibility study, or proposed modifications to an environmental infrastructure program authority included in the Annual Report meets the criteria established in Section 7001 of WRRDA 2014, as amended.

Please contact the appropriate district office or use the contact information above for assistance in researching and identifying existing authorizations and existing USACE decision documents. Those proposals that do not meet the criteria will be included in an appendix table included in the Annual Report to Congress on Future Water Resources Development. Proposals in the appendix table will include a description of why those proposals did not meet the criteria.

Jaime A. Pinkham,

Assistant Secretary of the Army (Civil Works).

[FR Doc. 2021–09042 Filed 4–29–21; 8:45 am]

BILLING CODE 3720–58–P

DEPARTMENT OF DEFENSE

Department of the Navy

Notice of Virtual Public Meetings for the Draft Environmental Impact Statement for Testing and Training Activities in the Patuxent River Complex

AGENCY: Department of the Navy, DoD.

ACTION: Notice.

SUMMARY: Pursuant to the National Environmental Policy Act of 1969, as implemented by the Council on Environmental Quality, the Department of the Navy (DON) has prepared and filed with the United States Environmental Protection Agency a Draft Environmental Impact Statement (EIS) for Testing and Training Activities in the Patuxent River Complex (PRC), Naval Air Station (NAS) Patuxent River, Maryland. The Draft EIS evaluates the potential environmental effects of continuing to conduct military research, development, test and evaluation (also referred to as "testing") and training activities within the PRC. Activities include those analyzed in the December 1998 PRC Final EIS and subsequent environmental assessments, as well as adjustments to current testing and training activities required to support projected DON military readiness requirements into the foreseeable future. This notice announces the public review and comment period and the dates of the virtual public meetings, includes information about how the public can review and comment on the document, and provides supplementary information about the environmental planning effort.

DATES: The 45-day public comment period begins April 30, 2021 and ends June 15, 2021. To be considered in the Final EIS, all comments must be postmarked or received online by 11:59 p.m. Eastern Daylight Time on June 15, 2021. Due to current Federal and State guidance on social distancing and travel and public event restrictions in response to COVID–19, the DON is holding virtual public meetings, consisting of a presentation and question and answer sessions, to discuss the proposed action and the draft environmental analysis. Visit the project website at *www.PRCEIS.com* to learn more about and to view and attend the virtual public meetings. Public meeting materials will be posted on the project website and copies may be obtained by phone at 301–342–9902.

The virtual public meetings will occur as follows:

1. Tuesday, May 18, 2021, from 6 to 7 p.m. Eastern Daylight Time
2. Wednesday, May 19, 2021, from 12 to 1 p.m. Eastern Daylight Time

Substantive questions for discussion with DON representatives at the virtual public meetings can be submitted between May 10 and 17, 2021 for the May 18 and 19, 2021 meetings by completing the form at *www.PRCEIS.com.*

ADDRESSES:

Written comments may be mailed to Naval Air Warfare Center Aircraft Division Range Sustainability Office, Atlantic Ranges and Targets Department, Attention: PRC EIS Project Manager, 23013 Cedar Point Road, Building 2118, Patuxent River, MD 20670–1183, 301–342–9902, or submitted electronically via the project website at *www.PRCEIS.com.* All comments submitted during the 45 -day public comment period will become part of the public record, and

substantive comments will be considered in the Final EIS. Federal, state, and local agencies and officials, and other interested organizations and individuals are encouraged to provide comments on the Draft EIS during the 45-day public comment period.

FOR FURTHER INFORMATION CONTACT: Naval Air Warfare Center Aircraft Division Range Sustainability Office, Atlantic Ranges and Targets Department, Attention: Ms. Crystal Ridgell, PRC EIS Project Manager, 23013 Cedar Point Road, Building 2118, Patuxent River, MD 20670–1183, 301–342–9902, or project website at *www.PRCEIS.com.*

SUPPLEMENTARY INFORMATION: The DON distributed the Draft EIS to federal agencies with which the DON is consulting and to other stakeholders, provided press releases to local newspapers, and distributed letters and postcards to stakeholders, Native American Tribes, and other interested parties. Copies of the Draft EIS are available for public review at the following public libraries:

1. St. Mary's County Library, Lexington Park Branch, 21677 FDR Blvd., Lexington Park, MD 20653–0048
2. St. Mary's County Library, Charlotte Hall Branch, 37600 New Market Rd., Charlotte Hall, MD 20622–3041
3. Calvert Library Southern Branch, 13920 H G Trueman Rd., Solomons, MD 20688–0521
4. Lancaster Community Library, 16 Town Centre Dr., Kilmarnock, VA 22482–3901
5. Northumberland Public Library, 7204 Northumberland Hwy., Heathsville, VA 22473–3326
6. Dorchester County Central Library, 303 Gay St., Cambridge, MD 21613–1812
7. Somerset County Library, Princess Anne Branch, 11767 Beechwood St., Princess Anne, MD 21853–1118

Depending upon COVID–19 conditions regulating access to public facilities, it is recommended to check with the library regarding its hours of operation and the availability of the document. The PRC Draft EIS is also available for electronic viewing or download at *www.PRCEIS.com.* A compact disc of the Draft EIS will be made available upon request by contacting 301–342–9902.

Dated: April 23, 2021.

K.R. Callan,

Commander, Judge Advocate General's Corps, U.S. Navy, Federal Register Liaison Officer.

[FR Doc. 2021–08896 Filed 4–29–21; 8:45 am]

BILLING CODE 3810–FF–P

DEPARTMENT OF EDUCATION

[Docket No.: ED–2021–SCC–0022]

Agency Information Collection Activities; Submission to the Office of Management and Budget for Review and approval; Comment Request; National Study to Inform the 21st Century Community Learning Centers (CCLC) Program

AGENCY: Institute of Educational Sciences (IES), Department of Education (ED).

ACTION: Notice.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, ED is proposing a new information collection.

DATES: Interested persons are invited to submit comments on or before June 1, 2021.

ADDRESSES: Written comments and recommendations for proposed information collection requests should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this information collection request by selecting "Department of Education" under "Currently Under Review," then check "Only Show ICR for Public Comment" checkbox. Comments may also be sent to *ICDocketmgr@ed.gov.*

FOR FURTHER INFORMATION CONTACT: For specific questions related to collection activities, please contact Erica Johnson, 202–245–7676.

SUPPLEMENTARY INFORMATION: The Department of Education (ED), in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. ED is soliciting comments on the proposed information collection request (ICR) that is described below. The Department of Education is especially interested in public comment addressing the following issues: (1) Is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

Title of Collection: National Study to Inform the 21st Century Community Learning Centers (CCLC) Program.

OMB Control Number: 1850–NEW.

Type of Review: A new information collection.

Respondents/Affected Public: Individuals and Households.

Total Estimated Number of Annual Responses: 1,228.

Total Estimated Number of Annual Burden Hours: 397.

Abstract: The 21st CCLC program funds services during non-school hours, primarily during the school year. The services aim to help students meet state academic standards, particularly for students in low-performing schools that serve high concentrations of low-income families. Most participants (71 percent) are students attending afterschool centers during the school year, with the remainder being family members (14 percent) or summer attendees (15 percent). Afterschool centers supported by program funds provide a broad range of activities and services, such as academic enrichment, physical activity, service learning, and activities to engage families. Program activities and services may play a crucial role in addressing the substantial learning loss and other challenges that have occurred as a result of the COVID–19 pandemic.

This study will have two components. The first is a national snapshot of strategies that afterschool centers in the 21st CCLC program use to serve their students and families. The national snapshot will complement and extend information from the program's annual performance measures by providing an in-depth understanding of the key outcomes centers aim to promote and the diverse ways their activities and services for students and families, supports for staff, and improvement strategies are designed to promote these outcomes. Describing these strategies can provide insights into ways that centers seek to address longer-term challenges, such as learning loss and trauma, stemming from the pandemic. The second component is an evaluation of a continuous quality improvement system implemented in the program's afterschool centers. The evaluation will examine the implementation and effectiveness of a system focused on improving staff practices that promote students' social and emotional skills. Promoting these skills may be particularly important to compensate for

L.3.6 Notice of Availability of the Draft EIS Newspaper Advertisement

The U. S. Navy
INVITES YOU TO REVIEW THE
Patuxent River Complex
Testing and Training Activities
Draft Environmental Impact Statement (EIS)

The Navy Requests your Input!

Copies of the Draft EIS are available on the project website, www.PRCEIS.com, and at several local libraries.

Comments may be submitted electronically via www.PRCEIS.com or by mail to:
Naval Air Warfare Center Aircraft Division
Range Sustainability Office
Atlantic Ranges and Targets Department
Attn: EIS Project Manager
23013 Cedar Point Road, Building 2118
Patuxent River, MD 20670

Virtual Public Meetings

TUESDAY, MAY 18, 2021
6 PM to 7 PM EDT

WEDNESDAY, MAY 19, 2021
12 PM to 1 PM EDT

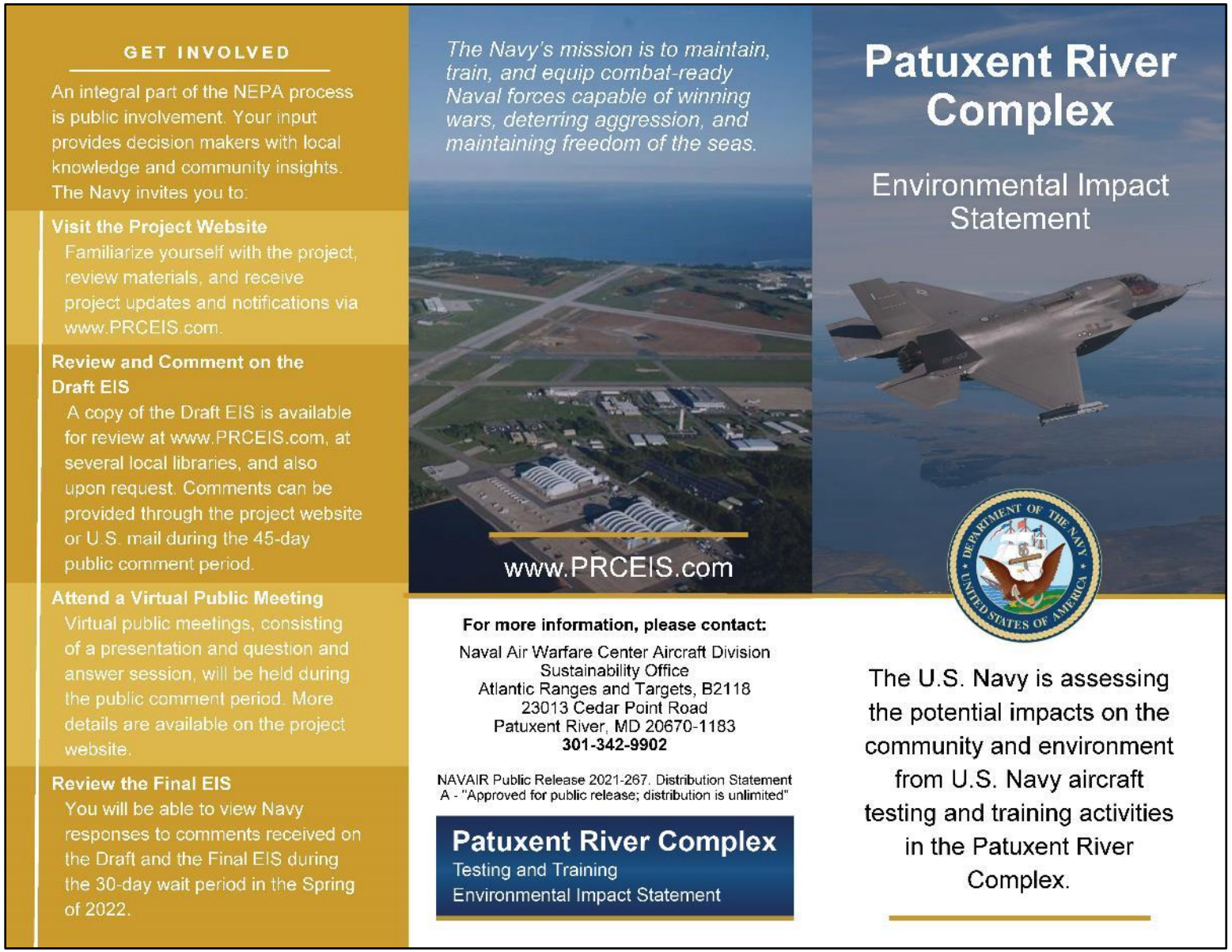
Submit questions for discussion during the virtual public meetings between **May 10 and May 17, 2021** by completing the form at www.PRCEIS.com.

Written comments must be submitted by **June 15, 2021** to be considered in the Final EIS.

Draft EIS: The Navy conducted a comprehensive analysis of potential impacts on resource areas including noise, biological and cultural resources, air and water quality, public health and safety, socioeconomics, land use, and environmental justice for the study area, which includes portions of Maryland, Virginia, and Delaware.

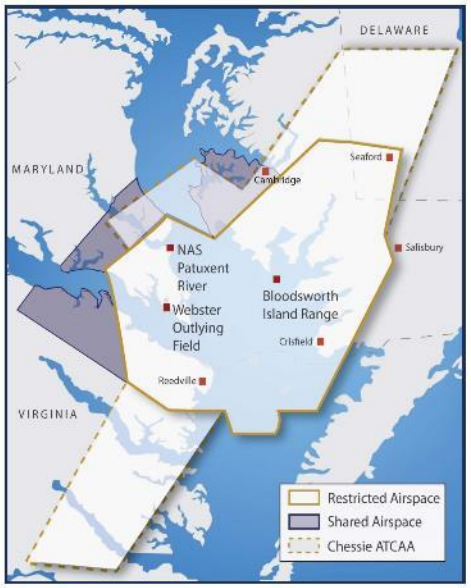
www.PRCEIS.com

L.3.7 Draft EIS Brochure



WHAT IS AN EIS?

An EIS – or an Environmental Impact Statement – is a detailed analysis of the potential effects a major federal action may have on people and the environment. The National Environmental Policy Act (NEPA) requires federal agencies to conduct assessments to make informed decisions. The Patuxent River Complex EIS assesses the potential impacts on the community and environment from Navy aircraft testing and training activities in the Patuxent River Complex Study Area, shown below.



NAVAIR Public Release 2021-267. Distribution Statement A - "Approved for public release: distribution is unlimited"

WHY PREPARE AN EIS?

The U.S. Navy has prepared an EIS to support testing and training activities in the Patuxent River Complex Study Area for the reasonably foreseeable future. Continued testing and training of naval aircraft, weapons, and systems results in the highest level of military readiness and provides Sailors and Marines with equipment and technology that operate effectively and safely.

The Navy has been operating in the Patuxent River Complex since 1943. An EIS titled "Increased Flight and Related Operations in the Patuxent River Complex" was completed in 1998. Since then, the Navy has continued to conduct testing and training activities in the Patuxent River Complex using the same and similar aircraft, aircraft systems, and non-explosive weapons. In the past 20 years, new technology, science, policy, and regulations have been developed that warrant new analysis.

EIS STUDY AREA

The Study Area includes Naval Air Station (NAS) Patuxent River, Webster Outlying Field, Bloodsworth Island Range, and the water and airspace where the Navy conducts aircraft testing and training. The airspace is comprised of military restricted airspace, Chessie Air Traffic Control Assigned Airspace (ATCAA), and adjacent shared airspace used for flights.

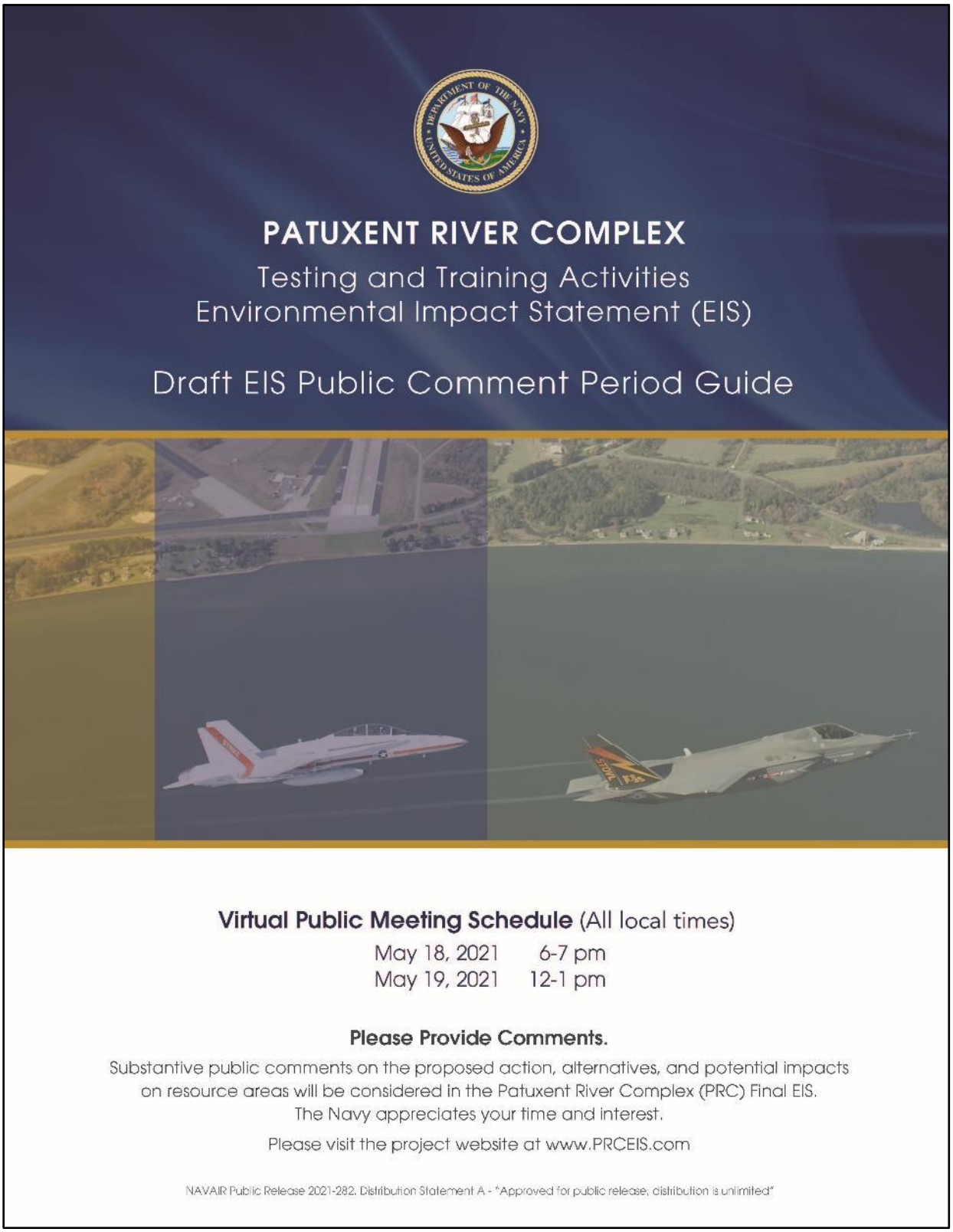
PROPOSED ACTION

The Navy proposes to continue conducting military testing and training activities within the Patuxent River Complex to meet current and projected military readiness requirements.

EIS TIMELINE

The study takes several years to complete and is mid-way through the multiyear process. The Notice of Availability of the Draft EIS has now been published, and the Draft EIS is available for review and comment. Opportunities for public involvement are represented by the gold ovals in the process below.

L.3.8 Draft EIS Booklet



How to Provide Comments:

Electronically via the project website:
www.PRCEIS.com

By mail:
Naval Air Warfare Center Aircraft Division
Range Sustainability Office
Atlantic Ranges and Targets Department
Attn: EIS Project Manager
23013 Cedar Point Road, Building 2118
Patuxent River, MD 20670-1183

The comment period is from April 30, 2021 to June 15, 2021. If you have questions or would like more information about the PRC EIS process, please contact the Naval Air Warfare Center Aircraft Division Range Sustainability Office at (301) 342-9902. Note, comments will not be accepted via the telephone.

The Draft EIS is available on the project website and at the following libraries:

St. Mary's County Library, Lexington Park Branch
21677 FDR Blvd.
Lexington Park, MD 20653

St. Mary's County Library, Charlotte Hall Branch
37600 New Market Rd.
Charlotte Hall, MD 20622

Calvert Library Southern Branch
13920 H G Trueman Rd.
Solomons, MD 20688

Lancaster Community Library
16 Town Centre Dr.
Kilmarnock, VA 22482

Northumberland Public Library
7204 Northumberland Hwy.
Heathsville, VA 22473

Dorchester County Central Library
303 Gay St.
Cambridge, MD 21613

Somerset County Library, Princess Anne Branch
11767 Beechwood St.
Princess Anne, MD 21853

Welcome

Thank you for your interest in the Patuxent River Complex (PRC) Testing and Training Activities Draft Environmental Impact Statement (EIS). The Navy prepared a Draft EIS to assess the potential impacts on the community and environment from conducting ongoing and new research, development, test, and evaluation ("testing"), and training activities in the PRC.

This booklet provides an overview of the PRC EIS and specifically the draft findings. The fact sheets included in this booklet are also available online at www.PRCEIS.com.

TABLE OF CONTENTS

NEPA

What is NEPA?

The National Environmental Policy Act (NEPA) of 1969 is environmental legislation that requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. The public is invited to participate in the process.

What is an EIS?

An Environmental Impact Statement (EIS) is a detailed public document providing an assessment of the potential effects a major federal action may have on the human, natural, and cultural environment. An EIS:

- Is a report prepared by a multidisciplinary team
- Considers alternative ways to accomplish the proposed action
- Includes an evaluation of existing resources
- Assesses the impact of the proposed action and alternatives on the environment
- Evaluates best management practices and mitigation measures to reduce environmental impacts

The Draft EIS contains the following sections:

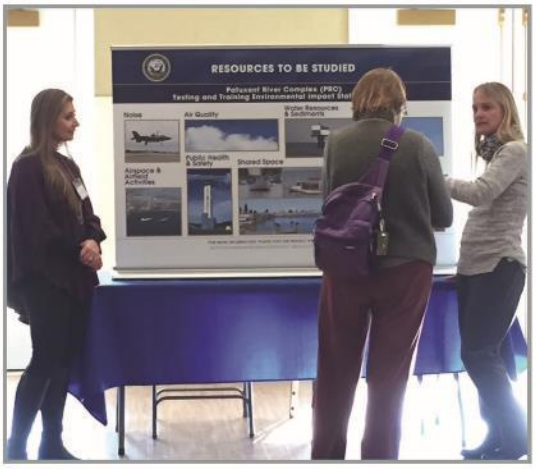
1. Purpose and Need – project objectives and why the proposed action is needed
2. Proposed Action and Alternatives – what the Navy wants to do and alternatives that can meet their needs
3. Affected Environment and Environmental Consequences – description of the existing environment or baseline conditions and analysis of potential impacts on resource areas associated with implementation of each alternative
4. Cumulative Impacts – effects of the proposed action considered along with other projects occurring in the same area

**Gold ovals represent public involvement opportunities*

Get INVOLVED

The Navy invites you to participate in the Environmental Impact Statement process.

The schedule highlights in gold the steps where you can get involved. The Navy invites the public to review and comment on the analysis. The release of the Draft EIS and the opening of the Draft EIS comment period was announced in the *Federal Register*, local newspapers, press releases, and stakeholder mailings. Virtual public meetings will be held to inform the public of our Draft EIS findings. The meetings will offer an opportunity for the public to engage with members of the project team and ask questions. The Navy then prepares a Final EIS, considering the comments received on the Draft EIS. Once the Final EIS is complete, a Notice of Availability is published in the *Federal Register* and local newspapers. This is followed by a 30-day waiting period. The final decision will then be published in the *Federal Register* as a Record of Decision.



The Importance of Testing and Training

Testing ensures that aircraft, systems, and equipment meet the needs of our Sailors and Marines. Training prepares Sailors and Marines to operate and maintain the systems and equipment they use to conduct their missions.

Importance of the Patuxent River Complex (PRC)

The Patuxent River Complex or PRC is a national asset for aircraft testing and training for all branches of the U.S. military. Testing and training at the PRC has been occurring since 1943. All Navy aircraft types are tested in the PRC, including fixed-wing jet and propeller aircraft, helicopters, and unmanned aircraft.

Research and development of new technologies occurs continuously to counter new and emerging threats. Testing ensures that aircraft, systems, and equipment meet the needs of our Sailors and Marines. Testing is conducted for new aircraft, as well as upgrades to aircraft currently operating in the Fleet. Testing is performed safely under highly controlled conditions, allowing for collection of data to evaluate performance.

The PRC is the Navy's principal location for testing due to its unique combination of:

- Airspace
- Facilities
- Environment
- Instrumentation, and
- Personnel with technical expertise.

Proposed Navy testing and training activities are similar to the types of activities that have been occurring in the PRC for decades.

The U.S. Naval Test Pilot School, located at the Naval Air Station, trains new test pilots, aircrew, and engineers to safely perform testing.

Training flights are also conducted in the PRC to keep Navy test pilots proficient in their jobs. Other military groups use the range for essential training.

PRC testing and training activities include:

- **Aircraft Flight Activities** - test flights, training flights, and other flights
  - Test flights - evaluate the performance, reliability, and safety of new, modified, or upgraded aircraft or aircraft systems and are categorized as:
    - Air Vehicle Testing – tests during flights to expose the aircraft and aircrew to varying altitude, speed, load factor, weight, and other conditions.
    - Carrier and Shipboard Suitability Testing – tests conducted using ground-based facilities designed to simulate a ship
    - Mission Systems Testing – tests to evaluate the performance and operability of electronic, computer, communications, and control systems including, black boxes, avionics, and aircraft electronics
    - Electronic Warfare Testing – tests to evaluate electronic systems designed to interrupt enemy electronic systems
    - Weapons Integration Testing – tests to evaluate the integration of non-explosive weapons with aircraft and associated systems
  - Training Flights – training of Naval Air Station Patuxent River tenant squadrons and other military aircrew in proficiency and unit level skills including:
    - U.S. Naval Test Pilot School training for new test pilots
    - Aircrew proficiency and Field Carrier Landing Practice
    - Air Force, Army, and National Guard training in support of national defense
  - Other Flights – flights conducted by tenant squadrons that have a support and/or operational function such as functional checks, strategic communications, and search and rescue flights.
- **Ground Activities** – ground-based activities related to aircraft flights. Some tests are conducted in specialized ground test facilities and laboratories.
- **Surface Activities** – range boat services (range clearance and target placement and recovery) to support testing and training activities. Also includes training on and testing of water vessels.

5 www.PRCEIS.com

Proposed Action and Alternatives

What is the Navy Proposing to Do?

The Navy proposes to continue conducting military testing and training activities within the Patuxent River Complex (PRC) to meet current and projected military readiness requirements. What the Navy is proposing to do is called the Proposed Action, and the ways to accomplish the Proposed Action are called "alternatives."

The Navy's Proposed Action includes adjustments to current testing and training activities, and combines the testing and training activities from the 1998 PRC Final Environmental Impact Statement and subsequent Environmental Assessments into one comprehensive, updated document. Proposed adjustments to the current type and tempo of activities would support projected Navy military readiness requirements into the foreseeable future.

Purpose

At Naval Air Station Patuxent River, the Navy tests and trains on newly developed aircraft, weapons, and technologies before they are put into service across the Navy. The Proposed Action to continue these critical testing and training activities within the PRC is of utmost importance in providing Sailors and Marines with equipment and technology that operate effectively and safely.

Need

The Proposed Action would meet the Navy's requirement to maintain military readiness of naval forces to win wars, deter aggression, and maintain freedom of the seas, now and into the future.

U.S. Sailors and Marines:

- Protect and defend the United States against enemies
- Protect rights to move freely on the oceans
- Provide humanitarian assistance

The Navy conducts testing and training on aircraft and weapons systems to ensure service members are equipped to be successful in their mission of national defense.

Alternatives

The Council on Environmental Quality regulations require Environmental Impact Statements (EISs) to have a range of alternatives, including a No Action Alternative, to provide options for the decision maker and the public (40 Code of Federal Regulations 1502.14). The Navy developed a range of alternatives that take into consideration the Navy's operational needs for the foreseeable future, as well as public input received during the public scoping phase of this project in 2019. Table 1 compares air, land, and water activities by alternative. The following is a description of the alternatives.

No Action Alternative. Under the No Action Alternative, the Navy would continue testing and training activities within the PRC at the same annual flight hours and mix of aircraft, non-explosive munitions, and systems as is currently being conducted. This baseline includes testing and training activities analyzed in the 1998 PRC EIS and subsequent EAs.

The No Action Alternative does not meet the purpose of and need for the Proposed Action and does not ensure readiness of naval forces, since it does not accommodate projected military readiness requirements. As required by NEPA, the No Action Alternative is carried forward for analysis in the EIS even though it does not meet the purpose and need. It is included as a baseline to compare the effects of the other action alternatives.

Alternative 1. Under Alternative 1, the Navy would conduct the same types of testing and training activities within the PRC as the No Action Alternative but with higher annual flight hours and adjustments to current aircraft mix, non-explosive munitions numbers, and systems to accommodate projected testing and training requirements identified by the Navy for the foreseeable future. This alternative is based on the annual level of increased operational tempo projected by the Navy to maintain readiness of naval forces for the foreseeable future but not the readiness level needed during increased global conflicts. Under this alternative, the Navy would be able to meet the typical, but not the highest, level of military readiness.

Considerations in Developing Alternatives

- Provide safe and realistic testing and training year round
- Meet current and future military readiness requirements
- Meet emergent military readiness requirements in response to increased global conflict
- Maintain capabilities at a single location and provide cradle-to-grave aircraft programs

Table 1: Comparison of Air, Land, and Water Activities by Alternative

Activity	No Action Alternative	Alternative 1	Alternative 2
Air			
Aircraft Flight Activities (# of Flight Hours)	20,100	23,400	26,000
Supersonic (# of Events)*	247	180	198
Land			
Aircraft Ground –Based Activities (# of hours)	3,693	4,299	4,729
Static Engine Runs (# Events Events/Hour)	92	92	101
Ground Support Equipment (# of Hours)	47,894	54,646	58,763
Water			
Vessels (#)	644	765	842

* The slight decrease in the number of supersonic events within the PRC reflects a trend toward supersonic operations being conducted in offshore Warning Areas.

Alternative 2 (Preferred Alternative). Under Alternative 2, the Navy would conduct the same types of testing and training activities within the PRC as Alternative 1 but with the ability to increase annual number of flight hours and adjustments to current aircraft mix, non-explosive munitions numbers, and systems to accommodate projected testing and training requirements needed by the Navy in the event of increased global conflict. Under this alternative, the Navy would be able to meet the highest level of military readiness.

Alternative 2 is the Preferred Alternative because it meets the purpose of and need for the Proposed Action and allows the Navy the greatest capacity to maintain readiness of naval forces at maximum levels in the event of increased global conflict.

Both Alternatives 1 and 2 include:

- Higher annual average of aircraft flight hours, adjustments in aircraft mix, increased use of PRC waters to accommodate surface vessel and underwater vehicle testing and training (the full list of activities can be found in the Draft EIS, Table 2.3-1)
- Increases in most non-explosive munitions and other military expended materials (MEM)
- The testing of new technologies to address new and emerging threats
- Adjustments in types of mission systems being integrated and tested in aircraft and surface and subsurface vessels
- Expanded use of the Patuxent River Seaplane Area to enhance Search and Rescue training
- The addition of active sonobuoy testing in conjunction with helicopter dipping sonar tests

About Munitions Use at the PRC

All munitions used within the PRC are non-explosive, meaning they do not contain a functional warhead and are not composed of explosive material.

All munitions used within the PRC are non-explosive, meaning they do not contain a functional warhead and are not composed of explosive material.

Primary types of non-explosive munitions used at PRC include bombs, mines, missiles, rockets, torpedoes, and gun ammunitions. Other MEM (e.g., chaff, flares, marine markers, sonobuoys) may be used as required for certain types of testing or training. Table 2 shows the types of munitions and MEM used by alternative. Small and medium-caliber gun ammunition is shown in Table 3. The full list of munitions can be found in the Draft EIS, Table 2.3-2.

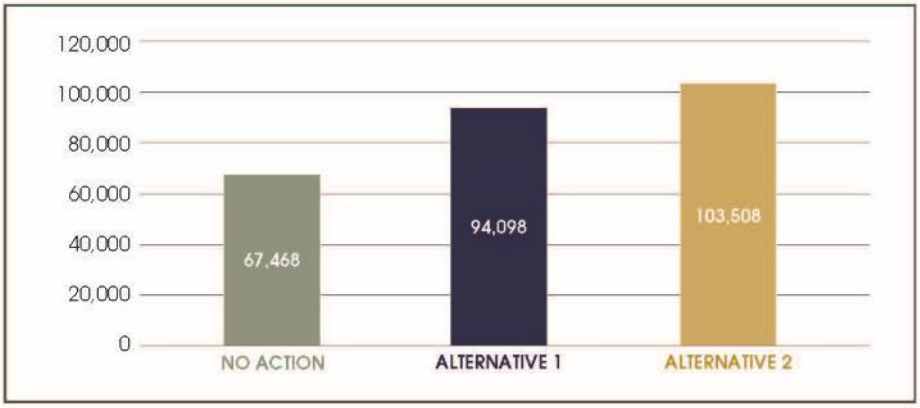
The majority of munitions and other MEM are expended during weapons separation tests which check the ability of a weapon to safely and reliably separate from an aircraft. The non-explosive munitions replicate the shapes, appearance, size, and weight of explosive munitions. They contain steel, concrete, vermiculite, or other non-explosive materials. Some may contain propellant (e.g., live rocket or missile motors), fuse sensors, signal cartridges, or other energetic materials but are non-explosive.

While the majority of munitions within the PRC are dropped from aircraft, gun ammunitions (non-explosive rounds) and rockets may be live-fired from aircraft or combatant and patrol craft. Rockets, missiles, and gun ammunition are also live-fired from and within the Armament Test Area.

Table 2: Munitions Use by Alternative

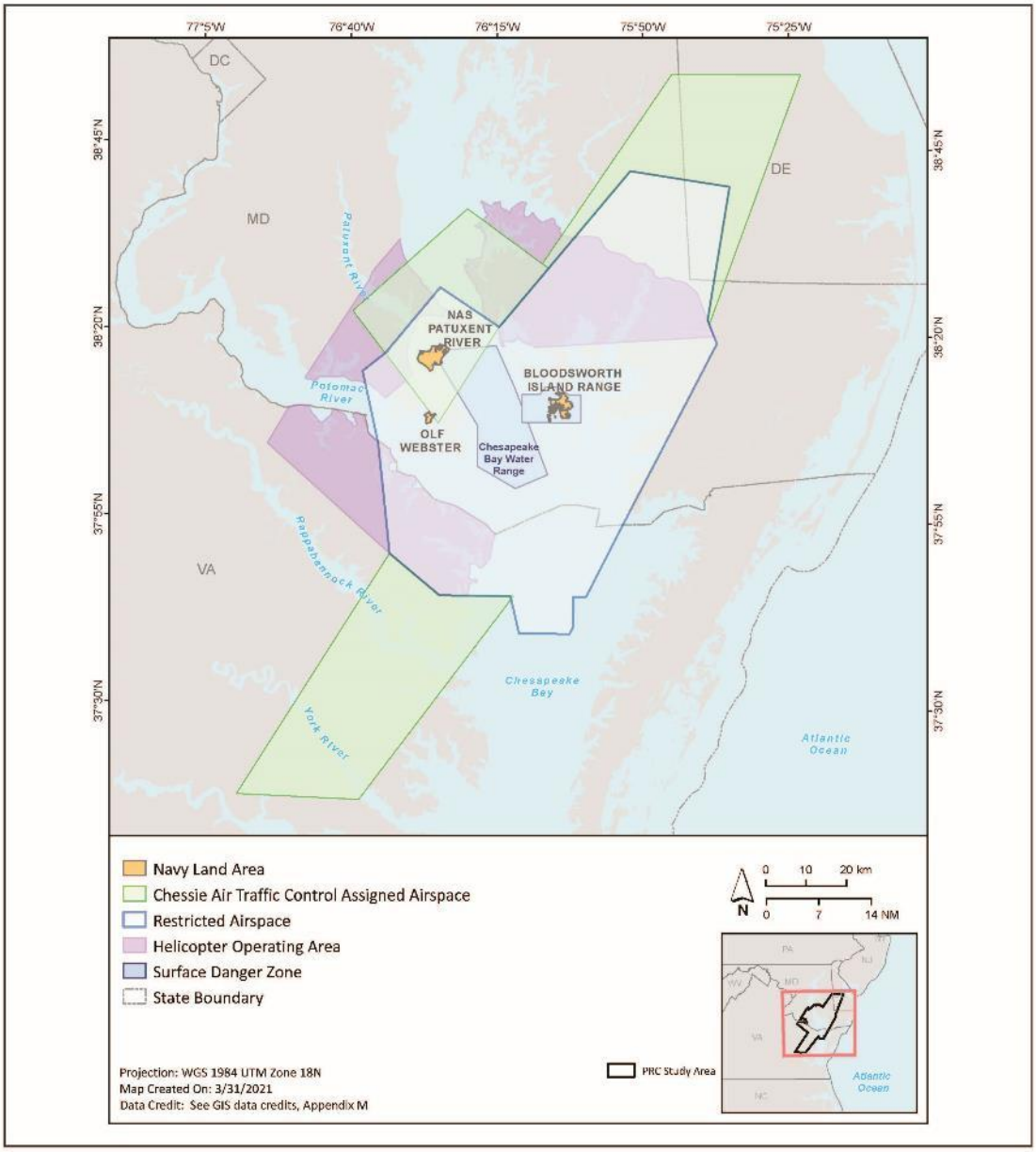
Munitions	No Action Alternative	Alternative 1	Alternative 2
Missiles/Rockets	440	641	705
Bomb/Mine/Torpedoes	249	494	543
Chaff/Flares/Other	644	709	781
Sonobuoys	122	146	160
Directed Energy (Events)	0	170	170
Miscellaneous	18	44	50

Table 3: Gun Ammunition by Alternative



Study Area

Figure 1: Study Area Map



The PRC is based at Naval Air Station (NAS) Patuxent River, located in Southern Maryland approximately 60 miles southeast of Washington, D.C. The study area includes military restricted and surrounding airspace that overlies portions of Maryland, Virginia, and Delaware, as well as land areas and water areas where the Navy conducts testing and training activities.

Land Areas

- **Naval Air Station (NAS) Patuxent River:** Covers 6,379 acres in St. Mary's County, Maryland and contains the main airfield, three runways, control tower, and the majority of aircraft and aircraft systems testing facilities.
- **Outlying Field (OLF) Webster:** An annex to NAS Patuxent River, OLF Webster covers 852 acres along the eastern shore of the St. Mary's River. OLF Webster contains two runways, and is primarily used for unmanned aircraft research, development, test, and evaluation.
- **Bloodsworth Island Range:** The range covers 4,738 acres, located 25 miles southeast of NAS Patuxent River in the Chesapeake Bay. The Navy conducts aviation-related testing activities within the military restricted airspace that overlies the Bloodsworth Island Range.

Water Areas

- **Chesapeake Bay Water Range:** Located in the middle Chesapeake Bay between the mouth of the Patuxent River and the mouth of the Potomac River, this range supports testing and training activities, including the release of non-explosive weapons from aircraft and surface vessels.
- **Patuxent River Seaplane Area:** A designated area historically used for seaplane takeoffs and landings and currently used for search and rescue training.
- **Potomac and St. Mary's Rivers surrounding OLF Webster:** These waters are used for non-impact testing activities, including aircraft overflights, surface vessels, and unmanned underwater vehicles.

Airspace

- **Military Restricted Airspace:** Designated airspace that provides a safe and controlled area for aircraft testing and evaluation.
- **Helicopter Operating Area:** Adjacent airspace shared with private and commercial aircraft, used by helicopter and small, fixed-wing propeller aircraft to conduct lower altitude operations.
- **Chessie Air Traffic Control Assigned Airspace (ATCAA):** Airspace that can be assigned to the military when needed to accommodate flight activities that require additional space beyond the boundaries of the military restricted airspace.

Atlantic Test Ranges (ATR) Assets

- **Fixed Targets, Aim Points, and Recovery Areas:** Used as reference points for non-explosive weapons and mission systems testing and training.
- **Instrumentation Sites:** ATR is a fully instrumented range with shore-based radars, remote data gathering equipment, optical (e.g., cameras), and communication systems.

Resources Studied in the EIS

The Navy conducted a comprehensive analysis of potential impacts on different environmental resource areas as shown below. Navy testing and training activities can cause: noise impacts to people, animals, or structures; physical disturbance/strike to animals, plants, or structures; release of pollutants; impacts to people, animals, or plants from energy emissions; and animal entanglement or ingestion of materials.

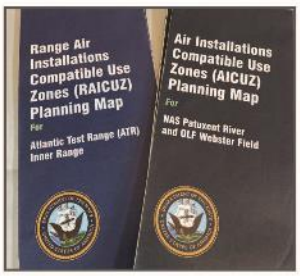
Noise

Air Quality

Water Resources and Sediments

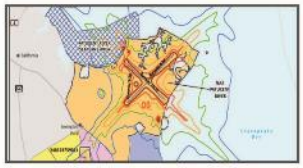
Biological Resources

Public Health and Safety



Land Use

Socioeconomics



Environmental Justice

Cultural Resources

Noise

What are the Potential Noise Impacts?

The Environmental Impact Statement (EIS) analyzed noise impacts associated with testing and training activities in the Patuxent River Complex (PRC) under each alternative. A noise study including aircraft and other operational noise sources was prepared as part of the Draft EIS. Under the action alternatives, the loudest aircraft noise levels heard would be similar to current conditions but the number of certain noise events would increase from the No Action baseline. This means that near the airfield, more land area and residents would be exposed to elevated noise levels. Proposed changes in testing and training activities in the range would also increase noise levels.

For more information on noise impacts associated with the action alternatives, please see section 3.1 of the Draft EIS.

Under Alternatives 1 and 2, some communities near the airfield would experience increased noise levels at residences and schools and subsequently, additional speech interference. The potential for hearing loss or sleep disturbance would remain low under all alternatives.

What is Noise?

Noise is any sound that is unwanted, interferes with normal activities, or otherwise diminishes the quality of the environment. Aircraft are the predominant noise source at the PRC, but other operational noise sources (e.g., munitions firing) also contribute to the noise environment.

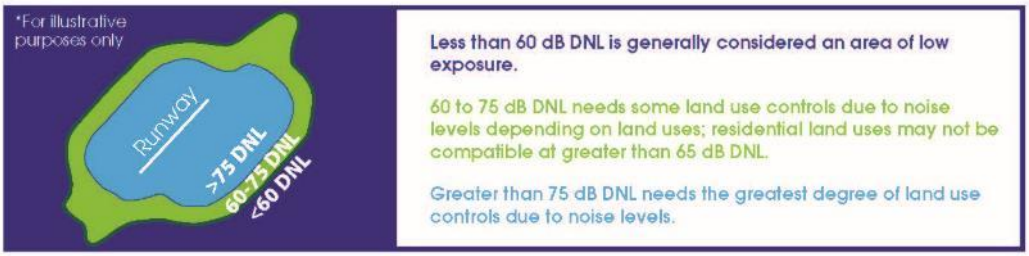
People's response to similar noise events is diverse and is influenced by many factors including: the type of noise, interference with activity, time of day, how long the noise lasts, how many times it occurs, background or ambient noise levels, previous experiences within the community, and individual sensitivity to noise.

How is Noise Assessed?

The Navy conducted noise modeling using day-night average sound level as the primary metric to quantify long-term noise exposure to the community. This metric is used by the Department of Defense and other federal agencies.

The decibel (dB)
is a logarithmic scale used to represent sound level

DNL represents the average sound energy of events over a 24-hour period, with a 10-dB adjustment added to late-night events between 10 p.m. and 7 a.m. This 10-dB adjustment accounts for the added intrusiveness of noise when background noise levels are low and when most people are sleeping. DNL is depicted as noise contours, which are a continuous line around a noise source (e.g., 65 dB DNL, 70 dB DNL), connecting points of equal noise levels. DNL takes into account the factors that influence the perception of noise by people (loudness, number and duration of events, and time of day) and includes them in one metric to identify compatible land uses with specific noise levels.



Other noise metrics were also used to assess speech interference, sleep disturbance, and potential hearing loss. The following noise metrics are included in the Draft EIS:

Table 4: Noise Metrics Analyzed in the Draft EIS

A-Weighted Day-Night Average Sound Level (ADNL)	• Used for evaluating community response to aircraft noise and land use compatibility • 24-hour cumulative noise metric • 10 dB added to events occurring between 10 p.m. and 7 a.m. to account for nighttime noise disturbance • A-weighted dB levels are used to represent human hearing frequency
C-Weighted DNL (CDNL)	• Used to describe sonic boom and impulsive noise • C-weighted dB levels best describe noise that can be felt, as well as heard
A-Weighted Monthly Onset Rate DNL (Ldnmr)	• Used for evaluating community response to aircraft noise and land use compatibility • A monthly average calculated based on the number of daily flights and the number of flying days in a month with the highest tempo
A-Weighted Sound Exposure Level (SEL)	• Used to compare relative noise levels of various flights • Used to estimate the potential for sleep disturbance • Noise exposure of a single event (e.g., flyover) as if it occurs in 1 second
Maximum A-Weighted Sound Level (Lmax)	• Used to estimate the potential for task interference and classroom interruptions • Maximum sound level that humans can hear during an overflight event
Unweighted Peak Sound Level (dBP)	• Used to estimate the likelihood of complaints associated with large-arms firing • Highest instantaneous sound level generated by weapon firing

How Is Noise Modeled?

The DoD uses environmental noise models to predict and compare noise levels of current conditions and future activities. The output of noise models is presented on land-use maps in the form of noise contours. For this Draft EIS, noise levels are also presented at several selected locations including schools, churches, parks, and residential areas.

Summary of Impacts by Alternative

Installation Noise Environment

No Action Alternative. Under the No Action Alternative, impacts to the community would be the same as current conditions.

Alternative 1. Under Alternative 1, the land area in the 65 dB DNL or greater noise contour increases by 564 acres and 1,350 residents above current conditions.

Alternative 2 (Preferred Alternative). Under Alternative 2, the land area in the 65 dB DNL or greater noise contour increases by 776 acres and 1,782 residents above current conditions.

Figure 2 presents the 65 DNL noise contours and acreage and population within each alternative. The figure also shows locations selected for additional noise analysis. Under Alternatives 1 and 2, no residents within the 65 dB DNL and greater noise contour would experience aircraft noise louder than current levels, although the noise may be heard more frequently. Table 5 compares the potential noise impacts at selected locations for each alternative.

Very few late-night flying events (i.e., between 10 p.m. and 7 a.m.) are conducted in the PRC. Under the No Action Alternative approximately 1% of flights at NAS Patuxent River and 0.1% of flights at OLF Webster are late-night events.

Under Alternatives 1 and 2, the number of late-night flying events at NAS Patuxent River would remain at 1%. At OLF Webster, late-night flying events would increase from 0.1 to 0.2%.

Figure 2: Comparison of 65 DNL Noise Contours by Alternative and Selected Locations Analyzed

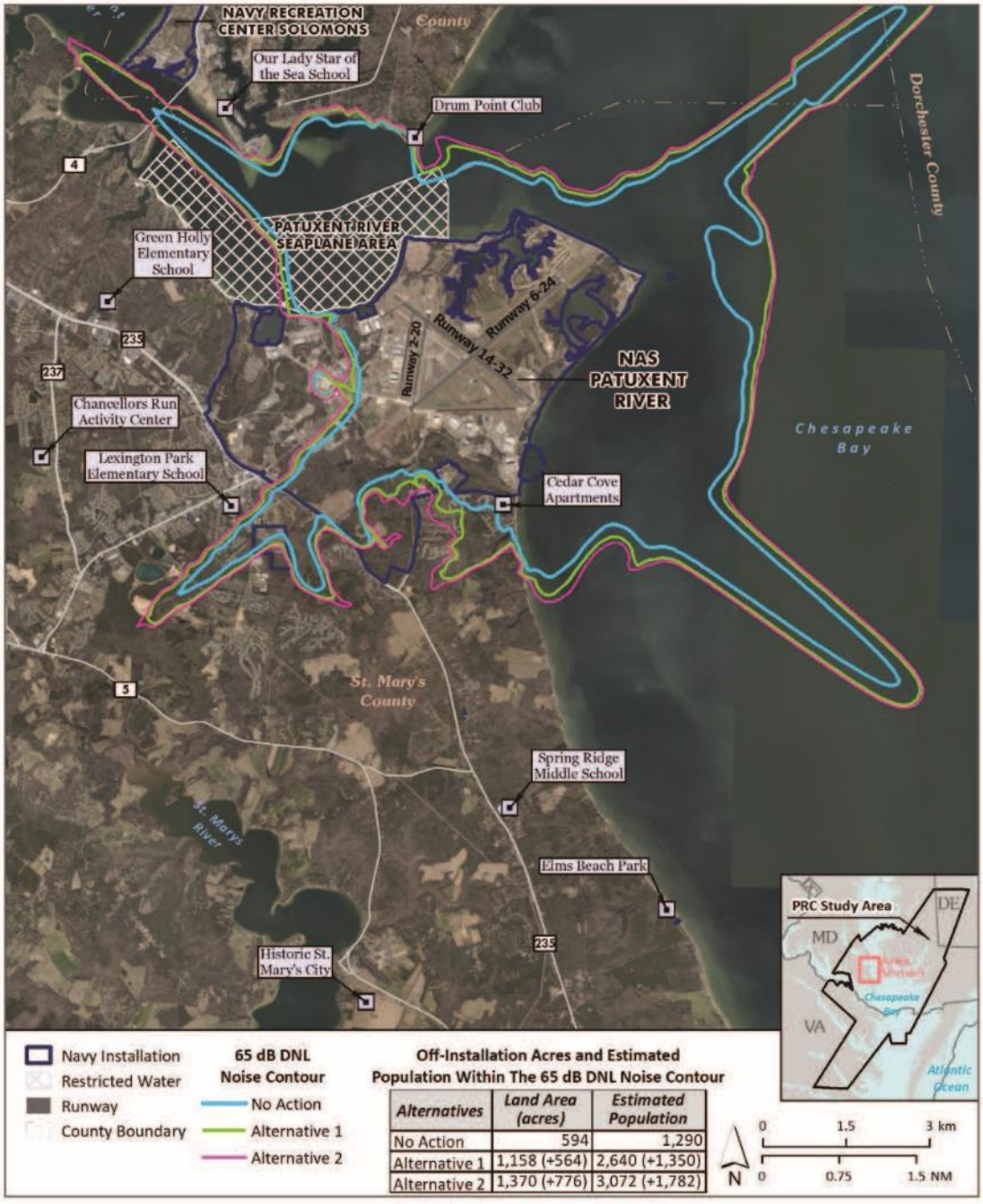


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Table 5: Potential Noise Impacts at Selected Locations

Potential Noise Impacts at Representative Locations	No Action Alternative	Alternative 1	Alternative 2
Highest DNL	66 dBA or less	Increase up to 2 dBA	Increase up to 2 dBA
Outdoor Speech Interference (Average # of events per daytime hour)	6 or less	Increase by 1 at four locations	Increase by 1 at six locations
Indoor Speech Interference (Average # of events per daytime hour)	3 or less	Increase by less than 1	Increase by 1 at two locations
Highest Leq(8 hr)	60 dBA or less	Increase up to 2 dBA	Increase up to 2 dBA
Classroom Speech Interference (# per hour)	2 or fewer	Increase by less than 1	Increase by less than 1
Probability of Sleep Disturbance (probability of being awakened once per night)	1% or less	Increase by 1% at 1 location	Increase by 1% at 3 locations
Risk of Hearing Loss	Low	Low	Low

Range Noise Environment

No Action Alternative. The loudest aircraft overflight noise levels outside the installation noise contours would continue to be up to 110 dBA Lmax. Subsonic and supersonic flight, as well as munitions time-averaged noise, are well below levels at which land uses would be considered incompatible. Sonic boom intensity would remain the same, and munitions noise would remain at levels associated with a low-risk of complaints (below 115 dBP) on land.

Alternative 1. Aircraft overflight noise levels would remain the same as under the No Action Alternative; time-averaged noise levels would increase by less than 2 dB slightly increasing the likelihood of annoyance, but remaining well below levels considered incompatible with land uses. Sonic boom intensity would remain the same as under the No Action Alternatives. Munitions noise would remain at levels associated with a low-risk of complaints (below 115 dBP) on land.

Alternative 2 (Preferred Alternative). Aircraft overflight noise levels would remain the same as under the No Action Alternative; time-averaged noise levels would increase by less than 3 dB slightly increasing the likelihood of annoyance, but remaining well below levels considered incompatible with land uses. Sonic boom intensity would remain the same as under the No Action Alternatives. Munitions noise would remain at levels associated with a low-risk of complaints (below 115 dBP) on land.

Guidance to Aircrews:

"Be Safe, Be Smart, and Be Sensitive"

What is the Navy doing to Manage Noise?

Under all alternatives, the Navy will continue its comprehensive noise management program for the PRC including:

- Noise response system with a toll-free noise hotline to report noise disturbances
- Sonic boom monitors throughout the PRC
- Annual aircrew awareness briefings and noise management instructions to reduce noise impacts
- Monitoring and tracking of activities
- Community noise advisories
- Real estate disclosure clause to notify prospective buyers of potential impacts from nearby military installations
- Noise zones to promote compatible development

Noise Hotline 866-819-9028

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Air Quality

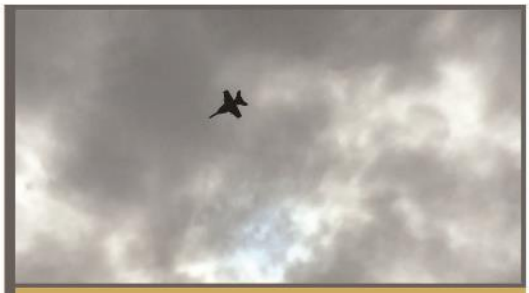
Air quality impacts and emissions, including regulated pollutants and greenhouse gases, from the Navy's testing and training activities would result in a minor increase over current conditions. The Navy has conducted similar operations in this area for many years, and the increase in emissions under all alternatives would be minimal in the context of the annual emissions in the PRC Study Area.

The U.S. Environmental Protection Agency (EPA) establishes geographic areas and determines if the areas are in compliance with the National Ambient Air Quality Standards. The EPA General Conformity Rule applies to federal actions occurring in nonattainment or maintenance areas when the total emissions of nonattainment pollutants (or their precursors) exceed specified thresholds. Pollutant emissions under all alternatives are below the de minimis levels. As a result, a General Conformity determination is not applicable to the Proposed Action.

No Action Alternative. There would be no change to baseline levels of air pollutants and greenhouse gases.

Alternative 1. Pollutant emissions would increase by 5% but air quality standards would not be exceeded. The Navy-generated air emissions represent a small portion of the annual emissions that contribute to the regional air quality.

Alternative 2 (Preferred Alternative). Pollutant emissions would be slightly higher than under Alternative 1 (7%) but would still be lower than regulatory thresholds and would continue to represent a small portion of the annual emissions that contribute to the regional air quality.



National Ambient Air Quality Standards

for air pollutants are established by EPA to protect human health and the environment. Standards exist for: carbon monoxide, sulfur dioxide (SO_2), nitrogen dioxide (NO_2), ozone, suspended particulate matter less than or equal to 10 microns in diameter, fine particulate matter less than or equal to 2.5 microns in diameter, and lead.

Water Resources and Sediments

What are the Potential Impacts to Surface Waters and Sediments?

The Environmental Impact Statement (EIS) analyzes the potential effects to water and sediment quality resulting from the No Action Alternative and Alternatives 1 and 2. Physical disturbance and pollutants from testing and training could impact the chemical and physical composition of water and sediments in the Chesapeake Bay. The impacts would be localized and temporary. No water quality or sediment standards would be expected to be exceeded due to the proposed testing and training activities.

Due to the nature and location of testing and training activities, there would be no impacts to groundwater, freshwater resources, wetlands, or floodplains.

Physical Disturbance. Physical disturbance to surface waters and sediments would primarily result from the initial impact and some limited recovery of munitions and other military expended materials (MEM) on the floor of the Chesapeake Bay (Bay). Almost all munitions and other MEM are unrecovered. Other disturbances could include:

- Anchor placements
- Propeller wash
- Any other action that results in contact with or disturbance of the Bay floor

In softer substrates (e.g., sand, mud, silt, clay, and composites), the impact of the expended material coming into contact with the bottom of the Bay, depending on the size and force, could result in a depression and a localized redistribution of sediments as they are temporarily suspended in the water column.

Most MEM that settle on soft-bottom habitats, while not damaging the actual substrate, would effectively convert the substrate from a soft surface to a hard structure, potentially making it suitable for organisms associated with hard surface environments. However, depending on currents and sedimentation rates, these effects would not likely be permanent as the MEM may be covered by sediment over time.

Pollutants. Pollutants would result from the physical/chemical decomposition/degradation of munitions and MEM. Degradation products of munitions and MEM could include:

- Metals (e.g., lead, copper, iron, aluminum, magnesium)
- Other constituents such as phosphorus (a major component of flares and marine markers), lithium, and sulfur dioxide (used in sonobuoy batteries)
- Some munitions and MEM contain small amounts of plastic; however, testing and training activities represent a negligible contribution when compared to other non-Navy sources

None of the munitions or MEM contain perchlorate, a chemical used in some solid rocket propellants. Residual constituents would be expected to gradually dissolve and/or become diluted by Bay tides and currents. No violations of any water quality or sediment standards from MEM constituents would be expected to occur.

Summary of Impacts by Alternative

No Action Alternative. Impacts would include minor, localized, and short-term increases in turbidity and decreases in dissolved oxygen due to resuspension of bottom sediments related to physical disturbances.

Alternative 1. Impacts would be similar to but slightly greater than the No Action Alternative because there would be slightly greater physical disturbance footprints.

Alternative 2 (Preferred Alternative). Increased testing and training activities and slightly greater physical disturbance footprints would result in slightly greater changes to water quality and sediments compared to the No Action Alternative and Alternative 1, but would remain short term and localized.

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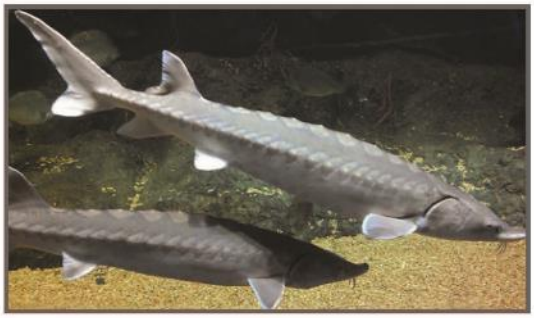
Biological Resources

What are the Potential Impacts to Biological Resources?



The EIS analyzed the potential impacts to biological resources. Stress factors were identified and are common to all alternatives as described below.

Acoustic. The acoustic stress factor (noise) could result in hearing loss, masking (sound that obscures other potentially important sounds), physiological stress, and behavioral reactions.

- Invertebrate, fish, reptiles, and amphibians are relatively insensitive to distant sounds and would be unlikely to encounter more intense close-range sounds from aircraft in flight.
- Birds and mammals are more sensitive to distant sounds but unlikely to encounter more intense close-range sounds from aircraft except for at the airfield or the Chesapeake Bay Water Range. Birds and animals often adjust to elevated noise levels to some degree over time. Occasional low-altitude sonic booms, weapons firing, and active sonar (dipping sonar) in the Chesapeake Bay Water Range could cause temporary behavioral or stress responses for affected animals (e.g., sturgeon, sea turtles, water birds, and marine mammals).

Physical Disturbance/Strike. Although unlikely, physical disturbance/strike could result from testing and training activities with non-explosive munitions, and other military expended materials (MEM). Standard operating procedures and mitigation measures will reduce the potential aircraft and vessel strikes during critical periods (e.g., migration, nesting) and locations (e.g., nearshore habitats, Bloodsworth Island). For rare aquatic species inhabiting the Chesapeake Bay Water Range, it would be unlikely that occasional non-explosive munitions or MEM would strike individuals. For common species, a strike would be more likely but would not be expected to result in a population-level effect.

Pollutants. Pollutants primarily include fuel burning emissions and some materials that make up MEM (e.g., lead, copper, phosphorus). Regulatory standards are established and required for most substances to ensure the safety of both humans and terrestrial and aquatic life (e.g., lead, copper, phosphorus).

Energy. Most animals are relatively insensitive to distant electromagnetic energies and unlikely to encounter more intense close-range energies from primarily mobile/high-altitude sources.

Entanglement. Most MEM used would not present an entanglement risk due to the absence of features such as netting, as well as the sparse distribution of both potentially entangling materials and species that are vulnerable to entanglement.

Ingestion. Most MEM used does not look like food so there would be minimal risk of ingestion. For potentially ingestible materials, the risk would be low due to the sparse distribution of both potentially ingestible materials and species that may ingest the material.

There are no long-term/population-level impacts on any biological resources expected under any of the alternatives.

Summary of Impacts by Alternative

No Action Alternative. The type of impacts would be similar to Action Alternatives 1 and 2, but the level of impact would be lower due to maintaining current activities and not increasing the level of testing and training. The current level of activity under the No Action Alternative has not resulted in long-term/ population-level impacts for any biological resource.

For context, current aircraft flights have resulted in an average of 10 birds struck per year. The impacts typically occur in and around the airfield environment where aircraft are taking off and landing.

Alternative 1. The type of impacts would be essentially the same as under the No Action Alternative but the level of impact would be greater due the increased level of current and additional activities. The additional activities feature the same stress factors, representative assets, and locations as under the No Action Alternative. Alternative 1 would add active sonobuoys in the same location as dipping sonar and directed energy weapon systems testing. The additional events and activities would not result in long-term/population-level impacts for any biological resource.

For context, under Alternative 1, increased aircraft flights could result in a potential average of 4 to 5 additional birds struck per year.

Alternative 2 (Preferred Alternative). The type of impacts would be essentially the same as under the No Action Alternative, but the level of impact would be greater due to a maximum level of current and additional activities. The additional events feature the same stress factors, representative assets, and locations as under the No Action Alternative. Alternative 2 would add active sonobuoys in the same location as dipping sonar and directed energy weapon systems testing. The additional events and activities would not result in long-term/population-level impacts for any biological resource, in accordance with the analysis summarized below.

For context, under Alternative 2, increased aircraft flights could result in a potential average of 6 additional birds struck per year.

Estuarine Environment. Estuarine vegetation (e.g., marsh plants, seagrass beds) could be affected by physical disturbance/strike and pollutants, primarily in the water. The effect of these localized and infrequent or temporary stress factors would not result in any long-term/population-level impacts on estuarine plant species.

Estuarine animals including sturgeon, sea turtles, water birds, and marine mammals could be affected by noise, physical disturbance/strike, pollutants, energy, entanglement, and ingestion from aircraft, vessels, and equipment and associated weapons firing/MEM. The likelihood of actually striking an estuarine animal would be low. The behavioral response to these localized and infrequent or temporary stress factors would not be expected to result in any long-term/population-level impacts on estuarine animal species.

Additional Activity Types

Due to the nature of the disturbances, estuarine vegetation could be minimally impacted by directed energy weapon systems testing and associated Unmanned Aerial System targets expended in the Chesapeake Bay Water Range and Bloodsworth Island Surface Danger Zones. Directed energy weapons systems testing over estuarine waters could impact plant tissue at or above the surface but the effect would be unlikely and/or insignificant. No long-term/population-level effects would be expected on estuarine plant species.

Most invertebrates, fishes, and reptiles, including shellfish beds, sturgeon, and sea turtles, are not sensitive to mid-frequency sounds from dipping sonar and active sonobuoys. Marine mammals are sensitive to mid-frequency sonar but impacts would be avoided with the required application of established avoidance and mitigation measures. It would be unlikely that directed energy weapon systems testing and associated Unmanned Aerial System targets expended in the Chesapeake Bay Water Range and Bloodsworth Island Surface Danger Zones would overlap with the presence of a rare species (e.g., sturgeon, sea turtles, and marine mammals), and these large and resilient animals would likely be unaffected in the unlikely event of an exposure. Smaller estuarine animals could be impacted, but it would be both unlikely and insignificant in terms of long-term/population-level effects.

Aerial, Terrestrial, and Freshwater Environments. Terrestrial vegetation in previously disturbed land areas (e.g., mowed areas) could be affected by physical disturbance/strike and pollutants from land-based testing and training activities. No long-term/population-level impacts on terrestrial vegetation would be expected, and freshwater vegetation would not be affected.

Aerial and terrestrial animals including rare tiger beetles, shore birds, and wading birds, could be affected by noise, physical disturbance/strike, pollutants, and energy from primarily air- and land-based testing and training activities. Freshwater animals could be affected by noise when above water. The likelihood of actually striking an aerial or terrestrial animal would be low. The behavioral response to these localized and infrequent or temporary stress factors would not be expected to result in long-term/population-level impacts on aerial, terrestrial, or freshwater animal species.

Special Status Species and Habitats

Endangered Species Act (ESA)

ESA listed species under the jurisdiction of the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) may occur in the Study Area. The Navy determined that:

- Six marine/estuarine species *may be adversely affected* by the Proposed Action (the shortnose and Atlantic sturgeon and green, Kemp's ridley, leatherback, and loggerhead sea turtles), and
- Five aerial, terrestrial, and freshwater species *may be affected but not likely adversely affected* by the Proposed Action (eastern black rail, northeastern beach tiger beetle, puritan tiger beetle, red knot, and West Indian manatee).

The Navy is consulting with the NMFS and the USFWS regarding these affected species. The finding (*may be adversely affected*) for rare sturgeons and sea turtles is predominantly due to the potential for occasional disturbance/strike from high speed vessels.

Marine Mammal Protection Act

Five marine mammal species may occur in the PRC Study Area: bottlenose dolphin, harbor porpoise, harbor seal, humpback whale, and West Indian manatee. The Navy determined that:

- The Proposed Activities would not result in the reasonably foreseeable harassment or harm of any marine mammals due to the seasonal absence of the only species commonly encountered in the area (bottlenose dolphin) and mitigation measures currently in place during testing and training activities to identify and avoid the species (Table 6).

Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act

The Navy has determined that:

- The Proposed Activities may result in the incidental harassment or harm of migratory birds; however, no adverse population-level effects are anticipated. Per USFWS screening criteria, eagles are not likely to be harassed or harmed by proposed activities.
- The Navy uses standard operating procedures and mitigation measures that minimize effects on birds.

Magnuson-Stevens Fishery Conservation and Management Act

The Navy has determined that:

- The Proposed Activities may adversely affect Essential Fish Habitat although impacts would be minimal and short-term.
- The primary impacts would be from the physical disturbance of primarily inert MEM on deeper soft-bottom habitats in the Chesapeake Bay Water Range.
- MEM may also affect shallower soft-bottom habitats in the range that are more exposed and subject to short-term effects before burial of heavier materials.

- Other estuarine habitats (e.g., seagrass beds, oyster reefs) would be relatively unaffected by the proposed action due to distance from activities involving MEM or vessel movement.

Because there would be adverse effects, although minimal, the Navy is consulting with NMFS on the findings.

[1] May affect, likely to adversely affect is a regulatory term meaning a significant impact cannot be discounted
[2] May affect, not likely to adversely affect is a regulatory term meaning a significant impact can be discounted

Table 6 presents the impact avoidance and minimization measures for biological resources. The Navy will continue to implement all current mitigation under all alternatives. The Navy will also apply the Standard Operating Procedures incorporated into the proposed action.

Table 6: Impact Avoidance and Minimization Measures for Biological Resources

Measure	Anticipated Benefit	Implementing and Monitoring
Monitor for marine species prior to mid-frequency active sonar system event	Mitigate impacts to marine species due to mid-frequency active sonar transmissions	• Visually survey for marine mammals and sea turtles within a radius of 1 nautical mile centered on the dip point prior to a mid-frequency active sonar event • Halt or delay the event if a marine mammal or sea turtle is observed until the animal has moved outside the survey area
Maintain altitude restrictions over Bloodsworth Island Range	Mitigate impacts to waterfowl during migratory season	• Avoid overflight of Bloodsworth Island Range below 3,000 feet for fixed-wing aircraft and 1,000 feet for rotary-wing aircraft during migratory waterfowl season (typically November 15 to March 31)
Monitor for marine species prior to mine countermeasure testing events	Mitigate impacts to marine species due to in-water electromagnetic devices towed at high speed	• Visually survey for marine mammals and sea turtles within the test area • Halt or delay the event if a marine mammal or sea turtle is observed until the animal has moved outside the survey area
Close one TERF area landing zone during northern diamondback terrapin nesting season[1]	Protect northern diamondback terrapin nests within the TERF area helicopter landing zones	• Close and use only one of two beach landing zones during northern diamondback terrapin nesting and hatching season (May to September) • Place fencing around the active landing zone to prevent terrapins from nesting in the area • Conduct terrapin nest surveys within landing zones each season
Aircraft flight restrictions over the Hannibal Target during the peregrine nesting season (February 15 – August 15)[1]	Avoid/reduce potential environmental impacts to nesting peregrine falcons	• Aircraft maintain 0.5-mile buffer from the Hannibal Target from February 15 through August to avoid disturbance of peregrine falcon nesting activities
Continue test plan environmental review process	Ensure all testing and training activities conducted within the PRC are adequately assessed under NEPA	• Review all project test plans for compliance with the PRC EIS and other NEPA documents as applicable

Key: EIS = Environmental Impact Statement; NEPA = National Environmental Policy Act; PRC = Patuxent River Complex; TERF = terrain flight.

[1] Voluntary mitigation

Stewardship

Programs

The Navy's stewardship programs contribute to both the success of the mission and the protection of the Chesapeake Bay for future generations.

Naval Air Station (NAS) Patuxent River manages robust resource compliance, community service, and environmental stewardship programs. Multiple partnerships with the private sector and other governmental agencies have been successful in advancing environmental compliance, conservation, and education. Initiatives include:

- Wildlife habitat protection and enhancement
- Rare, threatened, and endangered species monitoring and protection
- Archaeological surveys and site preservation

For example, the Navy works with the College of William and Mary to study bald eagle nesting success on NAS Patuxent River properties (above photo) and archaeologists have excavated a test pit showing a brick foundation dating to the 1800s (photo to right).

NAS Patuxent River did the first test flight of the Green Hornet, a bio-fueled F/A-18 jet.

Partnering

- The Navy partners with nonprofit organizations and local, state, and federal agencies to manage lands for uses such as agriculture, recreation, and natural habitat. Over 11,000 acres of land have been protected as conservation areas or easements.
- NAS Patuxent River partners with the University of Maryland to develop creative solutions to protect native terrapin (above photo). Natural resources experts found that prime terrapin nesting sites overlapped with an established helicopter landing zone. Working with the pilots, an acceptable alternative landing zone site was identified. Through an agricultural outlease, farmers cleared excess vegetation on the new site, and a terrapin exclusion fence was installed.
- Navy experts built and maintained heron nesting platforms at Bloodsworth Island Range (photo below).
- The Navy participates in the North American Waterfowl Management Plan along with the U.S. Fish and Wildlife Service and Maryland Department of Natural Resources.

Public Health and Safety

In compliance with Executive Order 13045, Environmental Health Risks and Safety Risks to Children, potential disproportionate risks to children were evaluated in the Draft EIS. The Proposed Action would increase overall aircraft and vessel activities within the PRC Study Area. Potential impacts to public health and safety include noise and physical disturbance/strike. For children, any percentage of the affected area greater than the community as a whole, in this case St. Mary's County, is considered disproportionate.

St. Mary's County	% Population
Children	24.8%

In addition, when conducting testing and training activities in shared waterways, the potential exists for increased interactions.

No Action Alternative. There would be no change to impacts over baseline conditions. An estimated 337 children reside in areas affected by noise greater than 65 dBA DNL. Release of non-explosive munitions and other MEM in the Chesapeake Bay Water Range near munition concentration areas would continue to limit the potential for public impact. No changes in airfield use, aircraft mix, or flight hours would occur. No resulting increase in aircraft mishaps or bird/animal aircraft strike hazard (BASH) incidents (currently 10 per year) would occur.

The Navy ensures public safety during testing and training activities by:

- Making sure any watermen or recreational users are clear of impact areas and targets before testing begins
- Canceling or delaying activities if public or personnel safety is a concern
- Communicating via radio to local watermen and recreational users of the location, date, and time of range closures
- Implementing temporary access restrictions to testing and training areas
- Designating restricted airspace for multiple, high-speed military aircraft
- Limiting the number of aircraft within restricted airspace
- Using a Military Radar Unit, named BayWatch, for surveillance when the restricted area is activated

PUBLIC NOTIFICATION

Noise advisories are posted to inform the public of dates and times when noise-generating activities are scheduled.

Alternative 1. An estimated 658 children would reside in areas affected by noise greater than 65 dBA DNL. This would be an increase of 321 children disproportionately impacted compared to the No Action Alternative. Increased activities would also increase potential for physical disturbance/strike and public interaction impacts (including vessel or MEM strike, and aircraft mishaps or BASH incidents); however, impacts would be similar to the No Action Alternative with continued implementation of standard operating procedures (SOPs).

Alternative 2 (Preferred Alternative). An estimated 751children would reside in areas affected by noise greater than 65 dBA DNL. This would be an increase of 414 children disproportionately impacted compared to the No Action Alternative. Increased activities would also increase potential for physical disturbance/strike and public interaction impacts; however, impacts would be similar to the No Action Alternative with continued implementation of SOPs.

Under all alternatives, the Navy would continue to implement procedures that protect public health and safety. The potential for flight mishap and bird/animal-aircraft strike hazard incidents would continue to be managed through established programs.

Land Use

The impacts of the proposed testing and training activities on land use in the PRC Study Area/surrounding the installation was analyzed as part of the Draft EIS.

The Navy has several policies that provide recommendations for compatible land use. The Air Installations Compatible Use Zones (AICUZ) program recommends land uses that are compatible with noise levels, accident potential, and obstruction clearance criteria for military airfield operations. The Range AICUZ program includes range safety and noise analyses and provides land use recommendations compatible with range compatibility zones and noise levels associated with military range operations.

State coastal programs coordinate with the federal consistency review process as authorized under the Coastal Zone Management Act. This provision allows states to review federal actions that may affect coastal uses and/or resources. As a federal agency, the Navy is required to determine whether its proposed activities would affect the coastal zone. Under all alternatives, testing and training activities would be consistent, to the maximum extent practicable, with state coastal zone management enforceable policies. The Navy is coordinating with Virginia, Maryland, and Delaware pursuant to the Coastal Zone Management Act.

Off Installation Acres and Estimated Population within the 65 dB and Greater Noise Contour

Alternative	Land Area (acres)	Population
No Action	594	1,290
1	1,158 (+564)	2,640 (+1,350)
2	1,370 (+776)	3,072 (+1,782)

No Action Alternative. There would be no changes to regional land use; however, a continuation of marginally incompatible noise exposure to a small area of residential land off the installation would occur. Flights under the No Action Alternative would not expose any new surrounding areas to incompatible noise levels compared to the current conditions.

Alternative 1. There would be an increase in land area exposed to noise levels of 65 dBA DNL or greater. Noise levels in parks underlying restricted airspace near the installation would increase by 1.1 dBA Ldnmr. This impact would be minor and would not cause a noticeable change.

Alternative 2 (Preferred Alternative). There would also be an increase in land area exposed to noise levels of 65 dBA DNL and greater. Noise levels in parks underlying restricted airspace near the installation would increase up to 2.3 dBA Ldnmr. This increase would not change land use patterns.

Socioeconomics

The socioeconomics analysis in the Draft EIS focused on commercial and private air traffic, vessel transportation, commercial and recreational fishing within the Chesapeake Bay Water Range, and other recreational activities throughout the PRC Study Area.

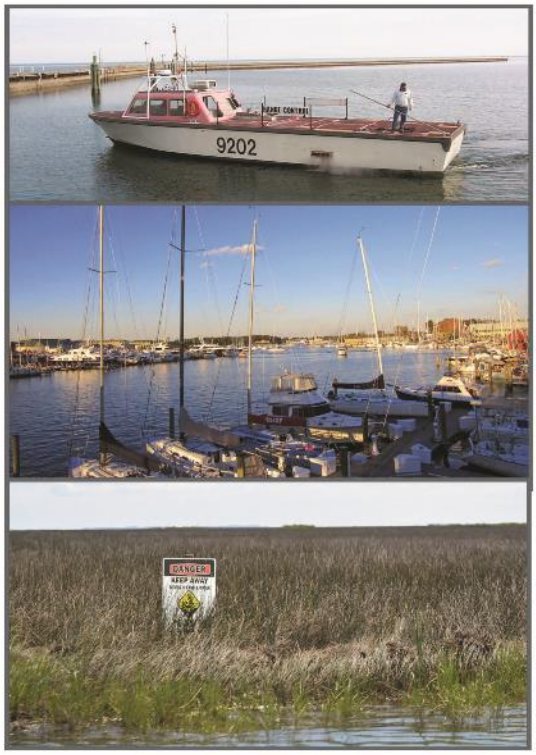
The water and airspace within the Patuxent River Complex (PRC) are used by many people for commercial and recreational purposes. The Navy shares the water and airspace with the community and recognizes the importance of public access.

Temporary access limitations (usually lasting several hours) can occur during testing and training activities for the safety of commercial and recreational users.

The safety measures implemented before and during testing and training, along with the cooperation of the public, commercial, and recreational users of the air and sea spaces, enable safe testing and training.

Communication is Key

The Navy uses marine very high frequency (VHF) Channels 81 and 82



No Action Alternative. Recreational users (e.g., divers, swimmers) and commercial and recreational boaters may experience annoyance and disturbance related to aircraft noise, weapons firing, and non-explosive munitions expenditure. Navy vessel movement is consistent with other vessel movement in waterways, and range clearance events and hours would occur at baseline levels.

Alternatives 1 and 2. Noise impacts would be similar to the No Action Alternative, but more frequent. Navy vessel movement would increase, as well as numbers of range clearance events and hours. Existing Standard Operating Procedures would continue to minimize potential public interaction with Navy aircraft and vessels.

Target Area Clearances by Alternative

Alternative	# of Events	Hours Cleared	Average # of Events	Average # of Hours Cleared per Event
No Action	68	196	5.7	2.9
1	250	750	20.8	3.0
2	275	825	22.9	3.0

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Environmental Justice

The Draft EIS analysis focused on identifying minority and low-income populations in the PRC Study Area that would be disproportionately affected by the proposed action.

Consistent with Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 16, 1994), the Navy's policy is to identify and address any disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.

For low-income populations, any percentage of the affected area greater than the community as a whole, in this case St. Mary's County, is considered disproportionate. For minorities, more than a 15% difference than the community as a whole is considered meaningfully greater and therefore disproportionate.

The EPA defines environmental justice as, "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies" (EPA, 2019)

St. Mary's County	% Population
Minority	24.9%
Low Income	8.2%

Estimated Total, Minority, and Low-Income Population within the 65 dBA DNL and Greater Noise Contour by Alternative

Alternative	Population	Minority	Low Income
No Action	1,290	579 (44.8%)	155 (12%)
1	2,640	1,143 (43.3%)	303 (11.5%)
2	3,072	1,301 (42.4%)	345 (11.2%)

No Action Alternative. Under the No Action Alternative, impacts to the community would be the same as current conditions. Under existing conditions, there is the potential for disproportionately high and adverse impacts to minority and low-income populations due to noise.

Alternative 1. There would be an increase in the frequency of aircraft activities that would expose a larger area and, therefore, more residents (including minority and low-income populations), to noise levels of 65 decibels DNL or greater.

Alternative 2 (Preferred Alternative). There would also be an increase in the frequency of aircraft activities that would expose a larger area and, therefore, more residents (including minority and low-income populations) exposed to noise levels of 65 decibels DNL or greater. However, theses average noise levels would only be up to 2 dBA DNL greater than the No Action Alternative and Alternative 1 (i.e., a maximum increase from 66 dB DNL to 68 dB DNL).

Under all alternatives, the Navy has developed noise mitigation and monitoring measures, including public outreach and communications designed to address impacts to the public.

Cultural Resources

Cultural resources includes prehistoric and historic archaeological sites; historic buildings, structures, and districts; and human-made or natural features important to a culture, a subculture, or a community for traditional, religious, or other reasons.

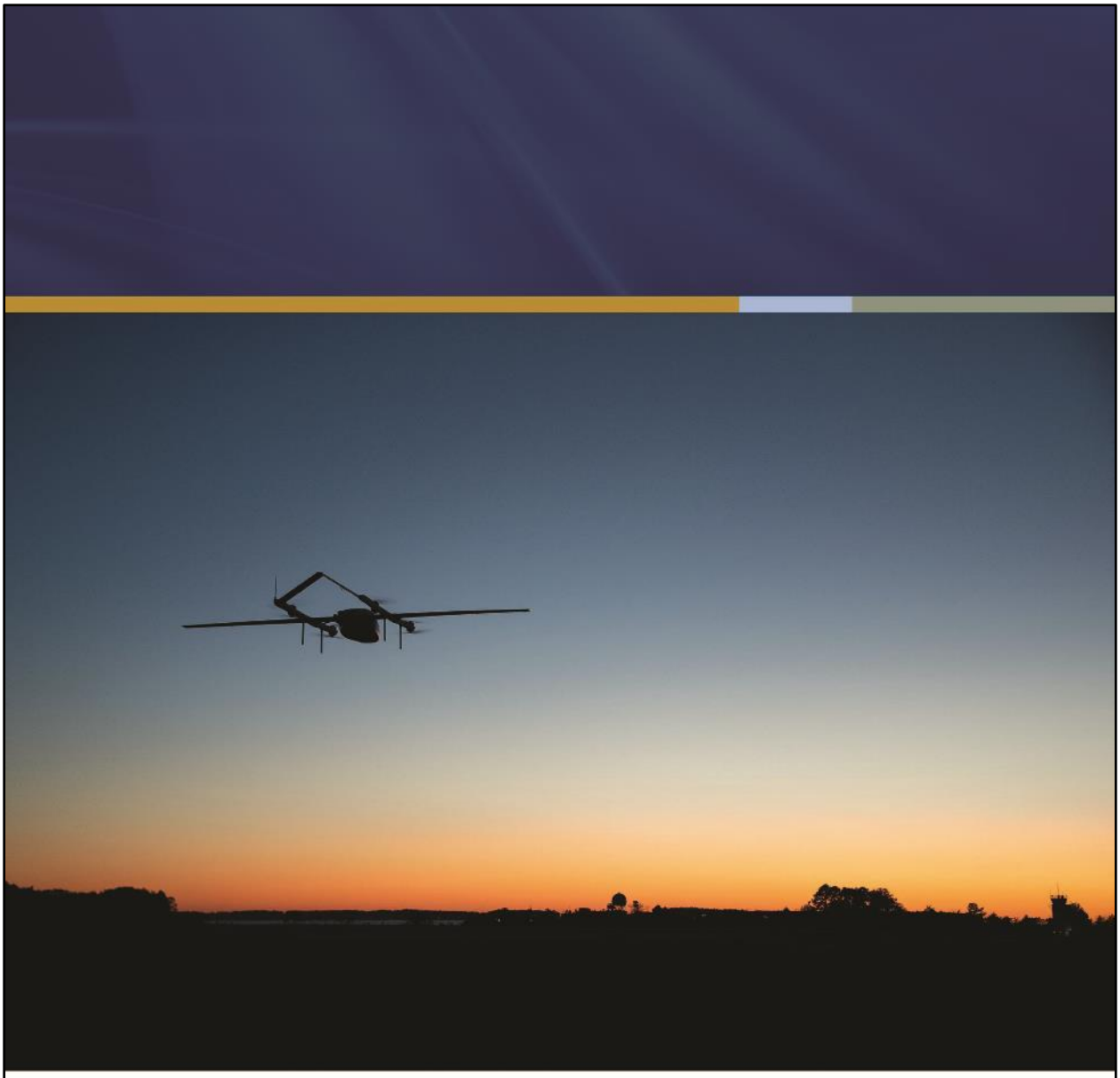
Cultural Resources are Governed by Federal Laws and Regulations:

- National Historic Preservation Act (NHPA)
- Archeological and Historic Preservation Act
- American Indian Religious Freedom Act, Archaeological Resources Protection Act of 1979
- Native American Graves Protection and Repatriation Act of 1990
- Cultural resources also may be covered by state, local, and territorial laws

No Action Alternative. The subsonic noise and sonic booms associated with continuation of existing testing and training activities would not be of sufficient magnitude to impact historic properties under the PRC airspace. Furthermore, the continued use of the PRC Study Area would not affect underwater historic properties in the Chesapeake Bay.

Alternatives 1 or 2. The proposed increase in testing and training activities under either Alternative 1 or 2 would not result in an adverse effect to cultural resources in the PRC Study Area.

The increase in flights over individual historic resources, and the associated sight and sound of aircraft, would be infrequent and of short duration and would not diminish the characteristics that make the resources eligible for the National Register of Historic Places. The minor change to the historic setting would not change the character or use of the historic properties. The State Historic Preservation Offices in the study area are reviewing the Navy's findings.



The Navy appreciates your time and interest.

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Appendix M
Public Comment Responses

Table of Contents

List of Tables

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This appendix includes public comments on the Patuxent River Complex (PRC) Draft Environmental Impact Statement (EIS) and the Navy's responses to those comments.

M.1 Introduction

The Navy would like to thank the elected officials, federal regulatory and local resource agencies, business and community leaders, organizations, and individuals for reviewing the PRC Draft EIS and submitting comments. Public involvement is an essential aspect of the environmental impact review process.

M.2 Public Comment Period for the Draft Environmental Impact Statement

The Draft EIS public review and comment period began with notices of availability published in the Federal Register (FR) (86 FR 22945) on April 30, 2021. The Draft EIS review and comment period was open from April 30, 2021 to June 15, 2021.

Due to federal and state guidance on social distancing in response to COVID 19, the Navy was unable to hold in-person public meetings as planned in May 2021 but did conduct two virtual public meetings on May 18 and 19, 2021. In addition, a dedicated voicemail line was set up to facilitate questions from the public. The public was also able to submit comments on the Draft EIS through previously established channels (website and mail). In total, the Navy received eight comment submissions from federal agencies, state agencies, non-governmental agencies, and individuals. These submissions have been separated in Table M-1 (Response to Comments) by the topic area of each comment.

M.3 Comment Response Process

The Navy considered and responded to all comments received on the Draft EIS, as detailed in this Final EIS. The Navy's responses to comments received during the public comment period are included in this appendix. In accordance with 40 Code of Federal Regulations (CFR) 1503.4, comments were assessed and responded to as follows:

The Navy project team read and carefully reviewed all comments received. Each comment was assigned to a resource-specific specialist from the Navy's interdisciplinary team.

Within each comment submittal, substantive comments were identified for consideration of possible updates to the EIS analysis. Generally, substantive comments included items such as questions related to the alternatives analysis and components of the Proposed Action; resource-specific methodology, analysis, or impact conclusions; or the use, adequacy, or accuracy of data used to support the analysis.

The EIS analysis was updated as warranted based on comment review.

Comment responses were developed for every comment based on the above-described comment review and Final EIS update process. Responses identify, as appropriate, sections of the Final EIS where revisions were made or details on where additional information is provided within the Final EIS.

Agency, Organization and Private Individual Comment Coding

Comments were received from 1 federal agency, 2 state agencies, 1 non-governmental organization, and 4 private individuals.

Agency and Organization Comment Coding

A comment letter from an agency could have multiple comments within it. To organize responses, each commenter received a Commenter Identification Number and each comment within the letter was

numbered (e.g., EPA3-01 is the first comment in the letter from the U.S. Environmental Protection Agency, Region 3).

Private Citizen Comment Coding

In order to keep personally identifiable information private and to allow commenters to find their comments in this appendix, the Navy assigned each comment a code based on components of the commenter's name. Personally identifiable information include an individual's name, physical address, email address, or place of employment. Individuals who commented on the Draft EIS during the public comment period may find their comments using the following method:

Each individual commenter was assigned a code that corresponds with their first, middle (if provided), and last name initials. If the commenter submits multiple comments within a letter, then a sequential number was assigned to each comment in the letter beginning with 01 and increases with each comment received from that individual.

Comment Responses

Responses to all comments received on the Draft EIS are included in this appendix. Table M-1 presents the Navy's response to each comment received. All comments received on the Draft EIS are part of the official project record. When applicable, the Navy's analyses were updated based on comments received.

Table M-1 Response to Comments

Comment		Navy Response
Federal Agencies		
US Environmental Protection Agency, Region 3 (EPA3), Stepan Nevshehirlian		
EPA3-01	General (Noise) In accordance with the National Environmental Policy Act (NEPA) of 1969, Section 309 of the Clean Air Act, and Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508), the U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement (DEIS or Study) for Testing and Training Activities in the Patuxent River Complex (PRC) at Naval Air Station Patuxent River, which was prepared by the U.S. Department of the Navy (Navy). Thank you for providing the Study for EPA's review. This action includes activities evaluated in the 1998 Final EIS for Increased Flight and Related Operations and subsequent Environmental Assessments but expands the PRC Study Area. The Study Area includes land and water areas as well as airspace that historically and currently support Naval Air Warcraft Center Aircraft Division testing and training activities in Maryland, Virginia, and Delaware. The Study Area includes Naval Air Station (NAS) Patuxent River, Outlying Landing Field (OLF) Webster, Bloodsworth Island Range, the Chesapeake Bay Water Range, Helicopter Operating Areas, and Chessie Air Traffic Control Airspace. The current DEIS evaluates two action Alternatives along with the No Action Alternative of continuing operations at the current activity levels. Alternatives 1 and 2 would substantially increase the number of aircraft flight hours and munitions and other military expended materials (MEM) and would introduce new activities, such as directed energy weapons testing and use of active sonobuoys. Alternative 2 was identified as the Navy's Preferred Alternative to accommodate testing and training that would allow the Navy to meet the highest level of military readiness. While operations would substantially increase under Alternative 1 or 2, no new mitigations are included. A number of avoidance measures are currently in place to monitor and reduce the impacts of noise. EPA appreciates that PRC has taken measures such as	The Navy conducted extensive public outreach as part of the NEPA process for this Proposed Action. Chapter 6 (Public Involvement and Distribution) details the extensive public involvement and outreach conducted throughout the NEPA process, including efforts specifically focused on engagement with identified environmental justice communities. Section 3.10 (Summary of Potential Impacts to Resources and Impact Avoidance and Minimization) provides a list of existing noise mitigations that have been in place for decades at NAS Patuxent River. The Navy promotes compatible development near military airfields through its Air Installations Compatible Use Zones (AICUZ) Program. The goal of the AICUZ Program is to protect the health, safety, and welfare of the people living near the airfield, while preserving the Department of Defense flying mission. The Navy conducts extensive communication and outreach with the local community (including environmental justice communities) and schools, through the AICUZ Program. NAS Patuxent River has a long history of working with surrounding counties to incorporate AICUZ recommendations into local land use plans and ordinances. In addition, the Navy partners with nonprofit organizations and local, state, and federal agencies to manage lands for uses such as agriculture, recreation, and natural habitat. Over 12,000 acres of land have been protected as conservation areas or easements to promote compatible land uses with the military mission. For example, funding from DoD's Readiness and Environmental Protection Integration Program (REPI) was obtained to help protect St. Mary's County waterfront property (Snow Hill Park), a key tool in minimizing encroachment since the land is beneath airspace used for testing and training.

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
	making the noise hotline readily available and easy to find on its website, restricting and monitoring supersonic events, and briefing aircrews on operating procedures and sensitive receptors. EPA recommends that the Navy continue to evaluate opportunities to fully assess and reduce impacts on nearby schools and communities, including communities of Environmental Justice concern. EPA recommends consideration of additional measures, such as evaluating potential operational measures that could decrease noise associated with increased aircraft operations or assistance in soundproofing. Additional outreach and communication may be appropriate to reduce potential impacts from noise.	
EPA3-02	General (Biological Resources) A number of existing avoidance and mitigation measures are also followed at PRC that reduce environmental impacts, such as actions to protect northern diamondback terrapins during nesting and hatching and peregrine falcons during nesting. EPA appreciates that these best management practices are currently in place. However, impacts from a combination of stressors, including climate-related impacts, are having population-level effects for a range of species. Much is unknown about the full range of anthropomorphic impacts on biota and ecological processes. Therefore, it is critical to minimize additional stressors, particularly for imperiled species and for species most vulnerable to impacts from the proposed activities. Generally, EPA recommends considering further commitments to mitigation, including additional time of year restrictions of certain types of operations to reduce the potential for impacts.	The avoidance and mitigation measures identified in Section 3.10 and finalized at the conclusion of regulatory consultations represent the maximum mitigation levels and area sizes that are practical to implement under the Proposed Action while also ensuring no significant impacts on biological resources at a maximum foreseeable testing and training tempo (Alternative 2). Implementing additional avoidance and mitigation measures could compromise national defense preparedness without a measurable reduction in the already low level of biological resources impact anticipated for the Proposed Action. Seasonal measures in place to protect terrapins and peregrine falcons include closing a helicopter landing zone located in terrapin nesting habitat during terrapin nesting season and maintaining altitude restrictions over the Hannibal Target during peregrine falcon nesting season. There are also seasonal restrictions in flight altitude over Bloodsworth Island to protected migratory waterfowl species.
EPA3-03	General (Biological Resources) EPA encourages the Navy to consult with appropriate agencies, including the National Oceanic and Atmospheric Administration (NOAA) Fisheries and the U.S. Fish and Wildlife Service (USFWS) to identify and incorporate actions into planning that would minimize impacts to wildlife, especially species of special concern and Essential Fish Habitat. A meeting to discuss agency comments and concerns may be appropriate. EPA also recommends creating or expanding research partnerships to increase knowledge of the	Thank you for your review. The Navy consulted with the U.S. Fish and Wildlife Service and NOAA Fisheries under the Endangered Species Act and coordinated with NOAA Fisheries under the Magnuson Stevens Fisheries Conservation and Management Act (regarding Essential Fish Habitat). The Navy provides extensive investment for research programs in basic and applied research. In fact, the U.S. Navy is one of the largest sources of funding for marine mammal research in the world, which has greatly enhanced the scientific community's understanding of marine species generally. The Navy's support and conduct of cutting-edge marine mammal

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
	impacts to estuarine and marine species from the Navy's testing and training activities. Thank you for the opportunity to review this project and for your consideration of our comments in this letter and enclosure. We would be happy to discuss these comments at your convenience.	research includes: marine mammal detection, including the development and testing of new autonomous hardware platforms and signal processing algorithms for detection, classification, and localization of marine mammals; improvements in density information and development of abundance models of marine mammals; and advancements in the understanding and characterization of the behavioral, physiological (hearing and stress response), and potentially population-level consequences of sound exposure on marine life. The Navy has also invested in research and monitoring with regard to protecting other species of marine life, as detailed in the Marine Resources Support Group FY20 Program Review included in the administrative record for this EIS (Rees, 2020). The work of over 200 Navy marine resources professionals includes many partnerships to increase knowledge of the impacts to estuarine and marine species from Navy's testing and training activities. During FY20 alone, Navy scientists contributed to 24 publications, 9 technical reports, and 9 oral presentations, including work in the Chesapeake Bay. NAS Patuxent River natural resources staff currently (and historically) serve as members of the Marine Mammal and Sea Turtle Stranding Network, collecting data and performing rescue work for these marine/estuarine fauna. For the last 10 years, NAS Patuxent River natural resources staff, with a large crew of volunteers, have been monitoring Diamondback Terrapin nests and placing predator guards over the nests, resulting in thousands of terrapin hatchlings surviving that otherwise would have been predated and lost. They also collaborate on a number of terrapin-related research projects being conducted by researchers at the University of Maryland's Chesapeake Biological Laboratory. NAS Patuxent River is hosting and supporting research on the acoustic impacts of pile driving and other marine construction activities on Atlantic Sturgeon. The Navy has also works with the College of William and Mary to study bald eagles, built and maintained heron nesting platforms at Bloodsworth Island Range, and participates in the North American Waterfowl Management Plan.

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
EPA3-04	Purpose and Need The overall purpose to maintain military readiness is readily understood, but how proposed Alternatives 1 and 2 reflect the specific needs of the Navy is not evident from the information stated in Section 1.4. EPA recommends that the Purpose and Need statement in 1.4 clearly describe the projected military readiness requirements; this would support the statement in Section 2.3.1 that the No Action Alternative does not meet the purpose and need.	Chapter 2 (Description of the Proposed Action and Alternatives) provides an overview of the information gleaned from operational interviews, as represented in the action alternatives, to meet the purpose of and need for the Proposed Action.
EPA3-05	Resources Eliminated from Further Consideration - Hazardous Materials and Waste Hazardous materials were eliminated from further consideration (3.0.2.2) as NAS Patuxent River maintains a robust hazardous materials compliance program and the proposed action would not introduce new types of hazardous materials or waste streams. As noted on page 3.0-4, hazardous materials are used in support of aircraft and vehicles; given the expanded operations, use of hazardous materials and potential for spill, fuel dumps or other events could increase. We recommend including an assessment of the potential increase of hazardous materials used or generated to support the finding that effects are insignificant.	As noted in Section 3.0.2.2, while quantities of hazardous materials may change (although not significantly), the hazardous materials and hazardous waste programs that are currently in place are mature, well established, and would be able to accommodate changes in materials and wastes. Current management practices would continue to be conducted in a manner that is compliant with all applicable regulations and existing procedures would continue to be implemented in response to any spills or other accidental releases.
EPA3-06	Noise The intensity of the loudest aircraft noise would remain the same under the No Action Alternative, but the frequency would increase under Alternatives 1 and 2. As detailed in Aviation Noise Impacts: State of the Science (Basner et al 2017), aircraft noise is one of the most detrimental environmental effects of aviation. Aircraft noise can cause community annoyance, disrupt sleep, adversely affect academic performance of children, and may adversely affect health. This consensus paper, prepared by the Impacts of Science Group of the Committee for Aviation Environmental Protection of the International Civil Aviation Organization, summarizes the state of scientific knowledge regarding the adverse effects of aircraft noise. We recommend including the Basner 2017 review and its findings in Appendix B. [Noise & Health, 19(87), 41–50. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5437751/]	The Final EIS has been updated to reflect the following: Citation(s) to Basner 2017 has been added to Appendix C (Noise Primer) (Section C.5 Noise Effects).

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
EPA3-07	Noise There is sufficient evidence for a negative effect of aircraft noise exposure on children's cognitive skills such as reading and memory, as well as on standardized academic test scores. We note the World Health Organization (WHO) Community Noise Guidelines suggest that the background sound pressure level in school classrooms should not exceed 35 decibels (dB) L_{Aeq} during teaching sessions to protect from speech intelligibility and disturbance of information extraction. The American National Standards Institute (ANSI) Standard for School Acoustics (ANSI S12.50-2002/2010), suggests that internal background noise for unoccupied classrooms should be 35 dB L_{Aeq}. We recommend a comparative analysis of these levels with the 60 dBA Leq(8 hr) indicated in the FEIS.	The Final EIS has been updated to reflect the following: Section 3.1.3.3 (Interference with Classroom Learning) has been amended to clarify that ANSI 12.6-2010 and WHO Community Noise Guidelines interior noise level criteria were a basis for DoD Noise Working Group exterior noise level criteria. The DoD Noise Working Group applies a 25 dB outdoor-to-indoor noise level reduction in establishing the 60 dBA $L_{eq(8hr)}$ exterior criterion.
EPA3-08	Noise EPA recommends conducting outreach to schools that may be affected regarding noise impacts and reduction strategies. Strategies to reduce noise impacts on children's education in schools are included "Assessing Aircraft Noise Conditions Affecting Student Learning – Case Studies," sponsored by the Airport Cooperative Research Program (ACRP), Project (http://www.trb.org/Publications/PubsACRPWebOnlyDocuments.aspx) and Effects of Aircraft Noise on Student Learning ACRP Educators' Handbook (http://onlinepubs.trb.org/onlinepubs/acrp/acrp_webdoc_034EducatorsHandbook.pdf) Evidence is also emerging to support the insulation of schools that may be exposed to high levels of aircraft noise. Windows and doors are among the main paths for sound to penetrate the building from outside. If they do not seal well, they can leak sound, just as they would hot or cold air. Acoustic ceiling tiles, acoustic wall paneling, and carpets can help to dampen noise and improve speech intelligibility.	The Navy conducted extensive public outreach as part of the NEPA process for this Proposed Action. Chapter 6 (Public Involvement and Distribution) details the extensive public involvement and outreach conducted throughout the NEPA process. Section 3.10 (Summary of Potential Impacts to Resources and Impact Avoidance and Minimization) provides a list of existing noise mitigations that have been in place for decades at NAS Patuxent River. The Navy promotes compatible development near military airfields through its AICUZ Program. The goal of the AICUZ Program is to protect the health, safety, and welfare of the people living near the airfield, while preserving the Department of Defense flying mission. The Navy conducts extensive communication and outreach with the local community, including schools, through the AICUZ Program. NAS Patuxent River has a long history of working with surrounding counties to incorporate AICUZ recommendations into local land use plans and ordinances. For example, the 1979 NAS Patuxent River AICUZ Study recommended Carver Elementary School (circa 1958 at 47382 Lincoln Avenue, Lexington Park, Maryland), located in the Accident Potential Zone and within the noise contours at or above 65 A-weighted decibels day-night average sound level (65 dB DNL), be relocated out of the AICUZ areas. In 2006, the Board of Education for St. Mary's County, Maryland, built the new Carver Elementary School outside the AICUZ at 46155 Carver School Boulevard, Great Mills, Maryland.

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
EPA3-09	Noise Undisturbed sleep of sufficient length is essential for daytime alertness and performance, quality of life, and health. The epidemiologic evidence that chronically disturbed or curtailed sleep is associated with negative health outcomes (such as obesity, diabetes, and high blood pressure) is overwhelming. For these reasons, noise-induced sleep disturbance is considered the most deleterious non-auditory effect of environmental noise exposure. In the analysis provided, sleep disturbance does not appear to be a main concern as the indicated increase in probability of awakening is indicated at 0 -1% at the assessed sites. However, given the health significance of sleep disruption, we encourage revisiting and incorporating opportunities to reduce night-time noise impacts.	The Navy currently implements several noise mitigation measures to protect public health in neighboring communities (Section 3.10). According to the analysis in Section 3.1 (Ambient Airborne Noise), late-night flying operations are relatively rare at NAS Patuxent River and OLF Webster, and the probability of being awakened at least once per night is 2 percent or less at all of the locations studied. Naval Air Warfare Center Aircraft Division Range Sustainability office monitors the weekly flight schedule and will typically issue noise advisories for noise generating events such as FCLPs, night operations, low level flights, supersonic weapons separations or any other flight test activities that are not conducted on a daily basis.
EPA3-10	Greenhouse Gases Section 3.2.1.4 refers to the Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and notes that it would replace the 2016 CEQ Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews Guidance if finalized. We note that this guidance has been rescinded and recommend updating the FEIS accordingly.	The Final EIS Section 3.2.1.4 has been updated to clarify that on February 19, 2021, the CEQ rescinded the Draft National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions consistent with Executive Order 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*.
EPA3-11	Biological Resources As detailed in the DEIS, much is currently unknown regarding impacts on species; for example, knowledge is limited regarding potential impacts of sonar on fish species and sea turtles, impacts of electromagnetic fields on marine mammals, the specific factors that lead to stranding of sea turtles and cetaceans, etc. Therefore, we recommend that the Navy be cautious when adding both new and increased potential stressors and suggest that opportunities be taken to study these impacts. Research could add to existing knowledge to better assess and avoid impacts in the future.	On the Proposed Action (including all stressors), the Navy consulted with the U.S. Fish and Wildlife Service and NOAA Fisheries under the Endangered Species Act and coordinated with NOAA Fisheries under the Magnuson Stevens Fisheries Conservation and Management Act (regarding Essential Fish Habitat). The Navy provides extensive investment for research programs in basic and applied research. In fact, the U.S. Navy is one of the largest sources of funding for marine mammal research in the world, which has greatly enhanced the scientific community's understanding of marine species generally. The Navy's support and conduct of cutting-edge marine mammal research includes: marine mammal detection, including the development and testing of new autonomous hardware platforms and signal processing algorithms for detection, classification, and localization of marine mammals; improvements in density information and development of

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
		abundance models of marine mammals; and advancements in the understanding and characterization of the behavioral, physiological (hearing and stress response), and potentially population-level consequences of sound exposure on marine life. The Navy has also invested in research and monitoring with regard to protecting other species of marine life, as detailed in the Marine Resources Support Group FY20 Program Review included in the administrative record for this EIS (Rees, 2020). The work of over 200 Navy marine resources professionals includes many collaborative efforts to increase knowledge of the impacts to estuarine and marine species from Navy's testing and training activities. During FY20 alone, Navy scientists contributed to 24 publications, 9 technical reports, and 9 oral presentations, including work in the Chesapeake Bay.
EPA3-12	Biological Resources While MEM may comprise a relatively small amount of the human-made materials discarded in the Chesapeake Bay overall, we recommend the Navy consider reducing the amount of material abandoned in the estuarine environment. This would also reduce potential risk of entanglement, ingestion risk, and microplastic pollution. Such measures may include incorporating more biodegradable materials and less plastic in MEM and retrieving sonobuoys instead of allowing them to sink.	As described in Section 3.0.2.3.2.4, most MEM is expended in the Chesapeake Bay Water Range around munition concentration areas (Figure 2.1-3, Chesapeake Bay Water Range Munition Concentration Areas). Considering costs and potential for reuse, the Navy attempts to recover as many items as possible including missiles, torpedoes, targets, and CAD/PAD devices. The Navy also uses simulation for testing and training when possible (see Section 2.4.2) thereby avoiding expenditure of MEM. The Navy considers means to reduce MEM expenditure to the extent possible within the context of mission requirements. While initiating engineering changes to the design of the systems tested on the range is out of scope for this EIS, as a good steward of the environment, the Navy will continue to pursue options for researching viable alternative MEM. Thus far, it has been challenging to meet performance requirements with alternative materials (e.g., biodegradable materials) given functional characteristics and space and weight constraints. The Naval Air Warfare Center Aircraft Division Sustainability Office can be part of the feedback loop and will encourage Program Offices to look for more environmentally friendly options to plastics where the options can meet performance criteria. However, any proposal to investigate alternative options to current materials through the Strategic Environmental Research and Development Program/Environmental Security Technology Certification Program would be initiated through the Program Offices.

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
EPA3-13	Biological Resources For threatened and endangered species, the DEIS generally indicates that the probability of a given animal encountering a stressor is low. However, additional measures could ensure that impacts are likely discountable. Time of year restrictions are currently employed to reduce the impacts of certain activities. EPA recommends considering additional seasonal limitations of certain activities to further reduce impacts to species of special concern as well as vulnerable life stages. For example, vessel strikes, ingestion, and entanglement hazards could potentially be lowered for sea turtles (primarily leatherbacks and loggerheads) by avoiding use of the Chesapeake Water Range in the summer months. Likewise, seasonal considerations to reduce impacts to fish and marine mammals could be employed.	The avoidance and mitigation measures identified in Section 3.10 and finalized at the conclusion of regulatory consultations represent the maximum mitigation levels and area sizes that are practical to implement under the Proposed Action while also ensuring no significant impacts on biological resources at a maximum foreseeable testing and training tempo (Alternative 2). Implementing additional avoidance and mitigation measures could compromise national defense preparedness without a measurable reduction in the already low level of biological resources impact anticipated for the Proposed Action. Seasonal measures applying to aircraft activity include maintaining altitude restrictions over Bloodsworth Island Range during migratory waterfowl season (November 15 – March 31) and aircraft restrictions over the Hannibal Target during the peregrine falcon nesting season (February 15 – August 15). There can also be seasonal restrictions placed on any military readiness activity through the test plan environmental review process.
EPA3-14	Biological Resources Visual surveys for marine mammals and sea turtles are conducted prior to in-water activities as an avoidance measure. While helicopter surveys are helpful to detect the presence of pods of dolphins, the FEIS would benefit from assessing whether there are better methods for the sighting and tracking of other marine mammals, turtles, sturgeon, and other species of concern that have been or could be employed.	The avoidance and mitigation measures identified in Section 3.10 and finalized at the conclusion of regulatory consultations represent the maximum mitigation levels and area sizes that are practical to implement under the Proposed Action while also ensuring no significant impacts on biological resources at a maximum foreseeable testing and training tempo (Alternative 2). Implementing additional avoidance and mitigation measures could compromise national defense preparedness without a measurable reduction in the already low level of biological resources impact anticipated for the Proposed Action. The Navy has invested extensively in research and monitoring with regard to protecting sensitive marine life, as detailed in the Marine Resources Support Group FY20 Program Review included in the administrative record for this EIS (Rees, 2020). The work of over 200 Navy marine resources professionals includes improving avoidance and mitigation measures protecting estuarine and marine species from the Navy's testing and training activities. During FY20 alone, Navy scientists contributed to 24 publications, 9 technical reports, and 9 oral presentations, including work in the Chesapeake Bay.

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
EPA3-15	Biological Resources As detailed in the DEIS, North American bird populations have decreased approximately 29% in the last 50 years. Low altitude aircraft operations increase the potential for collisions with birds or may elicit behavioral responses that are energetically costly. Given the proposed 45% increase in aircraft flights below 3,000 Above Ground Level for Alternative 1 and the 61% increase for Alternative 2, we recommend assessing whether further measures could be used to reduce the potential for collisions, especially during migratory periods.	The greatest potential for bird/aircraft strike is in the vicinity of the airfield. To reduce the potential for collisions between aircraft and birds, Bird/Animal Aircraft Strike Hazard (BASH) Plans are developed and implemented. With an effective BASH Plan, aircraft/bird strikes have averaged a relatively low 10 strikes/year over the period from 2008-2018. As noted in Section 3.4.3.3, an estimated six additional birds may be struck by aircraft under the Preferred Alternative. Given the threat for damage to birds, pilots and aircraft alike, the Navy seeks continuous improvement with regard to BASH statistics at NAS Patuxent River and OLF Webster. BASH measures include pilot practices and guidelines for decreasing airfield attractiveness to particular wildlife species. Pilots are training to avoid high bird count areas and receive ATC warnings when bird concentrations are observed near runways, taxiways, or within approach control airspace. Should a bird or animal strike occur, a report is completed by the squadron and submitted into the Navy's Web-Enabled Safety System Aviation Mishap and Hazard Reporting System.
EPA3-16	Biological Resources We recommend that the Navy work with the resource agencies to reduce potential impacts where possible. Section 3.4.4 indicates that the Navy has not consulted with USFWS or NOAA. We recommend that the FEIS document agency concurrence and coordination with appropriate state and federal agencies in compliance with applicable regulations, including the Marine Mammal Protection Act, the Endangered Species Act, and the Magnuson-Stevens Fisheries Conservation Act.	The Navy completed consultation with the U.S. Fish and Wildlife Service and NOAA Fisheries under the Endangered Species Act (see Appendix F of the FEIS for the consultation documentation). The Navy coordinated with NOAA Fisheries under the Magnuson-Stevens Fisheries Conservation and Management Act (regarding Essential Fish Habitat) (See Appendix H of the FEIS for the EFH coordination documentation). Consultation under the Marine Mammal Protection Act was not necessary as the Proposed Action would not result in a reasonably foreseeable take of any marine mammal. Page 3.4-112 last paragraph changed to "The action proponent has consulted with NMFS and USFWS on this Proposed Action, as documented in Appendix F (Endangered Species Act Documentation)."
EPA3-17	Environmental Justice The DEIS indicates that the proposed action would continue to have high and disproportionate impacts to EJ communities (minority and low-income populations) from noise. Additional assessment, outreach, and communication may be appropriate to reduce potential impacts. Data from the U.S. Census Bureau's 2013–2017 American Community Survey (ACS) were used to characterize minority populations in the area of impact and to define low-income	The Final EIS Section 3.8 (Environmental Justice) has been updated to reflect the availability of more recent census data contained in the U.S. Census Bureau – ACS (2015-2019) data, if 2020 data is available at the block group level.

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
	populations. We recommend utilizing the available United States Census Bureau 2020 Decennial Census and the 2020 ACS census data to identify minority and low-income populations in the affected area. At a minimum, the Navy is encouraged to utilize the U.S. Census Bureau – ACS (2014-2018) data for the most currently available demographic data representation of all impacted communities within adjacent counties.	
EPA3-18	Environmental Justice Section 3.8.2 - Environmental Justice, Affected Environment) describes the threshold for determining the presence of environmental justice communities. EPA has concerns that the stated methodology is not consistent with CEQ Environmental Justice Guidance to develop minority and low-income population benchmarks. We encourage the Navy not to add an additional ten percentage points to percent minority population and percent low-income averages as it may cause areas of Environmental Justice concern to be missed due to unduly high benchmark values being set. The CEQ Guidance states: "Low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census' Current Population Reports, Series P-60 on Income and Poverty. In identifying low income populations, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect." The CEQ Environmental Justice Guidance calls for two tests to help to identify minority populations. The first to be applied is the identification of populations that exceed the 50% minority population benchmark established by CEQ. All populations that exceed the 50% benchmark should be identified as minority populations. The second is the application of the significantly greater benchmark. This method should be used when appropriate when local minority population averages are below 50%. The process	The Final EIS Section 3.8.2 has been updated to remove the additional ten percentage points to percent minority population and percent low-income averages.

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
	should be designed to promote the appropriate identification and inclusion of minority populations of concern in the assessment. It should be noted that adding a set percentage to the minority population averages has an adverse impact on low minority population percentages and does not have the same impact on all populations. In a population that is 5% minority, adding 10 percentage points gives a benchmark of 15% which is three times higher than the minority population average. If the percent minority population is 10%, the benchmark would be 20%, which is twice the minority population percentage. Therefore, taking ten percent of the minority population average and adding it to the minority population percentage is the correct way to calculate the benchmark value. We would be happy to schedule a meeting to discuss determining appropriate benchmarks and calculating values.	
EPA3-19	<u>Environmental Justice</u> Section 3.8.1.2 – Environmental Justice Assessment (as displayed in Table 3.8-1) states, "Two block groups within the affected area are located in Calvert County. The block groups in the affected area located in Calvert County do not have a "meaningfully greater" concentration of minority residents and do not have a greater concentration of low-income residents, compared to the community of comparison (Calvert County). Consequently, these areas are not considered minority or low-income environmental justice communities." It is encouraged that the FEIS utilize, at a minimum, the 2014-2018 ACS data for more accurate/current demographic representation of the two referenced census block groups (#240098610032 and #240098609003). The 2014-2018 ACS shows potential communities of Environmental Justice concerns. The Population Over Age 64 is at the 95th percentile for the State and at the 94th percentile for the Nation. The Low-Income Population is at the 45th percentile for the State and Linguistically Isolated Population is at the 47th percentile for the State. Moreover, the Population Under Age 5 is at the 46th percentile for the State.	The Final EIS Section 3.8 (Environmental Justice) has been updated to reflect the availability of more recent census data contained in the U.S. Census Bureau – ACS (2015-2019) data. Consistent with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, the Navy's policy is to identify and address any disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. As a result, the analysis completed in this EIS is consistent with prior NAS Patuxent River environmental justice impact determinations as well as other Navy NEPA documents. The Navy's outreach to the local environmental justice communities (e.g., correspondence to over 2,400 residential addresses within environmental justice communities, availability of the EIS at a library within local environmental justice communities, and designated phone line during the virtual public meetings for participants with limited internet access) and the Navy's ongoing practices in the region such as coordination with community planning leaders have not resulted in the need to expand the demographic index beyond minority and low-income populations. The Navy's noise analysis included representative noise-sensitive locations within the region (Section 3.1.6, Ambient Airborne Noise, Affected

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
		Environment) as an additional means to determine the potential for impacts on the local population. In addition, in compliance with EO 13045, Environmental Health Risks and Safety Risks to Children, impacts to children are addressed in Section 3.5, Public Health and Safety.
EPA3-20	Environmental Justice Section 3.8.2 - Environmental Justice, Affected Environment does not contain current census block group demographic data for Westmoreland County and Northumberland County in Virginia. The Abstract states the affected region includes these counties. The 2014-2018 ACS data indicates the Population Over Age 64 is in the 93rd percentile for the State and Nation; the Low-Income Population is in the 66th percentile for the State; the Population of People Of Color/Minority is in the 50th percentile for the State; Linguistically Isolated Population is in the 66th percentile for the State; and Population With Less Than High School Education is in the 64th percentile for the State. These demographic characteristics indicate that these counties may contain communities with potential Environmental Justice concerns.	The overall PRC Study Area includes Westmoreland and Northumberland County as those counties have airspace that is part of the PRC. However, Section 3.8 notes that the environmental justice analysis focuses on the minority and low-income population in the affected environment, defined as those areas off-installation that are exposed to noise levels at or above 65 dB DNL from noise sources associated with operations from NAS Patuxent River and OLF Webster in the PRC Study Area. In addition, the environmental justice analysis considers populations residing within the Accident Potential Zones (APZs). The Virginia counties of Westmoreland and Northumberland are not within the noise contours or the Accident Potential Zones for the PRC Study Area and therefore, not included in the analysis. The introduction of Section 3.8 has been updated to acknowledge that environmental justice communities may be present in the PRC Study but outside the noise contours and APZs.
EPA3-21	Environmental Justice Section 3.8.2 - Environmental Justice, Affected Environment also does not contain current census block group demographic data for Dorchester County, Maryland. The 2014-2018 ACS data indicates: a Population Over Age 64 in the 80th percentile for the State; a Low-Income Population in the 79th percentile for the State; the Population of People Of Color/Minority in the 43rd percentile for the State; Linguistically Isolated Population in the 52nd percentile for the State; Population With Less Than High School Education in the 73rd percentile for the State; and Population Under Age 5 in the 51st percentile for the State. These demographic characteristics may depict these census block groups as containing communities of potential Environmental Justice concerns.	The overall PRC Study Area includes Dorchester County. However, Section 3.8 notes that the environmental justice analysis focuses on the minority and low-income population in the affected environment, defined as those areas off-installation that are exposed to noise levels at or above 65 A-weighted decibels day-night average sound level from noise sources associated with operations from NAS Patuxent River and Outlying Field Webster in the PRC Study Area. In addition, the environmental justice analysis considers populations residing within the Accident Potential Zones. Dorchester County does not include populations that are within the noise contours or the Accident Potential Zones for the PRC Study Area and therefore, is not included in the analysis. The introduction of Section 3.8 has been updated to acknowledge that environmental justice communities may be present in the PRC Study but outside the noise contours and APZs.

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
EPA3-22	Environmental Justice Section 3.8.2 - Environmental Justice, Affected Environment and Section 4.4.8 – Environmental Justice do not contain information regarding outreach efforts to the impacted adjacent communities. It is encouraged that these sections of the FEIS describe the outreach conducted to effectively engage and solicit feedback.	Section 3.8.3 cross references Standard Operating Procedures (Table 2.5-1) and Impact Avoidance and Minimization Measures (Table 3.10-1). These cross-referenced tables include outreach efforts that include the environmental justice communities. Furthermore, as part of the Draft EIS public comment period (April 30-June 15, 2021), the Navy provided written notice to over 2,400 residential addresses within environmental justice communities inviting them to join the environmental planning process. In addition, the Draft EIS was available for review at a local library within the identified environmental justice communities. Public involvement also included a designated phone line for participation in the virtual meetings to accommodate members of the public with limited internet access. Section 3.8.3 also notes that the Navy would continue its public outreach efforts to ensure that impacted environmental justice populations are kept informed and involved on Navy actions that may have potentially adverse noise impacts.
EPA3-23	Environmental Justice Section 3.8.3.4 - Alternatives Impact Summary describes the Alternatives explored. EPA encourages the Navy to fully assess affected communities and consider mitigative measures that protect human health and the environment.	Section 3.8.3 includes the full environmental justice analysis. Section 3.8.3.4 is a table summary. Existing practices that minimize impacts are cross-referenced and included in the analysis (i.e., Standard Operating Procedures (Table 2.5-1) and Impact Avoidance and Minimization Measures (Table 3.10-1). Impacts associated with each alternative reflect the existing noise mitigation measures and operating procedures designed with noise impact minimization in mind such as limitations on supersonic flights and Open-Air Engine Test Cell facility operations.
EPA3-24	Abstract The Abstract states the affected region includes St. Mary's and Dorchester County, Maryland and Westmoreland and Northumberland County, Virginia. We encourage including Calvert County, Maryland as it is referenced throughout the DEIS as an adversely impacted adjacent community.	The Final EIS has been updated to reflect the following changes: The Abstract has been updated to add Calvert County, Maryland among the Maryland counties included within the Affected Region.
EPA3-25	Cultural Resources The DEIS indicates that the Navy has initiated consultation with the Virginia Department of Historical Resources, the Maryland Historical Trust, and the Delaware Division of Historical and Cultural Affairs in compliance with Section 106 of the National Historic Preservation	The Navy consulted with all applicable State Historic Preservation Offices pursuant to Section 106 of the National Historic Preservation Act. The Final EIS Appendix J includes the documentation of consultation with each of the following agencies: Virginia Department of Historic Resources, Maryland Historical Trust, and Delaware Division of Historical and Cultural Affairs. All

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
	Act. We appreciate the Navy's commitment to avoid and mitigate adverse effects in consultation with the State Historic Preservation Offices. EPA recommends listing any mitigation or management actions that will be taken in the FEIS and including documentation of consultation from each of the agencies.	consultations pursuant to Section 106 of the National Historic Preservation Act are complete, with concurrence received from all three state agencies. No mitigations or management actions were recommended by the State Historic Preservation Offices, therefore none are listed in the Final EIS.
State Agency		
Maryland Department of the Environment (MDE), Amanda Redmiles		
MDE-01	Air Emissions If a project receives federal funding, approvals and/or permits, and will be located in a nonattainment area or maintenance area for ozone or carbon monoxide, the applicant needs to determine whether emissions from the project will exceed the thresholds identified in the federal rule on general conformity. If the project emissions will be greater than 25 tons per year, contact Brian Hug, Air and Radiation Management Administration, at (410) 537-4125 for further information regarding threshold limits.	Thank you for your participation in the National Environmental Policy Act process. Your comments are part of the official project record. Final EIS Section 3.2.3 Air Quality Environmental Consequences includes the air quality analysis, a General Conformity applicability analysis, and according to the analysis, pollutant emissions are well below the *de minimis* levels. A signed Record of Non-Applicability is included in Appendix E, *Air Quality Calculations*.
MDE-02	Above Ground or Underground Petroleum Storage Tanks Any above ground or underground petroleum storage tanks, which may be utilized, must be installed and maintained in accordance with applicable State and federal laws and regulations. Underground storage tanks must be registered and the installation must be conducted and performed by a contractor certified to install underground storage tanks by the Land Management Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.	The Proposed Action does not include the installation of any new petroleum storage tanks. As described in Final EIS Section 3.0.2.2, NAS Patuxent River maintains a robust hazardous materials compliance program that is compliant with all applicable regulations.
Commonwealth of Virginia Department of Environmental Quality (VADEQ), Bettina Rayfield		
VADEQ-01	Coastal Zone Consistency Determination Provided activities are performed in accordance with the recommendations which follow in the Environmental Impacts and Mitigation section of this report *(i.e, DEQ letter dated June 9, 2021*), the proposal described in the EIS is unlikely to have significant effects on ambient air quality, water quality, wetlands, wildlife resources, forest resources, historic resources, and solid and hazardous wastes. It is unlikely to adversely affect species of	Thank you for your participation in the National Environmental Policy Act process. Your comments are part of the official project record. Final EIS Section 3.2.3, Air Quality Environmental Consequences, includes the air quality analysis, a General Conformity applicability analysis, and according to the analysis, pollutant emissions are well below the *de minimis* level. Final EIS Section 3.4.3, Biological Resources Environmental Consequences, includes analysis of impacts to biological resources under the jurisdiction of DCR-DNH, VMRC, and DWR. No significant impacts were identified. All activities are expected to be performed in accordance with

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
	animals, plants or insects listed by state agencies as rare, threatened, or endangered.	the recommendations made in the letter dated June 9, 2021, contained in Appendix I.
Non-Governmental Organizations		
University of Maryland Center for Environmental Science Chesapeake Biological Laboratory (UM), Dr. Helen Bailey		
UM-01	Biological Resources Thank you for the opportunity to comment on the Patuxent River Complex (PRC) Testing and Training Activities Draft Environmental Impact Statement (EIS). I am writing to inform you of the data we have collected on bottlenose dolphins (*Tursiops truncatus*) in the Chesapeake Bay as part of our research at the University of Maryland Center for Environmental Science's (UMCES) Chesapeake Biological Laboratory in Solomons, Maryland. We have been studying the occurrence and distribution of bottlenose dolphins in and around Chesapeake Bay using visual sightings and underwater passive acoustic monitoring. Visual sightings are catalogued in Chesapeake DolphinWatch (ChesapeakeDolphinWatch.org), where members of the public report dolphin sightings in real-time. Since the launch in 2017, a total of 7,388 registered app users submitted 3,766 dolphin sightings. All reports were reviewed by scientists at UMCES and verified based on detailed descriptions, photographs, or video from users. We recently published a peer-reviewed scientific article summarizing these sightings in the journal PLOS One titled *Spatial and temporal variation in the occurrence of bottlenose dolphins in the Chesapeake Bay, USA, using citizen science sighting data* (Rodriguez et al. 2021). In this study we showed that bottlenose dolphins were not only found in the lower Chesapeake Bay and near the mouth of the Bay as described in section 3.4.5.1 in the draft EIS, but are widespread throughout the Chesapeake Bay. Sightings occurred throughout the mainstem and tributaries of the Bay. There were a similar number of confirmed bottlenose dolphin sightings within the lower, middle and upper Bay during 2017-2019 (see Figure 1 in Rodriguez et al., 2021). The occurrence of bottlenose dolphins peaked during the summer months, but was seasonally stratified within the Bay. Bottlenose dolphin sightings have been reported year-round in the lower Bay,	Thank you for your participation in the National Environmental Policy Act process. Your comments are part of the official project record. The Navy has included in the Final EIS, citation to the journal article in PLOS One titled, *Spatial and temporal variation in the occurrence of bottlenose dolphins in the Chesapeake Bay, USA, using citizen science sighting data* (Rodriguez et al. 2021). The Final EIS Section 3.4.5.1 has been updated with the study's estimates in addition to those estimates reported based on the aerial surveys. The Final EIS Section 3.4.5.1 has been updated with new stock information per study findings noting that some of the bottlenose dolphins in the Chesapeake Bay are from the Western North Atlantic Northern Migratory Coastal Stock and not just from the Western North Atlantic Southern Migratory Coastal Stock. The Navy will continue to monitor changes in bottlenose dolphin populations coming into the Chesapeake Bay and looks forward to cooperating with the Chesapeake DolphinWatch project with regard to monitoring the annual spatiotemporal abundance and distribution of bottlenose dolphins.

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
	whilst sightings in the middle Bay were primarily during May to September, and in the upper Bay were highest from June to August. Photographs and videos that have been submitted to Chesapeake DolphinWatch have shown young calves and dolphins with fish showing that the Chesapeake Bay serves as both a nursery area and feeding area for bottlenose dolphins. At the mouth of the Potomac River, we have deployed a C-POD (cetacean click detector) in collaboration with a local fisherman since 2016, which confirmed the seasonal presence of bottlenose dolphins in the middle Bay (Rodriguez et al. 2021). Acoustic monitoring of individually-identifiable bottlenose dolphin calls (signature whistles) has also allowed us to determine a minimum abundance estimate of 21 bottlenose dolphins at the mouth of the Rhode River in the upper Bay (Bailey et al. in press, Ecosphere, PDF copy available upon request), and at least 333 bottlenose dolphins in the Potomac River (H. Bailey, unpublished data). These estimates are higher than those reported based on the aerial surveys in section 3.4.5.1 in the draft EIS. Our acoustic monitoring has also revealed the re-occurrence of individuals identified from their signature whistles amongst the Rhode River, Potomac River, and the Atlantic Ocean offshore of Ocean City, Maryland (Bailey et al. in press, Ecosphere, and H. Bailey, unpublished data). This indicates some of the bottlenose dolphins in the Chesapeake Bay are from the Western North Atlantic Northern Migratory Coastal Stock and not just from the Western North Atlantic Southern Migratory Coastal Stock as suggested in section 3.4.5.1 in the draft EIS. We'd like to emphasize the potential for continued growth of the bottlenose dolphin populations coming into the Chesapeake Bay and hope that the Navy will continue to work with our Chesapeake DolphinWatch project to monitor the annual spatiotemporal abundance and distribution of bottlenose dolphins. We are available to answer clarifying questions about this comment. If you have an interest in knowing more about our research and how we can be of service to Navy efforts in, around, or near Chesapeake Bay, please contact us at your convenience.	

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
Individuals		
BB		
BB-01	Noise The Tappahannock-Essex airport in Virginia is utilized as a constant destination by military helicopters. DoD regulations allow for municipal airports to be used for training by military aircraft. However, this airport was built against the will of the citizens of Essex county and the surrounding community is very much against any and all usage of this airport by the military. There are more complaints filed against this airport (KXSA) than can be kept up with. This airport is not suitable for military aircraft to use as a training destination and ask that none of your aircraft use it for any purpose. There are many other destinations that can accommodate these training activities without disturbing a tranquil community and turning it against our military. The PAX River facility is just one of many facilities that may utilize KXSA. We ask for your facility to refrain from doing so. We want our military to obtain the best training they can get. We only ask that such training be accomplished at other more suitable locations, not KSXA.	Thank you for your participation in the National Environmental Policy Act process. Your comments are part of the official project record. The Proposed Action Study Area for the EIS does not include the Tappahannock–Essex Airport (Section 1.3). However, military aircraft from a variety of bases may use this airport, including in the event of an emergency. The Tappahannock-Essex County Airport Authority governs the use of the airport and may be a source for further information regarding airfield use.
MJM		
MJM-01	Noise This is to note that the current amount of flying is tolerable. The noise is disturbing to me enjoying the out of doors. Further, it scares my dog and she runs away. My concern is if there is going to be an increase in activity, flying times and occurrences. I am not a property appraiser, I am a retired zoning code enforcement officer. I believe the sound of the planes has an adverse affect on my property values (in son's name) as well as those in the surrounding area. Any increase in activity, occurrences and training of different type planes or flying objects would increase the adverse affect on surrounding properties. thank you for allowing me to give input.	Thank you for your participation in the National Environmental Policy Act process. Your comments are part of the official project record. The loudness of noise events that are heard currently would not change. However, since the tempo of operations would increase under Alternatives 1 and 2, certain neighborhoods adjacent to the air station would potentially hear noise more often. No louder types of aircraft would be added and no changes to flight paths, engine test run locations, or any other procedures are proposed. The Navy has a comprehensive noise management program for the PRC. Some of the noise mitigation and monitoring measures that are in place to address noise impacts to the community include: • Maintain a noise disturbance reporting system (Noise Hotline number: 866-819-9028; Noise email address: paxnoise@navy.mil) • Provide aircrew noise awareness briefs • Use established unmanned aerial system routes

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
		• Limit Open-Air Engine Test Cell operations (favorable wind conditions) • Follow supersonic event restrictions and maintain sonic boom monitoring system • Work with planning and zoning commissions throughout the Southern Maryland region to address development in potentially impacted areas. Noted in Appendix C, Noise Primer, there is enough data available to conclude that aircraft noise has a real effect on property values; however, the actual value varies from location to location and is very often small compared to non-noise factors such as market conditions, neighborhood characteristics, and individual real property characteristics (e.g., age of the property, size, and home amenities).
DL		
DL-01	Noise The noise and low flying craft SHAKE our home in the Chesapeake Ranch Estates. Windows rattle, and we have structural cracks that were not present previously. Some of these craft are flying VERY low and close to our community of 5000 homes. There should be a sound wall built around the airfield at Pax NAS when testing engines. The sound carries across the bay/river and sounds like we are on the tarmac. Much of the night testing disturbs animals & children (and many adults who have to get up and go to work). I cannot open the windows in the house and have a conversation on the phone day or night due to the amount of noise pollution. I should not have to constantly shout on the phone in my own home. It sounds like a warzone at times. I understand the need to keep our country safe by testing new craft etc., but, when this facility (PAZ NAS) was built, the population of SoMD was extremely small. It may be time for the Navy/Federal government to find a new facility away from such a densely populated area. The population density alone dictates some of the activities need to relocated elsewhere. There needs to be attention paid to the impact on Chesapeake Ranch Estates and other communities on the water. The water and lack of any sound containment structure exacerbates the sound within our community. Please keep this in mind.	In addition to the existing noise mitigation measures highlighted in the MJM-01 response above, the Navy notes that the PRC is in a unique location that is suited to the Navy's needs. Specifically, the Naval airfield, facilities, fully instrumented range, airspace, infrastructure, and geographic location provide an ideal environment for the highly trained, professional experienced pilots. In addition, using resources that are already in place is the best stewardship of federal funding. The Navy considered Alternative Testing and Training Locations (see Section 2.4.1). For the reasons stated therein, conducting activities at alternative sites outside the PRC does not meet the purpose of and need for the Proposed Action nor constitute a reasonable alternative.
LM		

Table M-1 Response to Comments, Continued

Comment		*Navy Response*
LM-01	General Keep flying. Our pilots need a place to train and I enjoy seeing the planes!	Thank you for supporting the Navy mission. Thank you for your participation in the National Environmental Policy Act process. Your comments are part of the official project record.

Key: ACRP = Airport Cooperative Research Program; ACS = American Community Survey; AICUZ = Air Installations Compatible Use Zones; ANSI = American National Standards Institute; APZ = Accident Potential Zone; BASH = Bird/Animal Aircraft Strike Hazard; CAD/PAD = Cartridge Actuated Devices/Propellant Actuated Devices; CEQ = Council on Environmental Quality; CFR = Code of Federal Regulations; dB = decibels; dBA = A-weighted decibels; DCR-DNH = Department of Conservation and Recreation's Division of Natural Heritage; DEIS = Draft Environmental Impact Statement; DNL = day-night average sound level; DoD = Department of Defense; DWR = Department of Wildlife Resources; EFH = Essential Fish Habitat; EIS = Environmental Impact Statement; EO = Executive Order; EPA = U.S. Environmental Protection Agency; FCLP = Field Carrier Landing Practice; FEIS = Final Environmental Impact Statement; FY = fiscal year; L_{Aeq} = A-weighted equivalent sound level; $L_{eq(8hr)}$ = 8-hour equivalent sound level; MEM = military expended material; NAS = Naval Air Station; NEPA = National Environmental Policy Act; NMFS = National Marine Fisheries Service (NOAA Fisheries); NOAA = National Oceanic and Atmospheric Administration; OLF = Outlying Field; PRC = Patuxent River Complex; REPI = Readiness and Environmental Protection Integration Program; U.S. = United States; UMCES = University of Maryland Center for Environmental Science; USFWS = U.S. Fish and Wildlife Service; VMRC = Virginia Marine Resources Commission; WHO = World Health Organization.

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Appendix N
Geographic Information System (GIS) References

Item Name in Figure Legend	*Basic Metadata Credits*
Acoustic Telemetry Receivers	Compilation of the following unpublished data sources: (1) Hager, C. (2016). Operation of the Navy's Telemetry Array in the Lower Chesapeake Bay: Annual Progress Report for 2015. Final Report. Williamsburg, VA: Chesapeake Scientific. (2) Ogburn, M. and R. Anguilar (2018, October). Personal communication with Carter Watterson, NAVFAC Atlantic, regarding Atlantic sturgeon presence in the Patuxent River and Tangier Sound based on telemetry data. Source affiliation: Smithsonian Environmental Research Institute. (3) Secor, D. and M. O'Brien. (2018, November). Personal communication with Carter Watterson, NAVFAC Atlantic, regarding Atlantic sturgeon presence in the Maryland waters of the Chesapeake Bay and the Potomac River based on telemetry data. Source affiliation: University of Maryland, Chesapeake Biological Laboratory. (4) Stence, C. (2018, October). Personal communication with Carter Watterson, NAVFAC Atlantic, regarding Atlantic sturgeon presence in the Nanticoke River and Marshyhope Creek based on telemetry data. Source affiliation: Maryland Department of Natural Resources.
Aim Point	Government furnished information
Airfield Runway	Government furnished information
Benthic Areas/ Substrate	NOAA Chesapeake Bay Program [CBP] (2011-2017). Benthic Habitat Integration for Chesapeake Bay. Processing Notes: Combination of 2017 NOAA CBP integration including only sonar-based classifications and the 2011 NOAA CBP integration including other, less precise, mapping methods.
Bloodsworth Island Range SDZ	Government furnished information
Building	Government furnished information
Chesapeake Bay Water Range	Government furnished information
Chessie ATCAA	Government furnished information
Depth (m)	Maryland iMAP [Original File Name: Maryland_Chesapeake_Bay_Bathymetry_Contours]
Dip Point	Government furnished information
Dissolved Oxygen (mg/l) Minimums	Maryland iMAP/Chesapeake Bay Program [Original File Name: Maryland_Chesapeake_Bay_Dead_Zones__Chesapeake_Bay_Dead_Zones]
Fixed Target	Government furnished information
Helo OPAREAs	Government furnished information
Helo Pads	Government furnished information
Impact & Recovery Area	Government furnished information

Item Name in Figure Legend	***Basic Metadata Credits***
Installation Road	Government furnished information
Land-use/Land-cover	National Land Cover Dataset (2011) [Original File Name: nlcd2011.img]
Low Altitude Airspace (>0 ft Altitude)	Government furnished information. Processing notes: Combination of restricted airspace (0-3,500 ft) and shared airspace
Munition Concentration Areas	Government furnished information. Processing notes: Digitized ordnance concentration areas from 2013 Patuxent River Complex Water Range Condition Assessment (U.S. Department of the Navy, 2013c)
Navy Installation/ Navy Land Area	Government furnished information
PRC Study Area	Government furnished information
Regulatory Designations - Artificial Reefs	Maryland iMAP [Original File Name: MD_Artificial_Reefs]
Regulatory Designations - Oyster Sanctuary	Maryland iMAP [Original File Name: BIOT_OysterSanctuaries_DNR]
Restricted Airspace	Government furnished information
Shoreline Habitats (Low Tide)	NOAA Office of Response and Restoration (2016) Chesapeake Bay Environmental Sensitivity Index ["Lines" feature class]
State Boundary	US Census Bureau 2018
Streams	Maryland iMAP [Original File Name: NHD_H_Maryland State Shape]
Summer Salinity (psu)	NOAA Chesapeake Bay Program [Original File Name: summer_sal]
Surface Danger Zones	Government furnished information
Target Prohibited Area (1000 yard)	Government furnished information
Water Features - Seagrass	Virginia Institute of Marine Science (2016) Seagrass Mapping Program
Wrecks and Obstructions	NOAA Automated Wreck and Obstruction Avoidance System (2015)
Census Block Groups and Tracts/ Census Geographical Area	U.S. Department of Commerce, U.S. Census Bureau, Geography Division, “TIGER/Line Shapefiles" (2019)
Vessel Traffic Density	“Vessel Density”. Office for Coastal Management (OCM). Published 2020. https://marinecadastre.gov/data/

Item Name in Figure Legend	***Basic Metadata Credits***
Land Use	MD Department of Planning 2018 “Parcel dataset, St. Mary’s County”. December 2018. Geospatial digital data. Downloaded from https://planning.maryland.gov/Pages/OurProducts/DownloadFiles.aspx. Last downloaded 11/20/2019.
Delaware Natural Areas	DNREC Division of Parks and Recreation. 2020. "Natural Areas Inventory". http://opendata.firstmap.delaware.gov/datasets/delaware-natural-areas/
Delaware Public Protected Lands	DNREC Division of Parks and Recreation. 2019. "Delaware Public Protected Lands". http://opendata.firstmap.delaware.gov/datasets/delaware-public-protected-lands
Maryland Protected Lands - Local Protected Lands	MD iMAP "Maryland Protected Lands - Local Protected Lands" https://geodata.md.gov/imap/rest/services/Environment/MD_ProtectedLands/FeatureServer/5 last accessed 11/13/2019
Delaware Park Facilities	DNREC Division of Parks and Recreation. "Park Facilities" https://firstmap.delaware.gov/arcgis/rest/services/Society/DE_Park_Facilities/FeatureServer. last accessed 11/13/2019.
Virginia Conservation Lands	VA-DCR, Natural Heritage. 2020. "Statewide GIS coverage of Conservation Lands in Virginia" http://www.dcr.virginia.gov/natural_heritage/cldownload.shtml. Downloaded 2/21/2019
Maryland Protected Lands - DNR Owned Properties and Conservation Easements	MD iMAP. 2020. "Maryland Protected Lands - DNR Owned Properties and Conservation Easements" https://geodata.md.gov/imap/rest/services/Environment/MD_ProtectedLands/FeatureServer/0
Maryland Historical Trust 2019	Maryland Historical Trust. (2019, October 23). Medusa, Maryland's Cultural Resource Information System. Retrieved from https://mht.maryland.gov/secure/Medusa/
U.S. Fish and Wildlife Service Interests	U.S. Fish and Wildlife Service. 2020. "FWS Interest shapefile". https://www.fws.gov/gis/data/CadastralDB/links_cadastral.html
National Park Service Boundaries.	National Park Service. 2020. "Boundaries". https://public-nps.opendata.arcgis.com/datasets/nps-boundary-1
National Park Service 2019	National Park Service. (2019, July 9). *NPS.gov*. Retrieved from National Register of Historic Places: www.nps.gov/subjects/nationalregister/data-downloads.htm
USGS Protected Areas Database of the United States	U.S. Geological Survey (USGS) Gap Analysis Project (GAP), 2018, Protected Areas Database of the United States (PAD-US): U.S. Geological Survey data release, https://doi.org/10.5066/P955KPLE.

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