APPENDIX A

115TH CONGRESS 2d Session

HOUSE OF REPRESENTATIVES

REPORT 115-1062

OIL REGION NATIONAL HERITAGE AREA REAUTHORIZATION ACT

DECEMBER 3, 2018.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. BISHOP of Utah, from the Committee on Natural Resources, submitted the following

REPORT

[To accompany H.R. 6507]

[Including cost estimate of the Congressional Budget Office]

The Committee on Natural Resources, to whom was referred the bill (H.R. 6507) to amend the Oil Region National Heritage Area Act to reauthorize the Oil Region National Heritage Area, and for other purposes, having considered the same, report favorably thereon without amendment and recommend that the bill do pass.

PURPOSE OF THE BILL

The purpose of H.R. 6507 is to amend the Oil Region Heritage Area Act to reauthorize the Oil Region National Heritage Area.

BACKGROUND AND NEED FOR LEGISLATION

The Oil Region National Heritage Area (ORNHA) was designated in 2004 and encompasses 34 municipalities in 708 square miles in northwestern Pennsylvania, including all of Venango County. The same acreage was designated as a Pennsylvania Heritage Area in 1994. The ORNHA includes oil artifacts, scenic communities and farmland, and industrial landscapes to teach visitors about the beginnings of the petroleum industry.

The northwestern region of Pennsylvania is known as the birthplace of petroleum and as "The Valley That Changed the World," because it was the location of the world's first successful commer-

¹ Public Law 108-447.

cial oil well.2 The developments in the region encompassed by the ORNHA led to major advancements in the transportation, communications, and energy industries and spurred population and eco-

nomic growth in the area.

The ORNHA is managed by the Oil Region Alliance of Business, Industry and Tourism, a nonprofit corporation dedicated to increase the prosperity and population of the region.³ The corporation took over management when the original entity, Oil Heritage Inc., merged with other organizations to form the Alliance in 2005.4 Since the designation, public and private organizations have worked together to expand trail systems, restored historic downtowns, and completed other preservation and economic development in the ORNHA.⁵

Authorization for the expenditure of funds and for technical assistance from the Department of the Interior for the ORNHA will sunset in late 2019 or early 2020 (depending on the interpretation of when funds were first made available). H.R. 6507 would extend the authorization to fiscal year 2026 and update the name of the management entity. Senator Robert P. Casey, Jr. (D-PA) has introduced companion legislation, S. 2604, in the Senate. The Senate Energy and Natural Resources Subcommittee on National Parks held a legislative hearing on the bill on August 15, 2018.

COMMITTEE ACTION

H.R. 6507 was introduced on July 25, 2018, by Congressman Glenn Thompson (R-PA). The bill was referred to the Committee on Natural Resources, and within the Committee to the Sub-committee on Federal Lands. On November 15, 2018, the Natural Resources Committee met to consider the bill. The Subcommittee was discharged by unanimous consent. No amendments were offered, and the bill was ordered favorably reported to the House of Representatives by unanimous consent.

COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

Regarding clause 2(b)(1) of rule X and clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Committee on Natural Resources' oversight findings and recommendations are reflected in the body of this report.

COMPLIANCE WITH HOUSE RULE XIII AND CONGRESSIONAL BUDGET

1. Cost of Legislation and the Congressional Budget Act. With respect to the requirements of clause 3(c)(2) and (3) of rule XIII of the Rules of the House of Representatives and sections 308(a) and 402 of the Congressional Budget Act of 1974, the Committee has received the following estimate for the bill from the Director of the Congressional Budget Office:

management-plan/.

² National Park Service. "Oil Region National Heritage Area." https://www.nps.gov/places/oil-

National Fark Service. On Region National Heritage Area." https://www.nps.gov/places/oil-region-national-heritage-area.htm.

3 "Oil Region Alliance." http://oilheritage.org/oil-region-alliance/.

4 Oil Heritage Region Management Action Plan Update Executive Summary http://oilheritage.org/wp-content/uploads/2018/07/OHRSummary.pdf.

5 "National Heritage Area Management Plan" http://oilheritage.org/national-heritage-area-

U.S. CONGRESS, CONGRESSIONAL BUDGET OFFICE, Washington, DC, November 29, 2018.

Hon. Rob Bishop, Chairman, Committee on Natural Resources, House of Representatives Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 6507, the Oil Region National Heritage Area Reauthorization Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Janani Shankaran.

Sincerely,

KEITH HALL, Director.

Enclosure.

H.R. 6507—Oil Region National Heritage Area Reauthorization Act

H.R. 6507 would authorize the National Park Service (NPS) to provide technical and financial assistance for the Oil Region National Heritage Area, located in northwestern Pennsylvania, through 2026. Under current law, the NPS's authority to provide such assistance expires in 2020.

In recent years, the NPS has allocated about \$19 million annually in appropriated funds to provide financial assistance to 49 national heritage areas. Based on the average amount of assistance for those areas, CBO estimates that implementing the bill would cost \$400,000 annually and would total about \$1 million over the 2021–2023 period; such spending would be subject to the availability of appropriated funds.

Enacting H.R. 6507 would not affect direct spending or revenues;

therefore, pay-as-you-go procedures do not apply.

CBO estimates that enacting H.R. 6507 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2029.

H.R. 6507 contains no intergovernmental or private-sector man-

dates as defined in the Unfunded Mandates Reform Act.

The CBO staff contact for this estimate is Janani Shankaran. The estimate was reviewed by H. Samuel Papenfuss, Deputy Assistant Director for Budget Analysis.

2. General Performance Goals and Objectives. As required by clause 3(c)(4) of rule XIII, the general performance goal or objective of this bill is to amend the Oil Region Heritage Area Act to reauthorize the Oil Region National Heritage Area.

EARMARK STATEMENT

This bill does not contain any Congressional earmarks, limited tax benefits, or limited tariff benefits as defined under clause 9(e), 9(f), and 9(g) of rule XXI of the Rules of the House of Representatives.

COMPLIANCE WITH PUBLIC LAW 104-4

This bill contains no unfunded mandates.

COMPLIANCE WITH H. RES. 5

Directed Rule Making. This bill does not contain any directed

rule makings.

Duplication of Existing Programs. This bill does not establish or reauthorize a program of the federal government known to be duplicative of another program. Such program was not included in any report from the Government Accountability Office to Congress pursuant to section 21 of Public Law 111–139 or identified in the most recent Catalog of Federal Domestic Assistance published pursuant to the Federal Program Information Act (Public Law 95–220, as amended by Public Law 98-169) as relating to other programs.

PREEMPTION OF STATE, LOCAL OR TRIBAL LAW

This bill is not intended to preempt any State, local or tribal law.

CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, and existing law in which no change is proposed is shown in roman):

OIL REGION NATIONAL HERITAGE AREA ACT

DIVISION J—OTHER MATTERS

TITLE VI—OIL REGION NATIONAL HERITAGE AREA

SEC. 601. SHORT TITLE; DEFINITIONS.

(a) SHORT TITLE.—This title may be cited as the "Oil Region National Heritage Area Act".

(b) TABLE OF CONTENTS.—For the purposes of this title, the fol-

lowing definitions shall apply:

- (1) HERITAGE AREA.—The term "Heritage Area" means the Oil Region National Heritage Area established in section 603(a).
- (2) Management Entity.—The term "management entity" means the [Oil Heritage Region, Inc.] Oil Region Alliance of Business, Industry and Tourism, or its successor entity.
 (3) SECRETARY.—The term "Secretary" means the Secretary

of the Interior.

SEC. 603. OIL REGION NATIONAL HERITAGE AREA.

(a) ESTABLISHMENT.—There is hereby established the Oil Region

National Heritage Area.

(b) BOUNDARIES.—The boundaries of the Heritage Area shall include all of those lands depicted on a map entitled "Oil Region National Heritage Area", numbered OIRE/20,000 and dated October 2000. The map shall be on file in the appropriate offices of the National Park Service. The Secretary of the Interior shall publish in the Federal Register, as soon as practical after the date of the enactment of this Act, a detailed description and map of the boundaries established under this subsection.

(c) Management Entity.—The management entity for the Heritage Area shall be the [Oil Heritage Region, Inc.] Oil Region Alliance of Business, Industry and Tourism, the locally based private, nonprofit management corporation which shall oversee the development of a management plan in accordance with section 605(b).

* * * * * * *

[SEC. 608. SUNSET.

[The Secretary may not make any grant or provide any assistance under this title after the expiration of the 15-year period beginning on the date that funds are first made available for this title.]

SEC. 608. SUNSET.

The authority of the Secretary to grant or provide any assistance under this title shall terminate on September 30, 2026.

APPENDIX B

Excerpts from Oil Heritage Region Management Plan Augmentation Executive Summary 2006

NATURAL RESOURCES

Landform & Physiography... Much of the area is still **characterized as rural**, marked by agricultural fields, broad swaths of forests, and spectacular natural beauty. There is an abundance of forested lands within the area, most of which are Appalachian Oak Forest. This forest is a tall broadleaf deciduous forest, characterized by white oak, and northern red oak as the dominant trees. The **topography** is generally flat to moderately sloped, but is punctuated by river or creek valleys and the accompanying rolling to sometimes steep hills.... If specific projects proposed in the future are identified that have significant adverse effects on physiography and land form, these would be assessed at a later time through supplemental, project-based environmental evaluations

p.24 Water Resources...The Allegheny River is the study area's most significant river, and is a federally designated Wild and Scenic River (1992). It is fed by four significant tributaries, Oil Creek, French Creek, Sandy Creek, and Sugarcreek, which also constitute the runoff channels for five of the seven major drainage basins in the county. These major watersheds are: Slippery Rock Creek, Allegheny River, French Creek, Oil Creek, Sandy Creek, East Sandy Creek and Sugar Creek.

p.25 Because of the climate in Northwest Pennsylvania, which can include significant precipitation at any time throughout the year, floods are a constant concern in the region. Flash flooding is a serious concern, especially in the summer when sudden thunderstorms can deposit rain at such an excessive rate that even the smallest creeks are transformed into overflowing water courses. Also, in the early spring or late winter, a combination of a thaw and a period of rainy weather can cause flooding. The local streams will sometimes develop ice jams, which hold back water flow and cause localized flooding. The Pennsylvania Department of Environmental Protection maintains four water quality network stations in Venango County where it regularly monitors water chemistry parameters, aquatic insects, and, every five years conducts fish tissue sampling for heavy metals and PCBs. These stations are located on the Allegheny River at Kennerdell, on French Creek at Utica, on Oil Creek at Rynd Farm, and on Sandy Creek at Pecan. Over the past ten years, as part of the State Surface Waters Assessment Program, the department has evaluated every named and unnamed river, creek, and stream for its water quality, aquatic life, and surrounding habitat and assigned a determination of impaired or not impaired.

p.25-26... Any **construction activities adjacent to** rivers and **creeks...** should be reviewed when design characteristics are further defined. It is expected that these effects would be mitigated by proper control of erosion, protection of 26 surface water from run-off, and that projects would comply with any state permitting requirements. Potential long-term impacts from such improvements would be addressed during their design – such as run off control and mitigation, possible fill, etc.

VEGETATION & ENDANGERED PLANT SPECIES

p.27 Much of Venango County is covered by Appalachian Oak Forest, which is a tall broadleaf deciduous forest, characterized by white oak and northern red oak as the dominant trees. Other tree species that are native to the area include sugar maple, sweet birch, bitternut hickory, beech, tulip poplar, white pine, scarlet oak, scrub oak, chestnut oak, and black oak. Table 2 is a list of plant species that have at one point existed in the Oil Heritage Region and which are now considered to be threatened to some extent, compiled using the Pennsylvania Natural Heritage Program database.... in the case of future construction projects that do not follow already disturbed rights of way, assessment of existence of such species should be done prior to construction to identify probably impacts and mitigation measures

FISH, WILDLIFE AND ENDANGERED ANIMAL SPECIES

p.28 Table 3 is a list of the which are now considered to be threatened to bird, fish, vertebrate, invertebrate, reptilian and bivalve species that have at one point existed in the Oil Heritage Region and to be threatened to some extent, compiled by the Western Pennsylvania Conservancy using the Pennsylvania Natural Heritage Program database. Table 5 is a list of the Federally Endangered and Threatened Species...... in the case of future construction projects that do not follow already disturbed rights of way, assessment of existence of such species should be done prior to construction to identify probably impacts and mitigation measures

OPEN SPACE & RECREATION RESOURCES

p.33 The forests, rivers and creeks of Venango County offer a variety of recreational opportunities and have been viewed as major regional assets by local residents, as well as attractions to visitors from outside the area. There are over 33,500 acres of major public recreation lands in the Oil Heritage Region, shown in Figures 5, 6, and 7. These public recreation lands include Oil Creek State Park, the Kennerdell Tract of Clear Creek State Forest, five state game lands, Two Mile Run County Park, the Drake Well Museum site, Pithole City, Fish Commission accesses and waterways, and a portion of the Crawford County Forest. Smaller municipal parks are also located in Titusville, Oil City, Franklin, Emlenton, and Cranberry Township. Oil Creek State Park, shown on Figure 7, is the only state park within the region. Interpretation in the park tells the story of the early petroleum industry and the environmental recovery of the region from the early methods of oil extraction and refining. Historical tableaus and interpretive signage portray the valley during the boomtown years while the forested hillsides, diverse wetlands, and trout streams illustrate the present tale of recovery. Oil Creek State Park has many recreational activities, including hiking, biking, and crosscountry skiing trails that weave through the valley, complemented by self-guided tours and interpretive signage. The National Audubon Society also designates Oil Creek State Park as an "Important Bird Area" as it is home to over 20 species of breeding warblers and up to 34 warbler species in migration

The 23,000+ acres of state game lands within the OHR are a significant resource for hunters, trappers, anglers, hikers, horseback riders, and bird and wildlife watchers. Five state game lands are located in the region: SGL 39, SGL 45, SGL 47, SGL 96, and SGL 253. SGL 39 and SGL 45 both have designated routes allowing horseback riding and mountain biking and the Sandy Creek Trail runs adjacent to SGL 39 and SGL 45. Pithole Creek, East Sandy

Creek, Prather Creek, and Little Sandy Creek are all Approved Trout Waters designated by the Pennsylvania Fish and Boat Commission that run through state game lands.

WATERWAYS

p. 34 The Allegheny River is Venango County's most significant river. It is fed by four significant tributaries, Oil Creek, French Creek, Sandy Creek, and Sugarcreek, which also constitute the runoff channels for five of the seven major drainage basins in the county. These waterways, shown in Figure 6, are major angling resources. Fishing opportunities draw a large number of recreational users to the region. Angling in both warmwater and coldwater fisheries is rated as one of the top recreational uses in the region. Figure 5 shows the wealth of angling resources in the region, including over 56 miles of the Allegheny River and over 12 miles of warmwater fishing on French Creek; approximately 150 miles of Pennsylvania Fish and Boat Commission (PFBC) Approved Trout Waters (i.e., streams stocked annually with trout) or Class A Wild Trout streams; and 57 streams that sustain natural trout reproduction.

**** includes Cherrytree Run

TOURISM

see map Fig 7 - appears that route 8 is some kind of trail?

p43. Visitation at key OHR recreation attractions is significantly higher than visitation at the region's major cultural/heritage sites. For example, Oil Creek State Park is estimated in the 95,000 – 170,000 range, with large annual visitation swings largely in response to prevailing weather. Two Mile Run County Park estimated 2003 visitation of 125,000.

LAND USE

Residential (importance of seasonal use) p.44 The county's 15.5% vacant housing rate is far above the state average (9.0%), but can be accounted for, in part, by the high number of seasonal units in the county (62.2% of the vacant units are seasonally occupied

Agricultural p. 45 Agricultural Farms are a key piece of the Commonwealth's heritage that contribute significantly to the state's economy and help to define the landscape of many Pennsylvania towns. Farmland provides habitat for game and non-game species and it also provides open areas for rain and ground water to seep into underground rivers or aquifers, which in turn supply the water for year-round wells. As such, the large open spaces of a community's agricultural area provide many, often intangible, benefits to a municipality's citizens." 3 Under the criteria defined for a 1972 survey of farmlands conducted by the Soil Conservation Service under direction of the United States Secretary of Agriculture, Venango County contains 103,585 acres of Prime Farmland and 118,090 acres of Additional Farmland of Statewide Importance. In total, there are 240,215 acres of Important Farmlands out of a total land area of 432,451 acres in the county. From these figures, it is calculated that over half (55%) of the County's land area is classified as "important farmland" and one-quarter of it can be labeled "prime farmland". The greatest amount of good agricultural land is found prominently in the northwestern corner of Venango County and the lower southern tier of the NHA area, with appreciable amounts also in Allegheny, Pinegrove, and Mineral Townships.

https://oilheritage.org/national-heritage-area-management-plan/

APPENDIX C

Language

All PV installations shall include a 36 inch wide pathway maintained along three sides of the solar roof. The bottom edge of a roof with a slope that exceeds 2:12 shall not be used as a pathway. All pathways shall be located over a structurally supported area and measured from edge of the roof and horizontal ridge to the solar array or any portion thereof.

Exceptions:

On structures with a PV array area of 1,000 square feet or less installed on a roof with a slope that exceeds 2:12 and with an intersecting adjacent roof and where no section of the solar PV array is larger than 150 feet measured in length or width:

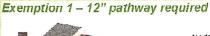
- Where the PV array does not exceed 25% as measured in plan view of total roof area of the structure, a minimum 12 inch unobstructed pathway shall be maintained along each side of any horizontal ridge.
- 2. Where the solar array area exceeds 25% as measured in plan view of total roof area of the structure, a minimum of one 36-inch unobstructed pathway from ridge to eave, over a structurally supported area, must be provided in addition to a minimum 12-inch (305 mm) unobstructed pathway along each side of any horizontal ridge

Pathways are not required on non-occupied accessory structures.

Systems that include a solar array section that is larger than 150 feet measured in length or width shall have additional intermediate pathways. An intermediate pathway not less than 36 inches wide separating the array shall be provided for every 150 feet of array including offset modules or angled installations. The maximum square footage of an array shall not exceed 22,500 square feet. without the installation of an intermediate pathway.

Comments and Guidance

This language, based off of a code developed by the State of Oregon, provides a recommended option for regulating setbacks for various roof sizes, configurations, and pitches. Oregon's code standard requires that all installations must maintain a 3-foot pathway along three sides of the roof for access (not including the edge if the pitch is greater than 2:12 (a roof that rises 2' for every 12' of run). However (importantly), Oregon's regulations provide exemptions for smaller systems (<1,000 square feet) that do not cover the majority of a roof surface, and further exemptions for roofs with a flatter pitch (<3:12). These exemptions may work well for municipalities that feel that a three-foot setback along all sides of the panel would be restrictive to apply to all properties.





Exemption 2 - 36" pathway required



APPENDIX D

Experience and research has shown that there is a possibility for today's solar energy systems to cause a glare hazard for pilots and/or air traffic controllers. The Department of Energy's Sandia National Laboratories developed a 3-D modeling based online hazard assessment tool to determine if a solar project is likely to create a Solar Glare Aviation Hazard. The tool is free (as of October 2016) and recommended by the Federal Aviation Association (FAA). https://share.sandia.gov/phlux. Contact the FAA's local Airport District Office (ADO) for help with the tool or to get input data for tool variables that must come from the airport. As of May 2016 Sandia announced that they licensed the technology behind the SGHAT to www.SolarForge.com who is offering a paid monthly software subscription to access their GlareGauge online software based on the SGHAT technology. Sandia says the free SGHAT will not always be available, but it is not known when it will be removed from public access. It is recommended that either SGHAT or GlareGauge analysis be accepted.

A new FAA interim policy¹⁶ (published 10-23-2013) for on-airport solar development requires the use of this glare assessment tool and defines the below criteria to assess acceptable risk of glare.

The proposed solar energy system meets the following standards:

- 1. No potential for glint or glare in the existing or planned Airport Traffic Control Tower (ATCT) cab, and
- 2. No potential for glare or "low potential for after-image" (shown in green in [reports]) along the final approach path for any existing landing threshold or future landing thresholds (including any planned interim phases of the landing thresholds) as shown on the current FAA-approved Airport Layout Plan (ALP)¹⁷. The final approach path is defined as two (2) miles from fifty (50) feet above the landing threshold using a standard three (3) degree glidepath.

As of October 2016 the FAA website still says "Note: The FAA is reviewing Section 3.1.2 ("Reflectivity") of this guidance [2010 FAA report on solar glare] based on new information and field experience. All users of this guidance are hereby notified that significant content in this section may be subject to change, and the FAA cautions users against relying solely on this section at this time." A note on the front of the 2010 publication directs readers to the October 2013 FAA interim policy for on-airport solar development.

The following are recommended steps required to complete the aviation notification requirement in the template solar ordinance for NC for SESs near an airport.

1) OFF AIRPORT solar project-

- a) Determine if the site is so close to an airport that it falls under FAA authority to require a filing with the Federal Aviation Administration (FAA) in accordance with CFR Title 14 Part 77.9 & follow instructions. If a filing is required steps b-f are not required, otherwise continue with the step below. (https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequiredToolForm)
- b) Use internet/software mapping tool (such Google Earth or Google Map) to identify airports within 5 nautical miles of the center of the proposed solar project site.
- c) If search results indicate no airport within 5 nautical miles of the project site, append research results to the permit application.
- d) If search results indicate airport(s) within 5 nautical miles of the project site, go to http://www.faa.gov/airports/planning_capacity/npias/ to determine if it is in the National Plan of Integrated Airport Systems (NPIAS), i.e. an FAA "obligated" airport. If you are unable to determine if the airport is in the NPIAS or require assistance, contact the FAA's local ADO.
 - i) Notification of airports in the NPIAS should be sent to the local ADO.
 - ii) Notification of military airports should be sent to the NC Commander's Council via mail or email

¹⁶ www.gpo.gov/fdsys/pkg/FR-2013-10-23/pdf/2013-24729.pdf

¹⁷ FAA airport GIS maps and eALPs at https://airports-gis.faa.gov/public/

- iii) Notification of all other airports should be sent to the management of the airport¹⁸
- e) Run the latest version of the SGAHT according to the user manual. Unless otherwise directed in the user's manual, use the tool to assess for glare hazards at¹⁹:
 - i) the Airport Traffic Control Tower (ATCT) cab, and
 - ii) the final approach path for any existing landing threshold or future landing thresholds (including any planned interim phases of the landing thresholds) as shown on the current FAA-approved Airport Layout Plan (ALP). The final approach path is defined as two (2) miles from fifty (50) feet above the landing threshold using a standard three (3) degree glidepath.
- f) Review and send the results summary as well as the results of the glare analysis tool for each flight path and the ATCT.

On-airport solar projects at FAA obligated airports must follow FAA requirements. The following are recommended steps to facilitate meeting the FAA requirements.

2) ON AIRPORT Solar Projects

- a) Contact the ADO to discuss big picture concept (type of system, siting, size, environmental requirements, FAA Form 7460, etc.). This way FAA can give the proponent a general "roadmap" for the way forward (General FAA areas of concern, introduce the SGHAT Tool, if an on-airport project: give a feel for which areas ON AIRPORT can be considered for siting (per FAA safety & design standards); lease requirements on obligated airports, etc. Also, the ADO can facilitate contact between the solar proponent, the sponsor (& NCDOA if project location is on or near a State Block airport. In this case the ADO will be available to support NCDOA as requested.
- b) If after preliminary discussion, the solar proponent is still interested, collaborate with the FAA (or NCDOA) until conceptual agreement by all parties with the FAA's lease requirements.
- c) Develop National Environmental Policy Act (NEPA) documentation to support siting alternatives & run the SGHAT Tool for all site alternatives carried forward for analysis.
- d) Submit 7460 with Proposed Lease, NEPA analysis & SGHAT Tool Results attached to FAA ADO Review & acceptance via Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) filing.

Limited information on low altitude flight paths in North Carolina.

Information about military airports and low altitude flight paths may be found in a 2012 report on military presence and land compatibility: 2012 NC Military Land Compatibility Report http://portal.ncdenr.org/c/document_library/get_file?p_l_id=1169848&folderId=8979146&name=DLFE-57386.pdf. Local planning departments may have or be able to request maps of local low altitude flight paths.

¹⁸ NC airports in NC contact information at www.faa.gov:
www.faa.gov/airports/airport_safety/airportdata
5010/menu/contacts.cfm?Region=ASO&District=&State=NC&County=&City=&Use=&Certification=

¹⁹ Sources of NC airport data: Unofficial Airport information available under *Maps and Diagram* at http://flightaware.com/resources/airport/browse/NC and official GIS maps at https://airports-gis.faa.gov/public/

APPENDIX E

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."

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."

PROJECT INFORMATION

Project Name:		
City:	County:	State:
Lat/Long (decimal degrees; ex. 38.	418310, -76.001096):	
Find Lat/Long via map		
Size: acres\miles		
PROJECT CONTACT INFORMATION	Ī	
Name:	Phone	e:
Address:		
Email:		
If your project has a Federal (ex. l	J.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 Ac	ctivities \rightarrow go to pages 5 - 7	
Maintenance and Restoration Act	ivities → go to pages 8 - 9	
Timber Operation and Forestry Pro	actices \rightarrow go to page 10	
Use of Helicopters and Fixed-wing	Aircraft \rightarrow go to page 11	
Blasting and Other Loud, Intermit	tent Noises (including Firew	vorks) → go to page 12
Recreational Activities → go to pa	ges 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.

Construction and Development Activities

Which specific construction activities do you plan to perform? (check all that apply)				
Building construction]	Water impoundment or withdrawal	
Tree and land clearing]	Mining	
Construction of roads, trails, canals, power]	Oil and natural gas drilling and refining	
lines, pipelines and other linear utilities]	Wind farm construction	
Agriculture or aquaculture – newor expanded operations]	Installation or expansion of marinas with a capacity of 6 or more boats	
Alteration of shorelines or wetlands]	Communications tower construction	
Installation of docks, piers, or moorings (pil driving may qualify as loud noise, page 12)	e		(excluding maintenance and repairs)	
and that bald eagles tolerated? Consider b	oth cons	tr		n
and that bald eagles tolerated? Consider be Consider all of the following elements/factor-duration -time of	ooth cons ors in ans of season	tr w	ering: -area/footprint	n
and that bald eagles tolerated? Consider be Consider all of the following elements/factors	ooth cons ors in ans of season ity	tr w	ering:	n
and that bald eagles tolerated? Consider to Consider all of the following elements/factor-duration -time of the following elements -visibility -visibility -visibility -time of the following elements -time of the following	ooth cons ors in ans of season ity ace	str w	ering: -area/footprint -magnitude -nature	n
and that bald eagles tolerated? Consider to Consider all of the following elements/factor-duration -time of day -visibil distant	ooth cons ors in ans of season ity ace	str w	ering: -area/footprint -magnitude -nature	n
and that bald eagles tolerated? Consider to Consider all of the following elements/factor-duration -time of day -visibil -distart Yes → No avoidance measures recomments	ors in ans of season ity ace ded. Go to	t(s	ering: -area/footprint -magnitude -nature self-certification (page 7).	n

Which of these categories most closely matches your proposed project or activity? (check all that apply) ☐ Building construction or expansion, 3 or ☐ Building construction, 1 or 2 story, with more stories a project footprint of ½ acre or less ☐ Building construction or expansion, 1 or Construction of roads, trails, canals, 2 story, with project footprint more than power lines, or other linear utilities 1/2 acre ☐ Agriculture or aquaculture – new or expanded operations Oil and natural gas drilling and refining Alteration of shorelines or wetlands ☐ Installation of docks or moorings ☐ Installation or expansion of marinas with a capacity of 6 or more boats ☐ Water impoundment or withdrawal ☐ Construction of communication towers → Implement AM 3, 4 and 5 (page 7) → Go to the next question Is there a similar activity within 1 mile of the nest? Yes \rightarrow Implement AM 3, 4 and 5 (see page 7)

 \square No \rightarrow Implement AM 1 and 5 (see page 7)

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 <u>and</u> 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>U.S. Fish and Wildlife Service Determination</u> : 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 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 a	activities do you plan to perform? (check all that apply)
Maintenance of linear utilities (e.g.,	power lines, pipelines, water and se	wer lines)
Road, bridge, or culvert maintenance	9	
Trail, campground, or recreational a	rea maintenance	
Maintenance of oil and gas wells, we	ell pads, and storage tanks	
Maintenance of dams, levees, berms	s, canals and other water-control str	ructures
Pond, lake, or reservoir maintenance	e (draw downs, dredging)	
Stream or stream bank maintenance stabilization, livestock crossings, in-s	e/restoration (e.g., stream bank fen stream habitat improvements, chan	cing, stream bank nel maintenance, dredging)
Wetland maintenance / restoration	(e.g., invasive plant control, restora	tion of hydrology)
Prescribed burning for invasive cont	rol	
Upland habitat maintenance / resto	ration (e.g., planting or cutting of ve	getation, invasive plant
control, trash cleanup, abandoned n	nine lands restoration). This does no	t include activities in
forests/woodlands (see Timber Ope	ration and Forestry Practices) or in	agricultural fields.
Is your activity similar to an ongoin	g or previous activity that coincide	d with the breeding season
and that bald eagles tolerated? Cor	nsider both construction and use/o	peration of your project.
Consider all of the following elemen	its/factors in answering:	
-duration -frequency -time of day	-time of season -visibility -distance	-area/footprint -magnitude -nature
Yes → No avoidance measures reco	ommended. Go to self-certification.	
No \rightarrow Go to Avoidance Measures.		
	•	LLS Fish and Wildlife Service

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>U.S. Fish and Wildlife Service Determination</u> : 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 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. \square 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? \square 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. (date) (signature) 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. \square NO – I am unable to follow one or more of the avoidance measures recommended by this form. Go to page 15 for further instruction.

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 elemen	its/factors in answering:	
-duration -frequency -time of day	-time of season -visibility -distance	-area/footprint -magnitude -nature
Yes → No avoidance measures reco	ommended. Go to self-certification.	
No \rightarrow Go to Avoidance Measures.		
The Service recommends you follo bald eagles.	heck mark next to each AM that yow this AM to prevent your activitie	s from disturbing nesting
AM 15 - During the breeding seaso	n, do not fly within 1000 feet (305 n	neters) of bald eagle nests.
VES - I certify that I have complete	commended avoidance measures? ed this form to the best of my ability mmitted to implementing all applica	, answered all questions ble avoidance measures.
(signature)		(date)
<u>U.S. Fish and Wildlife Service Dete</u> implementing all applicable avoid activities are unlikely to disturb ne	rmination: Based on your responses ance measures, the Service has dete esting bald eagles.	and commitment to rmined that your proposed
NO – I am unable to follow one or Go to page 15 for further instruct	more of the avoidance measures rection.	commended by this form.

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 elemen	nts/factors in answering:	
-duration -frequency	-time of day -time of season	-distance -volume
Yes \rightarrow No avoidance measures reconnocidance Measures.	ommended. Go to self-certification.	
The Service recommends you followed bald eagles. AM 16 - During the breeding seaso extremely loud noises within 1/2 m	theck mark next to each AM that your withis AM to prevent your activities in, do not perform blasting and othe hile (800 meters) of in-use nests. This ederal Department of Transportation ded for licensed public display.	s from disturbing nesting r activities that produce s measure also applies to the
YES - I certify that I have complete	commended avoidance measures? ed this form to the best of my ability, mmitted to implementing all applica	, answered all questions ble avoidance measures.
(signature)		date)
<u>U.S. Fish and Wildlife Service Determined</u> implementing all applicable avoide activities are unlikely to disturb ne	rmination: Based on your responses ance measures, the Service has deter esting bald eagles.	and commitment to rmined that your proposed
NO – I am unable to follow one or Go to page 15 for further instruct	more of the avoidance measures rec	commended by this form.

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 -nature
	-time of day	-distance	-nature
	Yes \rightarrow No avoidance measures reco	ommended. Go to self-certification.	
	No → Go to next question		
	Will your recreation occur during t	the breeding season?	
	Yes \rightarrow Go to Avoidance Measures.		
	No → No avoidance measures reco	mmended. Go to self-certification.	
			and the second second
	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 fro	nowing. The Service recommends your disturbing posting hald eagles.	ou follow the applicable
	Aivis to prevent your activities no	in distai bing nesting baia cag.es.	
	Non-motorized recreation and hu	man entry (including hiking, campi	ng, 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 h		will be visible or can be heard	
	from the nest.		
	Off word wakiele was lingly-ding on	owmohilos)	
	Off-road vehicle use (including sn		
	AM 18 - Stay at least 330 feet (100	meters) from the nest. In open are	as, where there is increased
	visibility and exposure to noise, sta	ay at least 660 feet (200 meters) fro	m the nest.

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>U.S. Fish and Wildlife Service Determination</u> : 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.

-- 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

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

State Mapping Resources

Connecticut

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

New Jersey

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

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

New York

Contact state https://www.dec.ny.gov/animals/311 81.html

https://fws.maps.arcgis.com/apps/we

bappviewer/index.html?id=87ac9653

6654495b9f4041d81f75d7a0

Maine

https://www.arcgis.com/apps/webap pviewer/index.html?id=796b7baa18d e43b49f911fe82dc4a0f1

Rhode Island

Pennsylvania

Contact state DEM.DFW@dem.ri.gov

Maryland

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

Vermont

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

Massachusetts

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

Virginia

https://www.ccbbirds.org/maps/#eag les

New Hampshire

Contact state
https://www2.des.state.nh.us/nhb d
atacheck/signin.aspx

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

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.

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.

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 and condition.

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.



Figure 1.



Figure 2.



Figure 3.



Figure 4.



Figure 5.



Figure 6.

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.

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

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

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 <u>Guidelines</u> 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 <u>Eagle Conservation Plan Guidance</u>. 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

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.

 ${f Fledge}$ — 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

APPENDIX F

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.

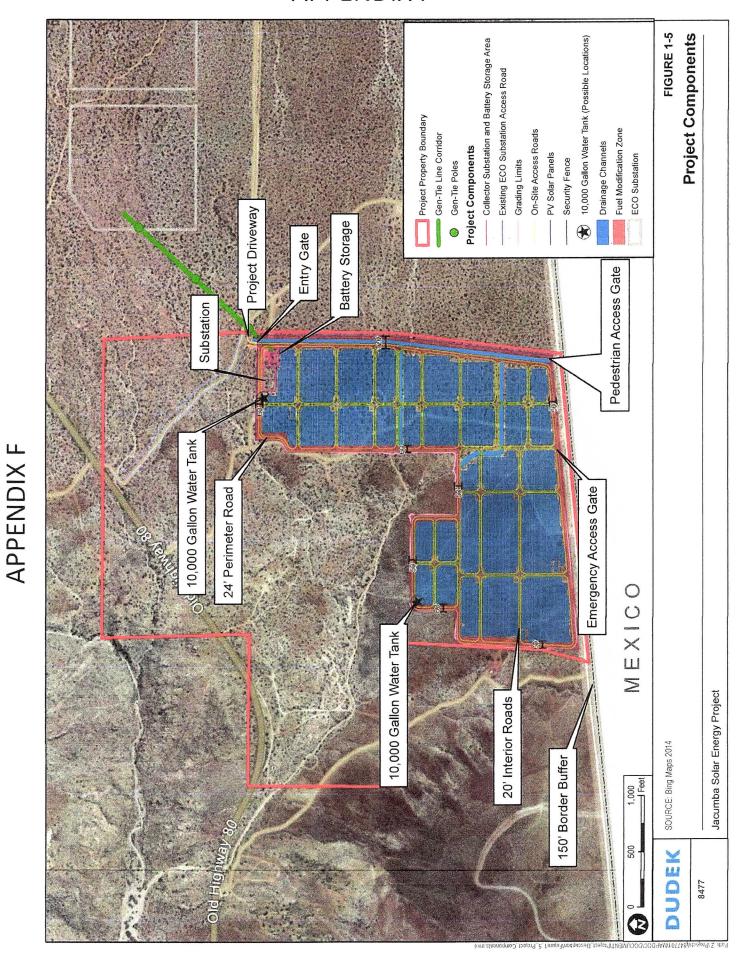
Nesting territory – the area that contains one or more eagle nests within the home range of a mated pair of eagles, regardless of whether such nests were built by the current resident pair.

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

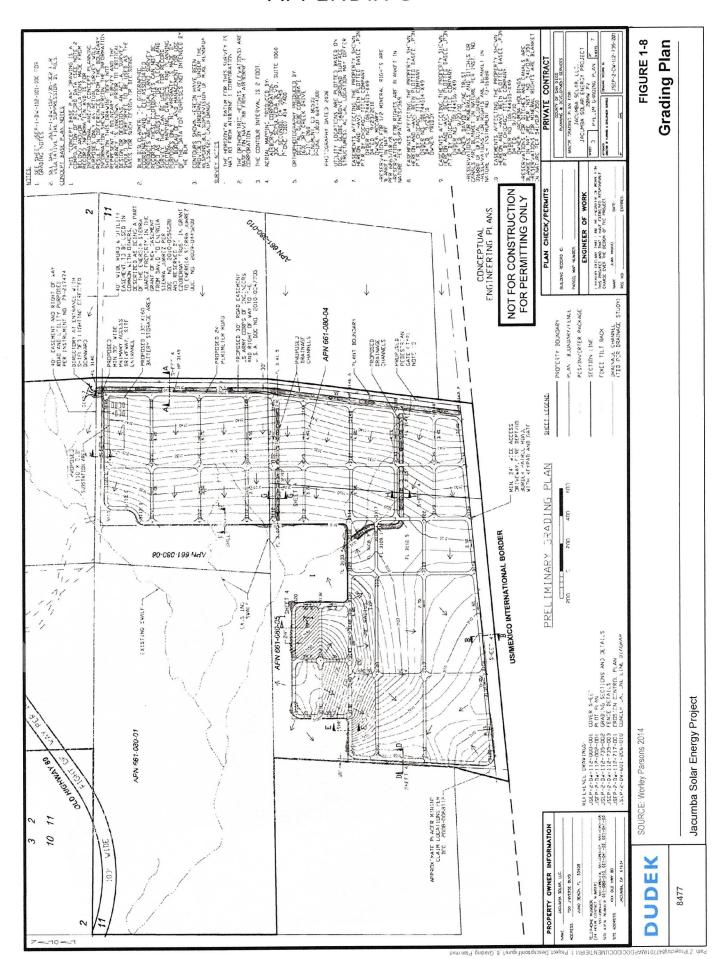
Project footprint – the area of land (and water) temporarily or permanently altered by a project.

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 F



APPENDIX G



APPENDIX G

APPENDIX H

Cherrytree Township, Venango County 1311 Cherrytree Road Titusville, PA 16354

Phone: 814 827-1078 Fax: 814 827-3579

Principal Solar Energy System (PSES) Decommission/Abandonment Plan

Decommission Plan for	Date	
Located At		
	- -	
Prepared and Submitted by, the	Owner of	
As required by Cherrytree Township, Venango County, this presented for the proposed Solar Facility	<u>*</u>	
Decommissioning will occur as a result of any of the follow 1. The land lease ends.	ving conditions:	

- 2. The system does not produce power for 6 months.
- 3. The system is damaged and will not be repaired or replaced.

Abandonment

A PSES that ceases to produce energy on a continuous basis for 6 months will be considered abandoned unless the current responsible party (or parties) with ownership interest in the PSES provides substantial evidence (updated monthly after 6 months of no energy production) to the Zoning Officer of the intent to maintain and reinstate the operation of that Facility. It is the responsibility of the responsible party (or parties) to remove all equipment and facilities and restore the parcel to its condition prior to development of the PSES.

- 1. Upon determination of abandonment, the Zoning Officer shall notify the party (or parties) responsible that they must remove the PSES and restore the site to its condition prior to development of the PSES, within three hundred and sixty (360) days of notice by the Zoning Officer.
- 2. If the responsible party (or parties) fails to comply, the Zoning Officer may remove the PSES, sell any removed materials, and initiate judicial proceedings or take any other steps legally authorized against the responsible parties to recover the costs required to remove the PSES and restore the site to a non-hazardous condition.

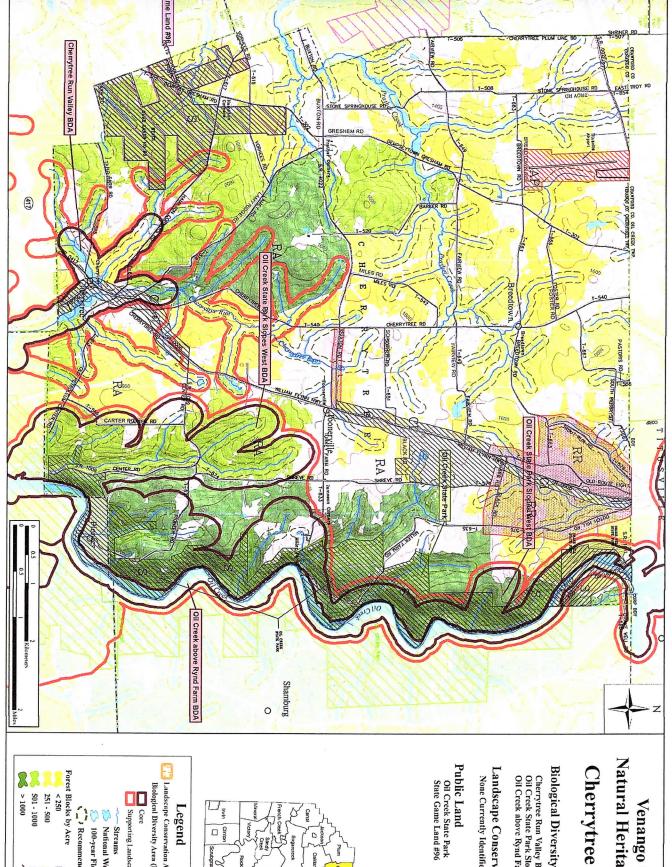
The owner of the Facility, as provided for in its lease with the landowner, will do the following as a minimum to decommission the project.

- 1. Remove all non-utility owned equipment, conduits, structures, fencing, and foundations to a depth of at least three feet below grade.
- 2. Remove all graveled areas and access roads unless the owner of the leased real estate requests in writing for it to stay in place.
- 3. Restore the land to a condition reasonably similar to its condition before PSES development, including replacement of top soil removed or eroded.

- 4. Revegetate any cleared areas with warm season grasses that are native to the region, unless requested in writing by the owner of the real estate to not revegetate due to plans for agricultural planting.
- 5. Remove any solid and/or hazardous waste, caused by the Facility, in accordance with local, State, and Federal waste disposal legislation.

All said removal and decommissioning shall occur within 12 months of the Facility ceasing to produce power for sale.		
the owner of the Facility, currently,, is responsible for this ecommissioning. Nothing in this plan relieves any obligation that the real estate property owner may ave to remove the Facility as outlined in the Commercial Solar Zone (CSZ) permit in the event the perator of the solar farm does not fulfill this obligation.		
The owner of the Facility will provide Venango County Planning Commission, Cherrytree Township Planning Commission, the Cherrytree Township Zoning Officer, and the Venango County Register & Recorder with an updated signed decommissioning plan within 30 days of change in the Facility owner.		
This plan may be modified from time to time and a copy of any modified plans will be provided to the planning staff and filed with the Venango County Register & Recorder by the party responsible for decommissioning.		
Any updated plans or revisions to the Facility will not relieve either the owner of the Facility (Solar Company) or the landowner from their financial obligations to cover all associated costs or charges for the decommissioning process.		
PSES Owner Signature	Date	
Landowner Signature		

APPENDIX I



Natural Heritage Inventory Cherrytree Township Venango County

Biological Diversity Areas

Cherrytree Run Valley BDA
Oil Creek State Park Slopes West BDA
Oil Creek above Rynd Farm BDA

Landscape Conservation Areas None Currently Identified





APPENDIX J

Cherrytree Township Venango County, Pennsylvania 1311 Cherrytree Road Titusville, PA 16354

Phone: (814) 827-1078 Fax: (814) 827-3579 Email: cherrytreetwp@zoominternet.net

SOLAR ZONING PERMIT APPLICATION Commercial Solar Zone Overlay District (CSZ)

PART 1 – PROPERTY LOCATION(S)		
Address of Property		
City		
PART II – INFORMATION		
Description of Work (Please enclose a narrative of the scope of the project – use extra sheets as needed.)		
Name of Property Owner Phone		
Address of Owner		
Email Address		
Name of Contractor Phone		
Address of Contractor		
Email Address		
PART III – SITE OR PLOT PLAN – Please provide or attach plot plan details. See attached.		
Please refer to the current Cherrytree Township Fee Schedule.		
CSZ District \$		
<u>PART IV</u> – <u>SIGNATURE</u> Applicant certifies that all information given is correct and that all pertinent Township ordinances will be complied with in performing the work for which this permit is issued. The Township Zoning Officer must inspect all work.		
Signature Date		
Application Received By Date		
Check Number		

PERMIT PROCEDURES

A Commercial Solar Zone (CSZ) Overlay District Zoning Permit is required for all new projects, renovations, alterations or replacements. **Application will not be accepted unless each section has been initialed by the Applicant.**

PERMIT APPLICATION FORM

Location of	<u>PART I</u> – <u>Location of Property</u> – Address, Zoning District Code (C/I or R/A) and Parcel Number must be provided on all applications.	
Project	provided on all applications.	
Initials		
Complete	PART II – Complete every section.	
Every Section		
Initials		
at. D		
Site Plan	PART III – Site Plan – Solar Company must submit a completed architectural and engineer stamped site plan, not a "conceptual plan", in order to receive the permit to construct. The actual, completed site plan must be	
	presented with all details fully established and dimensionally accurate. Please use Ordinance #01-2021, dated as the main guideline for all requirements throughout application. In general, the site plan must include, but is	
Initials	not limited to:	
	All Setbacks for Boundaries Electrical Diagrams and Specifications	
	All Setbacks for Adjacent Properties Equipment for Use on Site	
	Stormwater Management Protocols Property Maintenance Plan	
	Access Roads Grading and Landscape Design Property Surveys Project Start and End Dates	
	PART IV – Construction Specifics (Summary of Details. Refer to Ordinance #01-2021 for specific	
	requirements.)	
Stormwater	Stormwater Management Program	
Management	* Design submitted with this Application for permit.	
Program		
Initials		

Baseline Soil Sampling	Baseline Soil Sampling – Samples obtained prior to earth disturbance for post-project decommissioning	
Samping	Comparison and initial property qualification:	
Initials	* Parcel Numbers and Soil Sample Locations (marked on parcel map):	
	* Soil Sample Reports – One (1) copy provided to each landowner and One (1) copy provided to Cherrytree Township before construction begins. * All costs associated with sampling and testing will be incurred by Solar Company.	
Well Sampling	Well Sampling	
Initials	* Water samples to be taken from all adjacent occupied land and private water wells within 1500 feet before construction begins.	
	* Water Sample Reports – One (1) copy provided to each Landowner and One (1) copy provided to Cherrytree Township before construction begins.	
	* Yearly sampling of original sample sources will be taken and results compared with original tests.	
	Any deviation of water source health from base-line samples will be cause for immediate cessation of solar production until remediation of the cause can be determined and completed.	
	If the deviation is due to something other than the Solar Energy System or production of electricity, then the Solar Energy System may continue production practices with no cost to Landowner.	
	* All costs associated with sampling and testing will be by Solar Company.	
Origin of Product	Origin of Product Certification	
Certification	* Solar Company must supply the origin of products used throughout the project, whether made in USA or sourced from a foreign nation.	
Initials	* Solar Panels must have components listed and SDS sheets available for review.	
Bonding of Completed	Bonding of Completed Project and Roadways in Township	
Project and Roadways in	 Provide the road bond before construction begins per standard current Cherrytree Township Weight Limit Ordinance. 	
Township	* Submit with this Application for permit.	
Initials	* Initial deposit of 1% of project cost to Cherrytree Township in escrow account for office/attorney fees.	
Decommission Bond	Decommission Bond	
Initials	 * 15% total cost of proposed project. * COLA (Cost of Living Adjustment) clause included and reviewed every 18 months. * Paid for by Solar Company and verified by the Township at time of Application approval. 	

Fencing	Fencing Requirements			
Requirements	* Full details of type, scope, and style of fencing used in perimeter, as well as any internal fencing.			
	* Setbacks must be delineated for fencing from boundaries (natural or manmade), adjacent properties, and			
Initials	stormwater management systems.			
Emergency Access	Emergency Access Requirements			
Requirements	 Perimeter roadway access, dimensions and construction grading details Onsite training: startup and yearly for first responders. Access keys, codes or other entry information must be provided and maintained at the Cherrytree 			
Initials	Township VFD.			
Notifications	Notifications – The following agencies must be notified in writing and an acceptance letter or approval study must be received by the Township before permitting is accepted.			
	* Federal Aviation Administration (FAA)			
Initials	 Original letter to FAA to notify of intent to construct a solar farm/project in vicinity of Airport. FAA written approval of acceptance. Submit at time of application. 			
	 * PA Department of Environmental Protection (DEP) * PA Department of Environmental Resources (DER) * PA Department of Conservation & Natural Resources (DCNR) 			
	* Pennsylvania Game Commission* Pennsylvania Fish and Wildlife			
	 * Impact Study: National Heritage Area (Federal) * Impact Study: Natural Heritage Inventory (State/County) * A letter of acceptance from the connecting Electrical company stating that they have the capacity to accept the newly generated electricity 			
	 * 811 or reliable study showing current utilities/underground obstructions * Copy of the Leaseholder agreement without personal information * Wildlife surveys and impact (ex. Bald Eagle nesting in areas) 			
	 Venango County Planning Commission Other notifications that may be deemed necessary per particular parcel/location at time of application 			

Demonstrate Compliance With General Standards

PART V – Demonstrate Compliance With General Standards

- 1. All equipment for the Solar Energy System shall be located on the same lot as the principal use.
- 2. All requirements set forth within the Pennsylvania Uniform Construction Code must be met.
- 3. Solar Energy Equipment may not be artificially lighted.
- 4. Solar Energy Equipment that uses reflective materials to generate heat or electricity shall not be permitted.

Initials

- 5. ASES Permits: Solar Energy Equipment shall be mounted on a roof, or as an integral part of a structure, such as roof shingles or windows, that also produce electricity. Ground-mounted Solar Energy Equipment shall only be permitted if all roof-mounted Solar Energy Equipment would be ineffective. It shall be the burden of the applicant to demonstrate that roof-mounted Solar Energy Equipment would be ineffective or impractical.
- 6. The following rules shall apply to the installation of ASES Solar Panels:
 - a. Solar Energy Equipment, whether roof or ground-mounted, shall not be conspicuous from adjacent streets/roads. For example, Solar Panels directly facing adjacent streets/roads will be considered to be conspicuous. Solar Panels designed to look like roofing materials shall be considered, but not automatically accepted for all roof surfaces.
 - b. Solar Energy Equipment, whether roof or ground-mounted shall be located in the least visibly obtrusive location where Solar Panels would be functional.
 - c. Roof-mounted Solar Energy Equipment shall be located on a rear or side-facing roof, as seen from the fronting street/road unless the Solar Panel design is such as to look like other roofing materials.
 - d. There shall be no Solar Energy Equipment placed on a front or street/road-facing roof unless the Applicant can demonstrate that no other such installation would be effective or is impossible. A side-facing roof that faces an adjacent street/road will be considered a front-facing roof for the purposes of this section with the same restrictions.

<u>IF OWNER CANNOT COMPLY WITH THIS SECTION A STATEMENT IS</u> REQUIRED TO BE SUBMITTED STATING REASONS FOR NONCOMPLIANCE.

- e. Roof-mounted Solar Energy Equipment shall be installed in the plane of the roof (flush mounted) or made a part of the roof design (capping or framing is compatible with the color of the roof or structure).
- f. Roof-mounted Solar Energy Equipment shall not project vertically above the peak of the roof to which it is attached, or project vertically more than six (6) feet above a flat roof.
- g. If the ASES Solar Energy Equipment is mounted on the ground, the maximum height of the Solar Panels shall be no higher than ten (10) feet from the surface of the ground.
- Ground-mounted Solar Energy Equipment shall not be permitted in any front or street/roadfacing yard.
- i. Ground-mounted Solar Energy Equipment shall be screened from view from neighboring residential properties with vegetation or fencing.
- j. All exterior electrical and/or plumbing lines must be painted in a color scheme that matches as closely as reasonably possible the color of the structure and the materials adjacent to the lines.
- k. Non-functioning Solar Energy Equipment shall be repaired or replaced within six (6) months of becoming nonfunctional.
- 7. Applicant must show all dimensions of entire property (length x width and square feet of entire lot). Identify streets/roads adjacent to property. Place all buildings, with size dimensions (length and width) indicated, within property lines and indicate whether existing or proposed. Indicate front yard, side yard, and rear yard setbacks by showing distances from the energy structure to the property lines on all sides. The property owner is responsible for the accuracy of this plot plan. On-lot sewage disposal systems and/or any easements/deed restrictions must be indicated.

Sign and Date Application

<u>PART VI</u> – <u>Sign and Date Application</u> – If property resident is not the owner of the property, a notarized statement indicating the property owner's approval of the proposed construction must be submitted with the Application. Provide phone numbers where property owner/resident and contractor may be reached. Contractors making Application must provide a Certificate of Insurance verifying coverage for Worker's Compensation and their Federal or State Employer Identification Number (EIN).

Initials

PLANS AND SPECIFICATIONS

Two (2) copies of all plans and specifications must be submitted with all applications. Cross-section drawings, giving structural details, must be included.

DIMENSIONS – Show all dimensions of proposed work (width, length, and height).

FEES – Permit fees must be submitted with the permit Application.

REVIEW – The Application will be reviewed by the Cherrytree Township Planning Commission, the Cherrytree Township Board of Supervisors, and the Cherrytree Township Zoning Officer for compliance with all Township Ordinances.

PERMIT GRANTED – <u>If approved, the permit will be processed and issued to you within fifteen (15) business days.</u>

Work may not start until a permit has been approved and granted. The permit must be displayed so as to be visible from the road.