



# **DRAFT ENVIRONMENTAL IMPACT STATEMENT**

## **Proposed Development of a New Federal Correctional Institution and Federal Prison Camp – Letcher County, Kentucky**

Prepared by:  
**Federal Bureau of Prisons  
Washington, D.C.**

**February 2024**

# **ABSTRACT**



# Draft Environmental Impact Statement

## Proposed Development of a New Federal Correctional Institution and Prison Camp – Letcher County, Kentucky

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### ABSTRACT

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**Title:** Proposed Development of a New Federal Correctional Institution and Federal Prison Camp

**Designation:** Draft Environmental Impact Statement

### Background

The mission of the U.S. Department of Justice, Federal Bureau of Prisons (FBOP) is for corrections professionals to foster a humane and secure environment and ensure public safety by preparing individuals for successful reentry into society. The FBOP's highly skilled, diverse, and innovative workforce creates a strong foundation of safety and security. Through the principles of humanity and normalcy, the FBOP develops good neighbors. A growing challenge to successfully performing that mission is the increasing number of federal correctional facilities and supporting infrastructure that were constructed over 50 years ago (the approximate design life of such facilities), resulting in a continuous need to maintain existing facilities, and when necessary, develop new facilities and infrastructure.

In 2006, Congress directed the FBOP to initiate various investigations leading to development of a new federal correctional facility in Letcher County, Kentucky (Congressional authorization: P.L. 109-272). The National Environmental Policy Act (NEPA) of 1969, as amended in 2023, provides that all agencies of the Federal government shall prepare a detailed statement on major Federal actions significantly affecting the quality of the human environment. Pursuant to Section 102(2)(C) of NEPA and the Council on Environmental Quality regulations implementing NEPA, as amended May 20, 2022, a *Notice of Intent to Prepare a Draft Environmental Impact Statement* (DEIS) was published in the Federal Register on September 28, 2022 (Volume 87, Number 187). The purpose of this DEIS is to present an assessment of the environmental consequences of a proposed action by the FBOP to develop a new Federal Correctional Institution (FCI) and Federal Prison Camp (FPC) in Letcher County.

The DEIS, the assessment it presents, and the procedures by which the environmental investigations are conducted and incorporated in decision-making are parts of a process established by NEPA to ensure that the environmental consequences of federal projects and actions are adequately taken into account. The process is also designed to ensure that public officials make decisions based on a full understanding of the environmental impacts of proposed actions and take all appropriate steps to "protect, restore and enhance the environment".



## Proposed Action

In conformance with the Congressional directive, the FBOP has conducted a wide range of technical investigations and published multiple EISs in support of correctional facility development within the 339-square-mile area comprising Letcher County, and at the exclusion of other areas of the FBOP's Mid-Atlantic Region and the U.S. as a whole. At the time of the Congressional directive (2006), the need for new U.S. Penitentiary (USP) to house the population of high-security adults in custody (AIC) originating from the Mid-Atlantic Region was the priority and all NEPA and other technical investigations considered the potential impacts of such development. However, in the intervening period, the FBOP has determined that development of a new medium-security FCI is a higher priority than a new high-security USP as was originally conceived. With the Congressional directive in effect, and given the need for modern institutions and infrastructure, the FBOP is proposing to construct and operate a new FCI to house approximately 1,152 medium-security AIC and a new FPC to house 256 minimum-security AIC in Letcher County, Kentucky.

Development of a new FCI/FPC in Letcher County will help ensure that the federal criminal justice system in general, and the FBOP in particular, continues to function in a quality manner while addressing the need for modern, secure, efficient and cost-effective institutions. Doing so will also allow the FBOP to better accomplish its mission to foster a humane and secure environment and ensure public safety, meet the needs of current and future federal populations of AIC, and provide for the continued safety and security of AIC, employees, and the public.

## Project Location

Letcher County is located in southeastern Kentucky in the eastern coal field region of the state, an area stretching from the Appalachian Mountains westward across the Cumberland Plateau to the Pottsville Escarpment. Letcher County includes the cities of Whitesburg (the County Seat), Blackey, Jenkins, and Fleming-Neon and the towns of Seco, McRoberts, Roxana, and Isom. Two alternative locations within Letcher County for development of the proposed FCI and FPC, known as the Roxana Site and Payne Gap Site, were investigated as part of previous EISs.

## Findings

Development of the proposed FCI/FPC is intended to meet the on-going need for modern and secure federal correctional facilities generally, as well as to address an identified need for a new medium-security FCI and minimum-security FPC in the Mid-Atlantic Region. FCI and FPC development at the Roxana Site is considered the preferred alternative as it best meets the project needs and, on balance, would pose fewer impacts to the natural and human environments. Threatened and endangered species habitat was a factor in the identification of the preferred alternative with development at the Payne Gap Site potentially impacting a significant amount of summer roosting bat habitat versus the amount that would be impacted at the Roxana Site. Development at the Roxana Site would rely on established infrastructure services and would have fewer impacts to similar development at the Payne Gap Site and is preferred by local elected and other officials.

Based upon potential environmental impacts applicable to each site, the FBOP has determined that the proposed development at the Roxana Site to be the Preferred Alternative. The Preferred Alternative meets the project objectives, is technically feasible, would have fewer natural resource and other environmental impacts, and incorporates measures to avoid, minimize, or mitigate environmental impacts to the extent practicable.

Beneficial impacts would be derived from implementation of the proposed action, including contributions toward fulfilling the FBOP's mission to protect society along with achieving the goals of the U.S. Department of Justice and the mandates and directives of the U.S. Congress. Implementation of the proposed project would also result in positive impacts including creation of modern correctional facilities to house a portion of the federal AIC population; and stimulation of the local and regional economies with creation of employment opportunities during the project's

construction and operating phases. Cumulative, secondary and construction-related impacts and any other potentially adverse impacts would be controlled, mitigated or avoided to the maximum extent possible.

## **Publication Date**

March 1, 2024. Comments on the DEIS are due by April 15, 2024. To be considered during preparation of the Final EIS, comments need to be submitted using the project website: <https://www.proposed-fci-letchercountyky.com>, or by mail to: Kimberly S. Hudson, Chief, Construction and Environmental Review Section, Federal Bureau of Prisons, 320 First Street, NW, Room 901-5, Washington, D.C. 20534, or by email to: kshudson@bop.gov

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# **ACRONYMS AND ABBREVIATIONS**

# ACRONYMS AND ABBREVIATIONS

AEP	American Electric Power	LWSD	Letcher County Water and Sewer District
AIC	Adults in custody		
AMU	Adjusted Mitigation Units	MBTA	Migratory Bird Treaty Act
APE	Area of Potential Effects	MGD	Million gallons per day
ARH	Appalachian Regional Healthcare	µg/m <sup>3</sup>	Microgram per Cubic Meter
ASTM	American Society for Testing and Materials International	MSA	Mobile Source Air Toxic
		msl	Mean sea level
BMPs	Best Management Practices	NAAQS	National Ambient Air Quality Standards
CAA	Clean Air Act	NEPA	National Environmental Policy Act
CAAA	Clean Air Act Amendments	NHPA	National Historic Preservation Act
CEQ	Council on Environmental Quality	NOI	Notice of Intent
CFR	Code of Federal Regulations	NO <sub>2</sub>	Nitrogen dioxide
CMOA	Conservation Memorandum of Agreement	NO <sub>x</sub>	Nitrogen oxides
CO	Carbon monoxide	NRCS	Natural Resources Conservation Service
CO <sub>2</sub>	Carbon dioxide	NRHP	National Register of Historic Places
CWA	Clean Water Act	NWI	National Wetland Inventory
dB	Decibels	O <sub>3</sub>	Ozone
dBA	A-weighted decibels	OSHA	Occupational Safety and Health Administration
EIS	Environmental Impact Statement	pCi/L	Picocuries per liter
EISA	Energy Independence and Security Act	PM <sub>2.5</sub>	Particulate matter with a diameter of 2.5 microns or less
EIU	Ecological Integrity Unit	PM <sub>10</sub>	Particulate matter with a diameter less than 10 microns
EO	Executive Order	ppb	Parts per billion
ESA	Endangered Species Act	ppm	Parts per million
FBOP	Federal Bureau of Prisons	psi	Pounds per square inch
FCI	Federal Correctional Institution	ROD	Record of Decision
FEMA	Federal Emergency Management Agency	RCRA	Resource Conservation and Recovery Act
FPC	Federal Prison Camp	SHPO	State Historic Preservation Officer
FPPA	Farmland Protection Policy Act	SO <sub>2</sub>	Sulphur dioxide
GHG	Greenhouse gases	TCPs	Traditional Cultural Properties
GPD	Gallons per day	TMDL	Total Maximum Daily Load
HAP	Hazardous air pollutants	TPY	Tons per year
ITE	Institute of Transportation Engineers	TRI	Toxics Release Inventory
KDEP	Kentucky Department of Environmental Protection	TSCA	Toxic Substances Control Act
KGS	Kentucky Geological Survey	USACE	U.S. Army Corps of Engineers
KHC	Kentucky Heritage Council	USDA	U.S. Department of Agriculture
KRADD	Kentucky River Area Development District	USEPA	U.S. Environmental Protection Agency
KYLM	Kentucky Labor Market Information	USFWS	U.S. Fish and Wildlife Service
KYTC	Kentucky Transportation Cabinet	USGS	U.S. Geological Survey
LCPC	Letcher County Planning Commission	USP	U.S. Penitentiary
LOS	Level of service	WOTUS	Waters of the United States



# **EXECUTIVE SUMMARY**

# EXECUTIVE SUMMARY

The Federal Bureau of Prisons (FBOP) has prepared a Draft Environmental Impact Statement (DEIS) for the proposed development of a Federal Correctional Institution (FCI) and Federal Prison Camp (FPC) in Letcher County, Kentucky (the Proposed Action). The DEIS has been prepared consistent with the regulations implementing the National Environmental Policy Act (NEPA) of 1969, as amended in 2023; Council on Environmental Quality regulations implementing NEPA, as amended May 20, 2022; and Department of Justice regulations implementing NEPA

## Background

Since its establishment in 1930, the FBOP's overarching responsibility has been to provide for the care of the population of federal adults in custody (AIC) while maintaining safe and secure facilities that ensure the well-being of AIC, employees, and the public at large. Today, the FBOP manages 122 institutions including all aspects of facility repairs and maintenance involving interior and exterior finishes, roofs, perimeter fences and other security measures, mechanical, electrical, plumbing, lighting, and utility systems, communication equipment, and fire protection and life safety systems. The condition of facilities, infrastructure, and equipment in a correctional setting, which is continuously occupied by employees and AIC, is critically important to its operation and security. This is the case within the federal prison system where facilities and infrastructure require constant maintenance ranging from routine inspections and repairs to large-scale upgrades and replacements.

While the FBOP is continually working to effectively manage the AIC population and address its aging facilities and infrastructure, the challenges ahead are considerable. Of the FBOP's 122 institutions, 62 were developed between 1890 and 1991, 55 institutions were developed between 1992 and 2007, with the remainder developed since 2008. Carrying out its mission and protecting society is growing more challenging due to the increasing number of aging federal correctional facilities and the infrastructure that supports them.

## Purpose and Need for the Proposed Action

In 2006, Congress directed the FBOP to initiate investigations leading to development of a new federal correctional facility in Letcher County, Kentucky (Congressional authorization: P.L. 109-272). During the years that followed, the FBOP conducted a wide range of technical investigations and published multiple EISs addressing development of a high-security U.S. Penitentiary (USP) in Letcher County to comply with Congress' directive. In the intervening period, the FBOP has determined that development of a new medium-security FCI is a higher priority than a new high-security USP as was originally conceived. As the Congressional directive remains in effect, and given the need for modern institutions and infrastructure, the FBOP is proposing to construct and operate a new FCI in Letcher County, Kentucky, to meet the immediate and long-term need to house medium-security AIC. The FCI would be designed to house approximately 1,152 medium-security AIC while the FPC would house 256 minimum-security AIC (total 1,408 AIC).

The Proposed Action would address:

- FBOP's administrative, operational, and security requirements; provide the spaces and resources needed to conduct treatment, counseling, and other programs that support the behavioral, mental health, and medical needs of the AIC population;
- Utilize the latest security technologies and operating and management approaches to keep AIC, employees, visitors, and the public safe and secure;
- Incorporate modern mechanical systems to reduce the risks of exposure to COVID-19 and other contagions;
- Apply advanced approaches, materials, and equipment that are sustainable and resilient against the hazards associated with climate change; and
- Optimize the cost of operation by applying innovative designs, quality construction, highly

efficient systems, and facility maintenance programs to achieve and maintain peak performance standards.

Developing the proposed FCI/FPC will also demonstrate that the combination of modern facilities and contemporary best management practices can deliver better outcomes for the AIC population, improve public safety, and control operating costs.

## **Alternatives Considered**

Previous EISs conducted since 2015 analyzed the environmental consequences of the No Action Alternative and two Action Alternatives for acquiring land and constructing and operating a new USP, FPC, and associated ancillary facilities in Letcher County. The two Action Alternatives consisted of development on lands known as the Payne Gap Site located near Jenkins in eastern Letcher County, and on lands known as the Roxana Site located west of Whitesburg in western Letcher County. Studies conducted since 2016 identified development at the Roxana Site as the Preferred Alternative because it best met the project needs and would have fewer adverse impacts to the natural and built environments than developing at the Payne Gap Site.

In accordance with NEPA, alternatives that meet the purpose and need for the Proposed Action, avoid and (or) minimize impacts to the environment, and are technically and economically feasible have been considered in this DEIS. This includes a decision not to proceed with the Proposed Action (the No Action Alternative) and to proceed with the Proposed Action at the Roxana Site. Implementation of the Proposed Action at the Roxana Site has been determined by the FBOP to be the Preferred Alternative as it best meets the project objectives, is technically feasible, would have fewer adverse natural resource and other environmental impacts, and incorporates measures to avoid or minimize environmental impacts to the extent practicable.

Consistent with the guidance provided in 40 CFR 1502.9, this DEIS addresses changes in the Proposed Action and new circumstances or information relevant to environmental conditions, concerns, and potential impacts. The DEIS also incorporates relevant previous technical studies included in the original DEIS and FEIS (2015), the Revised FEIS (2016), and the Revised Draft Supplemental FEIS and Final Supplemental Revised FEIS (2017) while building upon the analyses contained in those documents. This DEIS therefore, focuses its data gathering and analyses on new information about the proposed project, the Roxana Site, Letcher County, and the surrounding region as appropriate.

## **Preferred Alternative**

Relying upon the findings of multiple EISs, the FBOP has identified development of the proposed correctional facility at the Roxana Site as the Preferred Alternative. Reinforcing the Roxana Site as the Preferred Alternative is the consistent, continuous, and unwavering support expressed by Letcher County's elected representatives, community leaders, members of local institutions and businesses, and the general public to developing the proposed correctional facility at the Roxana Site. Given that there have also been no meaningful changes or alterations to environmental and physical features, ownership arrangements, or off-site conditions affecting the Payne Gap Site, information contained in the 2015 - 2017 studies continues to be relevant and is incorporated by reference.

## **Public Engagement**

The FBOP published a Notice of Intent to prepare a DEIS for the proposed FCI and FPC in Letcher County, Kentucky, in the Federal Register on September 28, 2022. Coinciding with publication in the Federal Register, similar notices were also published in the Mountain Eagle and Letcher Community newspapers and again in advance of the public scoping meeting. Following publication of a Notice of Intent to Prepare a DEIS, the FBOP commenced the public scoping process to identify issues and possible alternatives for consideration in the DEIS. The FBOP held an in-person and virtual public scoping meeting at the Letcher County Central High School in Whitesburg, Kentucky, on November 17, 2022.

Information regarding the scoping process and FBOP activities to engage the public in the scoping and NEPA process is documented within this DEIS. Throughout the scoping process federal agencies, Commonwealth, Tribal, and local governments, agencies, and the public were encouraged to assist the FBOP to identify significant resources and issues, impact-producing factors, reasonable alternatives, and potential mitigation measures for analysis in the DEIS, as well as to provide additional information that would be meaningful to the analysis and decision-making process. Materials used during the scoping process and a summary of public comments and input submitted for consideration by the FBOP have been incorporated within the DEIS, Appendix A.

## **Summary of Potential Impacts**

The DEIS identifies, describes, and analyzes the potential effects of the Preferred Alternative and the No Action Alternative on the environment that are reasonably foreseeable and have a relationship to the Proposed Action. This includes effects that occur at the same time and place as the Proposed Action and effects caused by the Proposed Action that occur at a later time or in a different place. Resources potentially impacted (whether beneficial or adverse) during construction and operation are described in the DEIS and include topography, geology, and soils; air quality; noise; cultural resources; water resources; biological resources and threatened and endangered species; demographics, employment, housing; environmental justice; visual and aesthetic resources; hazardous materials, land use; community services; utility services; and traffic. The DEIS also includes descriptions of measures to avoid, minimize, or mitigate identified adverse impacts.

With the Proposed Action having the potential to significantly affect the quality of the human environment, the FBOP has complied with NEPA by preparing a new DEIS to ensure that the environmental consequences of such an action are adequately taken into account. This includes ensuring that the potential environmental impacts associated with the Proposed Action are minimized and documented and that required permits are obtained. This includes following all applicable environmental statutes including but not limited to: Clean Air Act of 1974; Clean Water Act and Amendments and 401 authorizations and 404 permits; stormwater and National Pollutant Discharge Elimination System permits; consultations under Section 7 of the Endangered Species Act of 1973; the Farmland Protection Policy Act of 1981, among other laws, regulations and Executive Orders. The NEPA process is also being used to support compliance with applicable procedural requirements under Section 106 of the National Historic Preservation Act (NHPA) of 1966 (54 U.S.C. 306108) as provided in 36 CFR 800.3(b)(3) and has conducted government-to-government Tribal consultations consistent with Executive Order 13175, Presidential priorities, and Department of Justice policies.

To address challenges resulting from climate change, agencies of the federal government, including the FBOP, are mandated to increase the use of electric powered vehicles in its operations. Therefore, plans for the proposed FCI/FPC will include installation of infrastructure necessary to allow use of government electric vehicles while providing for future use of employee and visitor electric powered vehicles. The project design will also aim to reduce the impact of construction by pursuing the sustainable green building certification program Leadership in Energy and Environmental Design.

## **1.0 INTRODUCTION**

# 1.0 INTRODUCTION

This document, together with its appendices and incorporations by reference, constitutes a Draft Environmental Impact Statement (DEIS) prepared pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) of 1969, as amended. NEPA provides that all agencies of the Federal government shall prepare a detailed statement on major Federal actions significantly affecting the quality of the human environment. The DEIS follows the Council on Environmental Quality "Regulations for Implementing NEPA" (40 Code of Federal Regulations [CFR] Part 1500-1508). Its purpose is to present an assessment of the environmental consequences of a proposed action by the Federal Bureau of Prisons (FBOP), to construct and operate a new medium-security Federal Correctional Institution and minimum-security Federal Prison Camp in Letcher County, Kentucky.

The DEIS, the assessment it presents, and the procedures by which the environmental investigations are conducted and incorporated in decision-making are parts of a process established by NEPA to ensure that the environmental consequences of federal projects and actions are adequately taken into account. The process is designed to ensure that public officials make decisions based on a full understanding of the environmental impacts of proposed actions and take all appropriate steps to *"protect, restore and enhance the environment."*

## 1.1 Background

In 1930, pursuant to Pub. L. No. 71-218, 46 Stat. 325 (May 14, 1930), Congress established the FBOP within the Department of Justice and charged the agency with the "management and regulation of all Federal penal and correctional institutions." The federal prison system had already existed for nearly 40 years under the Three Prisons Act (1891), which authorized the first three federal penitentiaries: United States Penitentiary (USP) Leavenworth, Kansas; USP Atlanta, Georgia; and USP McNeil Island, Washington, and by 1930 the number of federal prisons had increased to 11. Wardens functioned autonomously for the most part with limited oversight by the Department of Justice.



*Federal Bureau of Prisons Headquarters, Washington, D.C.*

By establishing the FBOP, the agency assumed responsibility for providing progressive and humane care for the federal population of adults in custody (AIC), to professionalize the prison service, and to ensure consistent and centralized oversight, management, and administration of the 11 federal prisons in operation at the time. Today, the FBOP's mission is to foster a humane and secure environment and ensure public safety by preparing individuals for successful reentry into their communities.

## 1.2 Security Levels

To appropriately house the broad spectrum of offenders the FBOP operates institutions of varying security levels. The level of security of an institution is based on such features as the presence of external patrols, security barriers, or detection devices; the type of housing within the institution; internal security features; and the employee-to-AIC ratio. Federal AIC are housed in facilities that



are rated as minimum-security, low-security, medium-security, high-security, and administrative, as described below:

- **Minimum-Security.** Minimum-security institutions, also known as Federal Prison Camps (FPC) and satellite work camps, are characterized by dormitory-style housing, a high AIC-to-employee ratio, and the absence of security fences. These institutions are work-and program-oriented, and many are located adjacent to other federal correctional institutions or on military installations where AICs help provide the labor needs of the institution or base by performing routine maintenance tasks.
- **Low-Security.** Low-security Federal Correctional Institutions (FCIs) have double-fenced perimeters, mostly dormitory-style housing, and work and program components. The AIC-to-employee ratio in low-security institutions is higher than in minimum-security facilities.
- **Medium-Security.** Medium-security FCIs have strengthened perimeters (often double-fences with electronic detection systems), cell-type housing, a wide variety of work and treatment programs, and an even more stringent AIC-to-employee ratio than low-security institutions, providing even greater controls.
- **High-Security.** High-security institutions, also known as United States Penitentiaries (USP), have highly secure perimeters (either walled or double-fenced with a taut wire fence), multiple and single occupant cell housing, guard towers and/or non-lethal/lethal fences, and close employee supervision and movement controls.
- **Administrative.** Institutions that house offenders who require an uncommon level of security due to their serious records of institutional misconduct, involvement in violent or escape-related behavior, and/or who have unusual security needs based on the nature of their offense's. These facilities have highly secure perimeters consisting of walled or double fenced enclosures with guard towers and/or non-lethal/lethal fences, and close employee supervision and movement controls.

The FBOP uses a classification system to appropriately house individuals of varying security levels. FPCs have generally the least restrictive environment and house AIC at the lowest security level, usually those serving short sentences or nearing the completion of longer sentences begun elsewhere. Low- and medium-security FCIs present increasingly more restrictive environments while USPs provide high-security and very restrictive environments. Administrative maximum facilities provide the highest level of security and the most restrictive conditions within the federal prison system.

The classification system has proven effective by enabling the FBOP to separate violent offenders from the rest of the AIC population, keep the AIC population in better balance, decrease the number of AIC transfers, and make better use of available resources, while confining individuals in the appropriately secure environment.

### 1.3 The Need for Modern Federal Correctional Facilities and Infrastructure

Since its establishment, the FBOP's overarching responsibility has been to provide for the care of the federal AIC population while maintaining safe and secure facilities that ensure the well-being of AIC, employees, and the public at large. In doing so, the FBOP manages over 120 institutions comprising 66 million square feet of space on 46,000 acres of land including all aspects of facility repairs and maintenance. This involves interior and exterior finishes, roofs, perimeter fences and other security measures, mechanical, electrical, plumbing, lighting, and utility systems, communication equipment, and fire protection and life safety systems. The condition of facilities, infrastructure, and equipment in a correctional setting, which is continuously occupied by employees and AIC, is critically important to its operation and security. This is the case with the federal prison system where facilities and infrastructure require continuous maintenance ranging from routine inspections and repairs to large-scale upgrades and replacements.

While the FBOP is continually working to effectively manage the AIC population and address its aging facilities and infrastructure, the challenges ahead are considerable. Of the FBOP's 122 institutions, 62 were developed between 1890 and 1991, 55 institutions were developed between 1992 and 2007, with the remainder developed since 2008.

Protecting society with facilities that are safe, humane, cost-efficient, and appropriately secure is growing more challenging by the increasing number of old federal correctional facilities and the aging infrastructure that supports them as documented in recent Department of Justice Office of the Inspector General's reports ([www.oig.justice.gov](http://www.oig.justice.gov)). Therefore, Congress has directed the FBOP to construct a new correctional institution in Letcher County, Kentucky as maintaining and operating aging facilities and obsolete designs are no longer cost-effective or sustainable.

## 1.4 Purpose and Need for the Proposed Action

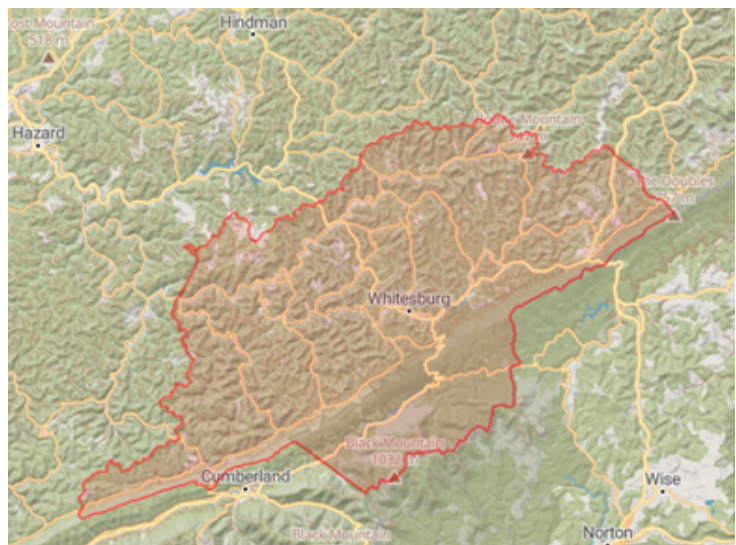
In 2006, Congress directed the FBOP to initiate various investigations for development of a new high-security USP in Letcher County, Kentucky. Soon thereafter, FBOP representatives visited Letcher County to gather information and inspect properties identified by county officials for possible correctional facility development. During the years that followed, the FBOP conducted a variety of technical investigations and feasibility studies in support of USP development in Letcher County and to comply with Congress' directive.

In the intervening period, the FBOP has determined that development of a new medium-security FCI to meet the needs of the Mid-Atlantic Region is a higher priority than a new high-security USP as was originally conceived. As the Congressional directive remains in effect, and given the need for modern institutions and infrastructure, the FBOP is proposing to construct and operate a new medium-security FCI in Letcher County, Kentucky. The FCI would be designed to house approximately 1,152 male AIC.

The proposed development includes a minimum-security FPC to house 256 male AIC. Camp AIC play an important function in augmenting FBOP employees in carrying out routine maintenance activities necessary for the proper functioning of the overall institution.

### 1.4.1 Project Location

Letcher County, with a land area of approximately 339 square miles, is located in southeastern Kentucky in the eastern coal field region of the state, an area stretching from the Appalachian Mountains westward across the Cumberland Plateau to the Pottsville Escarpment (Exhibit 1-1). Bordering counties include Pike to the northeast, Knott to the northwest, Perry to the southwest, Harlan to the south, and Wise County, Virginia, to the southeast. Cities in Letcher County include Whitesburg (the County Seat), Blackey, Jenkins, and Fleming-Neon; towns include Seco, McRoberts, Roxana, and Isom.



**Exhibit 1-1** Letcher County, Kentucky

### 1.4.2 Core Ideologies

The FBOP's Core Ideologies commit it to providing:

- A safe environment for both employees and AIC.
- Secure institutions to confine offenders and protect the public.
- Skill building programs it can afford, to offer AIC the opportunity to live crime-free lives.

- Service and stewardship to the public and a continued tradition of excellence.
- Employees who are ethical, professional, well-trained, and diverse.

Those Core Ideologies are encompassed in the FBOP's goals for the proposed project:

- Meet the immediate and long-term need to house medium-security AIC in the Mid-Atlantic Region.
- Meet the FBOP's administrative, operational, and security requirements.
- Provide the spaces and resources needed to conduct treatment, counseling, and other programs that support the behavioral, mental health, and medical needs of the federal AIC population.
- Utilize the latest security technologies and operating and management approaches to keep AIC, employees, visitors, and the public safe and secure.
- Incorporate modern mechanical systems to reduce exposure to COVID-19 and other contagions and the risks faced by AIC and employees.
- Optimize the cost of operation by applying modern and innovative design, quality construction, modern mechanical, electrical, and plumbing systems, and facility maintenance programs to achieve and maintain peak performance standards.
- Attract and retain correctional officers and other operating employees by elevating the quality of the work environment.
- Apply advanced building design approaches and construction materials that are sustainable and resilient.

Developing the proposed FCI/FPC will demonstrate that the combination of modern facilities and contemporary best management practices can deliver better outcomes for AIC, improve public safety, and control operating costs.

## **1.5 Institution Policies, Procedures and Physical Measures**

Internal security policies and procedures require all AIC to be formally counted and physically identified several times each day. FBOP employees would verify the location of each AIC throughout the workday and would also perform census counts for AIC accountability. AIC are also observed, monitored, and may be recorded via strategically placed video cameras in addition to recording AIC telephone conversations. AIC quarters would be supervised 24 hours a day and would be checked often for contraband material. An intensive urinalysis program, involving both specific and random sampling, would be carried out to detect and deter drug or alcohol use by AIC. The interior spatial arrangements of the FCI would provide internal control while permitting relatively free movement within the secure perimeter of the institution. Individual rooms in all housing units would have locking devices that enable employees in the unit to provide necessary controls when required.

The FBOP relies on its own employees to ensure the overall security of its institutions. It is also the responsibility of the United States Marshals Service and the Federal Bureau of Investigation to assist the FBOP, if necessary, in the event that an AIC is reported missing. State and local law enforcement agencies would also be advised of the situation and would assist the FBOP as necessary with local media contacted as a means to inform the public. Law enforcement personnel would also be responsible for removing any person involved in violating a federal law, such as trespassing, damaging federal property or possessing contraband on the FBOP's property.

The proposed FCI will incorporate stringent perimeter security systems, while other components, including the FPC, warehouses, employee training facility, and utility plant are generally unfenced. Perimeter security at the FCI would be provided by two parallel 12-foot-high chain-link fences with coils of barbed tape mounted on the fences and placed within the 20-foot-wide space between the two fences. FBOP employees in vehicles would also patrol the perimeter of the FCI and respond to automatic alarms received from the electronic detection system. Employee and visitor traffic, along with service and delivery vehicles traveling to the facility, would be separated from patrol traffic

operating along the perimeter road surrounding the FCI. There is no plan to install fencing around the entire property to be acquired by the FBOP.

Housing units within the FCI would consist of two to four-level structures that also contain activity spaces for AIC and office spaces for employees assigned to work in the units. Each housing unit would contain a centrally located multi-purpose space devoted to activities such as watching television, playing table games and attending group meetings. Small activity rooms would also be provided for quiet activities such as reading and would be used for group and individual counseling sessions. Different from the FCI, dormitory-style housing is provided for AIC at the FPC.

The FBOP employs a decentralized method for managing its institutions with employees assigned to work in the housing units where the AIC live. Offices for correctional officers, unit managers, case managers, counselors, and administrative assistants are also located in the housing areas. Other employees, such as psychologists, teachers, and chaplains, would periodically visit housing units to meet with AIC and unit employees. This system permits greater contact, communication, and interaction between employees and AIC, however, the first consideration for all FBOP employees, regardless of position, is security and supervision of AIC.

### **1.5.1 Work and Training Programs**

Federal AIC spend an initial four weeks in orientation where their needs, requirements, and interests are identified and where they learn about program and work opportunities. After orientation, AIC receive program and work assignments which are periodically reviewed and changed, if necessary, through unit team consultation.

All AIC have opportunities to participate in self-improvement programs including education, vocational training, religious instruction, and counseling. Program opportunities may include formal education from adult basic education through post-secondary courses, vocational training, social education programs to enhance self-confidence, library services including a law library, athletic and recreation programs, group and individual counseling, chaplaincy services, and AIC organizations. The literacy standard for AIC in federal correctional institutions is a high school diploma or its equivalent with promotions in prison industries and institutional assignments to jobs above the entry level contingent on meeting General Education Development literacy standards.

Medically able AIC are required to work at productive jobs within the institution. Work assignments reduce idleness and tension and create a more easily managed environment. Institution work assignments may be in food service, the business office, carpentry and electrical maintenance, or any other work necessary for the upkeep and operation of the facility. Efforts are also made to place individuals in job assignments where they can use previously acquired skills or receive on-the-job training in an employable skill.

Many FBOP institutions include an industry operated by Federal Prison Industries, Inc. (trade name UNICOR) as a way for AIC to learn skills in a vocation that promotes their rehabilitation and return to society, reduce recidivism, and provide former AIC the means to support themselves in post-institutional life. Created in 1934, UNICOR provides job training and work opportunities to AIC through the production of quality goods and services in multiple business segments where job skills can be developed, and good work habits acquired.

UNICOR supplies products and services strictly for federal use and typically involve labor-intensive tasks such as assembly and utilize materials available locally. In planning a prison industry, the FBOP first evaluates the availability of local resources and determines the current and future demand for products and services from among federal agencies. Among the products provided through UNICOR are apparel and accessories, awards and plaques, hygiene products, electronics and components, eyewear and optics, facilities and correctional management, food and food service, industrial storage, office furniture, lounge seating and accessories, printed paper products, screen print and embroidery, and signage. The mix and volume of products produced at UNICOR facilities are subject to market conditions and are adjusted as conditions warrant. Because the customers for



UNICOR products are branches of the federal government, the products much comply with federal regulations. Products are chamber tested for off-gassing, water based finishes and adhesives are used, and packing materials are made from recycled materials to the extent possible.

At this time there are no plans to include a prison industry at the proposed FCI and structures and equipment to support a UNICOR operation would not be constructed although development of an industry could occur if the opportunity arises in the future. (Information about Federal Prison Industries can be found at [www.unicor.gov](http://www.unicor.gov).)

The FBOP recognizes involvement of volunteers from the community is vital to both AIC and employees, and encourages their use in all facilities. Volunteers provide an array of services from one-on-one intensive mentoring and structured program service delivery to transition support in the institutions. Community involvement in AIC programs within the facility is also encouraged and supported with local civic and special emphasis groups often forming chapters within FBOP facilities.

## **1.5.2 First Step Act Programming**

In addition to the work, training, and other educational opportunities that are offered by the FBOP, the First Step Act (FSA) has provided additional impetus on providing programs that will help AIC succeed in their communities upon release. Signed into law in 2018, the FSA was the culmination of a bipartisan effort to improve criminal justice outcomes, as well as to reduce the size of the federal AIC population while creating mechanisms to maintain public safety. The FSA encompasses three major components: correctional reform, sentencing reform, and reauthorization of the Second Chance Act of 2007, in addition to other criminal justice-related provisions.

In addressing correctional reform, the FSA mandates development of a risk and needs assessment system (RNAS) to be used by the FBOP to assess the criminogenic needs of all federal AIC. This has led to the placement of individuals in evidence-based recidivism risk and reduction programs and other productive activities to address their specific needs to reduce their risk of recidivism. The FSA defines evidence-based recidivism reduction programs as a group or individual activity that has been shown through empirical evidence to reduce recidivism or is based on research indicating it is likely to be effective in reducing recidivism. These programs are designed to help individuals to succeed in life upon release from custody and may include:

- Social learning and communication, interpersonal, anti-bullying, rejection response, and other life skills
- Family relationship building, structured parent-child interaction, and parenting skills
- Classes on morals or ethics
- Academic classes
- Cognitive behavioral treatment
- Mentoring
- Substance abuse treatment
- Vocational training
- Faith-based classes or services
- Civic engagement and reintegrative community services
- Institution employment including through work programs
- Victim impact classes or other restorative justice programs
- Trauma counseling and trauma-informed support programs

Under the FSA, the risk and needs assessment system provides guidance on the type, amount, and intensity of recidivism reduction programming and productive activities to which each AIC is assigned, including information on which programs the AIC should participate in based on their needs. The system also provides guidance on how to group, to the extent practicable, AIC with

similar risk levels together in recidivism reduction programming and housing assignments.

Eligible AIC who participate in recidivism reduction programming and productive activities can earn credits towards placement in prerelease custody (i.e., home confinement or a Residential Reentry Center) earlier than they would have otherwise been allowed and/or toward earlier supervised release placement up to 365 days (i.e., earlier release date to US Probation). AIC who are ineligible for credits include those whose offenses involved violence, terrorism, espionage, human trafficking, sex and sexual exploitation, repeat felon in possession of a firearm, certain fraud, or certain controlled substances. These AIC are prohibited by the FSA from earning credits although they can earn other benefits by successfully completing the programming.

## 1.6 Planning and Construction Standards

In planning the proposed FCI/FPC, consideration was given to the relationship between the proposed facility to land use plans, policies, and regulations of Letcher County. Doing so has revealed a proposal consistent with the planning and development goals expressed county planning and economic development officials to diversify the local economy beyond resource extraction, promote economic opportunities and workforce development, while seeking living wage jobs such as that associated with the proposed project. Local, county, and federal elected officials have also been explicit in support of the proposed action for the potential employment and economic benefits that would be derived and its contribution to achieving the social, economic, and land use development goals of Letcher County.

Federal agencies are not subject to traditional local zoning and land use development regulations or review and approval policies, procedures and permits. Nonetheless, the FBOP will seek to maximize the benefits afforded to nearby communities, Letcher County, and southeastern Kentucky by:

- Adopting a site design that balances the mission and function of the proposed FCI/FPC with its surroundings.
- Ensuring that the architectural design contributes positively to the aesthetic character of Letcher County.
- Promoting a compact development plan that limits the portion of the project site subject to disturbance to the degree possible.
- Maintaining setbacks and wooded buffer areas between the proposed FCI/FPC and neighboring properties to minimize and avoid adverse visual and other impacts.
- Implement a traffic management plan to ensure the safety of the traveling public during construction and operation of the proposed FCI/FPC.

Federal buildings and institutions not only provide space for federal activities and workers—they also serve as symbols of the country's ideals and priorities. Given that these structures and their sites play a role in the quality of the nation's natural environment, economy, and worker productivity and health, the federal government is rethinking how it builds today to enhance the future. Current federal goals include the incorporation of sustainability into early planning, design, and operations of federal buildings to reduce costs, enable agency missions, enhance human health and performance, and minimize environmental impacts. In addition, the federal government is striving to create healthier indoor environments by specifying environmentally preferable building products and designing buildings to maximize natural daylighting and ventilation.

It is the desired goal of the FBOP, to the extent achievable and practicable within the correctional setting, to conform to the following energy conservation and sustainability standards for new building construction projects:

- Leadership in Energy and Environmental Design (LEED) certification per the FBOP's Technical Design Guidelines Sections 01 00 05, 01 33 10, and 01 81 13.
- Council on Environmental Quality's *Guiding Principles for Sustainable Federal Buildings* (December 2020)
- ASHRAE 90.1 (2022 or most recent edition at time of contract award for design and construction)



- International Energy Conservation Code (IECC) (2021 or most recent edition at time of contract award for design and construction)
- Executive Order (EO) 14057: *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*
- American Correctional Association 4th Edition Standards for Adult Correctional Institutions

## 1.7 Environmental Review Process

In 1969, Congress enacted NEPA, which requires consideration of environmental issues in federal agency planning and decision-making. Regulations for federal agency implementation of the act were established by the President’s Council on Environmental Quality (CEQ). NEPA requires federal agencies such as the FBOP, to prepare an environmental analysis for any major federal action significantly affecting the quality of the human environment, except those actions that are determined to be “categorically excluded” from further analysis.

Pursuant to the FBOP’s NEPA implementing regulations (28 CFR Appendix A to Part 61), an Environmental Impact Statement (EIS) is required prior to developing new federal correctional institutions. The EIS must disclose significant environmental impacts and inform decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. Its purpose is to present an assessment of the potential environmental impacts of a proposed action, in this case to acquire property and construct and operate a new FCI and FPC in Letcher County, Kentucky.

This document, together with its appendices and other documents incorporated by reference, constitutes a DEIS pursuant to NEPA, CEQ regulations, and DOJ procedures for implementing NEPA. The DEIS evaluates the potential impacts upon the natural and man-made environments and, if necessary, where impacts may be avoided or minimized, as well as if the impacts would require mitigation. The evaluation also determines which alternative would best meet project objectives and result in the least adverse impact to the environment.

### 1.7.1 Compliance with the National Environmental Policy Act

Since 2008 the FBOP has conducted a wide range of technical investigations and feasibility studies and published multiple EISs in support of correctional facility development in Letcher County as shown in Table 1-1.

**Table 1-1** Technical Investigations, Feasibility Studies, and EISs Prepared in Conformance with Congressional Directive

Date	Title	Description
2006	Congressional authorization: P.L. 109-272	P.L. 109-272 states that “additional \$5,000,000 for site planning and development of a FCI in Letcher County, Kentucky.
November 2008	Site Reconnaissance Study – Proposed Federal Correctional Institution	Preliminary analysis of the suitability of various sites for correctional facility development using criteria that included on-site conditions, adjacent and nearby land uses, environmental sensitivity, availability of support infrastructure (utility services, roadway access, etc.), potential for site contamination, among other characteristics and conditions.
June 2012	Feasibility Study for Proposed Correctional Facility, Letcher County, Kentucky	Evaluated four potential sites for development of a new USP and FPC in Letcher County, Kentucky to determine if there would be constraints associated with development of the sites. Evaluated the benefits, challenges, and potential risks associated with development of each site. Based on the results of the feasibility study and changes with the offers of sites, it was determined that two sites, Payne Gap and Roxana, would be carried forward for analysis in a DEIS.

Date	Title	Description
July 2013	Notice of Intent to Prepare a Draft Environmental Impact Statement	Provided notice of the FBOP's intent to prepare a DEIS for development of a USP and FPC on properties located in Letcher County, Kentucky. The proposed sites subjected to study consisted of non-FBOP properties located near the City of Whitesburg.
February 2015	Draft Environmental Impact Statement	Evaluated potential impacts to the natural and man-made environments resulting from development and operation of a proposed USP and FPC at two alternative sites in Letcher County: Alternative 1 – Payne Gap Site and Alternative 2 – Roxana Site.
July 2015	Final Environmental Impact Statement	Identified the Roxana Site as the preferred alternative for development and operation of new facilities as best meeting the project goals and objectives and, on balance, would have fewer impacts to the environment. The Final EIS (FEIS) included updated information contained in DEIS and responded to public comments received concerning the DEIS.
March 2016	Revised Final Environmental Impact Statement	Superseded the FEIS published in July 2015, which was withdrawn after consideration of comments received following its publication and to address inconsistencies in the FEIS.
November 2016	Notice of Intent to Prepare a Supplemental Revised Final Environmental Impact Statement	Provided notice of the FBOP's intent to prepare a Supplement to the Revised FEIS for the proposed USP and FPC in Letcher County. Preparation of the Supplement was necessary to address changes in the proposed action and new circumstances and information relevant to potential environmental impacts including a reduction in available land area of the Roxana Site necessitating changes to the facilities layout evaluated for Alternative 2 – Roxana Site.
March 2017	Draft Supplemental Revised Final Environmental Impact Statement	Draft Supplemental Revised FEIS incorporated by reference and expanded upon the analyses presented in the Revised FEIS. The Draft Supplement addressed new circumstances and information relevant to potential environmental impacts. Specifically, a reduction in available land area of the Roxana Site necessitated modifying the facilities layout evaluated for Alternative 2 – Roxana Site in the Revised FEIS which identified Modified Alternative 2 – Roxana Site as the preferred alternative.
September 2017	Final Supplemental Revised Final Environmental Impact Statement	Evaluated potential impacts to the natural and man-made environments resulting from development and operation of a proposed USP and FPC at two alternative sites in Letcher County. Identified Modified Alternative 2 – Roxana Site as the preferred alternative. Incorporated by reference and built upon the analyses presented in the Revised FEIS. Addressed changes in the proposed action and assessed new circumstances and information relevant to potential environmental impacts.
March 2018	Record of Decision	Director of the Federal Bureau of Prisons selected Modified Alternative 2—Roxana Site for land acquisition and development of a USP and FPC in Letcher County. The decision was made following consideration of potential environmental consequences, agency and public comments, FBOP operational, security, and management needs, and after being apprised of material in the DEIS, FEIS, Revised FEIS, and Draft and Final Supplemental Revised FEISs. Record of Decision (ROD) published to document the FBOP's decision with respect to the environmental review process.
July 2019	Withdrawal of ROD	Acting Director of the FBOP withdraws the ROD based on new information, which may be relevant to the environmental analysis for the proposed action, in order to evaluate the new information more fully.
September 2022	Notice of Intent to Prepared a DEIS.	Notice of the FBOP's intent to prepare a DEIS for development of a medium-security FCI and FPC at alternative locations in Letcher County, Kentucky. The proposed sites to be examined consist of non-FBOP properties located near the City of Whitesburg.

Although the ROD was withdrawn in 2019, Congress' directive to develop a new correctional facility in Letcher County remains in effect. In the 17 years since development of a new USP in Letcher County was first proposed, the FBOP has continuously evaluated its current and future AIC populations and has determined that the need to house medium-security AIC supersedes the need to house high-security AIC. Since the design, construction, and operation of a high-security USP differs from a medium-security FCI, the potential environmental impacts of its development and operation will also be different. As a result of the change in scope of the proposed action (i.e. development of a medium-security FCI vs a high-security USP), the FBOP has undertaken new evaluations and analyses in accordance with current CEQ and NEPA guidelines, DOJ procedures for implementing NEPA, and other federal regulations as part of preparation of a new DEIS.

### **1.7.2 Scope of the Environmental Impact Statement**

To adequately assess the potential environmental impacts, the data and analysis represented by this DEIS involved a multi-disciplinary team of specialists in planning, engineering, environmental science, cultural resource management, among other disciplines. Following current CEQ and NEPA guidelines, as well as DOJ guidance for complying with NEPA, environmental documentation was gathered and analyzed to identify and address:

- The purpose and need for developing the proposed FCI/FPC.
- Baseline conditions involving the natural and man-made environments within the alternative project sites and surrounding community.
- Alternatives to the proposed action including the No Action alternative.
- Potential environmental impacts of the proposed action and No Action alternatives.
- Documents consulted in the preparation of the DEIS document.
- Individuals responsible for preparation of the DEIS document.

The environmental impacts of the proposed action are presented in manner that defines the issues and provides a clear basis for choice among options by decision makers. If the analysis indicates potentially significant effects, which could be reduced to less-than-significant levels with mitigation measures, the document will include mitigating measures and how the FBOP proposes to implement them.

In furtherance of its commitment to the goals and objectives of NEPA, preparation of a new DEIS has been undertaken to independently document the potential environmental impacts associated with the new proposed action. During preparation of the DEIS, news articles, publications, communications, and other indications of interest or concern on the part of the elected and appointed officials, agencies, stakeholders, interest groups, and the public regarding the proposed action have been reviewed and considered. Upon completion, the DEIS will be widely circulated to allow for public review and comment. Individuals with an interest in the proposed action will be provided an opportunity to review the evaluations, inquire about any areas of concern, and offer additional information that should be considered by the FBOP during the planning and decision-making process.

Publication of the DEIS initiates a public comment period which will last no less than 45 days, during which the FBOP will host a public meeting in Letcher County. Following the end of the public comment period, the FBOP will prepare and publish a FEIS in accordance with NEPA, and which will incorporate additional data which may come to light into the decision-making process and respond to all comments received on the DEIS. The FEIS will be subject to a public review period of not less than 30 days. A decision on whether to proceed with the proposed action and if so, where, would be made thereafter by the Director of the FBOP. That decision will consider all environmental analyses and public comments and will be documented by a ROD as stipulated by the NEPA regulations.

## 1.8 Scoping and Public Engagement

Regulations for the implementation of NEPA are promulgated by the Council on Environmental Quality and include a requirement for *“an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.”* The process is known as “scoping.” In accordance with these regulations, the FBOP conducted the following scoping and other public engagement activities associated with this DEIS:

- Published a *Notice of Intent (NOI) to Prepare a DEIS* for development of a new FCI and FPC in Letcher County, Kentucky in the Federal Register on September 28, 2022 (Volume 87, Number 187), inviting federal, state, county, and local agencies, officials, organizations, and the public to participate in the scoping and environmental impact study process (Appendix A).
- Established a project website to host communications, technical reports, public announcements, and other relevant information to facilitate public access to such information. The 2015 DEIS and other documents prepared thereafter are available at: <https://www.proposed-fci-leitchercountyky.com>.
- Coinciding with publication of the NOI, notices were also published in editions of the Mountain Eagle and the Letcher County Community News-Press newspapers inviting federal, Commonwealth, county, and local agencies, officials, organizations, and the public to participate in the scoping and DEIS study process. The notice included information concerning the date, time and means to participate during the Public Scoping Meeting.
- In addition to the website and media outlets used for project-related announcements, a comprehensive contacts database was compiled to expand the audience receiving Public Scoping Meeting information and other project-related announcements and materials. The database, consisting of contact information for federal, Commonwealth, county, and local officials and agencies, community and business organizations, regional planning and economic development agencies, environmental and public interest organizations, Native American tribes, media outlets, and the public at large among others, was maintained and expanded throughout the EIS process.
- Held a Public Scoping Meeting at Letcher County Central High School in Whitesburg, Kentucky on November 17, 2022. FBOP officials presided at the meeting and approximately 150 citizens and officials attended in person with many providing written and verbal comments at that time. For the convenience of the public, interested persons were also able to attend by way of a virtual meeting service that allowed convenient participation from remote locations using a computer, tablet or smartphone or by calling a toll-free telephone number. Individuals who attended remotely were able to see and hear the FBOP’s presentation including many of the verbal comments provided during the meeting. Members of the media were also present, and the Public Scoping Meeting was reported in newspapers with local and regional circulations.
- During the Public Scoping Meeting, FBOP representatives presented information about the meeting’s purpose, current challenges involving aging facilities and infrastructure, objectives for developing the proposed FCI and FPC, the NEPA process, and how to submit questions or comments. Attendees were invited to share questions, comments, and concerns regarding the proposed action and preparation of the DEIS. Following the meeting, the presentation and a Project Fact Sheet were posted to the project website.
- During the days leading up to and following the Public Scoping Meeting, written questions and comments were submitted for FBOP consideration and have been reviewed and addressed in the DEIS. In reviewing the comments and questions received, it was apparent that many concerned a relatively small number of topics with FBOP responses to the more frequently cited topics provided to all on the contacts database and posted to the project website.
- Conducted scoping and information/coordination meetings during 2022-2023 among representatives of local, Commonwealth, and federal agencies and the FBOP. Information concerning the proposed project was shared with meeting attendees and procedures and protocols required to ensure compliance with NEPA and the regulations and requirements of various federal and Commonwealth agencies were discussed. Comments, guidance, and recommendations received at the meetings were incorporated within the DEIS study process.

- Determined the scope and significance of issues to be included within the DEIS on the basis of all relevant environmental considerations and information obtained during the scoping and public engagement process. The determination defined the scope and significance of the issues to be included in the DEIS and identified issues that could be eliminated from detailed study as irrelevant or insignificant.
- Identified additional data requirements on the basis of information obtained from the scoping process so that analyses and findings could be integrated into the DEIS.

Throughout the months of DEIS preparation, FBOP officials and employees reviewed incoming correspondence, newspaper articles and other indications of public interest or concern regarding the proposed FCI and FPC. During this time, meetings and discussions were also held with federal, Commonwealth, Letcher County, and local officials and regulatory agency representatives to further refine DEIS tasks.

## **2.0 ALTERNATIVES**



## 2.0 ALTERNATIVES

The Council on Environmental Quality guidelines for implementing the procedural provisions of NEPA establish a number of policies for federal agencies codified in 40 CFR 1500-1508. The analysis of alternatives should present the environmental impacts of the proposed action and the alternatives in comparative form based on the information and analysis presented in the sections on the affected environment (§ 1502.15) and the environmental consequences (§ 1502.16).

The alternatives analysis is required to:

- Evaluate reasonable alternatives to the proposed action, and, for alternatives that the agency eliminated from detailed study, briefly discuss the reasons for their elimination.
- Discuss each alternative considered in detail, including the proposed action, so that reviewers may evaluate their comparative merits.
- Include the No Action Alternative.
- Identify the agency's preferred alternative or alternatives, if one or more exists, in the DEIS and identify such alternative in the FEIS unless another law prohibits the expression of such a preference.
- Include appropriate mitigation measures not already included in the proposed action or alternatives.
- Limit their consideration to a reasonable number of alternatives.

The analysis conducted under these guidelines addresses the following alternatives:

- No Action Alternative – A decision to maintain the current situation (i.e., status quo) and not proceed with the proposed action to develop a new FCI/FPC.
- Alternatives, Letcher County – Alternative locations in Letcher County, Kentucky for implementation of the proposed action.
- Preferred Alternative. The alternative preferred by the FBOP for implementation of the proposed action.

A discussion of these alternatives follows.

### 2.1 No Action Alternative

The No Action Alternative is defined as a decision by the FBOP to maintain the current situation (i.e., status quo). This alternative would preclude development and operation of a new federal correctional facility to house a portion of the federal population of AIC.

Adoption of the No Action Alternative would avoid the potential short-term, temporary impacts associated with construction of the proposed FCI/FPC such as increased noise, dust, soil erosion, energy consumption, traffic movements, and air emissions. Implementation of the No Action Alternative would also avoid the potential permanent impacts to land use, biological resources, utility services, and visual and aesthetic resources associated with FCI/FPC operation. Based on experience developing new federal correctional institutions of a similar nature and scale in Kentucky and throughout the country, the FBOP anticipates that potentially significant adverse impacts from FCI/FPC construction and operation can and would be avoided and that none of the potential impacts associated with construction and operation, properly mitigated, would constitute significant adverse impacts as defined by NEPA.

While the No Action Alternative would avoid the potential impacts associated with development and operation of the FCI/FPC, adoption of this alternative would also result in the loss of the positive benefits associated with the proposed action. These benefits include contributing to achieving the mandates of Congress; the need for modern, secure, efficient and cost-effective institutions; the societal benefits derived from efficient operation of the federal criminal justice system; along with the potential economic and employment opportunities which would become available to the residents and businesses in eastern Kentucky/western Virginia as a consequence of FCI/FPC construction and operation.

The No Action Alternative, by definition, does not meet the purpose and need for the proposed action. The FBOP has a need for modern and secure correctional facilities and infrastructure nationwide, including a new correctional facility in the Mid-Atlantic Region. Increasing numbers of federal correctional facilities are aged, physically and operationally obsolete, and costly to operate and maintain requiring the FBOP to continuously work to improve the system's infrastructure through repair and renovation of existing facilities when possible and construction of new institutions when necessary. Although the No Action Alternative does not meet the purpose and need for the proposed action, it does provide a baseline for comparison of the potential impacts of the proposed action, therefore the No Action Alternative has been carried forward and addressed in Chapter 3.0.

## **2.2 Alternatives, Letcher County**

In 2006, Congress directed the FBOP to initiate various investigations for development of a new federal correctional institution in Letcher County, Kentucky (Congressional authorization: P.L. 109-272). In conformance with that directive, the FBOP has focused its attention and resources upon the 339-square-mile area comprising Letcher County at the exclusion of other areas of the Mid-Atlantic Region and the U.S. as a whole.

Among the FBOP's first steps when considering a new community is to determine the level of interest to hosting a federal correctional facility, including the support/opposition of elected and appointed officials, community leaders, the business community, and the resident population. If responses are generally positive, as they have been in Letcher County since 2006, the FBOP continues to advance the planning and development process.

Since initiating planning for a new federal correctional facility, FBOP officials have familiarized themselves with Letcher County in addition to regularly engaging members of the local community. During this time, the FBOP has been working with the Letcher County Planning Commission (LCPC) to identify prospective sites for development of a new correctional facility in response to the Congressional directive. The LCPC consists of individuals representing a broad spectrum of community and business interests with first-hand knowledge of public services and infrastructure as well as conditions and characteristics influencing development in the county.

Candidate sites for development are identified by FBOP officials or, in the case of Letcher County, have been offered by the LCPC on the basis of initial site requirements:

- Prospective sites should have sufficient land area to accommodate the institution and ancillary facilities while providing a buffer zone between the facility and neighboring properties.
- Sites should have an area for development that is relatively level (less than 10 percent grade) to minimize site preparation and grading while providing for proper drainage; this can be adjusted for geographic regions with mountainous terrain.
- Sites should allow for development while avoiding sensitive environmental resources (i.e., floodplains, wetlands, threatened and endangered species habitats, cultural and historic resources, etc.).
- Sites should be located so as to avoid potential conflicts with adjoining or nearby land uses.
- Prospective sites should be serviceable by utility infrastructure and police and fire protection.
- Sites should be served by well-maintained U.S, state, and/or county roadways to ensure safe travel by employees, service vehicles, and visitors.
- Elected officials, community leaders, the public, and owners of the sites should be supportive of correctional facility development.

Sites that satisfy these initial requirements are evaluated further using additional criteria, including optimal infrastructure and environmental requirements. Criteria used to evaluate sites are established by the FBOP and supplemented as necessary during follow-up investigations to ensure that all issues or potential issues are adequately addressed by the evaluation. Sites that appear suitable are subjected to analysis in greater depth and documented in the form of EISs and other

technical studies. The analysis becomes progressively more thorough and detailed at each step in the process, leading to in-depth, comprehensive documentation in compliance with NEPA and other federal laws and regulations.

Accordingly, the FBOP proceeded with the evaluation of potential development sites in Letcher County to determine the degree to which such sites satisfy the established criteria and avoid significant adverse environmental consequences. Searches for alternative sites outside of Letcher County would also be contrary to the Congressional directive.

### **2.2.1 Identification of Alternative Sites**

In accordance with the Congressional directive, FBOP representatives have engaged in discussions with Letcher County officials and shared its site requirements involving minimum land area and configuration, roadway access, available utility services, and other factors. By understanding the needs of the FBOP, local officials, in conjunction with property owners, elected officials, and other community representatives, identified four candidate sites, the Meadow Branch, Payne Gap, Roxana, and Van/Fields sites, which were offered to the FBOP for consideration, inspection, and evaluation for possible facility development.

The four sites are all located within proximity of the City of Whitesburg with the Meadow Branch site approximately 12 miles southeast of Whitesburg along Kentucky Route 932. The Payne Gap Site is approximately 11 miles northeast of Whitesburg along U.S. Route 119 at County Route 3406 and Old Route 119 North while the Roxana Site is approximately 8 miles west of Whitesburg along Kentucky Routes 160 and 588. The Van/Fields Site is approximately two miles northeast of Whitesburg, along Kentucky Routes 15 and 160.

The FBOP responded by undertaking a Site Reconnaissance Study in 2008 to gather data to determine the suitability of each for development based on site conditions, roadway and utility infrastructure, and environmental resources. Based on the analysis, it was determined that the four sites should be studied further and in greater detail in the form of a Feasibility Study. The Feasibility Study, completed in 2011, assessed cultural resources, wetlands, geologic conditions, and infrastructure and provided more in-depth analyses of each site while identifying constraints that could eliminate a site from further consideration.

During the initial phases of the Feasibility Study completed in 2012, the Meadow Branch site became unavailable for FBOP use. No detailed analysis of the site was included in the study and the Meadow Branch site was subsequently dropped from consideration due to changes with the offeror. For the remaining sites, various technical studies were conducted including wetland delineations, archaeological and historic structures surveys, geotechnical investigations among others. During the finalization of the Feasibility Study there were changes with the offeror of the Van/Fields site as well, necessitating its removal from consideration. Although the Feasibility Study highlighted potential concerns and challenges associated with development, there were no conditions identified that would prevent or prohibit development at any of the three sites (TEC, Inc. 2012). The remaining sites, Payne Gap and Roxana, were identified as viable alternatives and were the subject of a DEIS published by the FBOP in February 2015 and subsequent EISs published between July 2015 and September 2017 (see Table 1-1).

At the time this EIS was initiated the FBOP undertook an additional search for other possible sites in Letcher County that could meet its requirements while minimizing environmental and other impacts. With the passage of time since the planning process began (2006) and the Final Supplemental Revised FEIS was published (2017), it was considered possible that other viable sites could be found that would be equal to or superior to the Payne Gap and Roxana Sites and would have the support of local officials, residents, and property owners. Provided below is a description of efforts to identify additional viable development sites.

### 2.2.1.1 Other Alternative Locations

Letcher County is located within the mountainous southeastern part of the Eastern Kentucky coal field, with rugged terrain and significant local relief. With the exception of Harlan County, no other county in Kentucky has higher elevations.

Pine Mountain is the most conspicuous topographic feature in Letcher County. Bisecting the county from southwest to northeast, the crest of this long, straight mountain marks approximately two-thirds of the county's southern boundary. Elevations along the crest of Pine Mountain range from approximately 2,600 feet above mean sea level (msl) on the east to 2,900 feet above msl on the west with the highest elevation at 3,273 feet above msl at a peak located approximately five miles east of Whitesburg. Differences in elevations between the mountain crest and the parallel valley floors are commonly 1,200 to 1,300 feet. Two prominent landmarks on Pine Mountain, Hurricane Gap on the Letcher-Harlan County line and Pound Gap on the boundary between Letcher County and Wise County, Virginia, have elevations of 2,220 and 2,380 feet above msl, respectively.

North of Pine Mountain, the terrain is typical of the dissected Eastern Kentucky coal field, a region of irregular mountains and valleys with ridgetop elevations commonly between 2,000 and 2,300 feet above msl. Topographic relief of 600 feet or more is found over most of this part of the county. The highest elevations in Letcher County are found on Black Mountain, a large, irregular mountain mass lying south of Pine Mountain. The crest of the mountain approximates part of the boundary between Letcher County and Wise County, Virginia with elevations greater than 3,500 feet above msl common here. As a point of reference, the City of Whitesburg is located at an elevation of approximately 1,164 feet above msl.

By their very nature, and for reasons of security and day-to-day operations, development of federal correctional facilities require large level buildable sites or sites that can be altered to provide the necessary level surface. With the exception of areas previously mined, much of the county's surface area consists of steeply sloping terrain with topographic conditions being the one natural feature exerting the greatest influence over developments in Letcher County.

As noted above, an additional effort was made to expand the number of candidate sites with the potential for development. The effort, undertaken from June to November 2022, which included consideration of the FBOP's minimum site, environmental, infrastructure, and other criteria, revealed pockets of relatively level topography scattered throughout the county. Many of these locations comprise previous surface mines which were reclaimed after the coal deposits were extracted and are now available for redevelopment as golf courses and other recreational uses and for housing and small-scale warehouse and other light industrial uses. In addition to areas where the surface extraction of coal took place, large tracts of land in Letcher County were subjected to underground coal mining which, depending upon the depth of the mines and mining methods, rendered such lands equal to or less suitable than the current alternative sites.

Together with areas identified during previously investigations, all such locations were deemed suitable only for small-scale developments. Many are located within lower elevations and adjoining or near streams and rivers where historic and recent flood events resulted in the loss of human life and widespread damage and destruction to structures and infrastructure. No new sites reviewed and visited in 2022 were found sufficiently level to accommodate the proposed development without significant topographic alterations and the associated environmental damage.

In addition to a site's physical characteristics, the interest and cooperation of property owners is another key factor in determining a site's potential for development. During the initial planning phase, the FBOP seeks out owners willing to negotiate a sale of their holdings thereby avoiding other methods to acquire property. During this current effort, inquiries and outreach were made to several property owners to determine their willingness to discuss their land holdings between June and November 2022; however, none

Given the above, the effort to identify other alternative locations in Letcher County for development of the proposed project ended in favor of continuing to consider the Payne Gap and Roxana Sites as alternatives.

### **2.2.2 Development Planning**

In the absence of additional alternative sites, the FBOP resumed its efforts on developing a new federal correctional facility at the available sites. Previous studies of the Payne Gap and Roxana Sites envisioned development of a high-security USP along with a FPC, support structures, an access driveway, an internal circulation system, and parking lots. With the proposed action now involving development of a medium-security FCI and minimum-security FPC, consideration was given to facility configurations, spatial relationships, and building locations and orientations. This included the layout and placement of AIC housing units, administration spaces, utilities, recreational areas, warehouse locations, internal access roads and parking areas, the training center and firing range, and other ancillary development. The effort also served to address sensitive environmental features where possible while minimizing the potential costs associated with the proposed development.

Attention was also given to security and operational requirements for the new facilities, together with other development factors including:

- Topographic conditions and drainage features to minimize earthwork and other site preparation requirements to achieve level building surfaces.
- Placing buildings on bedrock features while avoiding areas where subsidence could occur to reduce potential risks to the safety and security of AIC, employees, and visitors associated with ground settlement.
- FBOP guidelines and standards involving security zones and setbacks from roadways, structures, property lines, buffer areas, etc.
- Limiting temporary and permanent impacts to jurisdictional streams and wetlands and sensitive wildlife habitats.
- Ability to provide utility services to the proposed facility.

Conceptual development alternatives depicted building locations, orientations and configurations to achieve a balance between FBOP operational and security requirements and the need to minimize potential environmental impacts, development costs, etc. The progression of conceptual development alternatives served to incorporate favorable components derived from less optimal plans. In this way, conceptual development alternatives evolved to produce a single overall conceptual development plan which incorporates the best features of each preceding plan and is considered the Preferred Alternative.

### **2.2.3 Alternative Location, Payne Gap Site**

This alternative involves acquisition of approximately 753 acres of land known as the Payne Gap Site which is located approximately 11 miles east of Whitesburg. The site is situated on a steeply sloping upland landform above the Kentucky River at its confluence with the Laurel Fork. U.S. Route 119 is located along the north end of the site and would provide vehicular access. The site is covered by secondary growth forests and portions of the original topography have been altered by past mining activities. Spoil piles, unpaved roads, and fill piles litter the site. Mining permit applications indicate surface and underground mining operations dating to the 1950s have occurred within the site. Both summer roosting habitat and winter hibernaculum for the endangered northern long eared bat have been identified at the Payne Gap Site.

To accommodate development (i.e., FCI, FPC, ancillary support buildings, access roads, internal driveways and parking areas, and other features), approximately 300 acres of the Payne Gap Site would require extensive rock and spoil excavation and fill material to level and prepare the site for construction. While site preparation would require the removal of mine spoil, there are no slurry ponds or coal mine waste facilities located on or near the Payne Gap Site (U.S. Environmental Protection Agency [USEPA] 2015a, USEPA 2015b, and Sierra Club 2015) and no active mining is occurring on site.



#### **2.2.4 Alternative Location, Roxanna Site**

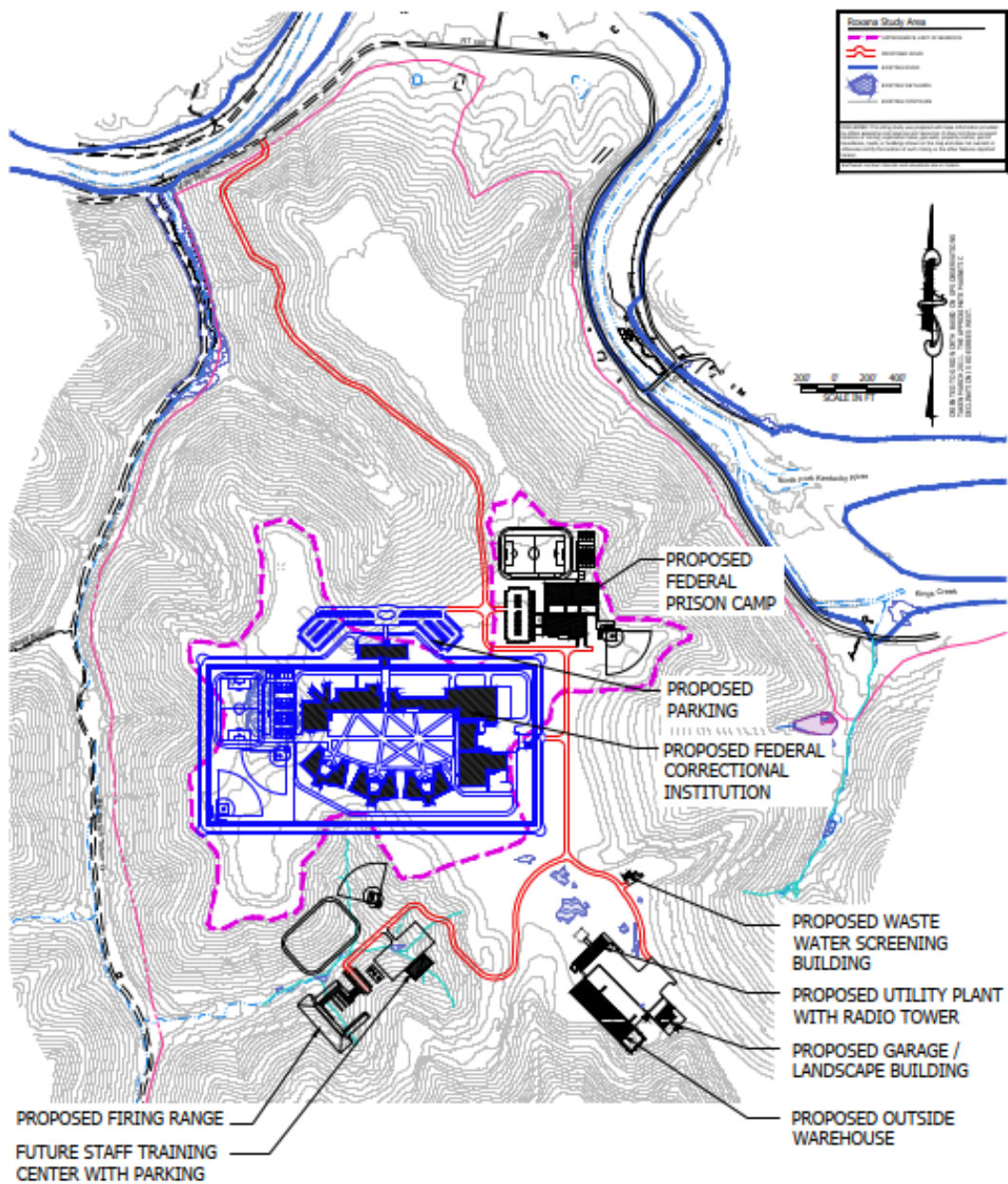
This alternative involves acquisition of approximately 500 acres of land known as the Roxana Site which is located approximately 10 miles west of Whitesburg. Much of the site consists of relatively steep terrain with similarly steep terrain extending beyond the site boundaries to the north and south. However, portions of the original topography have been altered by past mining activities rendering the central portion of the site relatively level. The site is also covered by secondary growth forests which have occurred since surface mining ended. Mining permit applications indicate mining operations dating to the 1960s have occurred within the site.

To accommodate development, approximately 200 acres of the site would require extensive excavation of spoil material and lesser amounts of structural fill and spoil fill. Preparation of the site for construction activities would also require dynamic compaction, clearing and alternation of previously mined areas, and forest clearing. Excavations would include the removal of mine spoil. No slurry ponds or coal mine waste facilities are located on or near the Roxana Site (USEPA 2015a, USEPA 2015b, and Sierra Club 2015) and no active mining is occurring on site. Exhibit 2-1 depicts the conceptual layout of the proposed FCI/FPC at the Roxana Site.

### **2.3 Preferred Alternative**

Development of the proposed medium-security FCI and minimum-security FPC at the Roxana Site is considered the Preferred Alternative as it best meets the project needs and, on balance, would have fewer impacts to the human environment. Threatened and endangered species habitat was also a factor in the identification of the Preferred Alternative with development at the Payne Gap Site potentially impacting a significant amount of summer roosting habitat versus the amount that would be impacted at the Roxana Site. Development at the Payne Gap Site would also have significant impacts to wastewater and natural gas infrastructure, while the Roxana Site would have less than significant impacts to infrastructure and utilities. Given that there have also been no meaningful changes or alterations to environmental and physical features, ownership arrangements, or off-site conditions affecting the Payne Gap Site, information contained in the 2015 – 2017 studies continues to be relevant and is incorporated by reference.

Based upon these and other potential environmental impacts applicable to each site, including wetlands and stream impacts and significantly greater site preparation required for the Payne Gap Site, development of the proposed project at the Roxana Site has been determined by the FBOP to be the Preferred Alternative. The Preferred Alternative meets the project objectives, is technically feasible, would have fewer natural resource and other environmental impacts, and incorporates measures to avoid or minimize environmental impacts to the extent practicable. Reinforcing the Roxana Site as the Preferred Alternative is the consistent, continuous, and unwavering support expressed by Letcher County's elected representatives, community leaders, members of local institutions and businesses, and the general public to developing the proposed correctional facility at the Roxana Site.



**Exhibit 2-1** Proposed FCI Site Plan

### **3.0 AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION**



## 3.0 AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION

This chapter examines environmental resources that have the potential to be affected by implementation of the No Action Alternative and Preferred Alternative. Natural resources, including topographic features, geology and soils, hydrological and biological resources among others, as well as community resources such as social and economic factors, environmental justice, land use, utility services, and transportation networks, are addressed. Each resource description focuses on the relevant attributes and characteristics of that resource with the potential to be affected by the alternatives or that could affect implementation of the alternatives.

NEPA regulations direct federal agencies to discuss any direct and/or indirect adverse environmental effects which cannot be avoided should the proposed action be implemented, and the means to mitigate adverse impacts if they occur. The NEPA regulations instruct federal agencies to consider both beneficial and adverse impacts of the proposed action and alternatives in terms of public health, unique features of the geographic area, the precedential effect of the action, public opinion concerning the action, and the degree to which the impacts are uncertain. Mitigation measures are identified as those actions that would reduce or eliminate potential environmental impacts that could occur from implementation of the alternatives. Mitigation, as defined by the NEPA regulations, includes:

- "Avoiding the impact altogether by not taking a certain action or parts of an action";
- "Minimizing impacts by limiting the degree or magnitude of the action and its implementation";
- "Rectifying the impact by repairing, rehabilitating, or restoring the affected environment";
- "Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action"; and
- "Compensating for the impact by replacing or providing substitute resources or environments."

The analyses which follow address the potential impacts associated with the No Action Alternative and Preferred Alternative and proposed mitigation, where appropriate. The potential impacts analysis evaluates the potential direct and indirect effects on each resource area for the Preferred Alternative (the Roxana Site), and the No Action Alternative. Potential impacts and measures to mitigate potential adverse impacts associated with the proposed action are discussed under each topic. If the FBOP decides to implement the Preferred Alternative, then these mitigation measures would also be discussed in the Record of Decision.

### 3.1 Topography

#### 3.1.1 Existing Conditions

Topography describes the physical surface of the land and includes elevation, slope, and other general surface features. In the case of Letcher County, topography is characterized as mountainous, as it is located in the southeastern part of the Eastern Kentucky coal field, with rugged terrain and substantial local relief. Pine Mountain is the most conspicuous and striking topographic feature in the county. Crossing the county from southwest to northeast, the crest of this long, straight mountain marks approximately two-thirds of the southern county boundary. In the southwest it is the boundary between Letcher and Harlan Counties, and in the southeast it is the boundary between Letcher County, Kentucky, and Wise County, Virginia. Only Harlan County in Kentucky has higher elevations than Letcher County.

Elevations along the crest of Pine Mountain range from approximately 2,900 feet above mean sea level (msl) on the west to 2,600 feet above msl on the east. The highest elevation on Pine Mountain, 3,273 feet above msl, is a peak located approximately five miles east of Whitesburg. Differences in elevation between the mountain crest and the parallel valley floors approximately 0.5-mile to the north are commonly 1,200 to 1,300 feet. Two prominent landmarks on Pine Mountain, Hurricane Gap on the Letcher-Harlan County line and Pound Gap on the boundary between Letcher County,

Kentucky, and Wise County, Virginia, have elevations of 2,220 and 2,380 feet above msl, respectively (McGrain and Currens 1978).

North of Pine Mountain, the terrain is typical of the dissected Eastern Kentucky coal field, a region of irregular mountains and valleys with ridgetop elevations commonly between 2,000 and 2,300 feet. Local relief of 600 feet or more is found over most of this part of the county. The highest elevations in Letcher County are found on Black Mountain, a large, irregular mountain mass lying south of Pine Mountain. The crest of the mountain approximates part of the boundary between Letcher County, Kentucky, and Wise County, Virginia. Elevations in excess of 3,500 feet are common here. The highest elevation in Letcher County, 3,720 feet above msl, is a peak on Black Mountain at the extreme southeastern corner of the county.

The lowest elevation in the county, approximately 940 feet above msl, is the point where the North Fork of the Kentucky River leaves the western edge of the county. All the communities are located in the valleys. The elevation of Whitesburg, the county seat, is 1,164 feet above msl while elevations (above msl) at other communities include Blackey at 1,000 feet; Fleming-Neon at 1,300 feet; Gordon at 1,309 feet; Jenkins at 1,526 feet; Letcher at 1,014 feet; Mayking at 1,214 feet; and Roxana at 1,043 feet.

The Roxana Site is located in west-central Letcher County between the City of Whitesburg and the Perry County border. According to USGS topographic mapping, much of the site consists of steep terrain with elevations ranging from approximately 1,080 to 1,880 feet above msl (USGS, Blackey, KY Quadrangle, 1997, and USGS, Roxana, KY Quadrangle, 1959). Similarly steep terrain extends beyond the site boundaries to the north and south as well (Exhibit 3-1). The highest elevations, at approximately 1,880 feet above msl, are found along the southern border of the site. The lowest elevations within the site coincide with water resources. The lowest elevation is approximately 1,080 feet, which is found along the northern border of the site, near KY 588 and the North Fork of the Kentucky River, and also in the north-central section of the site along Kings Creek and its unnamed tributary.

Topographic conditions within the Roxana Site have been significantly altered by a method of mining coal referred to as "mountaintop removal" where portions of the pre-existing mountainous terrain have been leveled, with a large volume of the resulting earthen material used to fill hollows and valleys. Steep mountain slopes and valleys are found throughout the majority of the site while gently rolling terrain resulting from mining has replaced the mountain ridge in the central portion of the site (elevation 1,525 feet above msl). While this change is not yet reflected in available USGS topographic maps, the highest and lowest elevations of the site remain largely unchanged. The highest elevation is located in the southeastern portion of the site at approximately 1,850 feet above msl while the lowest elevation is approximately 1,035 feet above msl in the northwestern portion of the site adjacent to the North Fork of the Kentucky River.

### **3.1.2 Potential Impacts**

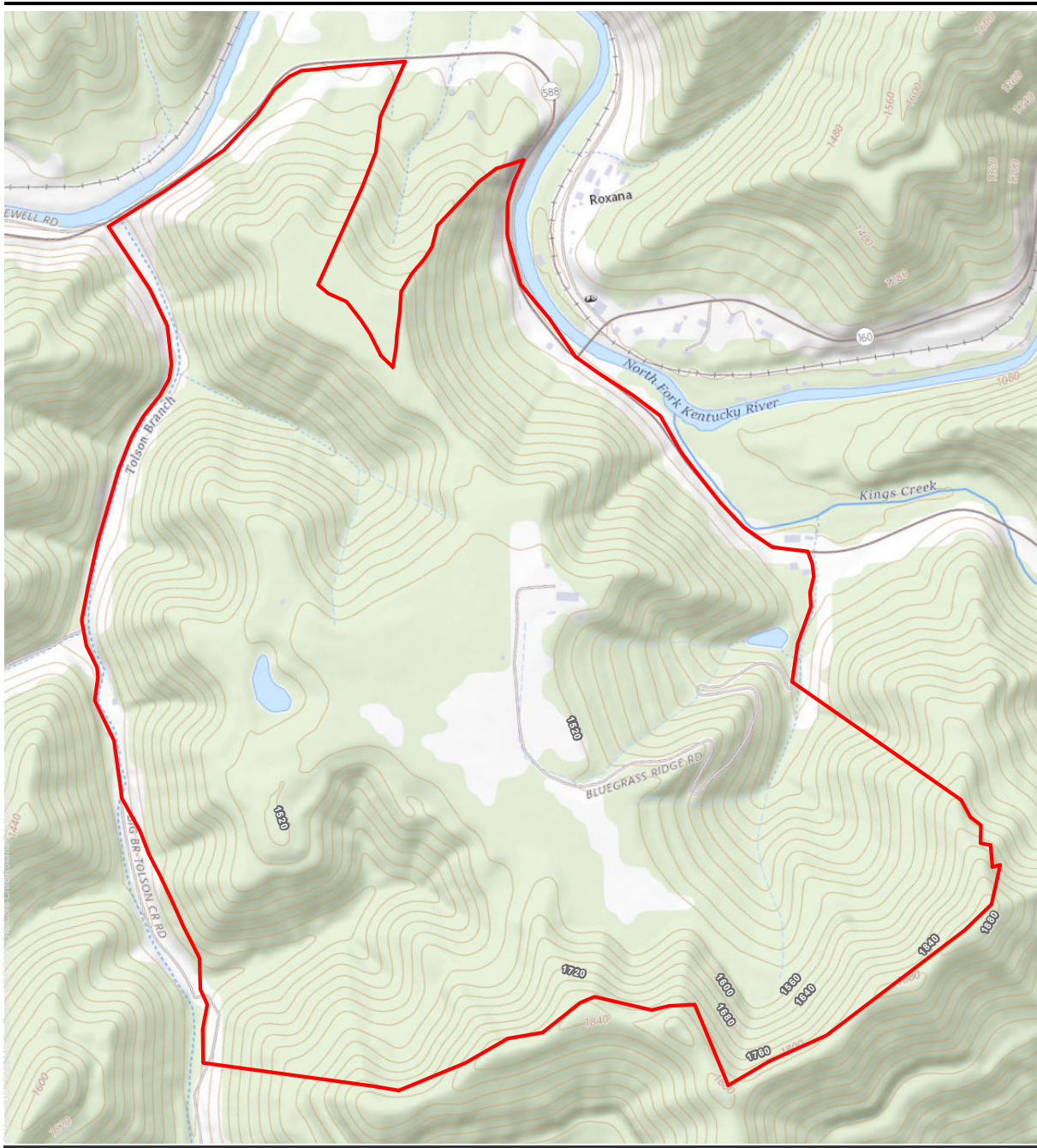
#### **3.1.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, topographic features and characteristics would be unaffected, and mitigation measures would not be necessary.

#### **3.1.2.2 Preferred Alternative**

Development of the Roxana Site would require significant earthwork and grading involving excavation (cut) in specific areas and valley fills in others to establish the necessary level and structurally stable building pads and to construct the access drive. This includes excavating the soil, spoil, and rock material that overlies the bedrock surface to allow the building foundations to be placed on firm base material. The excavated material would be placed in head-of-hollow fills situated adjacent to the proposed FCI/FPC location.

Based on the previous geotechnical study completed for a USP/FPC at the Roxana Site, estimates for earthwork and grading for the FCI/FPC involve approximately 950,000 cubic yards of rock



Source:  
 ESRI USA Topo Map  
 Service, obtained 2023.  
 Site falls within  
 Roxana, KY Quadrangle.



### Proposed Federal Correctional Institution and Federal Prison Camp Site Topography

Letcher County, Kentucky  
 December 2023

0 500 1,000  
 Feet

**Exhibit 3-1** Site Topography



excavation; 9.2 million cubic yards of spoil excavation, and 9.4 million cubic yards of structural fill. Excavated materials would be used on-site for structural fill. The maximum excavation (cut) at the site would be approximately 65 feet and the maximum fill would be approximately 215 feet. Where feasible, all grading and excavations of rock material would be performed using conventional equipment, however, the potential exists to utilize other means, including blasting, to carry out site preparation activities.

As a result of the anticipated excavation and fill activities, the topography of the site would be permanently changed from the present gently rolling, sloping, and steeply sloping conditions to a level platform throughout the development zone. Impacts as a result of the cuts and fills would include soil erosion and destabilization of slopes. No additional topographic impacts are anticipated once construction is completed.

### **3.1.3 Recommended Mitigation**

Given the site conditions and the substantial preparation required to develop the facility, the FBOP would locate the FCI/FPC building footprints, access drive, internal roadways and parking areas, utility corridors, and drainage facilities in a compact arrangement to unify the architectural design while minimizing earthwork and disturbance to the degree possible. Areas to be excavated, graded, filled, or otherwise disturbed for FCI/FPC development (i.e., the development zone) would be either built upon or stabilized and seeded.

Appropriate soil erosion and sediment control measures would be employed throughout the construction phase to minimize soil losses and similar short-term impacts resulting from site preparation and development activities. Implementation of best management practices (BMPs), to the extent practicable, would also occur to prevent damage from sedimentation, erosion, or dust entering streams, watercourses, natural areas, and adjoining properties. No other mitigation measures for topographic impacts are warranted.

## **3.2 Geology**

### **3.2.1 Existing Conditions**

#### **3.2.1.1 Geologic Features**

Geologic factors influence soil stability, bedrock depth, and seismic properties. Letcher County lies within the Eastern Kentucky Coalfields physiographic region, also known as the Cumberland Plateau and Mountains physiographic region and is comprised of the Pottsville (or Cumberland) Escarpment, the Cumberland Plateau, and the mountain and creek bottom (Bladen 1973,1984; McIntosh 2004). The southern portion of the Appalachian Plateau physiographic province, which extends from New York to Alabama, also envelops the region. The Eastern Coalfields physiographic region begins in the west with the Pottsville Escarpment. It is a rock wall with a coarse-grained Rockcastle sandstone conglomerate cap (Bladen 1973; Bladen 1984). This area is deeply incised by eroding streams.

The Cumberland Plateau is located between the Pottsville Escarpment to the west and the mountain and creek bottom area to the east. Deep canyons and gorges have been created by streams cutting through layers of soft decomposed shale and shales (Bladen 1973,1984; Newell 1986). The last area, east of the Cumberland Plateau, is the mountain and creek bottom, which consists of the Cumberland and Pine Mountains. The Cumberland Mountains are the projecting edge of the Pottsville sandstone, known as the Lee conglomerate. Similarly, the Pine Mountain range is the projecting edge of the Lee conglomerate. The mountain ranges were formed by an uplifting fault (Bladen 1973, 1984).

The Roxana Site is underlain by the Breathitt Group which is comprised of the Pikeville Formation and the Hyden Formation (Exhibit 3-2). The Hyden and Pikeville Formations consist of sandstone, siltstone, claystone, and coal. The Roxana Site is also underlain by the Four Corners Formation, which is composed of sandstone, siltstone, claystone, coal, and limestone (Kentucky Geological Survey 2020).

### 3.2.1.2 Previous Mining

According to studies conducted on behalf of the FBOP, the Roxana Site was surface mined using mountaintop mining methods in the late 1980s – early 1990s (Cardno 2016 and Kentucky Department for Surface Mining Reclamation and Enforcement). The site has been fully reclaimed and requires no further monitoring or reporting, based on research of Kentucky Department of Natural Resources, Division of Mine Permits, Surface Mining Information System databases. The permit is identified as having been released in the Division of Mines' Mine History Report for Cumulative Impact Area assessment.

Surface mining conducted at the site involved the removal of up to 200 feet of overburden to allow recovery of the Fireclay Rider (also known as Hazard No. 4 Rider) coal seam. Overburden material was replaced onto the nearly horizontal coal seam pavement after the coal was extracted, and in three head-of-hollow fills located to the northwest, east, and southeast from the mined area. The depth of rubble over the reclaimed mine area ranges from 0 to approximately 56 feet, based on available exploratory drilling results.

While records available from Environmental Data Resources, Inc. (EDR) indicate that underground coal mining was also conducted on the site (EDR 2023), no underground mining is known to have occurred beneath the planned development zone. There is one long-inactive underground mine, in the Fireclay Rider coal bed, located to the south of the area of previous surface mining (Big Oak Coal Company, Kentucky Permit No. 867-5062). The mine horizon is found at an elevation of approximately 1,525 feet above msl.

### 3.2.1.3 Seismicity

Based on historical earthquake locations and the recurrence rate of fault ruptures, USGS has produced seismic hazard maps that show, by contours, earthquake ground motions that have a common probability of being exceeded in a specified time period under specific geological site conditions (USGS 2014). The predicted maximum amount of earthquake-induced shaking with a two percent probability of being exceeded in 50 years is shown on these maps. Ground motion is expressed as a percentage of the force of gravity (percent g) and is proportional to the hazard faced by a particular type of building.

In general, little or no damage can be expected at values less than 10 percent g, moderate damage at 10 to 20 percent g, and major damage at values greater than 20 percent g. Letcher County is situated on contours ranging from 8 to 16 percent g (Exhibit 3-3). Thus, the potential for damage from seismic activity is a moderate concern for new developments in this region of Kentucky.

## 3.2.2 Potential Impacts

### 3.2.2.1 No Action Alternative

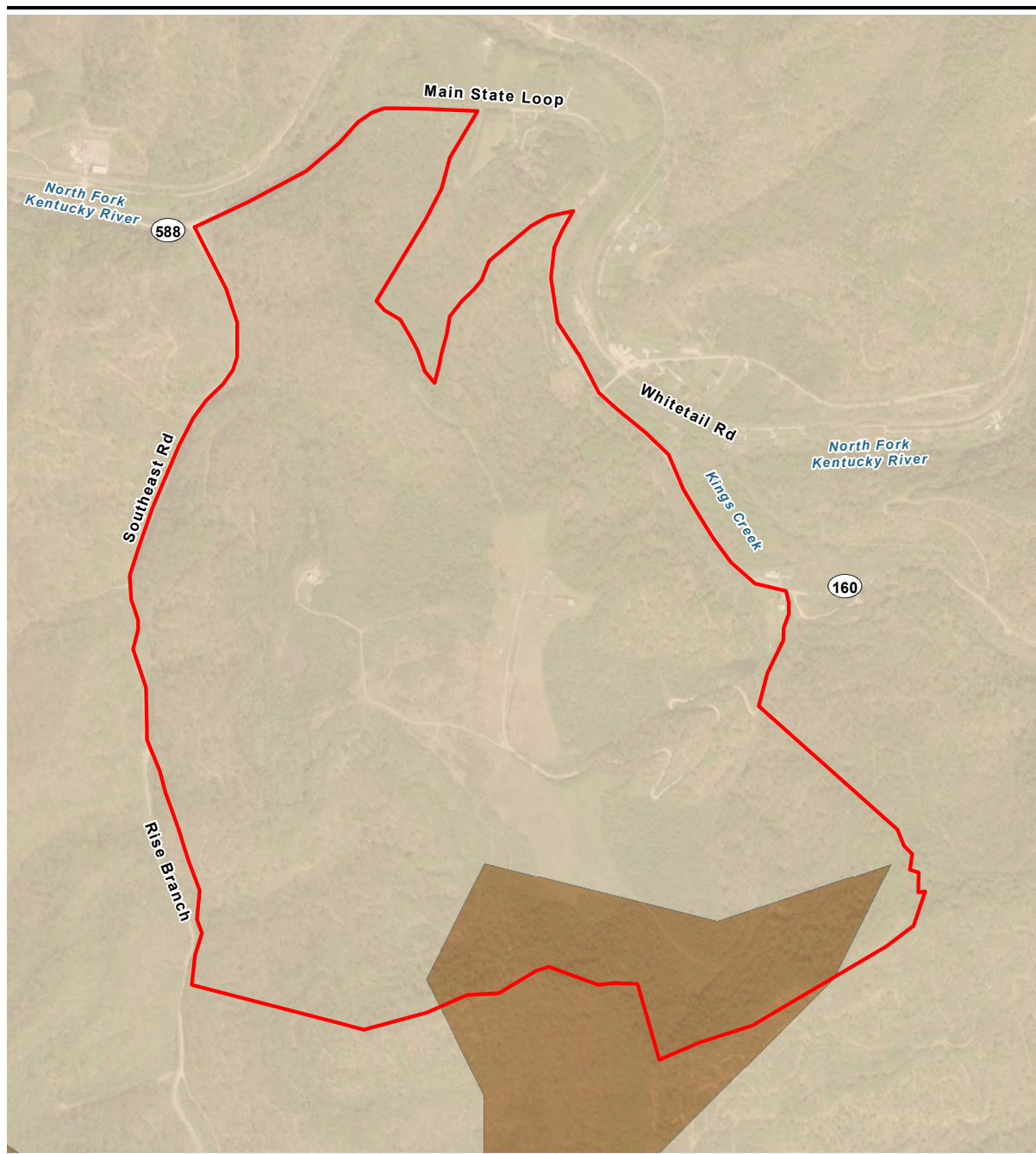
Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, geologic features and characteristics would be unaffected, and mitigation measures would not be necessary.

### 3.2.2.2 Preferred Alternative

#### *Geologic Features*

Geologic features influence soil stability, bedrock depth, and seismic properties. Development of the Roxana Site would require significant excavations and valley fills to establish the level and structurally stable building pads, the access drive and other internal roads, parking areas, underground utility installations, stormwater management facilities, etc. with additional disturbance of natural geologic features limited to those areas where deep excavations for footings and foundations would occur (See also Appendices F and G).

Where feasible, all excavations of rock material would be performed using conventional equipment, however, the potential exists to utilize other means, including blasting, to carry out site preparation



#### Legend

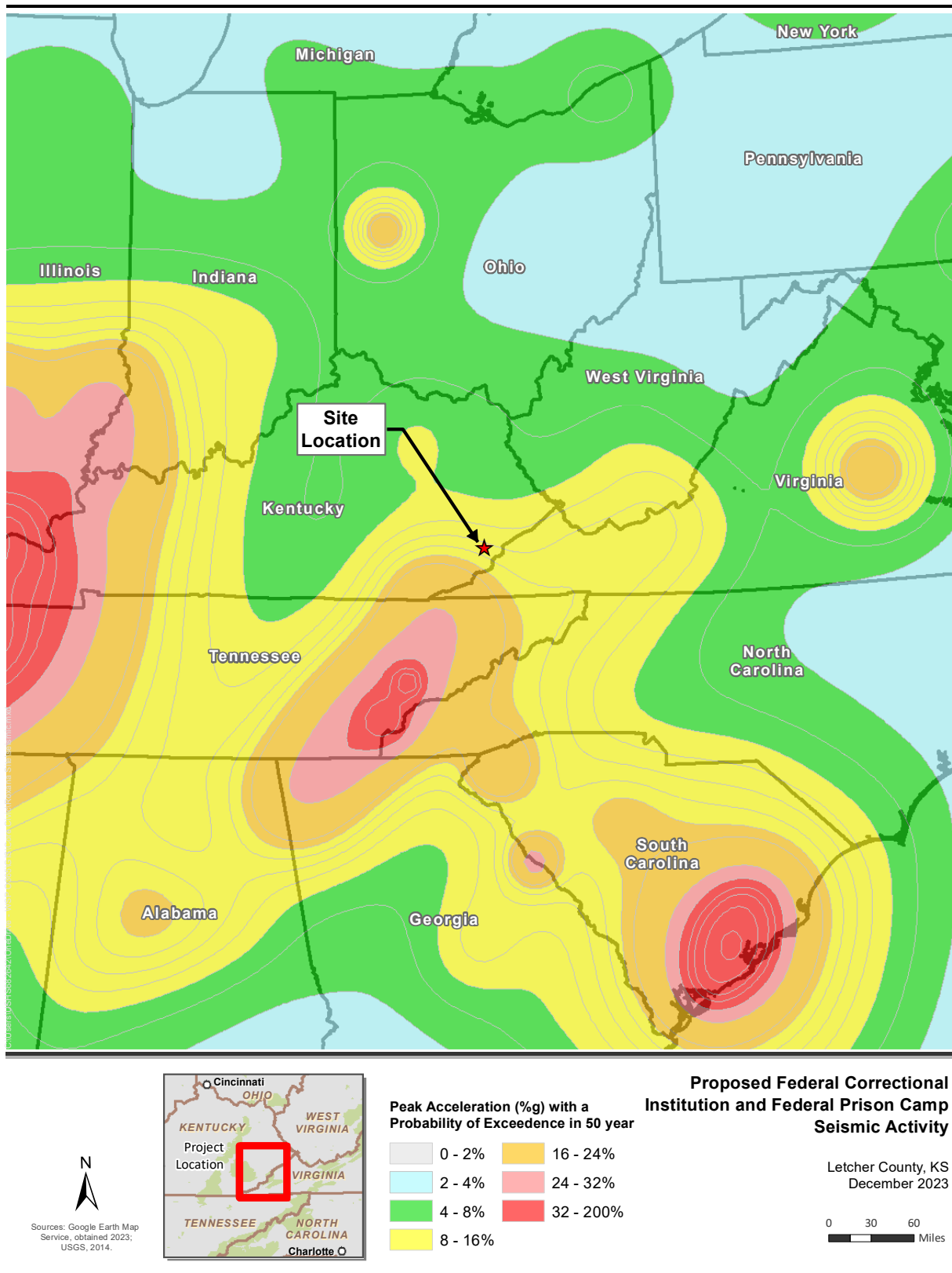
- Study Area
- Pbl - Breathitt
- Formation, lower part (incl Livingston Cgl)
- Pbm - Breathitt Formation, middle part

#### Proposed Federal Correctional Institution and Federal Prison Camp Geology

Letcher County, Kentucky  
December 2023



**Exhibit 3-2** Geology



**Exhibit 3-3** Seismic Activity



activities. FCI/FPC development is not expected to result in significant adverse impacts to geologic features and no additional impacts are anticipated once construction is completed.

### *Seismic Hazards*

Potential seismic hazards affecting development of the proposed FCI/FPC are discussed below.

- **Ground Shaking.** The intensity of ground shaking is highly dependent upon the distance to a fault, the magnitude of the earthquake, and the soil conditions beneath the site. The Roxana Site is located in an area of moderate seismic risk with the potential to experience ground shaking during a seismic event considered moderate.
- **Primary Ground Rupture.** Primary ground rupture is ground deformation that occurs along the surface trace of the causative fault during an earthquake. The proposed site is not known to be located on or near an active fault, however, it is located in an area of moderate seismic risk with the potential to experience primary ground rupture during a seismic event considered moderate.
- **Liquefaction.** Liquefaction is the transformation of a cohesionless (sandy) soil from a solid to a liquid state caused by an increase in pore pressure and a reduction in effective stress. It can occur when sandy soils are subjected to strong ground shaking. The proposed site does not contain sandy soils, therefore, the potential for liquefaction is considered low.
- **Seismically Induced Settlement and Differential Compaction.** Seismically induced settlement and differential compaction occur when soft or loose soils experience a reduction in strength caused by strong ground motion. With a large portion of the site consisting of overburden removed during the coal mining process, the potential to experience ground shaking during a seismic event considered moderate.
- **Other Phenomena.** Other phenomena include earthquake-induced flooding and tsunamis. Since the Roxana Site is not located near or at elevations below lakes, dams, or other large surface water bodies, these phenomena are not likely to occur.

The potential for damage from seismic activity is a moderate concern for development of the proposed FCI/FPC at the Roxana Site.

### **3.2.3 Recommended Mitigation**

Development of the proposed FCI/FPC is not expected to result in significant adverse impacts to geologic conditions, however, engineering studies of subsurface conditions would be undertaken prior to design and construction to ensure that appropriate design standards and sound building practices are implemented. This includes consideration of the risk from seismic activity and to address this risk properly during design and construction. No other mitigation measures are warranted.

## **3.3 Soils**

### **3.3.1 Existing Conditions**

Soil is the unconsolidated material above bedrock and is formed from the weathering of bedrock and other parent materials. The U.S. Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS) Custom Soil Resource Report for Knott and Letcher Counties, Kentucky, indicates there are nine soil units comprising the Roxana Site (Exhibit 3-4). As previously described a large portion of the site has been significantly altered from its original condition by mountaintop removal with a large volume of native earthen material moved to fill hollows and valleys during coal mining.

According to the Custom Soil Resource Report for Knott and Letcher Counties, Kentucky, approximately 80 percent of the soils at the Roxana Site comprise the Cloverlick-Kimper-Highsplint complex unit, (30 to 65 percent slopes), the Kaymine, Fairpoint and Fiveblock unit (2 to 70 percent slopes), and the Shelocta-Highsplint unit (20 to 70 percent slopes). To a lesser degree the following soils are also on the site: Allegheny Loam (2 to 15 percent slopes), Dekalb-Gilpin-Rayne complex (25

to 65 percent slopes), Fiveblock and Kaymine soils (0 to 30 percent slopes), Gilpin-Shelocta complex (12 to 25 percent), Grigsby sandy loam (frequently flooded), Grigsby-Urban land complex (0 to 3 percent slopes), and Urban land-Udorthents-Grigsby complex (0 to 6 percent slopes). Each soil unit, the extent of coverage, and the hydric soil and prime farmland status of each mapping unit are identified in Table 3-1.

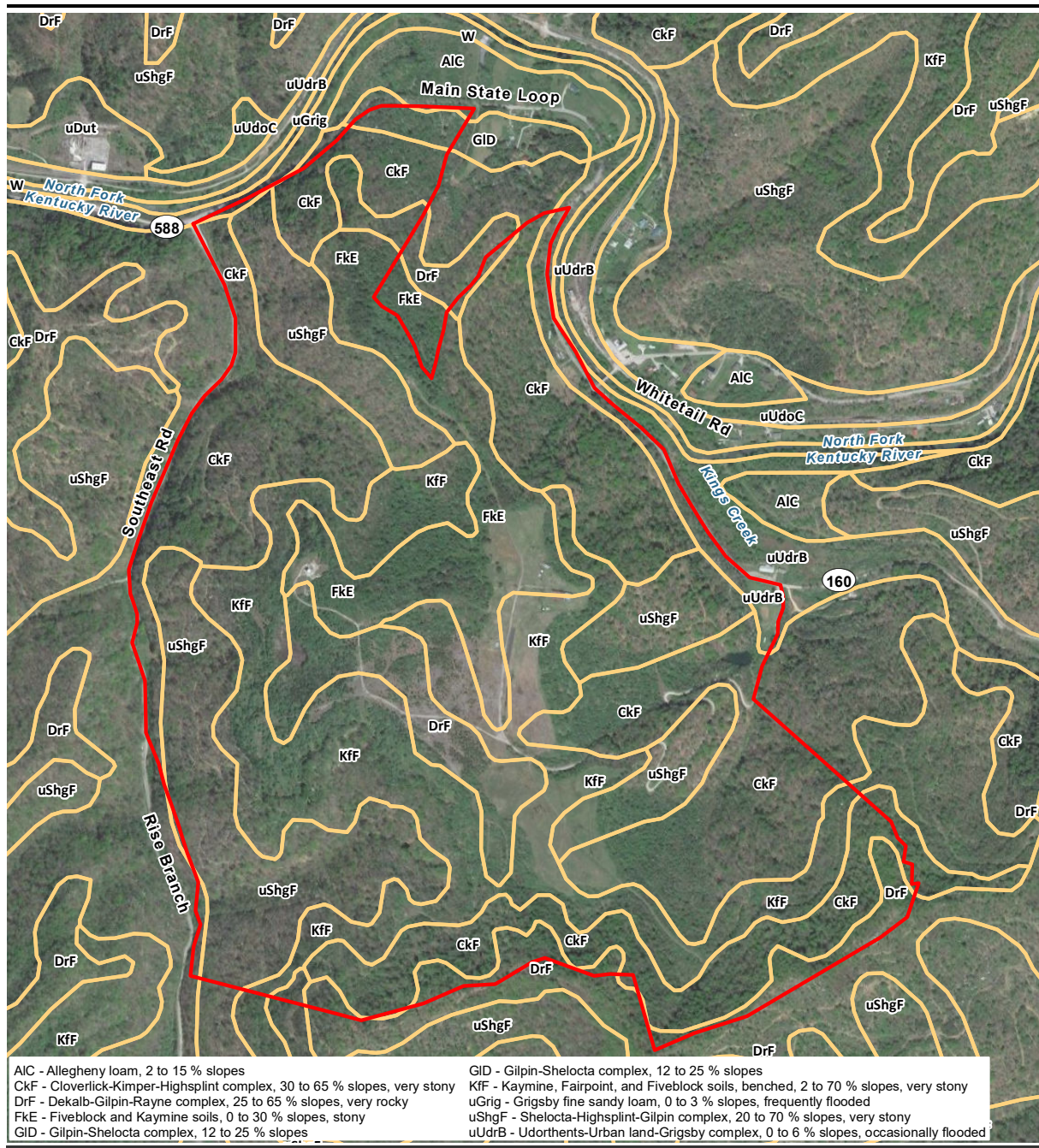
**Table 3-1** Soil Types and Characteristics

Soil Unit Symbol	Soil Unit Name	Percentage of Site	Hydric Soil	Prime Farmland
AIC	Allegheny loam, 2 to 15% slopes	0.1%	No	Farmland of statewide importance
CkF	Cloverlick-Kimper-Highsplint complex, 30 to 65% slopes, very stony	35.4%	No	Not prime farmland
DrF	Dekalb-Gilpin-Rayne complex, 25 to 65% slopes, very rocky	9.7%	No	Not prime farmland
FkE	Fiveblock and Kaymine soils, 0 to 30% slopes, stony	9.6%	No	Not prime farmland
GID	Gilpin-Shelocta complex, 12 to 25% slopes	0.8%	No	Not prime farmland
KfF	Kaymine, Fairpoint, and Fiveblock soils, benched, 2 to 70% slopes, very stony	23.0%	No	Not prime farmland
uGrig	Grigsby fine sandy loam, 0 to 3% slopes, frequently flooded	0.1%	No	Prime farmland if protected from flooding or not frequently flooded during the growing season
uShgF	Shelocta-Highsplint-Gilpin complex, 20 to 70% slopes, very stony	19.8%	No	Not prime farmland
uUdrB	Udorthents-Urban land-Grigsby complex, 0 to 6% slopes, occasionally flooded	1.5%	No	Not prime farmland
Source: Custom Soil Resource Report for Knott and Letcher Counties, Kentucky (USDA-NRCS 2023)				

A hydric soil is one that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part and is one of three indicators of a wetland environment. None of the soils associated with the Roxana Site are listed as hydric by NRCS.

Prime farmland is protected under the Farmland Protection Policy Act (FPPA) of 1981 (7 U.S. Code [USC] 4201 et seq.) which was introduced to conserve farmland soil and discourage the conversion of prime farmland soil to a non-agricultural use. The FPPA considers prime farmland soils as those that have the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed.

Farmland of statewide importance is land that is not prime or unique but is considered of statewide importance for the production of food, feed, fiber, forage and oilseed crops while farmland of local importance has local significance for production of food, feed, fiber and forage. These soils economically produce high yields of crops when treated and managed according to acceptable farming methods. Allegheny loam, 2 to 15 percent slopes soil unit, is considered as farmland of statewide importance (NRCS 2013). The soil is located in the floodplain of the North Fork of the Kentucky River in the northernmost portion of the site and comprises less than one percent of the Roxana Site's land area.



**Exhibit 3-4** Soils



The USDA-NRCS is responsible for overseeing compliance with the FPPA and has developed the rules and regulations for implementation of the Act (7 CFR Part 658, July 5, 1984). The implementing procedures of the FPPA require federal agencies to evaluate the adverse effects (direct and indirect) of their activities on prime and unique farmland, as well as farmland of statewide and local importance, and to consider alternative actions that could avoid adverse effects. Determining whether an area is considered prime or unique farmland and potential impacts associated with a proposed action is based on the outcome from preparation of the Farmland Conversion Impact Rating Form AD1006 for areas where prime farmland soils occur and by applying criteria established in the FPPA.

### **3.3.2 Potential Impacts**

#### **3.3.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, soil types and characteristics would be unaffected, and mitigation measures would not be necessary.

#### **3.3.2.2 Preferred Alternative**

Construction activities associated with site preparation and development (i.e., ground clearing, grading, trenching, excavation, filling, etc.) would directly affect native and other soils found within the limits of the FCI/FPC development zone and along the new access drive, internal roads, utility corridors, drainage facilities, etc. Construction of the proposed FCI/FPC would also expose soils to potential wind and water erosion and therefore, some slight, temporary adverse effects to soils would be expected. However, a large portion of the Roxana Site has been significantly altered from its original condition by mountaintop removal coal mining with a large volume of native earthen material used to fill hollows and valleys. Gently rolling terrain, resulting from past mining activities, has replaced a mountain ridge in the central portion of the site effectively eliminating native soils that one existed in this area of the site.

Construction of the FCI/FPC and ancillary facilities, access drive and internal roadways, parking areas and walkways, would require the removal of the overburden deposited during past mining operations and permanently impacting approximately 200 acres of soil within the development zone. Estimates for earthwork and grading involve approximately 950,000 cubic yards of rock excavation; 9.2 million cubic yards of spoil excavation, and 9.4 million cubic yards of structural fill with suitable excavated materials used on-site for structural fill.

Long-term impacts would occur in those areas where soils would be excavated, compacted or covered by structures, internal driveways, walkways, and parking areas. However, no additional impacts to soils are anticipated once construction is completed.

There are no commercial agricultural activities underway within the Roxana Site or its immediate surroundings and, therefore, the proposed project poses no significant adverse impact to agricultural activities in Letcher County. In accordance with the FPPA, preparation and submission of Form AD1006 has occurred to document potential impacts to prime farmland soils. The NRCS has been requested to review the Roxana Site with respect to requirements of the FPPA and to determine the potential impacts to farming as a result of the proposed project (Response pending) (Appendix B).

### **3.3.3 Recommended Mitigation**

Prior to initiating FCI/FPC construction extensive engineering studies would be conducted to ensure proper building placement, layout, and design. During these studies, attention would be directed toward erosion potential and other engineering characteristics of rocks, spoil material, and soils encountered within the development zone.

To minimize potential adverse impacts to soils and the erosion and sedimentation which can result during development, a soil erosion and sediment control plan would be prepared for approval by appropriate Commonwealth and local authorities. The plan would outline measures for controlling

erosion and sedimentation during construction such as placement of silt fencing and use of hay bales to minimize the dispersal of sediment within and around the construction zone, stabilization of exposed earth, and methods to control stormwater runoff during construction. BMPs, as applicable to site conditions, would also be implemented to prevent the migration of sediment off site to adjoining properties, surface waters, or natural areas. Upon completion of construction, re-vegetation of disturbed areas using native species would occur to minimize erosion of exposed soil.

Prior to initiating construction, construction contractors, with appropriate oversight and monitoring by the FBOP, would be responsible for implementing the soil erosion and sediment control measures defined in the plan with a copy of the plan maintained on-site throughout the duration of construction. Erosion control measures would also be inspected periodically and replaced or repaired as required. Among the measures to be included as part of the plan are those described below.

- **Construction Entrance**

A stabilized (stone) entry pad would be established at the construction site near the public roadway and be periodically inspected during construction. Among the purposes of the stabilized entry would be to avoid having sediment from construction vehicles tracked onto public thoroughfares. Additional stone would also be available so that the minimum dimensions can be maintained throughout the construction period.

- **Sediment Basins**

One or more sediment basins would be incorporated within the erosion control plan and be inspected periodically during construction. Sediment which accumulates within the basin(s) would be removed when it reaches the clean-out elevation. Filters around riser pipes would also be maintained throughout construction as would the dimensions of the basin(s).

- **Filter Fabric Fences**

Filter fabric fences would be installed where appropriate and would be inspected periodically. Sediment would be removed when the buildup reaches approximately one-half the height of the fence. Filter fabric fences damaged during construction would also be replaced in-kind.

- **Swales and Berms**

Swales and berms, if incorporated within the plan, would also be inspected periodically to ensure proper functioning. Berm heights and swale depths would also be maintained throughout the construction phase.

- **Inlet Protection**

Inlets would be inspected periodically during construction and any sediment accumulating around inlets would be removed when the build-up reaches one half the height of the inlet filter. Additional stone would also be available so that the minimum dimensions can be maintained throughout the construction phase.

- **Other Measures**

When trenching for underground utilities, constructing internal access driveways, and during other excavations or similar work, soil would be deposited on the upgrade side wherever possible to minimize soil migration. Soil preparation, fertilizing, and temporary and permanent seeding with native species would also follow the construction phase as soon as practicable. If weather conditions affect planting, exposed earth would be covered with hay, straw mulch, geotextiles, erosion control blankets, mats, or other suitable protective covering to keep soil from eroding by water or wind. Additional measures to be considered include protecting slopes and channels, promoting infiltration where practical, and minimizing the area and duration of exposed soils. Covering on-site soil and similar material stockpiles also helps reduce soil migration and the resulting sedimentation.

Erosion control measures to be employed following construction would be maintained lawns and landscaping, discharge pipe aprons, pipe outlet channels, and similar stormwater controls. The FBOP will be responsible for ensuring that such measures are deployed and maintained where

appropriate to minimize potential adverse impacts and to comply with applicable regulations. No other mitigation measures involving soils are warranted.

## **3.4 Hydrology**

### **3.4.1 Existing Conditions**

#### **3.4.1.1 Surface Waters**

Letcher County has an abundance of surface water suitable for domestic and recreational uses. The North Fork of the Kentucky River, which flows through the center of the county, is the largest surface water resource in the area while the Cumberland River is another large surface water resource flowing in the southeastern section of the county. Other principal surface water resources include Fish Pond Lake, Smoot Creek, Kings Creek, Meadow Branch, Kingdom Come Creek, Cowan Creek, Sandlick Creek, and Crafts Crolley Creek.

The Roxana Site lies within the Ohio Region (Hydrologic Unit Code [HUC] 05); Kentucky-Licking Subregion (HUC 0510); the Kentucky River Basin (HUC 051002); and the North Kentucky River Watershed (HUC 05100201) (U.S. Environmental Protection Agency 2013a) which drains an area of approximately 879 square miles. The North Fork of the Kentucky River flows to the east near the northern section of the site and borders the site for short distances. Flowing northward into the North Fork is Kings Creek which forms much of the site's eastern border while Tolson Branch, also flowing northward to the North Fork, forms the site's western border.

Hydrologic features of the Roxana Site have been substantially altered from their original condition as a result of past mining. At present, surface waters within the Roxana Site consist of ephemeral streams, intermittent streams, and perennial streams. Fifteen ephemeral tributaries were identified within the site. Within the eastern portion of the site, several ephemeral tributaries flow west to the confluence with Tolson Branch while the remaining ephemeral tributaries drain into other water resources such as intermittent tributaries.

Seventeen intermittent tributaries and four perennial tributaries were also identified within the site. All tributaries are dispersed along the outer edges of the site with the western tributaries draining into Tolson Branch and the eastern tributaries draining into the North Fork of the Kentucky River. During a recent field visit (October 2023), most of the intermittent tributaries had standing water with no visible flow. Approximately 25,338 linear feet of streams were delineated within the site boundaries (Table 3-2).

#### **3.4.1.2 Water Quality**

Water quality refers to the suitability of water for a particular use (i.e., potable supply, irrigation, industrial use) based on selected physical, chemical, and biological characteristics. Water quality is regulated under the Federal Water Pollution Control Act, as amended by the Clean Water Act (CWA). The CWA prohibits spills, leaks, or other discharges of oil or hazardous substances into waters of the United States (WOTUS) in quantities that may be harmful. The CWA also requires each state to establish water quality standards for its surface waters derived from the amount of pollutants that can be assimilated by a body of water without deterioration of a designated use. Waters not meeting the water quality standards may require the establishment of a total maximum daily load (TMDL) for the waterbody. Impaired waters requiring a TMDL are called 303(d) listed waters (Kentucky Energy and Environment Cabinet 2022).

Water quality of the streams on the Roxana Site has not been assessed by the U.S. Environmental Protection Agency (USEPA), and there are no identified impaired waters or TMDLs for the site (USEPA 2023c). The closest assessed water body to the Roxana Site is the North Fork of the Kentucky River, located on the opposite side of KY 588 and KY 160.

Mining operations have the potential to affect water quality of the North Fork Kentucky River Watershed. There are several active mining operations in the watershed. These mining operations have no direct impacts on water quality of the Roxana Site due to their distance (approximately one

**Table 3-2** Surface Waters Delineated Within the Roxana Site

Aquatic Resource	Cowardin Classification	Water Type	Length (linear feet)
WUS001	R5UB	Ephemeral	454.7
WUS002	R5UB	Ephemeral	559.1
WUS002	R4SB1	Intermittent	121.5
WUS002	R2UB1	Perennial	1,316.5
WUS003	R4SB1	Intermittent	372.4
WUS004	R3SB3	Perennial	8,145.9
WUS005	R4SB1	Intermittent	2,152.4
WUS006	R5UB	Ephemeral	258.4
WUS007	R5UB	Ephemeral	468.7
WUS008	R4SB1	Intermittent	456.8
WUS009	R4SB1	Intermittent	106.5
WUS010	R5UB	Ephemeral	729.3
WUS011	R5UB	Ephemeral	127.6
WUS012	R4SB1	Intermittent	659.9
WUS013	R5UB	Ephemeral	129.3
WUS014	R3UB1	Perennial	774.6
WUS015	R4SB1	Intermittent	296.3
WUS016	R4SB1	Intermittent	187.6
WUS017	R5UB	Intermittent	53.8
WUS018	R4SB1	Intermittent	287.1
WUS020	R5UB	Ephemeral	379.6
WUS021	R5UB	Ephemeral	263.9
WUS021	R4SB1	Intermittent	90.9
WUS022	R4SB1	Intermittent	802.5
WUS023A	R4SB1	Intermittent	120.5
WUS023B	R4SB1	Intermittent	49.6
WUS024	R5UB	Ephemeral	420.9
WUS100	R5UB	Ephemeral	1,003
WUS101A	R5UB	Ephemeral	865.9
WUS101B	R5UB	Ephemeral	117.5
WUS102	R2SB3	Perennial	1,894
WUS102A	R5UB	Ephemeral	38
WUS102B	R5UB	Ephemeral	381.6
WUS102B	R4SB1	Intermittent	118.7
WUS103	R3UB1	Intermittent	1,033.4
WUS103A	R4SB1	Intermittent	99.7
<b>Total</b>			<b>25,338.1</b>
Notes: R2SB3: Riverine, Lower Perennial, Streambed, Cobble-Gravel R2UB1: Riverine, Lower Perennial, Unconsolidated Bottom, Cobble-Gravel R3UB1: Riverine, Upper Perennial, Unconsolidated Bottom, Cobble-Gravel R3SB1: Riverine, Upper Perennial, Streambed, Bedrock R3SB3: Riverine, Upper Perennial, Streambed, Cobble-Gravel R4SB1: Riverine, Intermittent, Streambed, Cobble-Gravel R5UB: Riverine, Unknown, Ephemeral, Unconsolidated Bottom			



mile or greater) and hydrological separation from the site. Because municipally supplied water is drawn from the North Fork in Letcher County, indirect impacts to public health have the potential to occur if drinking water quality upstream of water intake infrastructure were to be compromised by mining or other activities in the North Fork watershed. The water supply would need to be treated to meet drinking water standards prior to distribution to consumers.

### **3.4.1.3 Floodplains**

Executive Order (EO) 11988, Floodplain Management, defines floodplains as the lowland and relatively flat areas adjoining inland waters, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year. The area subject to a one percent chance of flooding is referred to as the 100-year floodplain. EO 11988 also established a general policy and specific requirements for compliance by federal departments and agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid the direct or indirect support of floodplain development whenever there is a practicable alternative. If an action must be located in a floodplain, EO 11988 requires that agencies minimize potential harm to people and property and to natural and beneficial floodplain values.

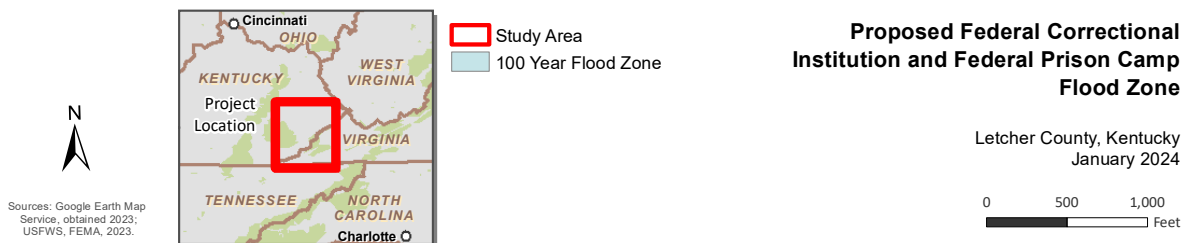
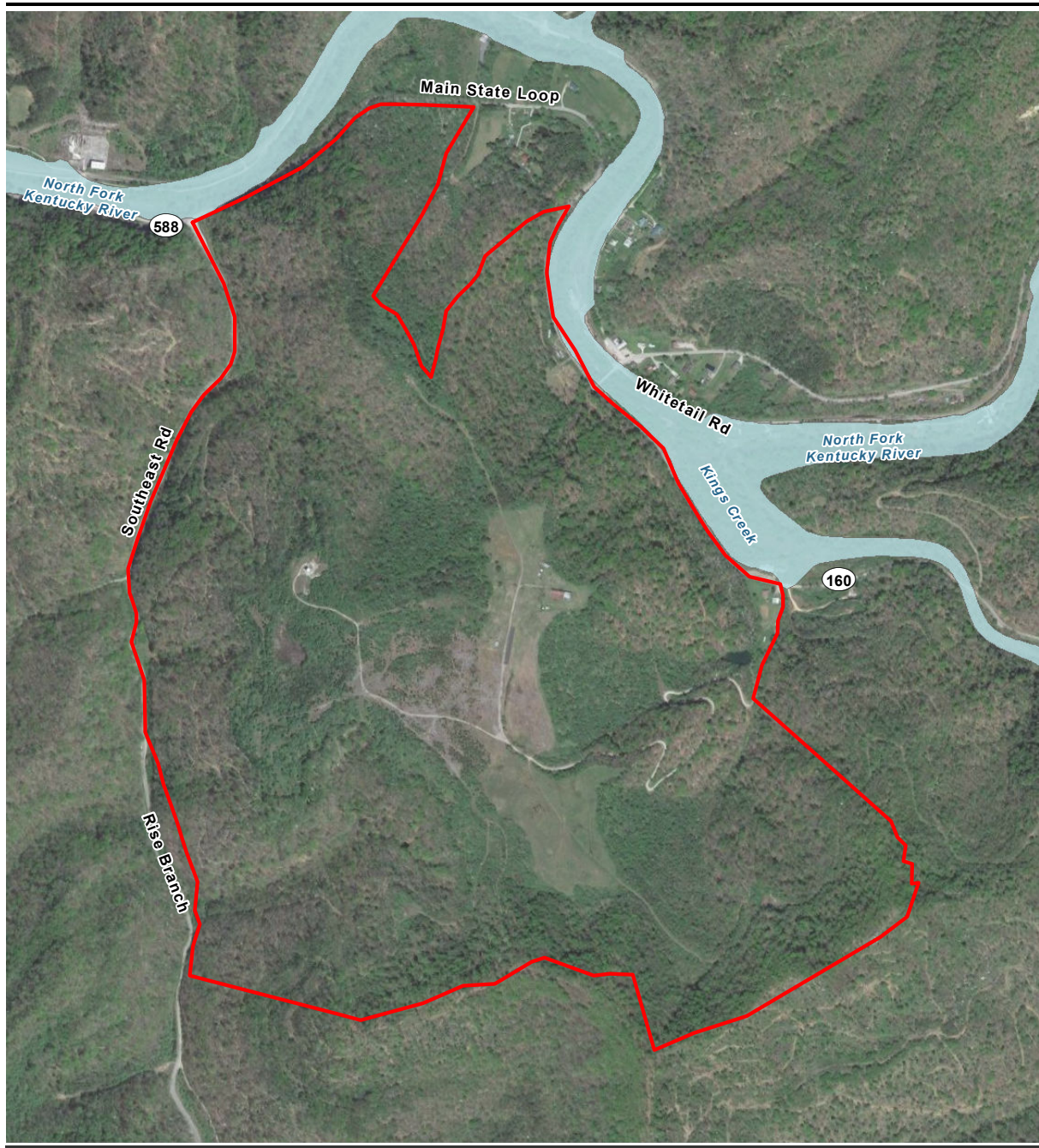
EO 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input (issued January 30, 2015), amended EO 11988 and established the Federal Flood Risk Management Standard (FFRMS) to improve the nation's resilience to current and future flood risks, which are anticipated to increase over time due to the effects of climate change and other natural threats. EO 13690 and the FFRMS reinforce the important principals defined in EO 11988, such as avoiding adverse impacts associated with actions in a floodplain and minimizing potential harm if an action must be located in a floodplain. EO 13690 and the FFRMS expand upon these principals by calling for agencies to use a higher vertical flood elevation and corresponding horizontal floodplain than the base flood for federally funded projects to address current and future flood risk.

Officially designated floodplains and floodways are established by the Federal Emergency Management Agency (FEMA) where substantial flooding may result in property damage or threaten public safety. According to FEMA mapping (FEMA Q3 Flood Data, 1996), the northern and eastern borders of the Roxana Site, formed by Kings Creek and the North Fork, lie within or adjacent to the 100-year flood zone (Exhibit 3-5). The narrow hollow bottoms, narrow eroded ridgetops, the elevation of the proposed development zone, and associated steep side slopes which exist in and around the site limit the potential for flooding to adversely affect the Roxana Site. As a result, the extent and location of these flood zones alone are not expected to pose a limitation to FCI/FPC development and operation at the site, however, recent large-scale flood events that occurred in southeastern Kentucky, including Letcher County, damaged or destroyed homes, businesses, public institutions, and public infrastructure located within and near floodplains.

### **3.4.1.4 Groundwater Resources**

Groundwater is water that flows or seeps downward and saturates soil or rock, supplying springs and wells and is commonly used for domestic consumption, agricultural irrigation, and industrial applications. In Letcher County, groundwater is obtained from consolidated sedimentary rocks ranging in age from Devonian and Mississippian to Pennsylvanian, and from unconsolidated sediments of Quaternary age. According to the Groundwater Branch of the Kentucky Division of Water, wells and springs provide approximately one-third of public domestic water supplies in the Commonwealth. Surface streams, the major source of Kentucky's water supply, are primarily sustained during base flow by groundwater discharge from adjacent aquifers.

The Safe Drinking Water Act of 1974 (42 USC §§ 300 et seq.; amended in 1986 and 1996) is the principal federal regulation addressing the protection of groundwater. The act was set forth to protect the nation's public water supplies, including groundwater in areas where it is the main potable water source. The USEPA and the Kentucky Division of Water enforce Safe Drinking Water Act standards and related legislation to protect public health.



**Exhibit 3-5** Flood Zones

Groundwater flow at the Roxana Site is expected to follow the sloped topography and flow to the north, east, and west towards the North Fork Kentucky River, Kings Creek, and Tolson Branch, respectively. Variations in groundwater conditions are expected based on location and elevation across the site, seasonal conditions, and weather patterns. The Roxana Site is underlain by subsurface geology of the Breathitt Group which in Letcher County can yield more than 500 gallons of groundwater per day in more than three-quarters of the wells drilled in valley bottoms, more than 500 gallons per day (gpd) in about three-quarters of the wells on hillsides, and more than 100 gpd to nearly all wells on ridges (KGS 2023).

Groundwater obtained from most drilled wells contains noticeable amounts of iron and is moderately hard in most of Letcher County although south of Pine Mountain the groundwater is moderately soft. The main naturally occurring contaminants that may be present in objectionable amounts in the groundwater are sulfate, sodium chloride (salt), iron and manganese. In some locations abandoned oil and gas wells are responsible for contamination of shallow freshwater aquifers by saltwater intrusion from much deeper formations. High iron and manganese levels are found in the groundwater in many wells, which can produce objectionable taste and stain laundry and porcelain fixtures. Often, coal mining aggravates these problems by increasing the amount of surface area of the rocks exposed to oxidation, which can increase the concentration of sulfate and metal in the groundwater. In Letcher County, the fresh water-saline water interface ranges from 900 to 1,200 feet above msl. Saline water is not likely to be found less than 200 feet below the level of the principal valley bottoms.

### **3.4.2 Potential Impacts**

#### **3.4.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, water resources and hydrologic features would be unaffected, and mitigation measures would not be necessary.

#### **3.4.2.2 Preferred Alternative**

##### ***Surface Waters***

The original hydrology of the Roxana Site has been substantially altered as a result of past mining activities which occurred across a large portion of the former mountain. Currently, stormwater runoff makes its way to the 15 ephemeral streams, 17 intermittent streams, and four perennial streams which flow to the Tolson Branch and the North Fork of the Kentucky River. A portion also travels across the site as overland flow, eventually infiltrating the ground below and replenishing groundwater resources.

Development of the proposed FCI/FPC at the Roxana Site would result in direct permanent impacts to approximately 6,290 linear feet of streams and 1.99 acres of wetlands (Table 3-3). The impacts would result primarily from the grading, excavating, filling, and related site preparation activities required to clear and level the site to the proper elevations for development.

Additional hydrologic changes would also occur by the introduction of new impervious surfaces. The changes would be the result of development of the FCI/FPC and associated structures; main access driveway, internal driveways, and perimeter security road; employee and visitor parking areas, walkways, etc. In general, increases in impervious surfaces contribute to increases in stormwater runoff which can contribute to water pollution, environmental degradation, impacts on local infrastructure, property damage, and public safety risks from flooding. In recognition of this concern, Section 438 of the Energy Independence and Security Act (EISA) of 2007 was enacted with the goal to prevent stormwater runoff impacts associated with federal developments involving more than 5,000 square feet of land that is redesigned, reconfigured, or reconstituted in any manner that diverges from the present-day use and composition. EISA Section 438 requires federal projects or actions to maintain or restore the stormwater runoff characteristics of the site in its natural state, prior to development.



Plans for the proposed FCI/FPC envision development and use of an on-site stormwater management system and BMPs that would detain/retain stormwater to avoid adverse impacts to neighboring properties and downstream infrastructure. BMPs would include grading to maintain existing hydrologic drainage patterns to the extent practical, providing gentle slopes, grassed areas, and shallow swales, as well as on-site stormwater basins to detain runoff, increase the time of concentration, and improve water quality. By doing so, runoff velocities would be controlled, the potential for soil erosion would be minimized, and the risks to downstream properties avoided. These elements would be developed into the overall site design and stormwater management plan that would result in post-development runoff conditions that are equal to or less than pre-development conditions, an approach consistent with EISA Section 438.

**Table 3-3** Potential Surface Water Impacts Within the Roxana Site

Aquatic Resource	Waters Type	Permanent Impacts (Linear Feet)
WUS001	Ephemeral	264.4
WUS002	Ephemeral	231.4
WUS002	Intermittent	--
WUS002	Perennial	--
WUS003	Intermittent	--
WUS004	Perennial	--
WUS005	Intermittent	1882.1
WUS006	Ephemeral	285.4
WUS007	Ephemeral	468.8
WUS008	Intermittent	456.8
WUS009	Intermittent	106.5
WUS010	Ephemeral	729.3
WUS011	Ephemeral	121.6
WUS012	Intermittent	659.9
WUS013	Ephemeral	129.3
WUS014	Perennial	226.8
WUS015	Intermittent	--
WUS016	Intermittent	--
WUS017	Intermittent	53.8
WUS018	Intermittent	287.1
WUS020	Ephemeral	--
WUS021	Ephemeral	--
WUS021	Intermittent	--
WUS022	Intermittent	219.1
WUS023A	Intermittent	6.5
WUS023B	Intermittent	--
WUS024	Ephemeral	--
WUS100	Ephemeral	161.4
WUS101A	Ephemeral	--
WUS101B	Ephemeral	--
WUS102	Perennial	--

Aquatic Resource	Waters Type	Permanent Impacts (Linear Feet)
WUS102A	Ephemeral	--
WUS102B	Ephemeral	--
WUS102B	Intermittent	--
WUS103	Intermittent	--
WUS103A	Intermittent	--
<b>Total Ephemeral</b>		<b>2,391.5 linear feet</b>
<b>Total Intermittent</b>		<b>3,671.8 linear feet</b>
<b>Total Perennial</b>		<b>226.8 linear feet</b>
<b>Total Permanent Waterway Impacts</b>		<b>6,290.1 linear feet</b>
Notes: R2SB3: Riverine, Lower Perennial, Streambed, Cobble-Gravel R2UB1: Riverine, Lower Perennial, Unconsolidated Bottom, Cobble-Gravel R3UB1: Riverine, Upper Perennial, Unconsolidated Bottom, Cobble-Gravel R3SB1: Riverine, Upper Perennial, Streambed, Bedrock R3SB3: Riverine, Upper Perennial, Streambed, Cobble-Gravel R4SB1: Riverine, Intermittent, Streambed, Cobble-Gravel R5UB: Riverine, Unknown, Ephemeral, Unconsolidated Bottom		

No additional hydrologic alterations are expected to occur once construction of the proposed FCI/FPC is completed.

Adverse impacts to the water quality of nearby streams and wetlands would be avoided by implementing an approved erosion and sediment control plan, which would control sediment and pollutants from the construction site to be carried into nearby water courses. Therefore, construction of the FCI/FPC would not result in significant impacts to surface water quality. Impacts to surface water features under the jurisdiction of the U.S. Army Corps of Engineers (USACE) are also discussed under Biological Resources.

### ***Floodplains***

No portion of the Roxana Site is located within a 100-year floodplain. Plans for the proposed FCI/FPC envision development of an on-site stormwater management system that would detain/retain stormwater to avoid adverse impacts to neighboring properties and downstream infrastructure. Therefore, significant adverse impacts to floodplains would not occur as a result of the proposed action.

### ***Groundwater Resources***

Implementation of the proposed action is not anticipated to affect groundwater, as excavation and construction activities are anticipated to occur at elevations above the groundwater table. Nonetheless, the FBOP would consider preparation and implementation of a groundwater protection plan in accordance with Kentucky regulations (401 KAR 5:037) to protect groundwater quality during construction and operation of the proposed FCI/FPC. The groundwater protection plan would describe the activities that have the potential to pollute groundwater as well as measures and practices that would be implemented during FCI/FPC construction and operation such as providing secondary containment for fuel and other above-ground storage tanks.

Groundwater available at the Roxana Site would not be used for potable purposes at the FCI/FPC; therefore, no human health impacts associated with groundwater use would occur, nor would there be direct or indirect impacts to groundwater quality. Construction and operation of the FCI/FPC at the Roxana Site is not expected to result in significant adverse groundwater impacts.

### 3.4.3 Recommended Mitigation

Development of the proposed FCI/FPC at the Roxana Site would result in direct permanent impacts to approximately 6,290 linear feet of streams and 1.99 acres of wetlands requiring mitigation. FBOP officials have initiated discussions concerning mitigation options with representatives of the USACE and Kentucky Department of Fish and Wildlife Resources (DFWR). The outcome was that wetland/stream mitigation for the Roxana Site is anticipated to be via an in-lieu fee mitigation program.

Mitigation for wetland impacts is calculated by totaling the acreage of wetlands to be impacted (1.99 acres) and multiplying by 2 (3.98) to determine the number of Adjusted Mitigation Units (AMU) to be purchased. To determine the cost associated with wetland mitigation, the FBOP, at the time the CWA Section 404 permit is acquired, would contact the Kentucky DFWR to determine the current cost of AMUs for purchase. The fee schedule from the Kentucky DFWR web site (February 2024) was \$78,000 per AMU.

Stream mitigation would be based on Ecological Integrity Units (EIU) which are calculated based on the stream rating (assessed using the USEPA's Rapid Bioassessment Protocol Sheets). To account for cumulative and temporary impacts, the EIU is multiplied by 1.2 (20 percent cumulative and temporary impacts); intermittent and perennial stream impacts totaling 3,899 linear feet would result in 4,678 EIUs. It is anticipated that the 2,391 linear feet of ephemeral stream impacts will not be considered regulatory in light of the May 2023, Sackett v. EPA, Supreme Court Ruling (the Approved Jurisdictional Determination request submitted to the USACE will confirm). The current In Lieu Fee Credits are \$930 per EIU.

At the appropriate time, the FBOP would submit a completed Section 404 permit application to the USACE and mitigation costs would be updated according to the current mitigation rates and permit requirements.

As a result of amendments to the federal Clean Water Act, the USEPA has adopted regulations that require permits for a number of stormwater discharges, including discharges associated with construction activities disturbing one or more acres of land, and discharges associated with certain industrial activities. The goal of the federal Stormwater Permit Program is to improve water quality by preventing pollutants from entering surface waters through stormwater discharges. The principal emphasis of this program is the use of source reduction and pollution minimization as the primary stormwater control techniques. The methods used for administering/implementing the permit program are based on the following objectives:

- Maximum use of pollution prevention and source controls to minimize or eliminate contact between rainfall and potential pollution sources;
- Cooperative development of permit conditions with the appropriate regulatory authorities to ensure implementation of permit requirements; and
- Minimize bank and instream activity, the use of low-impact development techniques and BMPs.

As part of the FCI/FPC development plan, stormwater collection infrastructure would be installed to control runoff by directing stormwaters into basins prior to discharge into receiving streams. Use of detention basins will serve a dual function: attenuate the intensity of the flow discharged to the receiving streams and rivers and allow for suspended solids in the stormwater to settle out prior to discharge. Vegetated or riprap-lined channels to reduce stream flow velocities and protect water quality will also be considered as may be appropriate to site conditions.

Recommendations contained in the USDA document entitled "Water Management and Sediment Control for Urbanizing Areas" would be considered in planning for stormwater management. This would be in addition to other USEPA stormwater guidance materials and measures required by applicable federal and Kentucky regulations including use of appropriate BMPs in key locations; a grading plan that maintains the existing hydrologic drainage patterns where possible and provides for slopes that can be properly vegetated and stabilized; and sufficient and adequately designed discharge outfalls to avoid erosive point discharge conditions.

Recent large-scale flood events that occurred in southeastern Kentucky caused widespread damage to homes, businesses, public institutions, and public infrastructure including roads, bridges, and culverts and other essential infrastructure. In light of such events, it is recommended that the FBOP prepare a contingency plan that will define response actions and activities to ensure access to the FCI/FPC by employees and emergency response personnel and equipment can be maintained at all times.

## 3.5 Biological Resources

### 3.5.1 Existing Conditions

Biological resources include living, native, or naturalized plant and animal species and the habitats where they occur. Habitat can be defined as the resources and conditions present in an area that supports the existence of a plant or animal (Hall et al. 1997). The analysis that follows focuses on species and vegetation types that are important to the function of the ecosystem, of special societal importance, or are protected under federal or state law or statute.

Biological resources within and around the Roxana Site have been determined through the use of agency contacts, available database inventories and maps, previous studies, and recent field observations. Data sources utilized included USGS topographic maps and USDA aerial photographs. Dominant vegetative species were recorded while vegetative communities, including wetlands and WOTUS, were examined for habitat types and size. Habitats were identified, analyzed, and compared to habitat requirements of species known to occur in the vicinity, including species of special status, to assess their potential for area use. Direct observations of wildlife and/or their sign were also recorded.

#### 3.5.1.1 Vegetation

Vegetation includes terrestrial plant communities and the analysis focuses on vegetation types that are important to the function of the ecosystem or are protected under federal or state law. Previous and recent field investigations indicated portions of the gently rolling terrain are routinely mowed or bushhogged or are dominated by scrub shrub vegetation (e.g., autumn olive, multiflora rose, etc.). The mountain slopes are covered with secondary growth forests with the exception of slopes created by fill from mining which are dominated by invasive species such as autumn olive and paradise tree (*Ailanthus altissima*).

Upland vegetation includes northern red oak, eastern red cedar (*Juniperus virginiana*), sericea lespedeza, paradise tree, Allegheny blackberry, Virginia pine (*Pinus virginiana*), bluestem broomsedge (*Andropogon virginicus*), tuliptree, American beech, Virginia creeper (*Parthenocissus quinquefolia*), Ohio buckeye (*Aesculus glabra*), red maple (*Acer rubrum*), stinging nettle (*Urtica dioica*), and Christmas fern (*Polystichum acrostichoides*). Wetland vegetation at the Roxana Site includes American sycamore, woolgrass, black willow, spicebush (*Lindera benzoin*), Nepalese browntop (*Microstegium vimineum*), small spike falsenettle (*Boehemeria cylindrica*), and cinnamon fern (*Osmunda cinnamomea*).

Vegetation observed within the Roxana Site are listed in Table 3-4, along with the species' wetland indicator status. While not a complete list of all vegetation present, it identifies the dominant species observed during recent field investigations.



**Table 3-4** Dominant Vegetation Observed at the Roxana Site

Scientific Name	Common Name	Wetland Indicator Status
<i>Acer negundo</i>	boxelder maple	FAC
<i>Acer rubrum</i>	red maple	FAC
<i>Asimina triloba</i>	American pawpaw	FAC
<i>Betula nigra</i>	river birch	FACW
<i>Bidens frondosa</i>	common beggar-ticks	FACW
<i>Boehmeria cylindrica</i>	false nettle	FACW
<i>Carex frankii</i>	frank's sedge	OBL
<i>Cyperus eragrostis</i>	tall flatsedge	FACW
<i>Cyperus strigosus</i>	straw-colored sedge	FACW
<i>Elaeagnus umbellata</i>	autumn olive	UPL
<i>Fagus grandifolia</i>	American beech	FACU
<i>Fraxinus americana</i>	white ash	FACU
<i>Fraxinus nigra</i>	black ash	FACW
<i>Fraxinus pennsylvanica</i>	green ash	FACW
<i>Impatiens capensis</i>	common jewelweed	FACW
<i>Impatiens pallida</i>	yellow jewelweed	FACW
<i>Juncus effusus</i>	soft rush	OBL
<i>Kyllinga brevifolia</i>	shortleaf spikesedge	FACW
<i>Lindera benzoin</i>	northern spicebush	FAC
<i>Liriodendron tulipifera</i>	tulip poplar	FACU
<i>Lonicera japonica</i>	Japanese honeysuckle	FACU
<i>Microstegium vimineum</i>	Japanese stiltgrass	FAC
<i>Nyssa sylvatica</i>	black gum	FAC
<i>Oplismenus hirtellus</i>	wavyleaf basketgrass	FACU
<i>Parthenocissus quinquefolia</i>	Virginia creeper	FACU
<i>Persicaria longisetia</i>	oriental Lady's-thumb	FAC
<i>Persicaria virginiana</i>	jumpseed	FAC
<i>Pilea pumila</i>	Canadian clearweed	OBL
<i>Pinus virginiana</i>	Virginia pine	UPL
<i>Platanus occidentalis</i>	American sycamore	FACW
<i>Polystichum acrostichoides</i>	Christmas fern	FACU
<i>Rosa multiflora</i>	rambler rose	FACU
<i>Salix nigra</i>	black willow	OBL
<i>Scirpus atrovirens</i>	dark green bulrush	OBL
<i>Scirpus cyperinus</i>	woolgrass	FACW
<i>Scirpus microcarpus</i>	panicked bulrush	OBL

Scientific Name	Common Name	Wetland Indicator Status
<i>Toxicodendron radicans</i>	poison ivy	FAC
<i>Urtica dioica</i>	stinging nettle	OBL
<i>Vitis vinifera</i>	common grape vine	FACU
Notes: OBL: Obligate, almost always occur in wetlands. FACW: Facultative Wetland, usually occur in wetlands, but may occur in non-wetlands. FAC: Facultative, occur in wetlands and non-wetlands. FACU Facultative Upland, usually occur in non-wetlands, but may occur in wetlands. UPL: Upland, almost never occur in wetlands.		

### 3.5.1.2 Wildlife

Wildlife includes all animal species, with the exception of those identified as special-status species. This includes invertebrates, fish, amphibians, reptiles, mammals, and birds, including native bird species protected under the Migratory Bird Treaty Act (MBTA).

Non-avian species likely to inhabit the county include coyote (*Canis latrans*), Virginia opossum (*Dipelphis virginiana*), American black bear (*Ursus americanus*), eastern gray squirrel (*Sciurus carolinensis*), southern flying squirrel (*Glaucomys volans*), eastern spotted skunk (*Spilogale putorius*), white tailed deer (*Odocoileus virginianus*), green frog (*Rana clamitans melanota*), American toad (*Bufo americanus*), black rat snake (*Elaphe obsoleta obsoleta*), copperhead (*Agkistrodon contortrix*), eastern hognose snake (*Heterodon platirhinos*), and fence lizard (*Sceloporus undulates*) (Kentucky Department of Fish and Wildlife Resources 2023).

Previous and recent field investigations identified evidence of habitation by red-winged blackbirds (*Agelaius phoeniceus*), tufted titmouse (*Baeolophus bicolor*), red-tailed hawks (*Buteo jamaicensis*), coyotes (*Canis latrans*), Virginia opossums (*Dipelphis virginiana*), American black bears (*Ursus americanus*), eastern gray squirrels (*Sciurus carolinensis*), green frogs (*Rana clamitans melanota*), American toads (*Bufo americanus*), black rat snakes (*Elaphe obsoleta obsoleta*), southern flying squirrels (*Glaucomys volans*), eastern spotted skunks (*Spilogale putorius*), copperheads (*Agkistrodon contortrix*), eastern hognose snakes (*Heterodon platirhinos*), fence lizards (*Sceloporus undulates*), wild turkeys (*Meleagris gallopavo*), and white tailed deer (*Odocoileus virginianus*) (Kentucky Department of Fish and Wildlife Resources 2023).

### 3.5.1.3 Wetlands and Waters of the U.S.

According to USACE regulations, wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands and WOTUS are considered jurisdictional by the USACE if they are relatively permanent waters (RPW); are intermittent, perennial streams; or are adjacent to RPWs.

Pursuant to EO 11990 (Protection of Wetlands), Section 404 of the CWA, multiple investigations (2011, 2014) have been conducted to identify potential jurisdictional wetlands and WOTUS. Since 2014, the Supreme Court decision in Sackett v. Environmental Protection Agency (September 8, 2023) ruled that ephemeral waterways are to be regarded as non-jurisdictional waterways. With that, a new wetland delineation was performed in October 2023. Site-specific wetland data was collected through on-site field work, aerial photographs, topographic maps, National Wetland Inventory maps (Exhibit 3-6), and NRCS soil surveys. A new delineation report documenting site conditions was prepared and submitted to the USACE requesting an Approved Jurisdictional Determination (Appendix D).

Based on the 2023 delineation, approximately 3.203 acres (139,583 square feet) of palustrine wetland under federal jurisdiction and approximately 25,338 linear feet of stream under federal jurisdiction (WOTUS) were identified within the property boundary (Table 3-5, Table 3-6, Exhibit 3-7).

**Table 3-5** Wetlands Identified Within the Roxana Site

Aquatic Resource	Cowardin Classification	Area (square feet)	Area (acres)
WET001	PEM1A	238.6	0.005
WET003	PEM1A	538.7	0.012
WET004	PEM1A	254	0.006
WET005	PEM1A	4,805.3	0.11
WET006	POW1H	127.1	0.003
WET007	PFO1A	4,051.1	0.093
WET008	PFO1A	511.6	0.012
WET009	PEM1A	353.2	0.008
WET010	PFO1A	18,502.8	0.425
WET011	PEM1A	1,076	0.025
WET012	PEM1A	9,383.7	0.215
WET013	PEM1A	2,247	0.052
WET020	PEM1A	2,096	0.048
WET021	PEM1A	2,027.6	0.047
WET022	PEM1A	316.6	0.007
WET023	PEM1A	4,807.2	0.11
WET024	PEM1A	410	0.009
WET025	PEM1A	2,959.4	0.068
WET026	PEM1A	1,909.9	0.044
WET027	PEM1A	8,076.8	0.185
WET028	PEM1A	1,565	0.036
WET029	PEM1A	3,206.7	0.074
WET030	PEM1A	975.7	0.022
WET031	PEM1A	334.9	0.008
WET032	PFO1A	798.5	0.018
WET033	PFO1A	688	0.016
WET034	PFO1A	826.3	0.019
WET100	POW1H	22,034.4	0.506
WET101	PEM1A	950.3	0.022
WET102	PEM1A	4,753.3	0.109
WET103	PEM1A	34,778.6	0.798
WET104	PEM1A	3,311.3	0.076
WET105	PEM1A	667	0.015
<b>Total</b>		<b>139,582.6</b>	<b>3.203</b>
Notes: PEM1A: Palustrine, Emergent, Persistent, Temporarily Flooded POW1H: Palustrine, Open Water, Cobble-Gravel, Permanently Flooded PFO1A: Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded			

**Table 3-6** WOUS (Streams) Identified Within the Roxana Site

Aquatic Resource	Cowardin Classification	Waters Type	Length (Linear Feet)
WUS001	R5UB	Ephemeral	454.7
WUS002	R5UB	Ephemeral	559.1
WUS002	R4SB1	Intermittent	121.5
WUS002	R2UB1	Perennial	1316.5
WUS003	R4SB1	Intermittent	372.4
WUS004	R3SB3	Perennial	8145.9
WUS005	R4SB1	Intermittent	2152.4
WUS006	R5UB	Ephemeral	258.4
WUS007	R5UB	Ephemeral	468.7
WUS008	R4SB1	Intermittent	456.8
WUS009	R4SB1	Intermittent	106.5
WUS010	R5UB	Ephemeral	729.3
WUS011	R5UB	Ephemeral	127.6
WUS012	R4SB1	Intermittent	659.9
WUS013	R5UB	Ephemeral	129.3
WUS014	R3UB1	Perennial	774.6
WUS015	R4SB1	Intermittent	296.3
WUS016	R4SB1	Intermittent	187.6
WUS017	R5UB	Intermittent	53.8
WUS018	R4SB1	Intermittent	287.1
WUS020	R5UB	Ephemeral	379.6
WUS021	R5UB	Ephemeral	263.9
WUS021	R4SB1	Intermittent	90.9
WUS022	R4SB1	Intermittent	802.5
WUS023A	R4SB1	Intermittent	120.5
WUS023B	R4SB1	Intermittent	49.6
WUS024	R5UB	Ephemeral	420.9
WUS100	R5UB	Ephemeral	1003
WUS101A	R5UB	Ephemeral	865.9
WUS101B	R5UB	Ephemeral	117.5
WUS102	R2SB3	Perennial	1894
WUS102A	R5UB	Ephemeral	38
WUS102B	R5UB	Ephemeral	381.6
WUS102B	R4SB1	Intermittent	118.7
WUS103	R3UB1	Intermittent	1033.4
WUS103A	R4SB1	Intermittent	99.7
Notes: R2SB3: Riverine, Lower Perennial, Streambed, Cobble-Gravel R2UB1: Riverine, Lower Perennial, Unconsolidated Bottom, Cobble-Gravel R3UB1: Riverine, Upper Perennial, Unconsolidated Bottom, Cobble-Gravel R3SB1: Riverine, Upper Perennial, Streambed, Bedrock R3SB3: Riverine, Upper Perennial, Streambed, Cobble-Gravel R4SB1: Riverine, Intermittent, Streambed, Cobble-Gravel R5UB: Riverine, Unknown, Ephemeral, Unconsolidated Bottom			





Study Area  
 NWI Wetland

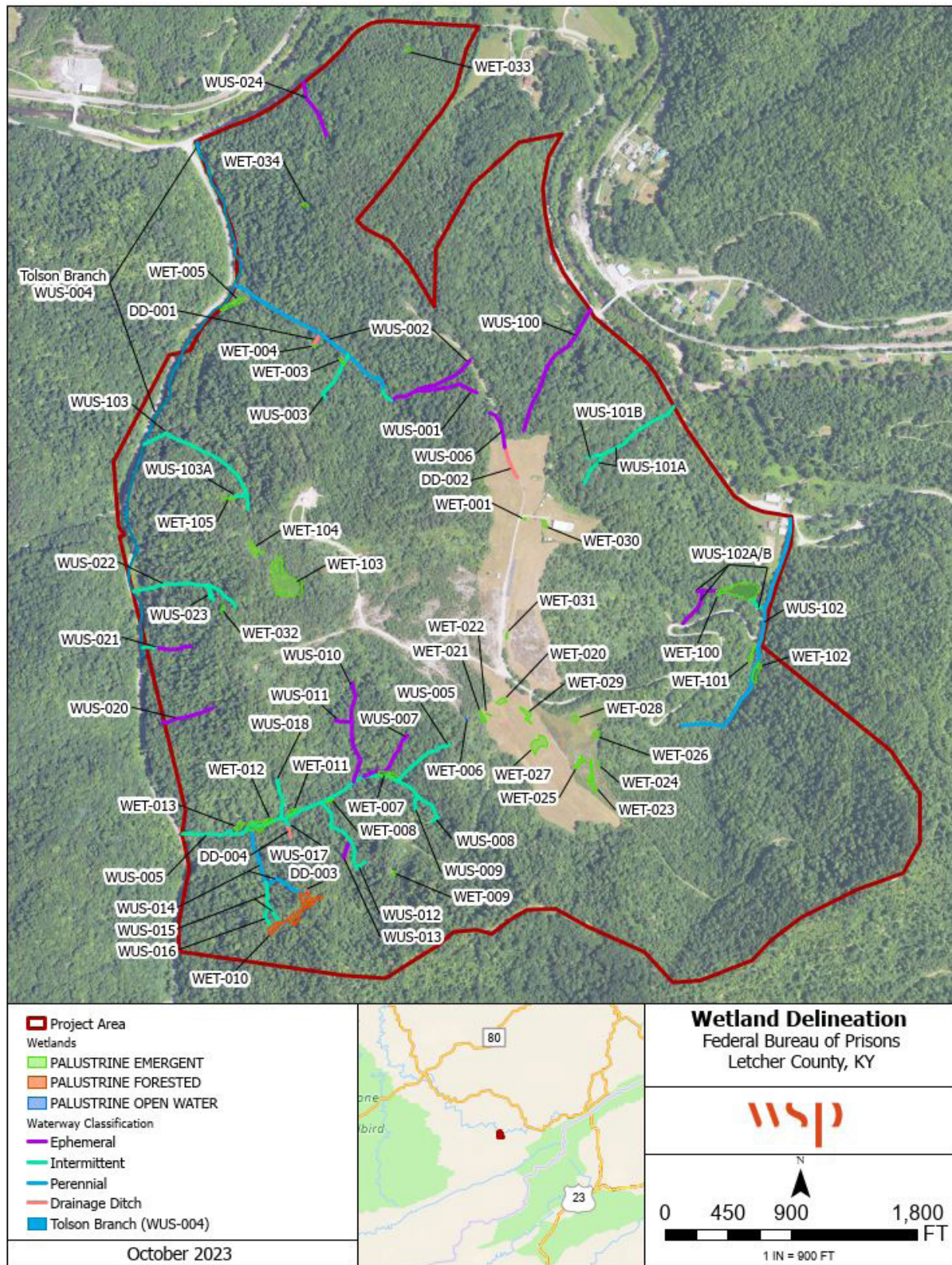
### Proposed Federal Correctional Institution and Federal Prison Camp National Wetland Inventory

Letcher County, Kentucky  
December 2023

0 500 1,000  
Feet

**Exhibit 3-6** National Wetland Inventory





**Exhibit 3-7** Wetland Delineation Map



### 3.5.1.4 Species of Special Status

Special status species include plant and animal species that are listed or proposed for listing by the U.S. Fish and Wildlife Service (USFWS) under the Endangered Species Act (ESA). The ESA provides for the conservation of threatened and endangered species of plants and animals and the habitats where they are found. This section will also address species that are listed by the Commonwealth of Kentucky as threatened or endangered.

Large-scale development activities are often performed in consultation with the USFWS in compliance with Section 7 of the ESA and with state wildlife agency officials. Table 3-7 provides federally and state-listed species documented as potentially occurring in Letcher County.

**Table 3-7** Threatened and Endangered Species - Letcher County

Scientific Name	Common Name	Status (State/Federal)	Habitat
<b>Liverworts</b>			
<i>Plagiochila caduciloba</i>	Gorge Leafy Liverwort	E/-	Bare rock/talus/scree in mixed hardwood forest
<b>Mosses</b>			
<i>Anomodon rugelii</i>	None	T/-	Rocks and tree bases in woodlands and forests
<i>Brachythecium populeum</i>	Matted Feather Moss	E/-	Rocks and tree trunks in woods and hedge banks
<i>Cirriphyllum piliferum</i>	None	T/-	Rocks, ground, banks in mixed woodland
<i>Dicranodontium asperulum</i>	None	E/-	Organic soils in montane heath, gullies, and ledges
<i>Entodon brevisetus</i>	None	E/-	Bark of hardwood trees, logs or stumps, and rock
<i>Neckera pennata</i>	None	T/-	Bark of hardwood trees, logs or stumps, and rock
<i>Oncophorus rauyi</i>	None	E/-	Damp acid rocks, mostly on cliffs in the mountains
<i>Polytrichum pallidisetum</i>	Hair Cap Moss	T/-	Rocks and tree trunks in mixed woods
<i>Polytrichum strictum</i>	None	E/-	Organic soils in coastal and montane bogs
<i>Sphagnum quinquefarium</i>	Five-ranked Bogmoss	E/-	Well-drained soil on banks in woodlands
<b>Vascular Plants</b>			
<i>Angelica triquinata</i>	Filmy Angelica	E/-	Hardwood forests, spruce and spruce-fir forests, shrub and grass balds, rock outcrops, and stream banks
<i>Aralia nudicaulis</i>	Wild sarsaparilla	T/-	Mixed woodlands, swamps, and bogs
<i>Baptisia tinctoria</i>	Yellow wild indigo	T/-	Grassland, meadows and fields, woodlands
<i>Botrychium matricariifolium</i>	Matricary grape-fern	E/-	Deep forests, forest edges, grassy meadows and roadsides
<i>Boykinia aconitifolia</i>	Brook saxifrage	E/-	Forested seeps and seepage swamps, rocky stream banks, and crevices of wet cliffs
<i>Carex appalachica</i>	Appalachian sedge	T/-	Montane forests, shaded rock outcrops
<i>Castanea pumila</i>	Allegheny chinkapin	T/-	Xeric forests and woodlands, generally in fire-maintained habitats

Scientific Name	Common Name	Status (State/Federal)	Habitat
<i>Cymophyllus fraserianus</i>	Fraser's sedge	E/-	Rich mountain woods; cove forests
<i>Cypripedium parviflorum</i>	Small yellow lady's-slipper	T/-	Bogs, mossy swamps and woods, rich mesic forested slopes.
<i>Eupatorium steelei</i>	Steele's joe-pye-weed	T/-	Cove hardwood and northern hardwood forests
<i>Houstonia serpyllifolia</i>	Michaux's bluets	E/-	Streambanks, grassy balds, moist forests, seepy rock outcrops, and moist disturbed areas
<i>Hydrophyllum virginianum</i>	Eastern waterleaf	T/-	Moist or wet woods, open wet places.
<i>Juglans cinerea</i>	White walnut	T/-	Mesic wooded ravines and alluvial forests
<i>Leucothoe recurva</i>	Red-twigg doghobble	E/-	Moist areas in mountain woods
<i>Lilium superbum</i>	Turk's cap lily	T/-	Moist meadows and woods including floodplains and coves
<i>Listera smallii</i>	Kidney-leaf twayblade	T/-	Humus of damp woods and thickets
<i>Monotropsis odorata</i>	Sweet pinesap	T/-	Sandstone ridgetops in woodlands
<i>Orontium aquaticum</i>	Golden club	T/-	Swamps and shallow water
<i>Pogonia ophioglossoides</i>	Rose pogonia	E/-	Open bogs and wet marshy meadows
<i>Sanguisorba Canadensis</i>	Canada burnet	E/-	Marshes, wet meadows, and damp prairies
<i>Saxifraga michauxii</i>	Michaux's saxifrage	T/-	Moist or wet ledges and rocky woods in the mountains
<i>Saxifraga micranthidifolia</i>	Lettuce-leaf saxifrage	E/-	Wet banks and rocks in mountain streams
<i>Trillium undulatum</i>	Painted trillium	T/-	Mesic ravine forests, upper elevation mesic hemlock forests
<b>Terrestrial Snails</b>			
<i>Neohelix dentifera</i>	Big tooth whitelip	T/-	Upland, often rocky forest and woodlands
<b>Crustaceans</b>			
<i>Cambarus parvovulus</i>	Mountain midget crayfish	T/-	Rocky streams
<b>Insects</b>			
<i>Amphiagrion saucium</i>	Eastern red damsel	E/-	Spring-fed bogs or pond margins
<i>Papaipema speciosissima</i>	Osmunda borer moth	E/-	Forested wetlands and scrub/shrub wetlands
<i>Stylurus notatus</i>	Elusive clubtail	E/-	Large, clear rivers with moderate current
<i>Stylurus scudderi</i>	Zebra clubtail	E/-	Streams and rivers with slight to moderate current
<b>Fishes</b>			
<i>Chrosomus cumberlandensis</i>	Blackside dace	T/T	Clear streams with rocky substrates
<i>Etheostoma spilotum</i>	Kentucky arrow darter	-/T	Upland creeks and streams, generally in headwaters

Scientific Name	Common Name	Status (State/Federal)	Habitat
<b>Amphibians</b>			
<i>Cryptobranchus alleganiensis alleganiensis</i>	Eastern hellbender	E/-	Fast-flowing streams with abundant cover
<i>Plethodon wehrlei</i>	Wehrle's salamander	E/-	Mixed deciduous and coniferous forests
<b>Birds*</b>			
<i>Corvus corax</i>	Common raven	T/-	Various, nests on cliffs
<b>Mammals</b>			
<i>Myotis grisescens</i>	Gray bat	T/E	Caves with domed halls
<i>Myotis leibii</i>	Eastern small-footed myotis	T/-	Mountainous areas, in or near deciduous or evergreen forest; roosts in caves and mine tunnels
<i>Myotis septentrionalis</i>	Northern long-eared bat	E/T	Forests, woodlots, other wooded areas; hibernate in caves and mines
<i>Myotis sodalis</i>	Indiana bat	E/E	Forests, riparian areas, ponds and fields; hibernate in caves and mines
<i>Sorex dispar blitchi</i>	Long-tailed shrew	E/-	Boulder piles on steep mountain slopes
Notes: - = not listed, E = Endangered, T = Threatened *Although not federally listed as threatened or endangered, the common raven is protected under the MBTA. Source: USFWS 2023.			

### Federally Listed Species

Five federally listed species have the potential to inhabit the Roxana Site: gray bat, Indiana bat, northern long-eared bat, Kentucky arrow darter, and monarch butterfly (USFWS 2023). The gray bat, federally listed as endangered (USFWS 2023), roosts in caves throughout the year, although suitable caves in the area are rare. Forested areas along the banks of streams and lakes provide important protection for adults and young.

The Indiana bat is federally and state listed as endangered. Indiana bats hibernate in caves; however, maternity sites are generally behind loose bark of dead or dying trees or in tree cavities.

The northern long-eared bat, listed as endangered (USFWS 2023), hibernates in the small cracks and crevices of caves and mines. During the summer they roost singly or in colonies underneath bark or in cavities, crevices, or hollows of both live and dead trees within forests.

### State-Listed Species

State-listed species with the potential to inhabit Letcher County are listed in Table 3-7. State-listed liverworts and mosses have the potential to occur on rocks, cliffs, and tree trunks in forested and woodland habitats in the Roxana Site. State-listed vascular plant and insect species have the potential to occur in woodland and forested habitats, grasslands, and wetland habitats in the site.

Wehrle's salamander occurs in upland forests and woodlands and can be found in rock crevices, under rocks, logs, and leaves, and in caves (at lower elevations). The species requires damp logs, moss, cave crevices, and other protected sites for their eggs (NatureServe 2023c). Wehrle's salamander has the potential to inhabit forested and woodland habitats at the Roxana Site.

Common ravens occur in a variety of habitats but are most common in hilly or mountainous areas, especially in the vicinity of cliffs, which are their preferred nesting sites (NatureServe 2023d). Common ravens could potentially nest and/or forage within the Roxana Site.

The eastern small-footed myotis is a small bat that occurs in hilly or mountainous areas, generally

in or near deciduous or coniferous forests. In the winter, these bats hibernate in caves and mine tunnels.

The long-tailed shrew is a small mammal that occurs in the central and southern Appalachian Mountains from West Virginia south to North Carolina and Tennessee. It is most commonly found in moist forested areas along mountain streams and in boulder piles and talus on steep mountain slopes (NatureServe 2023e).

State-listed animal species that are not likely to occur in the Roxana Site because of a lack of habitat include Mountain midget crayfish, which occur in rocky streams with high water quality, and the eastern hellbender, which occurs in fast-flowing streams with abundant cover.

### **3.5.2 Potential Impacts**

#### **3.5.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, biological resources (i.e., vegetation, wildlife, wetlands, and special status species) would be unaffected, and mitigation measures would not be necessary.

#### **3.5.2.2 Preferred Alternative**

##### *Vegetation*

The proposed development will permanently impact approximately 200 acres of the site consisting of secondary growth forests, understory, scattered shrubs, and grass areas as a result of the substantial excavation and grading required to prepare the site for development as well as by placement of construction trailers, construction equipment, and material staging and storage areas. A large portion of the Roxana Site, however, has already been significantly altered from its original condition by mountaintop removal coal mining. Restoration of areas disturbed by site preparation would commence as soon as possible and would include surface grading as necessary followed by seeding and planting of disturbed areas with native species.

Given the somewhat degraded vegetative community where development is expected to occur, the proposed FCI/FPC would not result in significant adverse impacts to vegetation or wildlife habitat. It should be noted that FBOP security standards require a 300-foot area, measured in all directions from the outer perimeter fence of the FCI be maintained as grass lawn, devoid of trees and shrubs throughout the life of the facility.

##### *Wildlife*

Development of the proposed FCI/FPC would have both short-term (temporary) and long-term (permanent) impacts to biological resources. Short-term impacts are directly related to construction activities (i.e. clearing, grubbing, excavating, and grading) as well as noise and visual disturbance from operation of construction equipment and the presence of humans. Long-term impacts include the permanent loss of vegetative communities within the development zone, and a decrease in the quality of the habitat in areas adjacent to the development zone from increase noise levels, vehicle movements, lighting, and other human activities. Long-term changes in the availability and type/composition of vegetative habitat, including an increase in habitat fragmentation, is also a possibility.

Common wildlife species may be harmed or displaced, primarily as a result of construction machinery operations. More mobile species such as birds, shrew, raccoon, and deer are expected to disperse to adjacent habitat when disturbed, while less mobile species, such as small mammals, reptiles, and amphibians, are expected to incur greater mortality. Fortunately, large areas with similar habitats are present adjacent to the Roxana Site and throughout western Letcher County which would accommodate all or most of the displaced wildlife.

Offsetting the potential impacts within the development zone are the over 300 acres of breeding and foraging areas for wildlife species that will remain largely undisturbed on-site. Additionally, the site is surrounded by thousands of acres of similar habitat that could accommodate species that

are displaced by development. Based on the available habitat that will remain on site and habitat adjacent to the site (Jefferson National Forest), the proposed project is not expected to have a significant adverse effect upon wildlife species that are present on-site.

### ***Wetlands and Waters of the U.S.***

Section 404 of the CWA requires consideration of impacts to wetlands and WOTUS and their associated functions and values. Other impacts to be considered include habitat fragmentation, stormwater runoff, sedimentation, hydrologic modifications and temporary disturbance incurred during construction. A wetland delineation report and approved jurisdictional determination request has been submitted to USACE for concurrence of jurisdictional limits under Section 404 of the CWA (response pending).

Based on the latest delineation of wetlands and WOTUS, development of the proposed FCI/FPC would result in direct permanent impacts to approximately 6,290 linear feet of streams and 1.99 acres of wetlands. The impacts would result primarily from the grading, excavating, filling, and related site preparation activities required to clear and level the site to the proper elevations for development. Based on initial discussion with USACE and Kentucky DFWR officials, it is likely that wetland and stream impacts would be mitigated via an in-lieu fee fund program.

At the appropriate time, the FBOP would submit a completed Section 404 permit application to the USACE and mitigation costs would be determined according to the current mitigation rates and permit requirements. Depending on their practicability and feasibility, BMPs to help reduce impacts include:

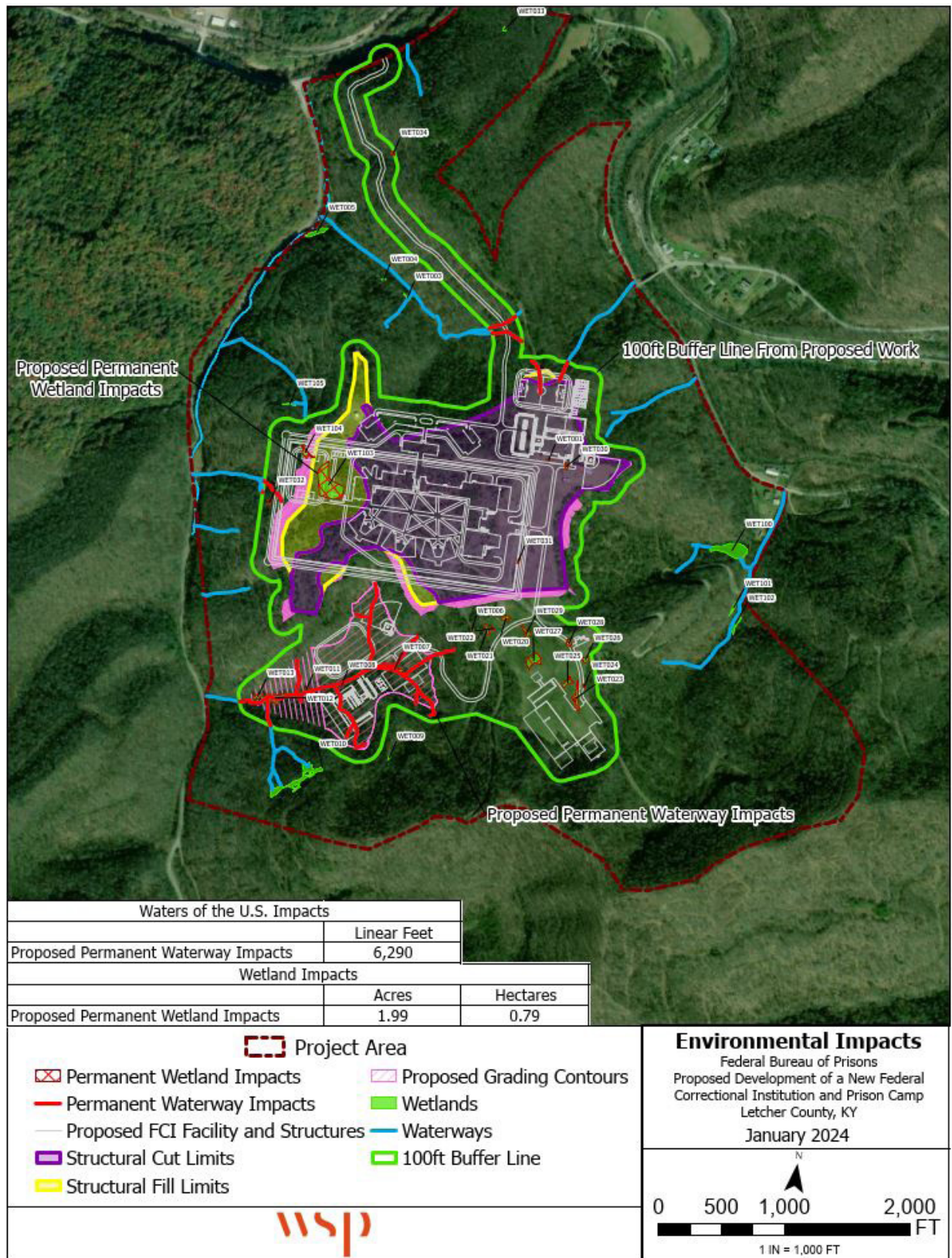
- To the maximum extent possible, surface water drainage patterns would be maintained through the use of pipes, swales and culverts.
- Track or balloon tire vehicle rigs would be used whenever possible to perform construction in soft soil areas.
- Access routes to the construction locations shall be minimized to the maximum extent practicable. Matting or track equipment would be used when the ground is soft to avoid soil compaction.
- Tree removal would be minimized to the extent practicable.
- A Sediment and Erosion Control Plan would be developed as an integral part of the construction plans. Emphasis would be given to the prevention of sediments from entering adjacent and nearby wetlands/open water.
- Planting of disturbed areas with native species would occur as soon as possible to minimize potential erosion.
- Stormwater outlets would be designed to minimize outlet velocities that might otherwise cause downstream erosion.
- The limits of disturbance would be indicated on the final design plans and would be the maximum necessary for the construction. The limits of encroachment would also be identified to prevent unauthorized intrusion by construction vehicles.
- Equipment storage would be restricted to areas disturbed for actual construction. Temporary roads or soil stockpiles would not be permitted in wetland/open water areas that are not needed for actual facility construction.

### ***Federally Listed Special Status Species***

The ESA, Section 7(a)(2) (hereafter Section 7) imposes upon federal agencies a procedural and substantive obligation whenever they authorize, fund, or implement an action. Federal agencies comply with Section 7 by consulting with the USFWS. In fulfilling these requirements, each federal agency shall use the best scientific and commercial data available.

In accordance with Section 7, a Biological Assessment (BA) was prepared to support consultation between the FBOP and the USFWS regarding the likelihood that development of the proposed project would have an adverse effect ("take") on the Indiana bat, northern long-eared bat, gray bat,





**Exhibit 3-8** Waterway Impacts

and Kentucky arrow darter. Potential impacts to federally listed species and their habitat from proposed construction activities and operations are based on the analysis in the BA (Copperhead Environmental Consulting 2017). For the purposes of the analysis, the area for potential direct and indirect impacts to federally listed bat species is within 2.5 miles from the center of the development zone within which the proposed facilities would be located.

Although Indiana bats and northern long-eared bats utilize habitats differently in ways that allow them to coexist, their foraging and roosting habitats closely coincide at the landscape level. While gray bats typically forage along streams and reservoirs rather than upland habitats, Indiana bats and northern long-eared bats also utilize these resources. The three species exhibit significant overlap in winter hibernation habitat and due to the high degree of habitat overlap between the three species, their impact analysis is combined.

USFWS did not identify any records for Indiana bats within the project area (USFWS 2016g). Spring and fall roosts for the species have the potential to occur within and around the project area. The area is within known Swarming 1 habitat for Indiana bats (USFWS 2016e). USFWS identified a P1/P2 hibernacula occurring 7.2 miles from the project area. The USFWS did not identify gray bat records within the project area with the closest record being an individual male captured approximately nine miles away (USFWS 2017b).

Impacts to spring, summer, and fall habitat for federally listed bat species would be minimized through use of BMPs. Only those trees necessary for construction and security purposes would be removed, and removal of any standing trees would not occur during June and July of any year during construction. Impacts to summer habitat could be mitigated through contribution to the Imperiled Bat Conservation Fund. The Imperiled Bat Conservation Fund would then provide the mitigation fees to the Kentucky Natural Lands Trust to support conservation and recovery actions for the species.

### ***Stream Sedimentation***

Temporary impacts to water quality could occur during project-related construction from potential stream sedimentation. Stream sedimentation can reduce populations of flying aquatic insects, which are a known component of the diet of all considered species (USFWS 1982, 2007, 2015b). Sedimentation impacts also have the potential to migrate offsite and into receiving streams.

Stream sedimentation impacts tend to be temporary in nature during the construction period provided that activities with the potential to cause erosion are properly planned/sited and adhere to project-specific BMPs and appropriate regulatory permit requirements. BMPs would include an erosion and sediment control plan and site-specific groundwater protection plan to further reduce potential impacts. Therefore, it is not anticipated that water quality of nearby streams and wetlands would be significantly adversely impacted by development.

### ***Noise and Vibration***

While construction noise would pose a potential impact, it would be limited in duration to the period of construction and would occur primarily during daylight hours. Although possible blasting activities would result in the loudest noise levels, blast noise is outside the hearing range of bats.

Construction noise would occur during daylight hours and is not expected to have a negative impact on federally listed species. Impacts from construction noise would be temporary in nature. Therefore, potential noise impacts to federally listed species are expected to be minimal.

Potential vibration impacts to federally listed species from project-related construction activities would occur within the project area. While some vibration would be produced by construction equipment, the greatest and farthest-reaching impact would occur from blasting necessary for site preparation. Impacts from vibration are temporary and would be limited to the period of construction.

Blasting during construction would be the primary source of vibration. In order to avoid potential

adverse impacts to hibernating federally listed bats at the potential hibernaculum within 0.5 mile of the project area, construction blasting would be avoided from November 15 through March 31.

### ***Increased Human Presence***

Human disturbance during construction would be limited to daylight hours during the period of construction. Potential for disturbance once the facilities are in operation would be minimized because most areas receiving human disturbance would already have been cleared of habitat. Access to the FCI/FPC would be tightly controlled.

The USFWS has concluded in their Biological Opinion (BO) that implementation of the Preferred Alternative and associated mitigation measures is likely to adversely affect the Indiana bat and the northern long-eared bat. The USFWS also concluded that the Preferred Alternative is not likely to jeopardize the continued existence of these federally listed species. The USFWS Final BO is included in Appendix H, USFWS Endangered Species Act Consultation. In addition, during informal consultation, the USFWS provided concurrence on the FBOP's determination that the Preferred Alternative may affect but would not adversely affect the gray bat.

### ***State-listed Species***

State-listed species that have the potential to occur in the Roxana Site are presented above in Table 3-7. No state-listed species have populations that are restricted to the Study Area or adjacent lands. Impacts from construction and operation activities to individual state-listed plants and wildlife would be similar in nature to those described in Sections 3.8.1.1 Vegetation, and 3.8.1.2 Wildlife, respectively.

Although state-listed wildlife species potentially occurring on the Roxana Site would likely be displaced during construction activities, such species would be expected to return to the area and utilize available habitats with the site once construction activities are finished.

Therefore, although individual state-listed species have the potential to be impacted by the proposed action, no state-listed species have populations that are restricted to the Study Area or adjacent lands. As such, the proposed action may impact individual state-listed species and have slight impacts on habitat but would not likely contribute to a trend towards federal listing or cause a loss of viability to a population or species.

## **3.5.3 Recommended Mitigation**

Mitigation measures for construction impacts to vegetation and wildlife would include minimizing disturbance of existing vegetation to the greatest extent possible. An open area with a direct line of sight is required for the areas surrounding the FCI/FPC; however, upon completion of construction, disturbed areas would be re-vegetated with native, non-invasive plants to the maximum extent possible while maintaining the FBOP's security requirements.

Under the Conservation Memoranda of Agreement (CMOA), the FBOP could pay into the Imperiled Bat Conservation Fund for summer roosting habitat impacted under the Preferred Alternative. The Imperiled Bat Conservation Fund would then provide the mitigation fees to the Kentucky Natural Lands Trust to purchase and protect important bat habitat.

As required under section 7 of the ESA, the FBOP has conducted formal consultation with the USFWS regarding potential impacts to the Indiana bat, northern long-eared bat, and gray bat. A BA was prepared to evaluate the potential effects of the Preferred Alternative on federally listed species. Based on the analysis provided to the USFWS in the BA and coordination between the FBOP and the Kentucky Field Office of the USFWS, the USFWS has issued a BO that describes potential impacts to the federally listed species.



## 3.6 Cultural Resources

### 3.6.1 Existing Conditions

Cultural resources are defined as prehistoric or historic sites, buildings, structures, objects, archaeological sites, districts, or other physical evidence of human activity that are considered important to a culture or community for scientific, traditional, or religious reasons. Cultural resources include prehistoric and historic archaeological resources, architectural resources, and Traditional cultural properties (TCPs) as summarized below:

- **Architectural Resources** – Standing buildings, infrastructure (i.e., dams, canals, bridges, etc.), and other structures.
- **Archaeological Resources** – Places where people changed the ground surface or left artifacts or other physical remains (e.g., arrowheads, bottles, etc.).
- **Traditional Cultural Properties** – Resources associated with the cultural practices and beliefs of a living community that link that community to its past and help maintain its cultural identity. TCPs may include archaeological resources, locations of historic events, sacred areas, sources of raw materials for making tools, sacred objects, or traditional hunting and gathering areas.

Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and implemented by 36 CFR 800, requires federal agencies to consider the effects of their actions on historic properties before undertaking a project that uses federal funds or is located on federal lands. A historic property is defined as any cultural resource that is included in, or eligible for inclusion in, the National Register of Historic Places (NRHP). The NRHP, administered by the National Park Service, is the official inventory of cultural resources that are significant in American history, prehistory, architecture, archaeology, engineering, and culture. The NRHP also includes National Historic Landmarks.

In consideration of 36 CFR 800, federal agencies are required to consult with the State Historic Preservation Officer (SHPO), Indian Tribes, representatives of local governments, and the public in a manner appropriate to the agency planning process for the planned action (undertaking) and to the nature of the undertaking and its potential to cause effects on historic properties. The methodology for identifying, evaluating, and mitigating impacts to cultural resources has been established through federal laws and regulations including the NHPA, the Archaeological Resource Protection Act, the Native American Graves Protection and Repatriation Act, and the American Indian Religious Freedom Act.

A cultural resource survey of the Roxana Site was performed in 2023 to meet the requirements of Section 106 of the NHPA, as well as the guidelines developed by the Kentucky Heritage Council (KHC) and the SHPO. The purpose of the investigation was to identify any cultural resources within the area of potential effects (APE) for the proposed undertaking, and to evaluate such resources as may be found regarding their eligibility for listing in the NRHP. The criteria for evaluating a cultural resource for inclusion in the NRHP are set forth in 36 CFR 60.6: National Register Criteria for Evaluation. The quality of significance in American History, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and may meet one or more of the following criteria:

- Criterion A (Event): Association with one or more events that have made a significant contribution to the broad patterns of national, state, or local history.
- Criterion B (Person): Association with the lives of persons significant in the past.
- Criterion C (Design/Construction): Embodiment of distinctive characteristics of a type, period, or method of construction; or representation of the work of a master; or possession of high artistic values; or representation of a significant and distinguishable entity whose components may lack individual distinction.
- Criterion D (Information Potential): Properties that yield, or are likely to yield, information important in prehistory or history. Criterion D is most often (but not exclusively) associated with

archaeological resources. To be considered eligible under Criterion D, sites must be associated with specific or general patterns in the development of the region. Therefore, sites become significant when they are seen within the larger framework of local or regional development. This criterion is typically used to assess the significance of archaeological sites.

The results of the background research and field surveys have been documented in cultural resource reports included as Appendix C.

### 3.6.1.1 Architectural Resources

The APE for the aboveground cultural resources survey, determined through consultations with the KHC, is based on the proposed FCI/FPC development at the Roxana Site. As such, the cultural historic survey APE consisted of all historic resources in direct line-of-sight within a 0.5-mile buffer surrounding the proposed site (Exhibit 3-9).

The survey was conducted to identify aboveground historic resources over 45 years of age located within APE; to evaluate these resources relative to their eligibility for listing in the NRHP; and to assess the potential direct and indirect effects of the proposed undertaking upon these resources.

A total of 20 resources over 45 years old, including six residential buildings, one service station and residential building, one industrial site, one religious building, one industrial/commercial building, five cemeteries, two bridges, one agricultural building, and two culverts, were identified within the APE (Table 3-8). Three of the resources were previously surveyed. Seventeen of the 20 resources are recommended as not eligible for listing in the NRHP due to a lack of historic and architectural significance and/or loss of integrity. Based on these findings, it is recommended that there will be no historic properties affected by the proposed project for these 17 resources.

**Table 3-8 NRHP Recommendations and Determinations of Effect**

KHC Site Number	Style/Form	NRHP Recommendation	Determination of Effect
LR-152	Early 20th Century American Vernacular/Hipped	Not Eligible	No Historic Properties Affected
LR-153	Early to Mid-20th Century American Vernacular/Hipped	Not Eligible	No Historic Properties Affected
LR-245	Mid-20th Century Cemetery	Not Eligible	No Historic Properties Affected
LR-318	Mid-Late 20th Century Industrial site	Not Eligible	No Historic Properties Affected
LR-319	Late 19th Century Cemetery	Not Eligible	No Historic Properties Affected
LR-320	Mid-20th Century American Vernacular/Side Gable	Not Eligible	No Historic Properties Affected
LR-321	Mid-20th Century Agricultural	Not Eligible	No Historic Properties Affected
LR-322	Mid-20th Century American Vernacular/Front Gable/Center-Steeple Church	Not Eligible	No Historic Properties Affected
LR-323	Mid-20th Century Commercial/ Mid-20th Century American Vernacular/Side Gable	Not Eligible	No Historic Properties Affected
LR-324	Mid-20th Century American Vernacular/Side Gable	Not Eligible	No Historic Properties Affected
LR-325	Mid-20th Century American Vernacular/Front Gable	Not Eligible	No Historic Properties Affected
LR-326	Early 20th Century Cemetery	Not Eligible	No Historic Properties Affected
LR-327	Early to Mid-20th Century Culvert	<b>Eligible</b>	<b>No Adverse Effect</b>
LR-328	Mid-20th Century American Vernacular/Front Gable	Not Eligible	No Historic Properties Affected



KHC Site Number	Style/Form	NRHP Recommendation	Determination of Effect
LR-329	Early 20th Century Family Cemetery	Not Eligible	No Historic Properties Affected
LR-330	Early to Mid-20th Century Concrete T-Beam Bridge	<b>Eligible</b>	<b>No Adverse Effect</b>
LR-331	Early to Mid-20th Century Culvert	<b>Eligible</b>	<b>Adverse Effect</b>
LR-332	Mid-20th Century Cemetery	Not Eligible	No Historic Properties Affected
LR-333	Early 20th Century Industrial/Commercial	Not Eligible	No Historic Properties Affected
LR-334	Early to Mid-20th Century Concrete Multiple Box Beam/Girder	Not Eligible	No Historic Properties Affected
Source: WSP 2023			

### 3.6.1.2 Archaeological Resources

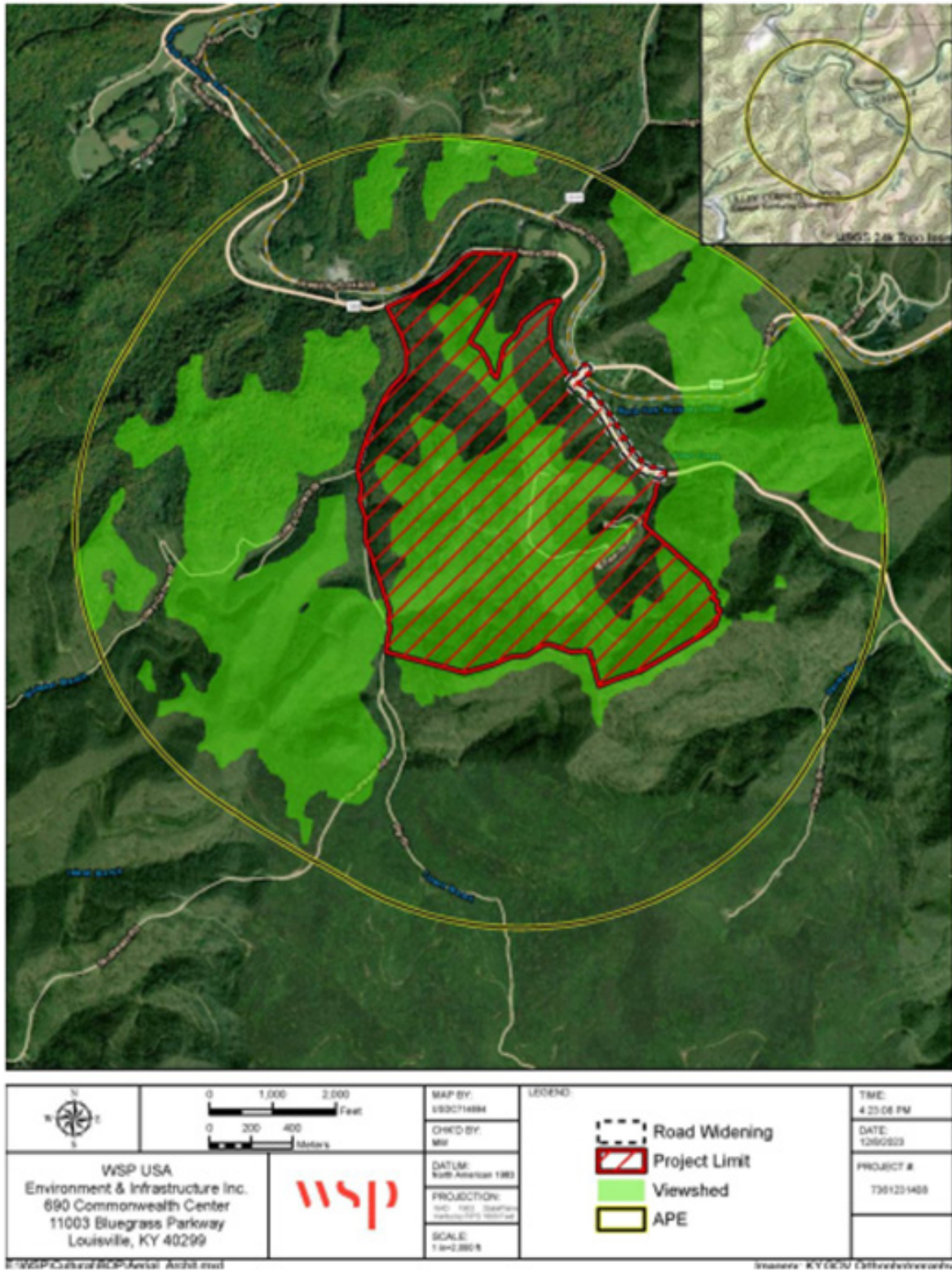
A review of mapping and aerial photos, along with two pedestrian reconnaissance conducted in 2011 (Sebestyen and Brann 2011) and 2014 (Sebestyen and Brann 2014) indicated that the Roxana Site had been completely disturbed by former surface mining activities. Background research conducted at the time also indicated that no previously identified archaeological sites were present at the Roxana Site. No archaeological resources eligible for listing on the NRHP were present and no further work was recommended as a result of the 2011 and 2014 archaeological surveys. Concurrence was received from the SHPO on January 24, 2012 and December 22, 2014. An additional survey was also conducted in 2017 (Brann 2017) with similar results.

Prior to the current (2023) survey, a records review was requested from the Office of State Archaeology (OSA) which showed that the three surveys collectively covered approximately 235 acres of the site leaving a substantial portion of the site not surveyed. To ensure thorough coverage of the site and any potential for direct impacts from ground-disturbing activities associated with construction of the proposed facility, the 2023 survey was conducted with an archaeological APE encompassing approximately 520 acres of the site. Such ground-disturbing activities include but are not limited to stripping and scarification of surface soils, construction of foundations and footings, trenching and excavation for infrastructure installations and extensions for water, sewer, power and natural gas services, new access drive construction, and installation of security fencing, lighting fixtures, and internal roadways and parking areas.

Since 235 acres were previously surveyed, the current investigation covered an additional 285 acres of the site. An additional three acres (representing a 50-foot buffer) were surveyed on the east side of KY 160 between the intersection of KY 160 and KY 588 and Rise Branch Road for possible roadway improvements. As a result of this survey one new archaeological site (15Lr114) was identified. The site was an early to late twentieth century occupation on the east side of Tolson Creek Road. Only one artifact was recovered. Also present was a modern outhouse, a covered well, and the remains of a small collapsed wooden shed. The area of the site was disturbed by previous road construction and by a small transmission line. Two possible sites were noted outside the site boundary along Tolson Creek Road. One was the foundation of a possible school and the other was the standing remains of a store. If the site boundaries should change to include the location of the school and/or store, then an additional archaeological investigation may be needed.

### 3.6.1.3 Traditional Cultural Properties

Under Section 106 of the NHPA, a federal agency is required to give consideration to issues of traditional religious or cultural areas concerning Native American groups. No TCPs have been identified within the project APE.



**Exhibit 3-9** Cultural Resource Survey Area of Potential Effects

## **3.6.2 Potential Impacts**

### **3.6.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, architectural and archaeological resources would not be affected, and mitigation measures would not be necessary.

### **3.6.2.2 Preferred Alternative**

#### ***Architectural Resources***

Based on the findings of the architectural survey, it is recommended that 17 of the 20 historic properties/ resources are not eligible for listing in the NRHP with none of the 17 adversely impacted as a result of the proposed FCI/FPC development. Three of the 20 historic resources, LR-327, LR-330, and LR-331, are recommended as eligible for listing in the NRHP under Criterion A and C due to their historic and architectural significance.

An increase in motor vehicle traffic within the area surrounding the site is expected during construction and operation of the proposed FCI/FPC. Given their locations along traffic corridors adjacent to the Roxana Site, LR-327, LR-330, and LR-331 may be impacted in relation to traffic-related capacity improvements, noise, and/or vibration.

The proposed project has the potential to have direct and/or indirect effects on LR-327 and LR-330. LR-327 is a box culvert located along KY 160, approximately 0.8-mile southeast of the intersection of KY 160 and KY 588. LR-330 is a concrete bridge located along KY 160, approximately 0.3-mile southeast of the intersection of KY 160 and Bluegrass Ridge Road. LR-331 is a box culvert located along KY 160, approximately 23 feet east of the intersection of KY 160 and Bluegrass Ridge Road. In the event improvements are necessary to KY 160, the proposed undertaking will have an impact on LR-331. KY 160 is adjacent to the structure and would likely require unsympathetic alteration or replacement of the structure. In that case, it is recommended that the proposed project will have an Adverse Effect on the resource with mitigation required for LR-331.

In the event access to the site during FCI/FPC construction and/or operation is necessary via KY 588, similar traffic-related capacity improvements, noise, and/or vibration may result with direct and/or indirect effects to as-yet unidentified historic resources. Therefore, further studies would be conducted to identify resources once the nature and extent of such improvements becomes known and to address potential effects and the need for mitigation.

#### ***Archaeological Resources***

Given the disturbed condition of Site 15Lr114 and the nondiagnostic nature of the artifact assemblage, the site was recommended as not eligible for the NRHP and that there will be No Adverse Effect by the proposed project with the condition that the 100-foot buffer around Site 15Lr115 (Frazier Cemetery) is maintained. If, however, proposed improvements to either KY 160 or KY 588 includes locations not previously surveyed and situated outside the existing right-of-way, then additional investigation of the new areas for archaeological resources will be completed once the proposed road design has been finalized.

#### ***Traditional Cultural Properties***

No TCPs have been identified within the project APE and no Adverse Effect is recommended.

## **3.6.3 Recommended Mitigation**

The proposed action would have an impact to one NRHP eligible cultural resource; therefore, further mitigation is required for this resource.

## 3.7 Hazardous Materials

### 3.7.1 Existing Conditions

The Roxana Site has been the subject of multiple Phase I Environmental Site Assessments (ESA) with latest performed in 2023. The purpose for conducting Phase I ESAs is to identify Recognized Environmental Conditions (RECs) as defined by ASTM International (ASTM) Standard Practice E1527-21, entitled “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” (ASTM Standard) and USEPA Rule entitled “Standards and Practices for All Appropriate Inquiries, Final Rule” (AAI Rule), 40 CFR Part 312. RECs are the presence or likely presence of any hazardous or petroleum products under conditions that indicate an existing release, a past release, or a material threat of release of such substances onto a subject property

Key definitions from ASTM Practice E1527-21, including REC, Controlled REC (CREC), Historical REC (HREC), and de minimis condition. The AAI Rule states that the ASTM Practice may be used to comply with the requirements of the AAI Rule, so, whenever reference is made to the ASTM Standard, it shall include the AAI Rule. The first Phase I ESA, conducted in October 2015 (Cardno, 2015), identified the following RECs associated with the Roxana Site:

- A large, red, steel barrel with a hand pump was observed and determined to be an environmental concern. The barrel contained liquid with a strong petroleum odor; however, no evidence of leaks or spills was observed on or around the barrel. It was recommended that the contents of the barrel be characterized, removed, and disposed of in accordance with applicable regulations.
- A storage tank was identified as a REC due to the fact that the open drainage valve presents a material threat of release. The tank was assumed to contain petroleum crude oil.
- A natural gas compressor station was observed and found to have experienced a release, and cleanup methods to address the leak were observed to be insufficient. The compressor station and surrounding soils were considered to be a REC.
- A larger steel fuel aboveground storage tank (AST) was observed to power the compressor station and considered an environmental concern due to lack of secondary containment and direct ground placement.
- An open topped, 50-gallon, plastic barrel and a 5-gallon bucket were observed near the compressor and were indicated to present a material threat of release of petroleum products and considered to be RECs.
- A small, stained area was observed beneath a valve at the large steel oil tank located approximately 50 yards south of the compressor station. The storage tank was contained within an earthen berm and no liner was observed beneath the tank. Therefore, the site was determined to present an environmental concern.
- A large plastic oil storage tank observed approximately 1,000 feet east of the compressor station was observed to be damaged and to have released a portion of its contents. This AST is within a lined and bermed area; however, the condition of the liner was not known. This site was considered to be a REC.
- Two transformers were observed, were assumed to contain PCBs, and were considered to be RECs.
- Several small receptacles containing solid waste and a fire pit where solid waste appears to be burned were observed. These were also considered to be environmental concerns.

The 2015 study recommended that a Phase II ESA be conducted in order to confirm the absence/presence of hazardous materials or petroleum products at the compressor station and at the leaking AST observed to the east of the compressor station. The two transformers located on the property were also recommended to be investigated for PCBs.

A Phase II ESA was conducted in 2016 (Cardno, 2016) which identified the concentrations of arsenic, which was detected at all locations on the subject property at concentrations well above the USEPA



Regional Screening Level. Sampling confirmed that impacted soils by petroleum products are located at three locations: the compressor station, the damaged AST, and the AST open drain valve. The following actions were recommended:

- The identified contaminated soils should be excavated and disposed of at a permitted disposal facility.
- The walls and floor of all excavated areas should be sampled to demonstrate compliance with Kentucky cleanup standards for petroleum hydrocarbons in residential areas.
- The owner/operator of the compressor station is a responsible party for the documented petroleum releases and, as such, is responsible for its cleanup. Prior to the acquisition of the property, it is recommended that the compressor station and all tanks, piping, and appurtenances be removed from the site. Once removed, any contaminated soils should also be removed and disposed of in accordance with applicable regulations.

With the passage of time, conditions within the Roxana Site may have changed and therefore, a new Phase I ESA was performed in October 2023 (WSP 2023). Preparation of the 2023 Phase I ESA consisted of a visual inspection of the Roxana Site, including any standing structures; a review of historical aerial photographs; a review and evaluation of local, state, and federal environmental databases containing information on each property; and interviews with appropriate officials regarding past uses of the properties. A field inspection was conducted October 2023 and the results of effort documented in a Phase I ESA report (Appendix E).

The findings of the 2024 Phase I ESA relevant to releases or suspected releases of hazardous substances and/or petroleum products and whether the finding is a REC, HREC, CREC, or de minimis condition are described below.

#### ***Recognized Environmental Conditions***

The Phase II Environmental Site Assessment confirmed that soils impacted by petroleum products are located at the compressor station, the damaged AST, and the AST open drain valve. It was recommended that the identified contaminated soils should be excavated and disposed of at a permitted disposal facility. It is unknown if these impacted soils have been removed from the site therefore this release is considered to be a REC.

#### ***Controlled Recognized Environmental Conditions***

No CRECs were identified in connection with the site.

#### ***Historical Recognized Environmental Condition***

Mining permit applications indicate surface and underground mining operations dating to the 1960s have occurred within the site with several mines listed in the US MINES and Abandoned Mines databases having occurred within the site. These mines include Meade & Shepherd Coal Company Inc., Lance Coal Corp, C&C Coal Company, Marie Enterprises Inc., Big Oak Coal Company, Roxana #2, and NO 1 Mine. These mines are indicated to have either been permanently closed or sealed and abandoned. No violations were found in connection with these mines but due to the historical use of hazardous substances in mining, this is considered a HREC.

#### ***De Minimis Conditions***

No minimis conditions were identified in connection with the site.

#### ***Business Environmental Risks***

No Business Environmental Risks were identified in connection with the site.

### **3.7.2 Potential Impacts**

#### **3.7.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, the use, storage, handling, and/or disposal of hazardous materials would not be affected, and mitigation measures would not be necessary.



### 3.7.2.2 Preferred Alternative

#### *Construction Phase*

Activities associated with the construction of the proposed FCI/FPC commonly require the use and storage of potentially hazardous materials including solvents, fuels, lubricants, hydraulic fluids, oils, batteries among other materials used to operate and maintain construction equipment. To avoid accidental spills or releases, materials considered hazardous and needed during construction would be delivered to the site and stored in a manner that would prevent these materials from leaking, spilling, and potentially polluting soil, surface waters, or groundwater. Such materials would also be handled in accordance with applicable federal, state, and local environmental and public and occupational health and safety regulations.

To avoid potential releases of hazardous materials into the environment, temporary staging areas would be established at the construction site for the storage and handling of such materials. Stored materials would be removed from designated areas by authorized personnel only, and removals would be recorded by on-site personnel overseeing the FCI/FPC construction. Liquid storage areas would also have secondary containment systems in place to reduce the risk of potential spillage. The storage of hazardous materials on-site during construction would be minimized or avoided where practicable (e.g., fuel oil for construction and other equipment would be transported to the site by fuel trucks as needed). With the implementation of appropriate handling and management procedures, the use of hazardous materials necessary during construction would have no significant adverse environmental impacts.

Contractors involved in FCI/FPC construction, with FBOP oversight, would be responsible for the handling and storing of wastes considered hazardous that may be generated during construction and to do so in accordance with applicable regulations. Such wastes commonly include, but are not limited to, empty containers, spent solvents, waste oil, spill cleanup materials (if used), lead-acid batteries from construction equipment among other wastes and are expected to total less than 220 pounds (100 kilograms) during a calendar month. Construction contractors would also be responsible for safely removing construction-generated wastes from the site and for arranging for transportation, recycling, or disposal. The construction contractor would be responsible for determining their regulatory status regarding hazardous waste generation during construction and obtaining and maintaining compliance with applicable federal and state regulations.

Based on experience developing other FCIs and FPCs, the volume of waste generated during construction should have no significant impact on the ability or availability of waste handlers operating in the area to collect and properly dispose of such wastes. With the appropriate handling storage, management, and oversight procedures, hazardous wastes generated during construction would have no significant adverse environmental impacts.

#### *Operation Phase*

FCI/FPC operation also involves the handling, use, and storage of materials considered hazardous including janitorial supplies, laundry detergents and sanitizers, pesticides and herbicides for landscape maintenance, propane and diesel fuels, lubricants, paints, and other maintenance supplies. All such materials are handled in accordance with applicable FBOP operating policies and procedures and regulatory requirements. This includes maintaining an inventory of such materials, designating secure areas for storage, storage in approved containers, proper labeling, and training employees in the proper handling and use of such materials. These steps combined with proper spill response would decrease the likelihood of spills and reduce the potential for adverse environmental impacts.

Experience from existing FCIs and FPCs around the nation has found that activities associated with operation of the new FCI/FPC may result in the generation of small amounts of regulated wastes. Hazardous materials used during operation and any resulting wastes represent a small portion of the overall volume of wastes generated at a federal correctional facility and would be handled and stored in accordance with operating policies and procedures, collected only by licensed handlers,

and disposed of at only approved disposal facilities in accordance with regulatory requirements. The same applies to biohazardous medical wastes generated by the health care unit with a commercial contractor retained to provide approved waste containers and to collect and dispose of such wastes in accordance with institution policies and procedures and applicable regulatory requirements.

Operation of the proposed FCI/FPC is not expected to result in the release of contaminants into the environment. In addition, the volume of hazardous wastes generated during construction and routine operation should have no significant adverse impact on the ability or availability of licensed handlers to collect and properly dispose of such wastes. As a result, the proposed action is not expected to result in the release of contaminants into the environment and, therefore no significant adverse impacts are anticipated.

### **3.7.3 Recommended Mitigation**

The Phase II ESA confirmed that soils impacted by petroleum products are located at the compressor station, the damaged AST, and the AST open drain valve and recommended that any contaminated soils which exist in these locations be excavated and disposed of at a permitted disposal facility. Any testing and permitting required to excavate and dispose of contaminated soils will be incorporated within the initial site preparation phase. No other mitigation measures, other than adherence to regulations governing the proper management, storage, and disposal of hazardous materials and wastes, would be warranted during the facility's construction and operation.

## **3.8 Fiscal Considerations**

### **3.8.1 Existing Conditions**

Fiscal considerations are those having to do with the public treasury or revenue. Potential fiscal impacts could, but do not always, include removal of property from the public tax rolls; acquisition of property through use of public funds; and other public expenditures related to a proposed action (e.g., public infrastructure improvements).

Fiscal considerations of federal government-sponsored projects or actions, such as development of the proposed FCI/FPC, are of interest to local governments. This is due to the possible loss of tax revenues since federal agencies typically do not contribute property taxes or make similar payments to other government jurisdictions for federal institutions or facilities. In this case the Roxana Site properties are privately owned and contribute property and other applicable tax payments to Letcher County and/or other levels of government.

### **3.8.2 Potential Impacts**

#### **3.8.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, there would be no changes to property ownership that would affect the county's fiscal condition, and mitigation measures would not be necessary.

#### **3.8.2.2 Preferred Alternative**

As noted above, properties comprising the Roxana Site are in private ownership and control and contribute property and other applicable tax payments to Letcher County and/or other levels of government. With property acquisition by the federal government for FCI/FPC development, all tax and similar payments would cease. Offsetting the loss of tax payments will be the positive fiscal impacts resulting from the economic activities derived from the institution's construction and operational phases, as well as from multiplier effects resulting from the new economic activity provided by the new institution and its employees. Expenditures for utility services and related expenses are recouped through payment of user charges and, therefore, have no adverse impact.

### **3.8.3 Recommended Mitigation**

In the absence of significant adverse impacts, no mitigation measures are warranted.

## 3.9 Visual and Aesthetic Resources

### 3.9.1 Existing Conditions

Aesthetic features of the Roxana Site are representative of those found throughout Letcher County with gently rolling terrain (a remnant of past mining activities) in the central portion of the site. From the central area, the site slopes downward towards the Tolson Branch and Kings Creek with the overall landscape consisting of steep mountain slopes and valleys. While the site is largely vacant, there are several small standing structures remaining from past use of the site. Roadways in the vicinity of the site are located at the base of the site with views of the interior obstructed by topographic conditions and the dense tree stands that line the roadways. Aesthetic features of the site are not considered unique to the area and there are no sensitive viewer groups or view sheds in and around the site.

### 3.9.2 Potential Impacts

#### 3.9.2.1 No Action Alternative

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, there would be no changes to the landscapes and visual environments, and mitigation measures would not be necessary.

#### 3.9.2.2 Preferred Alternative

Development of the proposed FCI/FPC would result in changes to the aesthetic and visual conditions of the site. Potential impacts could arise as described below.

##### *Construction Phase*

Immediately following authorization, the construction contractor would begin mobilizing manpower, equipment, and materials to the project site. The initial phase of development would involve site preparation activities and access road construction followed by utility infrastructure installations and extensions. This would involve the extension of power lines, natural gas, water supply, wastewater collection, and telecommunications utilities. Physical features to manage stormwater and control soil erosion and sedimentation during and after construction would also be installed in select locations around the planned development zone. The land area required for actual development would comprise approximately 200 acres of the overall site with the majority of the site to remain in its current condition.

Throughout the construction phase, visual and aesthetic conditions within the development zone would be altered by installation of temporary construction trailers, the use of equipment involved in preparing the area for development (i.e., ground clearing, grading, trenching, excavating, etc.), delivery and stockpiling of building materials and equipment, construction of the structures comprising the new FCI/FPC, along with internal access drives, parking areas, and similar facilities. The duration of such impacts would extend for the period of time devoted to construction, estimated at 36 months, and projected to begin in 2026 and end in 2029.

The proposed action envisions positioning the planned development zone within the central portion of the site at an elevation well above the surrounding roadway network and adjoining and nearby residences and other land uses. To minimize the potential environmental impacts associated with site preparation, a compact, campus-style arrangement of structures is planned that allows for the majority of the forests, understory, and topography that comprise the periphery of the development zone to remain undisturbed.

The structures comprising the FCI/FPC would be primarily low-rise (one and two stories in height) and, to the degree feasible, be designed to be unobtrusive. As a result, development of the new FCI/FPC is not expected to result in significant adverse impacts to visual and aesthetic resources beyond the development zone, site boundary, or to neighboring and nearby properties. No additional visual and aesthetic impacts are anticipated once construction of the proposed FCI/FPC is completed.

## **Operation Phase**

Once construction is completed, the visual and aesthetic characteristics of the site would be permanently changed to an intensively developed area with the structures and other components of the FCI the dominant visual features on the formerly vacant and predominantly wooded landscape. By comparison, the FPC, garage/landscape building, outside warehouse, utility plant, water tank, and employee training center would be less consequential as these features would be overshadowed by the FCI and its surrounding perimeter fences, light fixtures, and other security measures.

Following construction, the principal visual features of the FCI would comprise the AIC housing units; administrative offices, program spaces, and support buildings; indoor and outdoor recreational facilities; internal roadways, parking areas, and pedestrian walkways; utility plant, warehouses and other support structures; lighting fixtures, security fencing, and signage. The principal groupings associated with AIC housing, administrative structures, and support components, totaling approximately 400,000 to 500,000 square feet of floor space, would be organized as a visually simplified and unified architectural composition in terms of building arrangements and uses as well as the selection of exterior façade colors, textures and building materials, and would remain as permanent additions to the landscape.

It is recognized that the night sky is an important component of the visual and aesthetic environment and that lighting equipment used to illuminate the secure compound, perimeter fences and patrol road, parking lots and internal access roads has the potential to have negative impacts. Lights would be both building- and pole-mounted and would provide a minimum of 1.5 foot-candles of illumination within and immediately surrounding the grounds of the FCI/FPC and along internal roadways and parking areas. FBOP lighting standards involve use of 100-foot tall metal poles; in this case the height of light poles will be determined during the design process to ensure the required lighting levels are achieved throughout while avoiding shadows and blind spots. In addition, the luminaries on each pole will consist of LED fixtures suitable for high mast applications. Pole height and the choice of light sources used for illumination are employed for the ability to relight the institution quickly in the event of a power outage.

The location and design of the access drive from the public roadway network would also be given careful attention including the placement of directional signage and lighting fixtures leading to the FCI/FPC, other facilities, and parking areas. Internal roadways and parking areas would also be designed, constructed, and maintained to a high standard.

Depending upon location, nighttime operation of the proposed facility would be visible from adjoining hills and vantage points; however, the facility would be largely obstructed by its elevation relative to the nearby roadway network and the widely spaced residences which line portions of KY 588 and KY 160. Nonetheless, the potential for adverse impacts would be minimized to the extent possible using the measures described below.

### **3.9.3 Recommended Mitigation**

While permanent aesthetic alterations are anticipated as a result of the proposed project, impacts would be minimized/mitigated by implementing design features that are sensitive to the site's visual environment. These features include a low-rise and compact development in a campus-style arrangement, a location at an elevation well above the community of homeowners in Roxana, and the undeveloped woodland surrounding the facility.

Potential impacts during night-time operation of the FCI/FPC would result primarily from equipment used to illuminate the secure compound, perimeter fences and patrol road, parking lots and internal access roads. While the precise details of the lighting plan to be employed at the proposed facility have not yet been fully developed, FBOP Technical Design Guidelines (Section 26 25 00 - Exterior Lighting) requires the lighting plan to comply with the following standards: NFPA 70 - National Electric Code; NFPA 101 - Life Safety Code; IESNA - Lighting Handbook, Reference, and Application; the American Correctional Association; and the Buy American Act. Together these requirements incorporate many of the most effective measures to limit unwanted light. This includes

use of full cutoff luminaires for all security lights which provide complete concealment of the light source above the rim of the fixture. By incorporating such fixtures, the light emitted is projected below the horizontal plane of the lowest point of the fixture resulting in maximum downlighting while minimizing upward dispersal of light to the sky. In addition to security lighting, the facility will employ typical parking lot, roadway, and pathway lighting which also includes use of full cutoff luminaires to minimize potential impacts.

Current generation LED fixtures mounted on tall metal poles are proposed for use to provide state-of-the-art, energy-efficient illumination. FBOP experience with LED fixtures has demonstrated less light spread beyond the secure compound than traditional high-pressure sodium and metal halide fixtures, resulting in lower ambient light pollution levels.

The FBOP has reviewed its typical security lighting system to identify additional measures which could be employed to further reduce potential impacts associated with security lighting. While use of full cutoff luminaires and LED fixtures would address most concerns over unwanted light, the following recommendations will be considered during design of the lighting plan:

- Require full cutoff fixtures for wall pack lighting in all applications.
- Use shields on luminaires in which light trespass may be an issue. Shields are not normally recommended for use at correctional facilities since spill light is beneficial to serve as transition lighting for security purposes.
- Employ low-reflectance surface materials where practical to minimize the upward reflection of light. An example of a low-reflectance surface material would be use of asphalt rather than concrete for parking areas, walkways, etc. The FBOP already uses asphalt rather than concrete in areas which can function with that material.

No other mitigation measures are warranted.

## **3.10 Demographics**

### **3.10.1 Existing Conditions**

To assess the potential effects of a proposed project, the current demographic characteristics of the host area are established and potential impacts to the resident population are then identified and analyzed. Potentially significant adverse impacts could result if a project would substantially alter the location, composition, and distribution of the population or segment of the population within a given geographic area or cause the population to increase or decrease beyond traditional historical growth rates. The study area selected for analysis comprises the City of Whitesburg (the County Seat) and Letcher County within which the proposed FCI/FPC would be located, with comparisons to the Commonwealth of Kentucky as a whole. Given their small population size, detailed demographic statistics for Whitesburg and other communities in Letcher County are unavailable.

#### **3.10.1.1 Population Trends**

Letcher County has experienced a steady decline in population, decreasing from its peak of 30,763 in 1981 to 27,000 in 1990 (-12.2 percent). The decline in population has continued, reaching 25,275 in 2000 (-6.4 percent), 24,519 in 2010 (-2.9 percent), to the current population of 21,548 in 2020 (-12.1 percent). During this time, the City of Whitesburg's population, as a percentage, surged from 1,598 in 2000 to 2,139 in 2010 (33.8 percent) only to see it return to a more traditional level of 1,773 (-17.1 percent) between 2010 to 2020. The City of Jenkin's population (the most populated community in the county) followed Letcher County's trend with decreases of 3.1 percent and 13.6 percent respectively between 2000 and 2010 and between 2010 and 2020. These rates compare to the state as a whole which grew by 7.4 percent and 3.8 percent during the same periods (Table 3-9). The decreases in population experienced in Letcher County is likely the result of people who leave the area to seek employment and other opportunities.



**Table 3-9** Population Trends, 2000-2020

Jurisdiction	2000	2010	% Change 2000-2010	2020	% Change 2010-2020
Whitesburg, Kentucky	1,598	2,139	33.8%	1,773	-17.1%
Jenkins, Kentucky	2,273	2,203	-3.1%	1,902	-13.6%
Letcher County, Kentucky	25,275	24,519	-2.9%	21,548	-12.1%
Commonwealth of Kentucky	4,041,769	4,339,357	7.4%	4,505,836	3.8%
Source: U.S. Census Bureau 2000, 2010, 2020.					

### 3.10.1.2 Population Characteristics

Of Letcher County's 2020 population, approximately 10,903 (50.6 percent) were female and 10,645 (49.4 percent) were male with the state recording similar percentages with approximately 2,276,655 (50.3 percent) females and 2,249,499 (49.7 percent) males (Table 3-10).

The largest share of Letcher County's population in 2020 identifies with the White racial category (97.9 percent) representing approximately 21,095 individuals followed by the Black/African American population at 0.7 percent or 151 residents. Asians comprise 0.3 percent (65 persons) of the population followed by American Indian/Alaskan Native alone at 0.2 percent (43 persons). Persons of Hispanic or Latino origin represent approximately 1.0 percent of the county's population or 215 individuals (Table 3-10).<sup>1</sup>

**Table 3-10** Racial Characteristics

Category	Letcher County		Commonwealth of Kentucky	
	Total	% of Total	Total	% of Total
Population	21,548	100%	4,526,154	100%
Male	10,645	49.4%	2,249,499	49.7%
Female	10,903	50.6%	2,276,655	50.3%
White alone	21,095	97.9%	3,933,228	86.9%
Black/African American alone	151	0.7%	393,775	8.7%
American Indian/ Alaska Native alone	43	0.2%	13,578	0.3%
Asian alone	65	0.3%	81,471	1.8%
Native Hawaiian/Other Pacific Islander alone	0	0.0%	4,526	0.1%
Hispanic or Latino Origin*	215	1.0%	194,625	4.3%
Notes: Data presented reflects most reported race and ethnicity categories; percentages may not add to 100 percent due to rounding. *Hispanic or Latino origin may be of any race. Source: U.S. Census, 2020.				

<sup>1</sup>Storms occurred throughout Letcher County and southeastern Kentucky in 2022, producing catastrophic flooding. In addition to the loss of life, over 9,000 homes and 120 businesses were damaged or destroyed and contributing to the declining population and struggling economy of the county and region.

The racial composition of Letcher County in 2020 was less diverse than the state as a whole where 3,933,228 (86.9 percent) residents are White and 393,775 (8.7 percent) were Black/African American. Approximately 13,578 individuals (0.3 percent) were American Indian/Alaska Native while 81,471 (1.8 percent) were Asian; and 4,526 (0.1 percent) were Native Hawaiian/Other Pacific Islander. Persons of Hispanic or Latino origin represent approximately 4.3 percent of the state's population or 194,625 individuals (Table 3-10).

U.S. Census data for 2020 also indicates that 1,151 persons (5.4 percent) in Letcher County were under the age of five; 913 (4.2 percent) were between five and nine years of age; 2,891 (13.5 percent) were between 10 and 19 years; 3,495 (16.3 percent) were between 20 and 34 years; 2,657 (12.4 percent) were between 35 and 44 years of age; 2,827 (13.2 percent) were between 45 and 54 years of age; 3,233 (15.0 percent) were between 55 and 64 years of age; 55,992 (10.3 percent) were between 65 and 84 years of age; and 344 (1.6 percent) were over the age of 85 (Table 3-11).

The age breakdown for the state as a whole is similar to that for Letcher County with 12,849 persons (5.0 percent) under the age of five; 11,597 (4.5 percent) between five and nine years of age; 29,847 (11.6 percent) between 10 and 19 years; 68,724 (26.6 percent) between 20 and 29 years; 40,305 (15.6 percent) between 30 and 39 years of age; 26,555 (10.3 percent) between 40 and 49 years of age; 25,687 (9.9 percent) between 50 and 59 years of age; 22,319 (8.6 percent) between 60 and 69 years of age; 13,211 (5.1 percent) between 70 and 79 years of age; and 7,272 (2.8 percent) over the age of 80.

Approximately 36.0 percent of persons 25 years of age or older residing in Letcher County had a high school diploma in 2020, a level higher than the state as a whole where approximately 32.4 percent of the population 25 or older had a high school diploma. However, the population without a high school diploma (a standard for most federal employment) in Letcher County was 21.1 percent, far higher than the state as a whole a 11.0 percent. Of those 25 years and older in Letcher County, approximately 13.1 percent had a bachelor's degree or higher, far less than the 27.9 percent recorded for the state as a whole (Table 3-12).

**Table 3-11** Age Characteristics

Age Group (years)	Letcher County		Commonwealth of Kentucky	
	Total	% of Total	Total	% of Total
All	21,548	100%	4,526,154	100%
< 5	1,151	5.4%	262,517	5.8%
5 to 9	913	4.2%	280,621	6.2%
10 to 19	2,891	13.5%	579,348	12.8%
20 to 34	3,495	16.3%	891,652	19.7%
35 to 44	2,657	12.4%	570,295	12.6%
45 to 54	2,827	13.2%	561,243	12.4%
55 to 64	3,233	15.0%	588,400	13.0%
65 to 84	3,979	18.6%	715,132	15.8%
85+	344	1.6%	76,945	1.7%
Source: U.S. Census, 2020.				

**Table 3-12 Educational Attainment**

Category	Letcher County		Commonwealth of Kentucky	
	Total	% of Total	Total	% of Total
Population 25 years and older	15,377	100%	3,091,499	100%
Did not graduate high school	3,245	21.1%	340,065	11.0%
High School graduate	5,536	36.0%	1,001,646	32.4%
Some college or Associate's degree	4,582	29.8%	887,260	28.7%
Bachelor's degree	1,138	7.4%	510,097	16.5%
Graduate or professional degree	876	5.7%	352,431	11.4%
Source: U.S. Census, 2020.				

## 3.10.2 Potential Impacts

### 3.10.2.1 No Action Alternative

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, the demographic composition of Letcher County and the Commonwealth of Kentucky would be unaffected, and mitigation measures would not be necessary.

### 3.10.2.2 Preferred Alternative

#### *Construction Phase*

During FCI/FPC construction, there is the potential for the population of Letcher County to increase as construction workers and their families are attracted to the area for employment. Any potential increase is dependent upon the duration of construction, the number of jobs and skills required to construct the FCI/FPC, the ability of the local labor market to fill those positions, and the availability and location of suitable housing for the workforce in proximity to the project site.

Letcher County currently has a small and declining population base (21,548 residents) and a small civilian workforce (7,553 workers) of which approximately 336 workers are employed in the construction industry. By contrast, nearby Wise County, Virginia has a larger population base (36,118 residents), a larger civilian workforce (13,054 workers), and approximately 590 workers in the construction industry. The same is true for nearby Pike County which has a population of 54,134, a civilian workforce of 19,273, and approximately 1,253 workers in the construction industry. Other counties in southeastern Kentucky and western Virginia also have workers which may be available to assist with FCI/FPC construction. Given these conditions, the construction workforce in general, and the skills needed among the workforce in particular, is expected to be drawn from communities throughout southeastern Kentucky, western Virginia, and beyond with only a small portion of the construction workforce expected to be filled by current Letcher County residents.

Experience developing other federal correctional facilities in southeastern Kentucky (McCreary County, Martin County, and Clay County) and western Virginia (Pennington Gap) has shown that the availability of suitable housing for long-term and short-term stays plays a key role in whether any portion of the construction workforce will relocate to the host county. The lack of available and suitable housing and hotel and motel accommodations will likely limit the number of workers and their families from relocating to Letcher County during construction. Construction workers traveling long distances from their place of residence are also known to use recreation vehicles for housing during the work week, returning to the place of residence on weekends.

A contingent of FBOP employees and contractor staff retained by the FBOP, is commonly assigned to observe and monitor the construction, meet periodically with construction contractors, review construction progress, process payments, and carry out other administration functions on-site. The number of workers involved in construction oversight is expected to be small (less than 10)

and following completion, these FBOP and/or contractor employees would be assigned to other locations or return to their original offices. Given that, the potential population impacts directly attributable to FCI/FPC construction are not expected to significantly alter the number, location, composition, and distribution of the county's population.

With development confined to the Roxana Site, no sensitive population groups, (i.e., children, minorities, low income individuals, seniors, etc.) would be displaced, relocated or otherwise adversely affected during this phase. Instead, FCI/FPC construction is expected to support population retention in southeastern Kentucky and western Virginia based on the increased economic activity and construction employment opportunities associated with the project. Taken together, population impacts directly attributable to FCI/FPC development are expected to be widely distributed, minimizing potential impacts in any given location.

FCI/FPC construction is also expected to lead to the creation of employment from the spin-off ("multiplier effects") of construction payrolls and material and supply purchases and lasting for the duration of construction (approximately 36 months). A review of recent census data for southeastern Kentucky and western Virginia involving working age populations, labor force participation, unemployment rates, and educational attainment has revealed a labor pool within the region sufficient to support in-direct demand with any resulting induced population impacts expected to benefit the region as a whole.

### ***Operation Phase***

Once operational, the proposed FCI/FPC is expected to employ a workforce of approximately 300 to 350 permanent employees. To ensure that the new FCI/FPC has a core group of experienced employees for activation and initial operation with being fully staffed at an estimated 325 employees, approximately 40 percent of the workforce (130 employees) would be current FBOP employees transferred from other federal correctional facilities while 60 percent (approximately 195 persons) would be new hires. All prospective new hires would be required to meet FBOP standards for employment involving age limits, educational achievement, and relevant work experience, and successfully pass stringent background examinations (i.e., criminal history, drug use, financial stability, etc.).

The FBOP has faced challenges in recruiting and retaining its workforce in southeastern Kentucky, evidence by the number of open (vacant) positions among the workforce with 36 vacancies at USP McCreary in McCreary County, 27 vacancies at USP Big Sandy in Martin County, and 27 vacancies at FCI Manchester in Clay County (FBOP 2024). Letcher County has a small population base with 3,495 residents (16 percent) of the total population between the ages of 20 and 35 and eligible to be hired by the FBOP. (At the time of hiring, applicants for Correctional Officer positions must not have reached their 39th birthday unless they meet conditions which may exempt them from the entry age threshold). Coupled with the level of educational achievement among the resident population over the age of 25, and FBOP experience recruiting applicants that can successfully pass stringent background examinations, the number of new hires originating from the current Letcher County labor force is expected to be small.

This is further substantiated by the number of Letcher County residents currently employed by the FBOP at its facilities in Kentucky. Examination of place of resident information (zip codes) for 1,061 FBOP employees working at federal correctional facilities in McCreary County, Martin County, and Clay County reveals 58 percent are residents of just six counties; Laurel County (123), Johnson County (118), Clay County (117), Pulaski County (104), Whitley County (80), and Floyd County (71). Without limits on their place of residence, FBOP employees are free to reside in locations where the combination of housing availability, spousal employment opportunities, low crime rates, racially diverse populations, quality public schools, amenities, cost of living, and other factors meet their needs and preferences. While FBOP employees were found residing in West Virginia, Tennessee and Virginia, only one employee amongst the 1,061 employees had a home address in Letcher County (Exhibit 3-10).

Given these conditions and the experience at federal correctional facilities in McCreary County, Martin County, and Clay County, only a small portion of the permanent workforce needed to operate

the FCI/FPC is expected to be filled by current Letcher County residents. Instead, the majority of workers are expected to be drawn from communities throughout southeastern Kentucky and western Virginia. As a result, the potential population impacts directly attributable to FCI/FPC operation would be widely disbursed and not significant enough to alter the number, composition, and distribution of Letcher County's population. Further implications of these findings are described further in the sections that follow.

FCI/FPC operation has the potential to lead to the creation of employment from the spin-off ("multiplier effects") of annual payrolls and material and supply purchases. Recent census data for southeastern Kentucky and western Virginia involving working age populations, labor force participation, unemployment rates, and educational attainment reveals a labor pool within the region sufficient to support in-direct demand with any resulting induced population impacts expected to benefit the region as a whole.

#### ***Addition of Federal AIC to the Resident Population***

Federal AIC are considered to be residents of the area in which they are housed and are counted as such by the U.S. Census Bureau at the time of the decennial census. Therefore, federal AIC, when housed within a local jurisdiction during the decennial census, can act to increase the community's population which may benefit the host community in some state and federal aid programs without consuming any housing or increasing the burden on community services. Any benefits which may result from having approximately 1,408 federal AIC housed in the county and included among its total population would be governed by state and federal laws and the requirements and regulations of particular population-based aid programs.

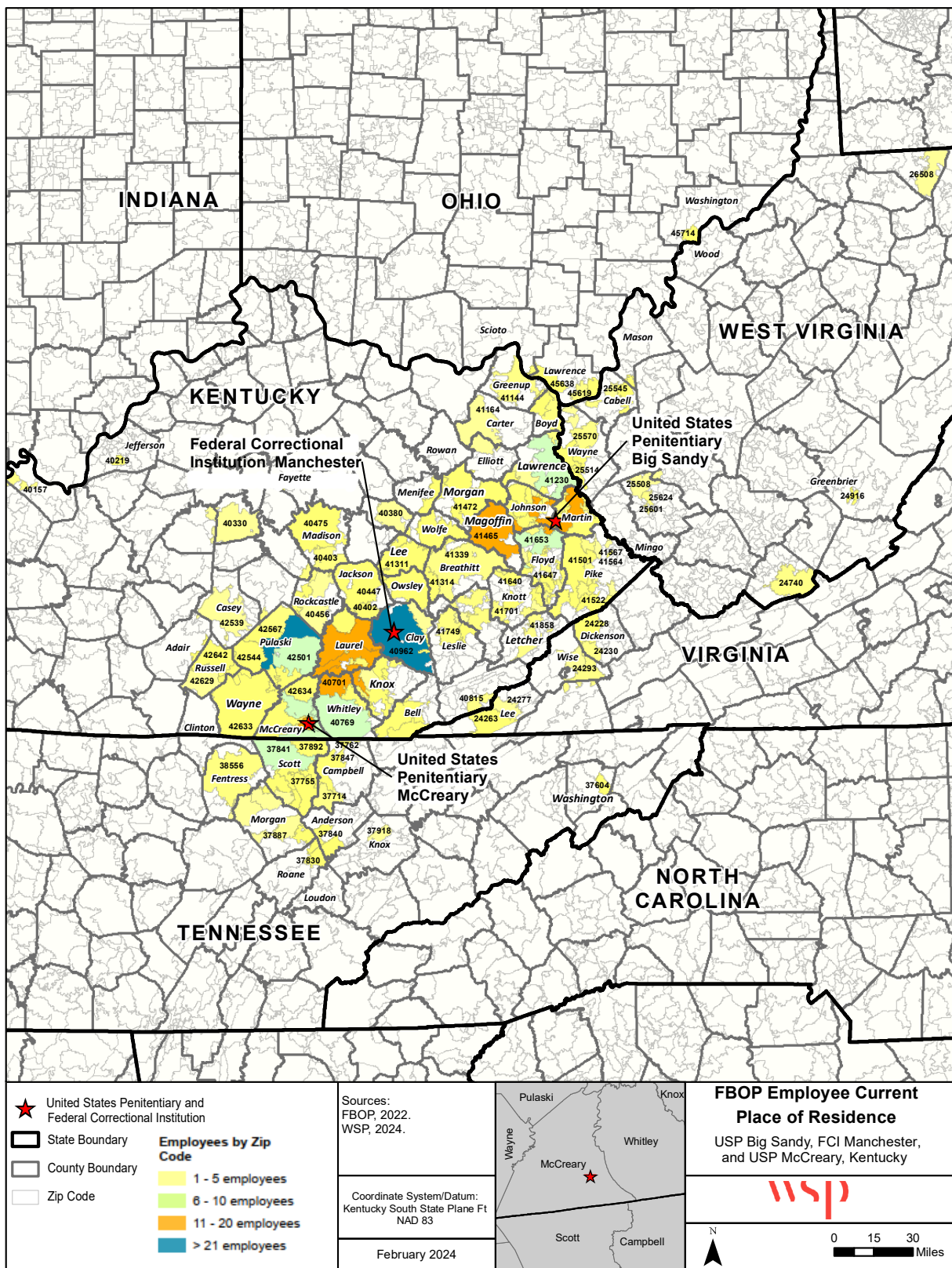
Federal AIC are not released to the host community (i.e., Letcher County) at completion of their sentence nears but rather exit from custody via FBOP contracted half-way houses and similar housing located in more urban areas where transitional housing and AIC employment opportunities are more plentiful. Available evidence also indicates that dependents of federal AIC do not typically relocate to the place of incarceration, choosing instead to remain in their home communities (due in part to cost considerations). Federal AIC and their dependents also generally do not return to the place of incarceration upon release, choosing instead to return to their home communities to resume their personal and work lives. Therefore, the direct impact on a host community population would be limited to the number of AIC housed in the facility which, in the case of the proposed FCI/FPC, would total approximately 1,408 individuals.

### **3.10.3 Recommended Mitigation**

Any increase in Letcher County's population experienced during the FCI/FPC construction phase, although temporary, would be considered beneficial. However, with the workforce involved in construction expected to originate from widely dispersed locations, potential impacts to any single jurisdiction attributable to FCI/FPC construction would be minimal with no significant adverse population-related impacts expected. In the absence of adverse impacts, no mitigation measures during construction are warranted.

Unlike the construction phase, any increase in Letcher County's population experienced during FCI/FPC operation would be long-term, lasting during the life of its operation and beneficial. However, the employees responsible for FCI/FPC operation are also expected to originate from widely dispersed locations. While potential impacts to Letcher County or other single jurisdiction attributable to FCI/FPC operation would be small, the impact would be considered beneficial and help offset the decline in population experienced throughout the region. In the absence of adverse impacts, no mitigation measures during operation are warranted.





**Exhibit 3-10** FBOP Employee Current Place of Residence

## 3.11 Economics

### 3.11.1 Existing Conditions

According to the U.S. Census, Letcher County's employed civilian labor force (age 16 years and over) in 2021 totaled 6,797, form a total civilian labor force of 7,553. The industries that employ the greatest number of workers in Letcher County include educational services, and health care and social assistance (34.6 percent) and retail trade (14.7 percent). In Kentucky, the largest industry employers are educational services, and health care and social assistance (23.8 percent); manufacturing (14.4 percent); and retail trade (12.3 percent). Employment by industry in Letcher County and Kentucky is depicted in Table 3-13.

**Table 3-13** Employment Characteristics

Industry	Letcher County, Kentucky		Commonwealth of Kentucky	
	Number Employed	Percent Employed	Number Employed	Percent Employed
Agriculture, forestry, fishing and hunting, and mining	323	4.8%	25,440	1.7%
Construction	336	4.9%	86,289	6.2%
Manufacturing	280	4.1%	227,494	14.4%
Wholesale Trade	154	2.3%	30,703	2.0%
Retail Trade	997	14.7%	143,675	12.3%
Transportation and warehousing, and utilities	505	7.4%	97,714	7.0%
Information	108	1.6%	19,777	1.3%
Finance and insurance, and real estate and rental/leasing	147	2.2%	93,543	5.8%
Professional, scientific, management, and administrative and waste management services	309	4.5%	127,396	9.1%
Educational services, health care and social assistance	2,354	34.6%	331,575	23.8%
Arts, entertainment, recreation, accommodation, and food services	476	7.0%	63,159	7.5%
Other services, except public administration	346	5.1%	55,962	4.7%
Public administration	462	6.8%	76,707	4.3%
<b>Total</b>	<b>6,797</b>	<b>100%</b>	<b>1,379,434</b>	<b>100%</b>
Source: U.S. Census Bureau 2021.				

While unemployment rates in Kentucky have seen a steady decline from a peak of 9.3 percent in 2014 to 5.3 percent in 2021, the unemployment rate in Letcher County has remained steady during that time ranging between 12.0 to 12.9 percent with a dip to 9.1 percent in 2020, rebounding to 10.0 percent in 2021 (Table 3-14). By comparison, the U.S. unemployment rate for 2021 was 3.9 percent.

**Table 3-14** Unemployment Rates

Jurisdiction	2014	2015	2016	2017	2018	2019	2020	2021
Letcher County, Kentucky	12.0	12.6	12.9	12.2	12.8	12.6	9.1	10.0
Commonwealth of Kentucky	9.3	8.4	7.6	6.8	6.1	5.6	5.4	5.3
Source: U.S. Census Bureau 2021.								

According to the U.S. Census, Letcher County residents recorded a median household income of \$38,466 in 2020, which is 36.1 percent lower than the state (\$60,183) and 40.8 percent lower than the median household income for the U.S. (\$64,994). The U.S. Census recorded per capita income for Letcher County of \$23,522 in 2020, which is 29.8 percent lower than the state (\$33,515) and 33.5 percent lower than the U.S. (\$35,384). Approximately 28.7 percent of Letcher County's population is living below the poverty line which is higher than the state (16.5 percent) and considerably higher than the U.S. (12.8 percent).

Research was conducted to identify the patterns of workers commuting into Letcher County from neighboring counties, those commuting to jobs in Letcher County from within the county, and those commuting from Letcher County to jobs in neighboring counties (Kentucky Stats, Commuting Patterns Report, 2018). The research revealed that 1,883 workers commute into Letcher County for work with the largest percentages originating from Pike County (16 percent), Knott County (9 percent), Floyd County (7.5 percent) and all other counties inside and outside of Kentucky (68 percent). Of those employed Letcher County residents, approximately 2,175 commute to jobs within Letcher County.

Approximately 4,091 workers are commuting to jobs located outside Letcher County with the largest percentages traveling to Pike County (15 percent), Perry County (13 percent), Fayette County (7.5 percent), and all other counties inside and outside of Kentucky (64 percent). The number of workers traveling to jobs outside Letcher County is greater than those commuting into the county from neighboring areas as well as those commuting from Letcher County to jobs in Letcher County.

Given employment opportunities outside the county, the openings available across a broader range of industries, trades, and service sectors, and the potential for higher wages, Letcher County residents have shown a willingness to commute long distances to meet their employment needs.

## 3.11.2 Potential Impacts

### 3.11.2.1 No Action Alternative

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, the economies of Letcher County, southeastern Kentucky, and western Virginia would be unaffected, and mitigation measures would not be necessary.

### 3.11.2.2 Preferred Alternative

Development of the proposed FCI/FPC has the potential to stimulate the local and regional economy during both the construction and operation phases. Economic impacts would result from material purchases in the region generating local sales, from construction and operation payrolls, and from related spending by supplying firms and laborers ("multiplier effects"). The economic impacts associated with the construction phase would occur for only the period of time while construction is underway (approximately 36 months), while economic activity generated during the operation phase would continue throughout the life of the facility. Three types of economic impacts could result from development of the proposed FCI/FPC:

- **Direct Impact.** A direct impact is defined as the initial change in demand for materials and labor in the region. The direct impact to the region due to the construction or operation and maintenance is attributable to the local purchase of needed materials and services and the expenditure of payroll by construction workers or the permanent FBOP workforce.

- **Indirect Impact.** Direct expenditures prompt further “indirect” economic activity by industries that furnish materials and services to the businesses directly involved in construction or the vendors supplying goods and services to the facility during operation. These indirect impacts reflect the intermediate production or increased economic activity to supply services, materials, and equipment necessary to support FCI/FPC construction and operation.
- **Induced Impact.** Construction and operating labor forces would re-spend a portion of their salary and wage earnings on various consumer expenditures, producing an “induced” effect. The induced impact is the effect of increased consumer spending by salary and wage earners in the study area. The induced impact is conservatively estimated downward by accounting for potential “leakages” due to taxation, savings, and non-local spending.

The successive rounds of economic activity stimulated by the expenditures during construction and operation is the “multiplier effect” and can account for a significant portion of the total regional economic impact of the preferred alternative. Together, the indirect and induced impacts constitute the multiplier effect – the extent to which the direct impact results in additional economic activity. For example, a multiplier of 1.50 indicates that for every \$1.00 of direct expenditures, an additional \$0.50 of ripple effects are experienced within the surrounding region, for a total impact of \$1.50.

### *Construction Phase*

The ability to assess the potential economic impacts of the proposed FCI/FPC is dependent upon budget estimates for acquisition of property and mineral rights, building construction labor, and materials, furnishing and equipment among other components, however, such costs are not known at this time. Adding to the uncertainty is the timing for Congress to appropriate the funds needed to acquire property and for construction; selection of a project delivery method (i.e., design/build; design, bid, build; other methods); expectations regarding inflation on the cost of labor and materials and resulting budget escalation; among similar factors. However, as with previous studies, what are known are the components of site preparation which is expected to represent a considerable portion of the overall construction budget.

To accommodate the FCI, FPC, ancillary buildings, access driveway and internal roads, etc., the Roxana Site would require extensive excavation of rock and spoil material and a lesser amount of structural fill. The excavated soil and rock would be compacted to create a structural fill for the building pads or deposited into the valleys adjacent to the proposed FCI/FPC location. Site preparation would also require clearing mined areas and forests.

The estimate shown in Table 3-15, is for site preparation costs only and does not include design and construction costs. The analysis relied on the earthwork unit quantities included in the estimate prepared for the FBOP (Cardno 2014) for a USP/FPC located at the Roxana Site; individual unit costs for the Letcher County area were then escalated to the anticipated construction start date (2026). While earthwork unit quantities at the Roxana Site for a USP/FPC and FCI/FPC are expected to be similar, additional geotechnical investigations would be conducted during the design phase to confirm quantities and update site preparation costs.

Outside of the mining industry, there are few projects involving the nature and scale to the site preparation required to develop the proposed FCI/FPC. The site preparation budget of approximately \$466,203,000 is anticipated to be expended over an estimated 12-month period with 30 percent (\$139,861,000) devoted to labor and the rest to equipment operations and maintenance. Assuming average annual wages and benefits of \$100,000 for each member of the construction workforce, site preparation is estimated to directly support approximately 1,400 total man-years of labor.

Typically, spending for FCI/FPC construction would “ripple” through the economy, generating additional indirect jobs predominantly in industries providing building materials and associated construction supplies, equipment, and related purchases in food services and retail trade to the benefit of the regional economy. While a portion of the spending for site preparation would also “ripple” through the economy, largely for operating equipment fuel, repair, and maintenance, this phase of construction is not expected to result in the same quantity of indirect jobs that would be produced once building construction is underway.



**Table 3-15** Roxana Site Preparation Costs

Component	Quantity (Est.)	Unit Cost	Total Cost (Est.)
Spoil Excavation	9,205,000 cubic yards	\$20.00/cubic yard	\$184,100,000
Rock Excavation	954,000 cubic yards	\$40.00/cubic yard	\$38,160,000
Structural Fill	9,400,000 cubic yards	\$10.00/cubic yard	\$94,000,000
Cleare Mine Area	81 acres	\$11,325/acre	\$917,325
Clear Forest Area	110 acres	\$11,325/acre	\$1,245,750
<b>Subtotal Costs (2022)</b>	--	--	<b>\$318,423,075</b>
<b>10% Escalation (2023)</b>	--	--	<b>\$350,265,382</b>
<b>10% Escalation (2024)</b>	--	--	<b>\$385,291,921</b>
<b>10% Escalation (2025)</b>	--	--	<b>\$423,821,113</b>
<b>10% Escalation (2026)</b>	--	--	<b>\$466,203,224</b>
Source: Cardno 2014, FBOP 2024.			

Given the rates of unemployment in the region, it would be expected that any indirect jobs that result would be filled by unemployed local residents. In addition, visitors to the construction site (i.e., FBOP officials, contractors, etc.) would be expected to boost spending in hotels and restaurants in the area. Population in-migration is not expected as a result of indirect job growth. Overall, the potential economic impacts during the site preparation phase of construction would be beneficial and there would be no significant adverse economic impacts.

### Operation

Once operational, the proposed FCI/FPC is expected to employ approximately 325 permanent workers. As construction nears completion, and several months prior to activation, the FBOP will begin the process of transferring experienced employees from other federal correctional facilities to the new facility (totaling approximately 130 employees). During this time, recruitment would also begin with a goal of hiring approximately 195 new FBOP employees to operate the facility.

Potential impacts on the local and regional economy during FCI/FPC operation are the result of the new annual direct labor payments (i.e., wages and salaries) as well as annual expenditures for materials, services, utilities, supplies, and other requirements. Estimates of the operating employment and output have been made based on FBOP projections for operation of the new FCI/FPC:

- An annual operating budget of approximately \$57 million (2023 dollars);
- An annual payroll of approximately \$43 million (2023 dollars). Take home wages would constitute approximately 70 percent of the total payroll, with deductions for federal, state and local taxes, social security, as well as other employee benefits; and
- Annual operating expenditures totaling approximately \$14 million (2023 dollars) for supplies, equipment, utilities, and other goods and services necessary for operation.

Annual FCI/FPC operation will inject approximately \$43 million annually into the regional economy in the form of wages and salaries in addition to \$14 million for the purchase of materials, supplies, utilities, and other goods and services. Multiplier effects associated with these direct expenditures are expected to support additional regional sales each year, indirectly supporting additional private-sector employment.

Southeastern Kentucky, including Letcher County, has experienced declining populations and slow or no economic growth which makes development of the proposed FCI/FPC attractive and consistent and compatible with the socioeconomic goals and objectives expressed by county leaders and representatives. However, to realize the maximum economic benefit from operation



of the proposed FCI/FPC, the transferring FBOP workforce (130 employees) would need to reside in Letcher County where wages and salaries spent on housing, goods, and services would contribute to the local economy. This is also true for any of the new hires (195 employees) who are currently residing outside the southeastern Kentucky region.

Successfully recruiting and hiring current Letcher County residents to join the FBOP workforce has proven difficult evidenced by the 90 open (vacant) positions currently at USP McCreary, USP Big Sandy, and FCI Manchester. This is one indication of the challenges facing the FBOP in recruiting and retaining the new FCI/FPC workforce in southeastern Kentucky in general and Letcher County in particular. Since FBOP employees are free to reside in locations of their choosing, the current workforce is choosing locations where housing availability, spousal employment opportunities, low crime rates, racially diverse populations, public school systems, cost of living, and other factors meet their needs and preferences. This has resulted in FBOP employees choosing to reside in over 25 counties in Kentucky and 11 counties in West Virginia, Tennessee and Virginia, with only one employee having a home address in Letcher County. Adding to the challenge is the small county population eligible to be hired by the FBOP (39 entry age threshold for new Correctional Officers) and the difficulties associated with passing stringent background examinations.

Given these conditions and the experience at other federal correctional facilities in southeastern Kentucky, only a small portion of the permanent workforce needed to operate the FCI/FPC is expected to be filled by current Letcher County residents. Instead, workers are expected to be drawn from communities throughout southeastern Kentucky and western Virginia. As a result, the potential economic impacts directly attributable to FCI/FPC operation would be beneficial, the impacts would be widely dispersed and not significantly contribute to the economy of any one jurisdiction.

### **3.11.3 Recommended Mitigation**

Input by local officials, the business community, and others during preparation of this document have substantiated the importance of attracting new economic activities to achieving the social and economic goals of Letcher County. The potential impacts during construction and operation would be beneficial to the economic health and well-being of southeastern Kentucky by expanding employment and economic opportunities to residents and business owners. In the absence of adverse impacts, no mitigation measures are warranted.

## **3.12 Environmental Justice**

The USEPA defines environmental justice as “the just treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies” (EPA 2022). EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, issued in 1994 by President Clinton, stipulates that each federal agency is to make achieving environmental justice a part of its mission by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations.

On April 21, 2023, President Biden issued EO 14096, Revitalizing Our Nation’s Commitment to Environmental Justice for All, to further advance environmental justice. The EO states that “restoring and protecting a healthy environment – wherever people live, work, learn, grow, and worship – is a matter of justice and a fundamental duty that the Federal Government must uphold on behalf of all people.” The EO recognizes that every person has a right to breathe clean air, drink clean water and live in a healthy community and calls on agencies to implement and enforce the nation’s environmental and civil rights laws, prevent pollution, address climate change and its effects, and work to clean up legacy pollution that is harming human health and the environment. EO 14096 further builds upon EO 14008 (Tackling the Climate Crisis at Home and Abroad) and EO 12898.

EO 14096 includes commitments to: deepen federal agencies’ “commitment to environmental justice.” Environmental justice must be incorporated into the missions of all executive branch agencies and “central to the implementation of our bedrock civil rights and environmental laws.” In

addition, the EO commits to protect overburdened communities from the disproportionate impacts of pollution and environmental harms. Agencies must examine how they can address the adverse cumulative impacts of pollution, climate change, and other burdens that disproportionately impact communities of color and low-income communities around the country.

A minority population is defined as either: the minority population of the affected area exceeds 50 percent, or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the community of comparison. Low-income populations are identified where a meaningfully greater portion of the population is living below the poverty level threshold as compared to the appropriate community of comparison (CEQ 1997). The environmental justice analysis addresses the characteristics of race, ethnicity, and poverty status for populations residing in the area encompassing the Roxana community and the proposed project site. The environmental justice analysis is also based on the compilation of data collected using USEPA's Environmental Justice Screening and Mapping Tool (2024) ("EJ Screen").

Potential environmental justice effects have been assessed with data gathered at the census tract level within which the Roxana Site is located (Census Tract 9506.02) to determine minority or low-income populations that may have environmental justice concerns. Letcher County, as a larger geographic unit or population, is used as a point of comparison to identify minority or low-income communities. Low-income and minority populations that meet certain thresholds relative to the reference community are considered environmental justice communities that may be disproportionately affected by the proposed action.

Data from the U.S. Census Bureau (2020) were used to define minority and low-income populations. For the purposes of this analysis, minorities are individuals who identify themselves as one or more of the following races or ethnicities: Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian, or Hispanic or Latino. Low-income populations are defined using the percent of all individuals for whom poverty status has been determined, as defined by the U.S. Census Bureau, for each specific geographic area. Poverty status is a measure of an individual or household's financial ability to meet basic living needs and varies based on the number of individuals in a household.

In 2020, the poverty line ranged from \$13,171 for a single individual to \$50,035 for a family of nine or more (U.S. Census Bureau 2020). Low-income environmental justice communities were identified by comparing the percentage of individuals with incomes below the poverty level in Census Tract 9506.02 to the percentage of individuals with incomes below the poverty level in Letcher County and the state. If the percentage in the Census Tract is greater than the percentage in Letcher County, a low-income environmental justice community was identified.

### **3.12.1 Existing Conditions**

The largest share of the population of Census Tract 9506.02 in 2020 identifies with the White racial category (97.6 percent) followed by American Indian/Alaskan Native alone which comprises 0.5 percent. The Black/African American population and the Asian population each comprise 0.1 percent while Persons of Hispanic or Latino origin represent approximately 0.2 percent.

The largest share of Letcher County's population in 2020 also identifies with the White racial category (97.9 percent) followed by the Black/African American population at 0.7 percent. Asians comprise 0.3 percent of the population followed by American Indian/Alaskan Native alone at 0.2 percent. Persons of Hispanic or Latino origin represent approximately 1.0 percent of the county's population.

The racial composition of Census Tract 9506.02 and County in 2020 was less diverse than the state as a whole where 86.9 percent of the residents are White and 8.7 percent were Black/African American. Approximately 0.3 percent of the population were American Indian/Alaska Native while 1.8 percent were Asian; and 0.1 percent were Native Hawaiian/ Other Pacific Islander. Persons of Hispanic or Latino origin represent approximately 4.3 percent of the population of Kentucky.

According to the U.S. Census, residents of Census Tract 9506.02 recorded a median household

income of \$42,647 in 2020, which is 10.8 percent higher than Letcher County (\$38,466), 29.2 percent lower than the state (\$60,183) and 34.4 percent lower than the median household income for the U.S. (\$64,994). The U.S. Census recorded per capita income for Letcher County of \$23,522 in 2020, which is 29.8 percent lower than the state (\$33,515) and 33.5 percent lower than the U.S. (\$35,384). Approximately 28.7 percent of Letcher County's population is living below the poverty line which is higher than the state (16.5 percent) and considerably higher than the U.S. (12.8 percent).

U.S. Census data for 2020 also indicates that 5.4 percent of Letcher County residents were under the age of five; 4.2 percent were between five and nine years of age; 13.5 percent were between 10 and 19 years; 16.3 percent were between 20 and 34 years; 12.4 percent were between 35 and 44 years of age; 13.2 percent were between 45 and 54 years of age; 15.0 percent were between 55 and 64 years of age; 10.3 percent were between 65 and 84 years of age; and 1.6 percent were over the age of 85.

The age breakdown for the state as a whole is similar to that for Letcher County with 5.0 percent of the population under the age of five; 4.5 percent between five and nine years of age; 11.6 percent between 10 and 19 years; 26.6 percent between 20 and 29 years; 15.6 percent between 30 and 39 years of age; 10.3 percent between 40 and 49 years of age; 9.9 percent between 50 and 59 years of age; 8.6 percent between 60 and 69 years of age; 5.1 percent between 70 and 79 years of age; and 2.8 percent over the age of 80.

According to EJScreen, American Community Survey (ACS) 2017 - 2021 data indicates that 99 percent of the population in Letcher County speaks English with only one percent speaking Spanish at home (USEPA 2023).

Of the 13 environmental justice indices delineated in the USEPA EJScreen, the census tract where the Roxana Site is located did not score at or above the 80th percentile threshold set by EJScreen. These include the following markers which were compared to other areas of Kentucky: PM 2.5, ozone, diesel particulate matter, air toxics cancer risk, air toxics respiratory hazard index (HI), toxic releases to air, traffic proximity, lead paint, proximity to Superfund sites, proximity to Risk Management Plan (RMP) facilities, hazardous waste proximity, presence of underground storage tanks, and wastewater discharges. This means that the population in the Roxana area (Census Tract 9506.02) does not experience greater levels of exposure to the pollutants identified above, or is within closer proximity to Superfund sites, hazardous waste sites or facilities, or wastewater discharge points than 80 percent of areas in Kentucky (USEPA 2024). The study area did not score above the 80th percentile threshold for any indices at the national level.

Utilizing the USEPA EJScreen Community Report, the FBOP identified that there are no schools; subsidized housing complexes; public housing complexes; hospitals; places of worship, or American Indian Reservation Lands in the Census Tract comprising the Roxana Site. The EJScreen also indicates there is relevant public health data and cumulative exposure to environmental hazards for populations in the study area, including 13 wastewater discharge sites and one Brownfields site that are reporting to the USEPA within Census tract 9506.02 (USEPA 2024).

### **3.12.2 Potential Impacts**

#### **3.12.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, members of environmental justice communities would be unaffected, and mitigation would not be necessary.

#### **3.12.2.2 Preferred Alternative**

##### ***Construction Phase***

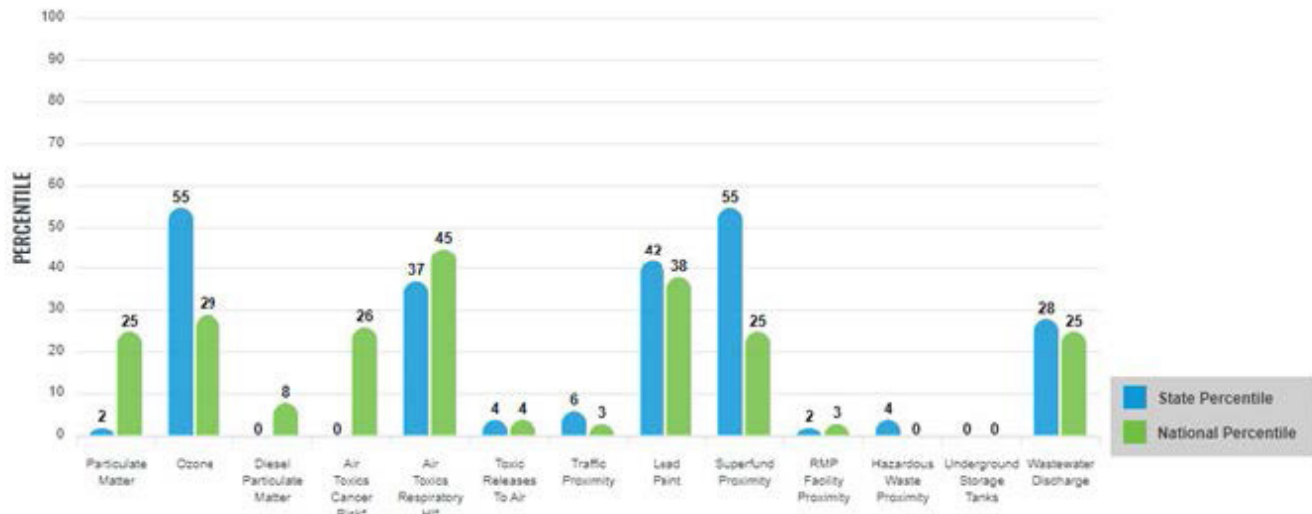
With approximately 97.9 percent of Letcher County's population identifying as White, minority communities are not present. Residents of Census Tract 9506.02 recorded a median household income 10.8 percent higher than Letcher County but 29.2 percent lower than the state and 34.4 percent lower than for the U.S. Approximately 28.7 percent of Letcher County's population is living

below the poverty line, far higher than the state (16.5 percent) and the U.S. (12.8 percent).

Much of Letcher County, including the Roxana Site itself, has been mined for coal using mountain top removal methods with populations in proximity to such locations exposed to the health and other adverse effects of such mining. Currently, the area surrounding the Roxana Site is not undergoing mountain top removal, nor does it contain hazardous waste, treatment, storage, or disposal facilities, stationary sources of air pollution, or other potentially hazardous conditions.

Construction of the proposed FCI/FPC would result in air emissions from equipment and vehicle use, fugitive dust, and elevated noise levels over an approximately 36-month period. Temporary air quality and noise impacts would be concentrated at the Roxana Site itself and to a lesser degree immediately adjacent properties. Sensitive receptors surrounding the Roxana Site include a small number of widely scattered single-family residences lining KY 588 and KY 160 to the north and east.

Air emissions resulting from construction equipment and motor vehicle operation would occur during working hours. In addition, fugitive dust emissions could occur during dry weather conditions, periods of maximum construction activity, and high wind conditions. These emissions would occur in an area that currently experiences relatively low exposure to particulate matter, diesel particulate matter, and air toxics cancer risk from existing land uses and activities (EJScreen 2024).



**Exhibit 3-11 Environmental Justice Percentiles for Letcher County Compared to State and National Averages**  
Source: USEPA's Environmental Justice Screening and Mapping Tool

During construction activities, elevated noise levels would be experienced in and around the development zone. Construction noise would be intermittent with the levels dependent on the type of equipment being used, work locations relative to sensitive receptors, and the equipment usage cycle. Construction noise would typically be limited to daylight hours and attenuate to 62 to 65 dBA at a distance of 800 feet from the source, or similar to ambient noise levels in an urban area (Goodfriend n.d., USEPA Office of Noise Abatement and Control 1974). The few sensitive receptors (single-family residences) are all over 2,000 feet from and at a lower elevation from where construction activities will take place. They are unlikely to experience average noise levels higher than 65 dBA intermittently during construction which would be further attenuated if windows are closed.

The volume and timing of traffic would vary during construction with construction workers arriving and departing the site generally between the hours of 7:00 AM and 4:00 PM. An indeterminate number of trucks delivering construction materials, supplies, and equipment would also access the site throughout the workday, with the frequency of trips depending on the stage of construction. Construction traffic would access the site via a new entrance drive with the construction contractor responsible for using safe haul routes to and from the project site. All drivers would also be required

to comply with local traffic laws with safety measures provided at the site entrance to maintain safe driving conditions. The temporary increase in construction traffic in and around the site would also be coordinated with the appropriate traffic control authorities (i.e., law enforcement) to ensure the safety of the traveling public.

Temporary impacts to environmental justice and disadvantaged communities during construction would include elevated noise levels, traffic volumes, and air pollutants emissions and be similar in magnitude and duration to other comparable construction projects in Letcher County and southeastern Kentucky. Residents of Census Tract 9506.02 are not expected to experience disproportionately high and adverse impacts during construction.

### ***Operation Phase***

Operation of boiler systems for providing heat and hot water would be the primary stationary source of air emissions. While operation of the proposed FCI/FPC would be a new source of emissions, the use of modern, highly efficient mechanical equipment is not expected to have a significant adverse impact on air quality. Diesel-powered emergency generators included at the FCI/FPC would be periodically tested and used to provide electricity in the event of a power disruption. The generators would be installed in conformance with applicable regulations and are not expected to exceed New Source Review requirements or result in a violation of the National Ambient Air Quality Standards (NAAQS). Stationary sources will require issuance of an air permit regulated by the Kentucky Division for Air Quality. This would ensure that all requisite source registrations are undertaken and regulatory permit compliance achieved prior to initiating operations.

During operation, noise would occur in and around the FCI/FPC during routine grounds maintenance (lawn mowing, leaf blowing, snow removal, etc.), from periodic testing and operating the emergency generators (an infrequent occurrence), and during firearms training conducted at the firing range. The FCI/FPC will not employ outdoor public address systems or operate other outdoor noise-producing equipment or activities.

Any increase in ambient noise levels during operation of the proposed FCI/FPC is expected to be slight and imperceptible beyond the boundaries of the site. The distances between the proposed facility and the residences and other sensitive land uses surrounding the site, the change in elevation, and the large vegetative buffers that will remain should go far to attenuate any potential noise impacts during operation. While firearms training will be conducted, the noise produced is not expected to result in a significant adverse impact to the community surrounding the site.

Activities associated with operation and maintenance of the FCI/FPC would require the storage and use of materials considered hazardous and result in the generation of small amounts of regulated wastes. All hazardous materials used during operation and any resulting wastes would be handled in accordance with stringent operating policies and procedures and regulatory requirements. The FBOP would incorporate its policies and practices for proper management, storage, use, and disposal of hazardous materials and wastes in the facility's operating procedures.

Based on the above, operation of the proposed FCI/FPC is not expected to result in disproportionately high or adverse impacts to environmental justice or disadvantaged communities.

### ***Protection of Children***

EO 13045, Protection of Children from Environmental Health Risks and Safety Risks, was issued in 1997 requiring federal agencies to identify and assess environmental health risks and safety risks that may disproportionately affect children. The EO also requires federal agencies to ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks. Impacts to children would occur if there was an increased disproportionate environmental, health, or safety risk to children residing in areas potentially affected by the construction and operation of the proposed FCI/FPC.

None of the potential environmental impacts (beneficial and adverse) associated with the proposed FCI/FPC are expected to result in disproportionate health or safety risks to children.



### **3.12.3 Recommended Mitigation**

#### *Construction Phase*

Mitigation measures included in this document describe how construction impacts would be mitigated to minimize or avoid potential impacts to environmental justice and disadvantaged communities. Based on the assessment of potential socioeconomic and environmental impacts, as discussed throughout the document, beneficial employment and income impacts, as well as minor beneficial impacts to populations in the surrounding communities would be expected as a result of construction of the proposed project. There are no environmental impacts that would have disproportionately high or adverse environmental effects on minority or low-income populations during construction and therefore, the proposed action would not result in significant adverse impacts to environmental justice communities.

#### *Operation Phase*

Measures discussed throughout this document describe how mitigation would be employed during operation of the proposed FCI/FPC to avoid or reduce short- and long-term adverse impacts. Based on the assessments discussed throughout the document, beneficial employment and income impacts, as well as minor beneficial impacts to populations in the surrounding communities would be expected as a result of operation of the proposed project. There are no environmental impacts that would have disproportionately high or adverse environmental effects on minority or low-income populations during operation and therefore, the proposed action would not result in significant adverse impacts to environmental justice communities.

## **3.13 Housing**

### **3.13.1 Existing Conditions**

Impacts to local and regional housing markets could be expected if an action would substantially alter the supply of housing, either by reducing the number of housing units or increasing the population above the capacity of the available housing stock. According to the U.S. Census there were 10,520 housing units in Letcher County in 2020 and of this total, approximately 9,047 units (86.0 percent) were occupied and 1,473 units (14.0 percent) were vacant. As noted earlier, southeastern Kentucky experienced catastrophic flooding in July 2022, with over 9,000 homes damaged or destroyed. Letcher County was hard hit by the flooding with numerous housing units damaged or destroyed which are not reflected in the statistics that follow.

Of the occupied units in the county in 2020, approximately 7,774 (73.9 percent) were owner-occupied (also known as the homeownership rate) and 2,746 (26.1 percent) were renter-occupied. The average household size of owner-occupied units was 2.25 and 2.27 in renter-occupied units. Of the occupied units, approximately 2.5 percent of the householders had moved into their unit since 2019, while 27.3 percent moved into their unit prior to 1990.

The median property value for owner occupied housing units in Letcher County in 2023 was estimated to be \$66,000 and for renter-occupied units the median gross monthly rent (with utilities) was estimated to be \$625. However, the numbers regarding rental units are distorted since 1,107 units pay no rent. Of the owner-occupied households, 32.7 percent had a mortgage while 67.3 percent owned their houses “free and clear,” that is without a primary mortgage or loan on the house. The median monthly housing costs for owners with a mortgage was \$945 and for owners without a mortgage it was \$285.

Approximately 55.1 percent of the housing inventory in the county was built before 1980 with 12.7 percent built before 1939 and only 4 percent built since 2010. Only 5.8 percent of the total housing stock is multifamily units which are particularly desirable by those considering relocation while 29.9 percent are mobile homes or other type of housing. Households that devote 30 percent or more of their income on housing costs are considered cost-burdened and in 2020, cost-burdened households in Letcher County accounted for approximately 34.4 percent of owners with a mortgage, 10.3 percent of owners without a mortgage, and 52.6 percent of renters.

By contrast, Kentucky in 2020, had 1.8 million housing units that were occupied while 246,501 were vacant. Of the occupied housing units, the percentage owner-occupied was 70 percent while renters occupied 30 percent. The average household size of owner-occupied houses was 2.5 and in renter-occupied houses it was 2.18. Of the occupied units, approximately 1.8 percent of the householders had moved into their unit since 2019, while 20.6 percent moved into their unit prior to 1990.

The median property value for owner-occupied housing units in Kentucky in 2023 was estimated to be \$222,200 and for renter-occupied units the median gross monthly rent (with utilities) was estimated to be \$625. Of the owner-occupied households, 32.7 percent had a mortgage while 67.3 percent owned their houses “free and clear,” that is without a primary mortgage or loan on the house. The median monthly housing costs for owners with a mortgage was \$1,344 and for owners without a mortgage it was \$440.

Approximately 45.6 percent of the housing inventory in the state was built before 1980, 11.6 percent was built since 2010, and 30.3 percent was constructed between 1980 and 2009. Approximately 70.1 percent of the housing stock is single family (attached and detached units), multifamily units comprise 18.8 percent while only 11.1 percent are mobile homes or other type of housing. In 2020, cost-burdened households in Kentucky accounted for 21.9 percent of owners with a mortgage, 10.8 percent of owners without a mortgage, and 43.2 percent of renters.

### **3.13.2 Potential Impacts**

#### **3.13.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, the supply, availability, and cost of housing in the local and regional housing markets would be unaffected, and mitigation would not be necessary.

#### **3.13.2.2 Preferred Alternative**

##### ***Construction Phase***

Experience developing other federal correctional facilities in southeastern Kentucky has found that the availability of suitable housing for long-term and short-term stays plays a key role in whether members of the construction workforce will relocate to the host county. The shortage of available and suitable housing and hotel and motel accommodations, however, will likely limit the number of construction workers and their families from relocating to Letcher County. Moreover, given the temporary nature of the work, construction workers are often unwilling unroot their families to relocate to a new area. Under such conditions, and as a cost-saving measure, construction workers are known to use recreation vehicles as a substitute for housing during the work week, returning to their permanent residence on weekends.

In addition to the construction workforce, a contingent of FBOP employees and contractor staff retained by the FBOP is commonly assigned to the project site to observe and monitor the construction and carry out various oversight and administrative functions. The number of workers involved is expected to be small (less than 10) and following completion of construction, all will relocate to new project locations or return to their place of work and homes.

The potential impacts directly attributable to FCI/FPC construction are expected to be minor, temporary, and widely disbursed thereby minimizing potential impacts in any one location. Taken together, any potential impacts during construction are not expected to significantly alter the number, composition, availability, and cost of housing in the region. While housing units may be developed by the private sector to meet the additional demand, any new units are likely to be marketed towards the needs of the permanent operating workforce and not the construction workforce. Also, no housing units would require relocation or removal as a result of the proposed development.

##### ***Operation Phase***

Approximately 325 full-time permanent employees are needed to operate and maintain the

proposed FCI/FPC of which 40 percent (130) would be current FBOP employees relocating from other federal correctional facilities. Assuming approximately four percent of the transferring employees will reside with a spouse, friend, or relative also employed at the new FCI/FPC, the demand for housing from transferring FBOP employees decreases slightly to 125 households. The remaining 60 percent (195 employees) would be new hires who must meet FBOP standards for employment (i.e., age limits, educational achievement, relevant work experience, etc.) and pass stringent background examinations. Overall, the demand for housing from all FBOP employees is expected to total approximately 320 households.

Experience has found that a portion of the transferring households will rely on short-term rental units while deciding upon long-term permanent housing. Only 5.8 percent of the total housing stock in Letcher County are multifamily rental units which are particularly desirable by those FBOP employees considering relocation. At the present time, 30 apartments are available for rent in the county with prices ranging from \$550 to \$2,800 per month and 27 single family homes, condominiums, and townhomes with monthly costs ranging from \$525 to \$2,600. The shortage of available rental housing is evidenced by the limited number of MLS (Multiple Listing Service) listings displayed on local realtor and housing search websites (Homes.com, Realtor.com, Zillow.com 2024).

Prospective workers and their families considering relocation to a new area are dependent upon hotels and motels for short stays while attending job fairs, interviewing for positions, and conducting housing searches. Therefore, the availability of hotel and motel rooms plays an important role in decisions regarding future employment, where to conduct housing searches, and ultimately where to reside. With the limited number of hotel and motel rooms available in Letcher County, much of the short stays are expected to occur at hotels and motels located beyond the county's borders.

The demand for housing from FBOP employees is expected to total approximately 320 households. Research involving federal correctional facilities operating in McCreary County, Martin County, and Clay County, has found that the majority of the workforce operating those facilities reside in communities distributed throughout southeastern Kentucky while small numbers reside in western Virginia, southwest West Virginia, and northern Tennessee. As noted earlier, only one FBOP employee currently resides in Letcher County. This suggests that the experience at facilities in McCreary County, Martin County, and Clay County will be replicated at the proposed FCI/FPC in Letcher County with its workforce similarly dispersed across the region with only small numbers of employees concentrated in any one location. Any existing Letcher County residents hired by the FBOP would already be housed in the county, thereby reducing the need for housing within other areas of southeastern Kentucky.

Based on surveys conducted by the FBOP, the majority of its employees prefer a relatively new three-bedroom, single-family detached home with far fewer preferring duplexes, townhouses, and mobile homes. Contrary to those preferences, over 55 percent the housing inventory in Letcher County is comprised of units built before 1980 and almost 30 percent in the form of mobile homes. In addition to age and type, the condition of many units may not meet employee expectations as well. Windshield surveys and on-line research suggests that housing units considered acceptable by transferring FBOP employees will comprise only a small portion of the overall number of units available.

With the majority of the workers widely dispersed across communities throughout southeastern Kentucky and western Virginia, the potential impacts directly attributable to FCI/FPC operation would be minor with no significant adverse impacts expected to the number, availability, composition, and cost of housing in Letcher County and the surrounding region. While additional housing units may be developed by the private market, previous experience has shown that the new units are likely to become available as the facility nears activation and too late to benefit those employees who choose to live in Letcher County.

### **3.13.3 Recommended Mitigation**

Any increase in the demand for housing during the FCI/FPC construction phase, although temporary, would be considered beneficial for retaining population and spurring economic activity

in the area. However, with the construction workforce expected to originate from widely dispersed locations, potential impacts to the inventory and market for housing attributable to FCI/FPC construction would be minimal with no significant adverse impacts expected. In the absence of adverse impacts, no mitigation measures during construction are warranted.

Unlike the construction phase, any increase in Letcher County's population experienced during FCI/FPC operation would be long-term, lasting during the life of its operation and beneficial. However, the majority of the employees responsible for FCI/FPC operation are also expected to originate from widely dispersed locations. Potential impacts to Letcher County or other single jurisdiction attributable to FCI/FPC operation, although small, would be considered beneficial and help aid in population retention although insufficient to offset the declines experienced over the past several decades in the region. In the absence of adverse impacts, no mitigation measures during operation are warranted.

## **3.14 Community Services and Facilities**

Community services include police and fire protection, healthcare services, and public education.

### **3.14.1 Existing Conditions**

#### **3.14.1.1 Law Enforcement**

Law enforcement in Letcher County is provided by the Whitesburg Police Department, the Fleming-Neon Police Department, and the Jenkins Police Department in addition to the Letcher County Sheriff's Office and Kentucky State Police. The Whitesburg Police Department, headquartered at 38 East Main Street, is the primary law enforcement agency in the City of Whitesburg. Response time for the police department averages less than five minutes within the city. The Department has mutual aid agreements with neighboring towns, the Letcher County Sheriff's Office and the Kentucky State Police.

Supplementing the municipal police departments is the Letcher County Sheriff operating from 6 Broad Way in Whitesburg. Although the Sheriff's office is approximately 10 miles from the Roxana Site, Deputies are on routine patrol throughout the county in order to respond quickly to incidents and emergencies. The Kentucky State Police operates state-wide providing law enforcement services to protect life and property, prevent and detect crime, and apprehend and arrest suspects. The agency is organized around 16 posts with Letcher County, in addition to Breathitt, Knott, Leslie and Perry counties, served by Post 13 which has its office in Hazard. Among its responsibilities is conducting periodic traffic safety checkpoints to enforce the traffic laws of Kentucky and promote safety for motorists using the public roadways. As with Deputy Sheriffs, State Police officers are on routine patrol throughout the Commonwealth to respond to incidents and emergencies.

#### **3.14.1.2 Fire Protection**

Fire protection is provided to the residents and businesses within Whitesburg by the Whitesburg Fire Department, located at 38 East Main Street (in collaboration with local law enforcement). There are also nine other fire departments operating within Letcher County including the Jenkins Fire and Rescue, Sandlick Volunteer Fire Department, Colson Volunteer Fire Department, Neon Fire and Rescue, Mayking Volunteer Fire Department, Letcher Fire and Rescue, Kings Creek Volunteer Fire Department, Cumberland River Fire Department, and Gordon Volunteer Fire Department. All departments are equipped to provide emergency services to the residents of Letcher County and neighboring counties in the event of mutual aid request.

Departments that provide emergency services to the Roxana area include Letcher County Fire and Rescue, Whitesburg Fire and Rescue, and the Kings Creek Volunteer Fire Department. The Kings Creek Volunteer Fire Department, located at 8978 KY 160, is the closest station to the Roxana Site with a drive distance of approximately three miles. The Kings Creek Volunteer Fire Department has relationships with other local volunteer fire departments and though a paging system, can request assistance from these departments.

Letcher County Fire and Rescue provides fire response to the area of the Roxana Site. Letcher County Fire and Rescue has stations in Jeremiah (approximately nine miles from the site), Blackey, and Hallie, and services the western portion of Letcher County. Whitesburg Fire and Rescue has mutual aid agreements with other fire companies in the county and is able to assist with emergencies if dispatched.

Whitesburg Fire and Rescue, with a station located approximately 11 miles east of the Roxana Site, is able to assist with emergencies if called upon. Other nearby stations include the Sandlick Volunteer Fire Department, located at 2968 KY 931, approximately 13 miles from the Roxana Site, the Gordon Volunteer Fire Department located at 20 Cr-1639, approximately 14.4 miles from the site and the Mayking Volunteer Fire Department, located at 37 KY 1862, approximately 16.5 miles from the site.

### **3.14.1.3 Medical Services**

Appalachian Regional Healthcare (ARH) serves over 350,000 residents in eastern Kentucky and southern West Virginia. ARH operations in Letcher County include the Whitesburg ARH Hospital, ARH Whitesburg Clinic, Jenkins ARH Family Care Center, Neon ARH Family Care Center, Whitesburg ARH Surgical Clinic, ARH Cardiology Associates-Whitesburg, and Whitesburg ARH Home Health Agency.

Whitesburg ARH Hospital was established in 1956 as one of the nine original Miners Memorial Hospital Association facilities. Serving the residents of Letcher, Knott, Harlan and Perry counties in Kentucky, the 90-bed Whitesburg ARH Hospital also operates two clinics and one pharmacy. Among the hospital's services are cardiology, oncology, surgical services, rehabilitation, obstetrics and sleep care. Additionally, the hospital offers skilled nursing "swing beds," which provide an opportunity for patients to transition from observation to acute care to extended-stay post-acute care without changing rooms.

Whitesburg ARH Hospital provides 24-hour emergency service for both adult and pediatric patients and has an on-site heliport for receiving and transferring patients. Whitesburg ARH is an acute care hospital that covers internal medicine, family practice, pediatrics, general surgery, advanced laparoscopic surgery, obstetrics and gynecology, cardiology, pulmonology, radiology and emergency services (ARH 2022). Whitesburg ARH is a Level IV Trauma Center.

Since its founding in 1971, Mountain Comprehensive Health Corporation (MCHC) has grown to be one of the largest rural community health centers in Kentucky. With over 500 employees including 80 healthcare providers across multiple specialties, MCHC provides services to over 53,000 patients each year via a network of clinics located in Letcher, Perry, Owsley, Harlan, Bell, Knott, and Pike counties.

The Whitesburg clinic, at 226 Medical Plaza Lane, offers a full suite of services including internal medicine, pediatrics, cardiology, pulmonology, and obstetrics and gynecological services, as well as pulmonary rehabilitation. The clinic also offers a full-service laboratory and extensive X-ray, ultrasound, and mammography services (Mountain Comprehensive Health Corporation 2024). An additional facility, Whitesburg Annex 1, was established in January 2022 at 324 Medical Plaza Lane. MCHC's Leatherwood/ Blackey Medical Clinic, located at 569-821 KY 699 in southern Perry County, also serves residents in western Letcher County.

### **3.14.1.4 Public Education**

Public schools in Letcher County are administered by the Letcher County School District which operates five elementary schools, three middle schools, and one high school. Table 3-16 identifies the schools, the grades they serve, and the number of students enrolled during each of the past two school years.



**Table 3-16** Letcher County Public Schools and Enrollment

School	Grades	2021-2022 Enrollment	2022-2023 Enrollment
Arlie Boggs Elementary	K-8	125	121
Cowan Elementary	PK-8	228	254
Fleming Neon Middle School	6-8	175	167
Letcher County Elementary and Middle School	K-8	387	374
Letcher County Central High School	9-12	861	779
West Whitesburg Elementary School	PK-5	441	415
Whitesburg Middle School	6-8	188	165
Martha Jane Potter Elementary	PK-5	331	320
<b>Total</b>	--	<b>2,736</b>	<b>2,595</b>
Source: National Center for Education Statistics 2022, 2023			

As the population of Letcher County has declined, so has public school enrollment. During the 2006-2007 school year, total district enrollment stood at 3,283 students; by the 2014-2015 school year enrollment stood at 3,211 students and during the 2021-2022 school year it had declined to 2,736 students. Since then, damaging storm events occurred throughout southeastern Kentucky producing flooding that damaged or destroyed over 9,000 homes and 120 businesses, contributing to the declining population and struggling economy of the region. During the 2022-2023 school year, total district enrollment stood at 2,595 students.

### 3.14.2 Potential Impacts

#### 3.14.2.1 No Action Alternative

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, the availability and capacity of law enforcement, fire protection, health care services, and public schools would be unaffected, and mitigation measures would not be necessary.

#### 3.14.2.2 Preferred Alternative

##### *Law Enforcement*

Law enforcement in Letcher County is the responsibility of various municipal police departments, the Letcher County Sheriff's Office, and the Kentucky State Police. Individually and together, these law enforcement agencies provide police protection and coverage throughout the county.

To ensure the safety and security of the construction site, fencing would be installed and maintained around the construction zone with security provided by the construction contractor (with the FBOP ultimately responsible for the construction site). KY 588 and KY 160 and other public roads leading to and from the construction site would remain open, accessible, and available at all times for law enforcement patrols throughout the construction period. There is no reason to expect that FCI/FPC construction activities would place an undue burden upon law enforcement agencies serving the residents, businesses, and public institutions in the county. Significant adverse impacts to law enforcement services are not anticipated during FCI/FPC construction.

The FBOP relies upon a well-trained and well-equipped workforce to ensure the overall functioning and security of all its institutions. This workforce has proven its ability to handle virtually all emergency situations which may arise at federal correctional facilities. It is also the responsibility of the United States Marshals Service and the Federal Bureau of Investigation to assist the FBOP, if necessary, if an AIC is reported missing (a rare and unusual occurrence). In the event of an emergency, FBOP personnel would contact the appropriate law enforcement agencies, advise them of the situation, and request their assistance and cooperation as necessary.

Members of the public and law enforcement community often have concerns about how the presence of a federal correctional facility, and the associated workforce and visitors, affects local crime rates. Based on over 100 years of experience operating federal correctional facilities in urban, suburban, and rural environments, the FBOP has found the presence of a federal correctional facility alone does not result in an increase local crime rates within the host community. Rather, the presence of FBOP correctional officers and other employees working, commuting, and residing in communities surrounding a facility often provides added support in such areas. From experience operating 122 correctional facilities around the country, and three in southeastern Kentucky, significant adverse impacts to law enforcement agencies and services in and around Letcher County are not expected to occur as a result of the proposed project.

### ***Fire Protection***

Fire protection and emergency services to the residents and businesses in Letcher County are provided by ten fire and rescue agencies. During FCI/FPC construction, the health and safety of the workforce and the security of the construction site would be the responsibility of the construction contractor (with appropriate FBOP oversight). This would include developing and implementing health and safety procedures and measures to protect workers against injuries and other emergencies. Throughout this period, public roadways leading to and from the construction site would remain open, accessible, and available for emergency response. As a result, construction activities are not expected to adversely impact fire protection services in Letcher County or place an undue burden upon any of the local fire departments.

The FBOP undertakes stringent precautions to guard against fire emergencies during operation of its facilities. Among the precautions are those involving policies and procedures, inspections, fire prevention, control and evacuation planning, and emergency drills as described below.

- **Policies and Procedures**

The design and construction of new federal correctional facilities comply with the most current edition of applicable fire safety codes, standards and regulations of the National Fire Protection Association, Occupational Safety and Health Act, and mandatory standards of the American Correctional Association, American Society for Testing and Materials, American National Standards Institute, and Factory Mutual Engineering Corporation. Such fire safety codes, standards and regulations would be applied to the design and construction of the proposed FCI/FPC.

- **Inspections**

Fire and safety inspections are regularly conducted at FBOP facilities by qualified employees. Written reports of the inspections are typically forwarded to the Warden for review and corrective action, if needed. The inspection reports and documentation of corrective actions taken are maintained in the Safety Office for review by the appropriate officials. In addition, a complete review of the institution's fire/safety program is conducted by the FBOP's Program Review Division on a two-year interval. During the off year, the Regional Safety Administrator conducts a review with inspections by other agencies, such as local or state fire officials, as permitted.

- **Fire Prevention, Control, and Evacuation Planning**

Each federal correctional facility develops and maintains a fire prevention, control and evacuation plan which includes provision of fire protection service, quarterly testing of fire equipment and monthly inspections, placement of fire protection equipment throughout the institution, the location of building/ room floor plans, and placement of fire exit signs and directional arrows for traffic flow. The plan is issued to local fire departments along with each revision, and all areas of the institution have an individual exit diagram posted in a conspicuous location.

- **Emergency Fire Drills**

Emergency fire drills are conducted and documented regularly from all institutions by FBOP employees. Drills are conducted in all areas occupied or manned during normal working hours

and are rotated in order to conduct a drill on every shift annually. Along with a general area diagram, exit diagrams are also provided, depicting (in English and Spanish languages) areas of safe refuge, “You are here” points of reference, and emergency equipment locations. Use of portable space heaters is also prohibited in FBOP institutions.

The FBOP anticipates establishing mutual aid agreements for emergency back-up fire protection assistance as needs may arise. However, there is no reason to expect situations to arise that would place an undue burden upon outside resources or agencies or result in a significant adverse impact to fire departments serving the Roxana community and broader Letcher County region.

### ***Medical Services***

During FCI/FPC construction, the health and safety of the workforce would be the responsibility of the construction contractor (with FBOP oversight) which would implement measures to protect against accidents, injuries, and other emergencies. Public roadways would remain accessible to emergency vehicles during construction for emergency response. There is no reason to expect that injuries and accidents which may occur during construction would adversely affect emergency medical services and facilities or place an undue burden upon medical responders or health care providers operating in Letcher County.

To service the AIC population, the proposed FCI/FPC would include a medical clinic for general examination and treatment, including an in-patient suite and a dental clinic, with on-site employees and equipment to provide the AIC with routine examinations and medical care. Circumstances where outside medical assistance would be needed to treat the AIC are expected to be rare and would be addressed in the same manner as with other FBOP institutions; via contracts with area medical providers for such assistance. The FBOP would also contract for local emergency ambulance service in cases requiring an AIC to be transported to an area medical facility. In addition to on-site health care resources provided at the proposed FCI/FPC, the FBOP also operates Federal Medical Centers in North Carolina, Massachusetts, Minnesota, Kentucky, Missouri, and Texas which serve most non-emergency medical needs of adults in FBOP custody. Existing health care facilities and providers are expected to continue serving the medical needs of area residents and their families without interruption or adverse impacts.

Given experience at federal correctional facilities in McCreary County, Martin County, and Clay County, only a small portion of the permanent workforce needed to operate the FCI/FPC is expected to be filled by current Letcher County residents. Instead, the majority of workers are expected to be drawn from communities throughout southeastern Kentucky and western Virginia. As a result, the potential impacts directly attributable to the FCI/FPC workforce and their families would be small and not enough to result in significant adverse impacts to emergency medical and health care facilities and service providers serving Letcher County.

### ***Public Education***

Operating the proposed FCI/FPC will require a workforce of approximately 325 employees comprising a mix of existing FBOP employees (130) transferred from other facilities as well as new hires (195) that can meet the FBOP’s hiring requirements. For reasons described earlier, public school enrollment in the Letcher County School District has been steadily declining. Since the 2006-2007 school year, total district enrollment has dropped by 21 percent with 5.2 percent of the decline occurring since 2021-2022. Any increase in the number of school age children enrolled in Letcher County public schools as a result of FCI/FPC development and operation is expected to be easily accommodated without significant adverse impacts.

Experience operating federal correctional facilities in McCreary County, Martin County, and Clay County has found that the majority of the workforce reside in communities distributed throughout southeastern Kentucky with a small number residing in western Virginia, southwest West Virginia, and northern Tennessee. Although there are currently 90 job openings at the three facilities, only one Letcher County resident is employed by the FBOP suggesting that a number of the open

positions don't interest local residents or prospective employees are unable to meet the FBOP's hiring requirements. Until the current circumstances change, the employees needed to operate the new FCI/FPC will originate from communities throughout the region with only small numbers of employees concentrated in any one location and school district. As a result, the potential impacts directly attributable to the families of the FCI/ FPC workforce and their school age children would be small and not enough to result in a significant adverse impact to public school systems and services.

### **3.14.3 Recommended Mitigation**

Significant adverse impacts to law enforcement and fire protection capabilities are not anticipated as a result of construction and operation of the proposed FCI/FPC. Consequently, no mitigation measures, outside of communicating and coordinating design, construction and operating policies and procedures with local and county law enforcement and fire protection agencies, are warranted. Similarly, in the absence of significant adverse impacts to medical services and public schools resulting from development of the FCI/FPC, no mitigation measures are warranted.

## **3.15 Land Use**

Potential impacts to land use are assessed by comparing existing land uses with the changes that would occur from implementation of the proposed action. Impacts to land use are evaluated for significance by determining the degree to which proposed development conflicts with existing land use and local plans and policies. In addition, growth induced impacts to land use could result from the employment created during construction and operation and the spending of wages and salaries by direct and indirect employees on housing, transportation, and services.

### **3.15.1 Existing Conditions**

A large portion of the approximately 339 square miles that comprise Letcher County has been subjected to many decades of surface and underground coal mining and oil and gas extraction; today the reclaimed land consists largely of secondary growth forests. Like most of the county, west-central Letcher County, within which the Roxana Site is located, exhibits steeply sloping terrain limiting most residential, commercial, industrial and other developments to narrow corridors adjoining streams and rivers and lining the roadway network. Coal mining and oil and gas extraction also continue as important industries in the county although the demand for coal has been steadily declining for several decades.

Several state parks, nature preserves, and a national natural landmark are located within 10 miles of the Roxana Site. They include Hensley-Pine Mountain Wildlife Management Area (4.9 miles), Kingdom Come State Park (6.3 miles), and the Bad Branch State Nature Preserve (8.1 miles). Closest to the site is Lilley Cornett Woods (1.3 miles), one of seven National Natural Landmark sites within Kentucky (National Park Service 2023). Owned by the Commonwealth of Kentucky and managed by Eastern Kentucky University, Lilley Cornett Woods serves as an ecological research station with 554 acres of mixed mesophytic and old growth forest (Eastern Kentucky University 2016).

The Roxana Site is a former mountain top removal surface mine with KY 160 and KY 588 forming the site's northern and eastern borders, Tolson Branch Road forming the western boundary, and Pacies Branch Road on the south. Land use associated with the Roxana Site consists of secondary growth forest and reclaimed land from previous surface mining. Other on-site land uses include a small pasture, widely scattered residences fronting on KY 588 and KY 160, active and abandoned oil and gas extraction wells and infrastructure, a small pavilion, and an asphalt RC model airplane airstrip. The site is also bisected by unpaved trails providing access to portions of the site's interior.

There are no large concentrations of homes, businesses, industries, public institutions, or other uses located on or near the site with most lands surrounding the site undeveloped, former surface and underground mines, and in forest cover. The area was previously deep mined; however, mining activities no longer occur at the site. The Roxana Site and its surroundings are also located within the unincorporated portion of Letcher County within which no formal zoning designation is in place.

### **3.15.2 Potential Impacts**

#### **3.15.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, adjoining and nearby lands and land uses would also remain in their current condition, and there would be no direct, indirect, or secondary impacts to land uses. As a result, mitigation measures would not be necessary.

#### **3.15.2.2 Preferred Alternative**

Developing the proposed FCI/FPC would have a direct land use impact by transforming a portion of the Roxana Site from its current undeveloped, forested condition to a large-scale institutional use consisting of the structures associated with the FCI and FPC, the new access drive from the roadway network, garage/landscape building, outside warehouse, utility plant, water storage tank, training center with a firing range, parking lots, and related infrastructure. However, by planning the proposed FCI/ FPC in a compact arrangement and placing the facility near the center of the site, potential direct land use impacts would be limited to a small portion of the overall site with the majority remaining undeveloped. While all current uses of the site would cease upon FBOP acquisition, other locations in the vicinity should accommodate relocation of the RC model airplane strip and oil and gas extraction wells.

The self-contained nature of the proposed FCI/FPC and the limited availability of developable land (outside of flood zones) elsewhere in the area restricts potential direct land use impacts to the site itself. There are also no plans to develop other uses within the remaining undeveloped acreage which would act as a buffer between the proposed FCI/FPC and adjacent properties further ensuring that direct impacts would be avoided. In the absence of local zoning ordinances, development of the proposed project would not result in incompatible land uses from a regulatory perspective. As a result, no significant adverse land use impacts are expected to occur on adjoining or nearby properties as a result of the proposed project.

Attention has been given to the relationship of the proposed FCI/FPC to the plans and policies of the Letcher County. Developing the proposed FCI/FPC at the Roxana Site is considered consistent with the goals and objectives of local planning officials to secure employment opportunities, stimulate economic activities, and to direct such activities towards areas in proximity to available infrastructure. Since planning for the proposed facility began in 2008, elected and appointed officials, the business community, and others representing Letcher County have expressed their support for its development at the Roxana Site which is considered important to achieving the social, economic, and land use development goals of Letcher County.

As noted earlier, damaging storm events occurred throughout southeastern Kentucky in 2022 producing catastrophic flooding. Local planning and development officials have expressed optimism that development of the proposed FCI/FPC will spur construction of new homes and businesses in the county to accommodate the FBOP workforce. Local officials can be expected to encourage and support secondary development to secure the economic benefits represented by the employment opportunities and annual spending on goods and services necessary during FCI/ FPC operation.

### **3.15.3 Recommended Mitigation**

Federal agencies are not subject to local zoning and land use development regulations. Nonetheless, the FBOP will seek to minimize potential adverse impacts upon the surrounding community and Letcher County as a whole by:

- Developing a site design that contributes positively to the character of the Roxana community.
- Limiting the portion of the project site subject to disturbance to the degree possible.
- Maintaining setbacks and wooded buffer areas between the new facility and neighboring properties to ensure physical compatibility.



The FBOP has developed similar facilities in suburban and rural environments over the past 30 years that have successfully integrated each within the surrounding neighborhoods. That experience siting, designing, constructing and operating federal correctional facilities will help ensure that potential land use impacts upon neighboring properties and the community at large are minimized or avoided entirely.

## **3.16 Utilities**

### **3.16.1 Existing Conditions**

#### **3.16.1.1 Water Supply**

There are multiple public water supply providers operating in Letcher County including the Fleming-Neon Water Company, the Jenkins Water System, Whitesburg Water Works, and the Letcher County Water and Sewer District (LCWSD). The LCWSD purchases water from three systems that treat surface water: Whitesburg Water Works, using the North Fork of Kentucky River, serves the Little Cowan area and from the mouth of Sand Lick to Hurricane Branch. Jenkins relying on Jenkins Lake, serves the KY 119 North corridor and the Knott County Water District, using Carr Fork Lake, serves the remaining LCWSD customers including those in the Roxana area. Supply sources for the Knott County Water and Sewer District include wholesale water purchases along with various surface and groundwater sources.

The LCWSD is one of the fastest growing water district's in Kentucky and in recent years extended water supply infrastructure (eight-inch main) to the Roxana Site. Potable water would be provided by the LCWSD via this supply main with the construction contractor responsible for extending the water infrastructure to the connection point at the FCI/FPC as determined by the FBOP. To provide emergency backup and for fire protection purposes, the FBOP is proposing to construct an on-site water storage tank.

It was recently reported that Letcher County is close to securing the funds needed to construct a new water treatment plant near Linefork that would supply portions of Letcher County and part of Perry County. The plant would be capable of treating up to two million gallons a day (mgd) supplied from the North Fork of the Kentucky River.

#### **3.16.1.2 Wastewater Collection and Treatment**

The LCWSD also provides sanitary sewer service to customers in Letcher County, relying on the Whitesburg Wastewater Treatment Plant to provide the necessary treatment prior to discharge. The Whitesburg plant was upgraded treat up to 600,000 gpd with an average load of 300,000 gpd. The plant also has the ability to phase-in upgrades as necessary to handle additional flows. In anticipation of future development, wastewater collection infrastructure has been extended to the Roxana area and the proposed site.

#### **3.16.1.3 Electric Power Service**

Kentucky Power provides electricity to approximately 163,000 customers in all or part of 20 eastern Kentucky counties including Letcher County. Kentucky Power, operating from service centers in Ashland, Hazard and Pikeville and from area offices in Paintsville and Whitesburg, currently provides power service to the Roxana area. Kentucky Power is one of seven operating companies owned by American Electric Power (AEP) which on April 17, 2023, agreed to terminate a previously announced transaction to sell its Kentucky Power operations to another provider thereby keeping ownership of Kentucky Power's distribution and transmission operations.

Kentucky Power reports that there is sufficient capacity in the system (generation and distribution) to meet the anticipated load from the proposed FCI/FPC. Overhead lines extending along KY 160 and Big Branch-Tolson Creek Road have sufficient capacity to supply power to a connection point at the FBOP's on-site utility plant.

#### **3.16.1.4 Natural Gas Service**

The Roxana Site contains multiple gas wells and transmission lines, a compressor station, and an oil well in addition to gas transmission line extending through the property and additional gas wells adjacent to the site.

#### **3.16.1.5 Telecommunications**

Telecommunication services are provided to residential, business, and other customers throughout Letcher County with customers in Whitesburg and other population centers having access to multiple TV and internet service providers. AT&T, Windstream, and Thacker-Grisby provide the most coverage with other providers serving smaller populations. Available telecommunications infrastructure includes DSL, fiber optic, copper wire, fixed wireless, and satellite coverage. Hughes Net, T-Mobile, and Viasat are among the providers for cable television, internet, and/or telephone within the county.

The availability, quality, and choice of telecommunications services is best in locations in and around the county's population centers with coverage and services less available in the rural and more remote parts of the county. However, telecommunications infrastructure is continually being improved and expanded to support customer demands and accommodate new customers.

#### **3.16.1.6 Solid Waste Management**

There are over 160 landfill disposal facilities of various types currently operating in Kentucky which accept approximately 6.9 million tons of waste annually (18,900 tons per day) for disposal. Over 1.3 million tons, or 19 percent of the wastes, originate from out of state sources. Among the active landfills is the Laurel Ridge landfill located near London, Kentucky, approximately 90 miles west of Whitesburg.

Solid wastes generated by residences, businesses and institutions in Letcher County are transported for disposal at the Laurel Ridge landfill which accepts municipal and commercial wastes, construction and demolition wastes, and special wastes with proper approval. The landfill is permitted to accept approximately 350,000 tons of solid waste annually and based on its current capacity and expansion potential, the landfill has a 30-year life expectancy.

Wastes in Letcher County are collected and transported to a transfer station located off of KY 113 in Millstone where it is loaded onto large haul trucks and transported to the Laurel Ridge landfill for final disposal. Based on available information, there appears to be no constraints to the collection and disposal of solid wastes in the Letcher County region.

### **3.16.2 Potential Impacts and Mitigation**

#### **3.16.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, utility providers and the infrastructure serving Letcher County would also remain in their current condition, and there would be no direct, indirect, or secondary impacts to utility services. As a result, mitigation measures would not be necessary.

#### **3.16.2.2 Preferred Alternative**

##### ***Potential Impacts - Water Supply***

Based on experience operating other federal correctional facilities, water demand at the proposed FCI/FPC is projected to average approximately 300,000 gallons per day (gpd) with a peak water demand of 700 to 800 gallons per minute (gpm), fire flow requirements of approximately 2,000 gpm for 90 minutes, a minimum water pressure of 40 pounds per square inch (psi), and on-site water storage of approximately 500,000 gallons. Water demands include use by both AIC and the FBOP workforce during routine operation and maintenance. There are no plans to develop a prison industry at this time, however, if an industry is established in the future, it would likely be a low to moderate water user with its requirements not expected to affect daily and peak water supply

requirements.

Water supply infrastructure to the Roxana Site has been extended by the LCWSD which is prepared to provide potable water to the FBOP's specifications. Potable water would be provided by the LCWSD with the construction contractors responsible for extending the water infrastructure to a location at the FCI/FPC to be determined by the FBOP. To provide emergency backup and for fire protection purposes an on-site water storage tank is also planned. Potential impacts attributable to the FCI/FPC is not expected to result in significant adverse impacts to public water supply services in the region.

Development of the proposed facility could result in additional water demands associated with the FBOP workforce residing in and around Letcher County. However, FBOP employees and their family members are expected to reside in widely disbursed areas of southeastern Kentucky/western Virginia with only small numbers concentrated in any one geographic location and the service territories of water supply providers. Any new demands upon public water supply systems would serve to offset, to a degree, reductions in water demands experienced in the region as a result of the declining population and workforce. Potential impacts attributable to the FBOP workforce and their families would be small and would not pose a significant adverse impact to public water supply services in the region.

#### ***Potential Impacts - Wastewater Collection and Treatment***

Daily wastewater flows resulting from FCI/FPC operation are estimated to be approximately 85 percent of daily water demand, or 255,000 gpd, with a peak discharge approximately 350 percent of average flow or 500 to 600 gpm. The primary source of flows would be domestic wastewater generated by the AIC population and the FBOP workforce. These flows typically occur in a pattern with daily peaks occurring between 6:00 AM and 9:00 PM during periods of peak water usage (meal preparation, personal hygiene, etc.) and may be as high as two to three times the average flow. There are currently no plans to develop a prison industry, however, if an industry is established in the future, it would likely be a low to moderate water user with wastewater flows not expected to affect projected daily and peak flows.

The LCWSD provides sanitary sewer service to the Roxana area and in anticipation of FCI/FPC development, has extended wastewater collection infrastructure to the area of the Roxana Site. Collection and treatment service would be provided by the LCWSD with the construction contractors responsible for extending the wastewater collection infrastructure from the LCWSD connection point to the FCI/FPC at a location to be determined by the FBOP.

Development of the proposed facility could result in additional wastewaters associated with the FBOP workforce and their families. For the reasons cited earlier, employees and family members are expected to reside in widely disbursed areas of southeastern Kentucky/western Virginia with only small numbers concentrated in any one geographic location. Any new wastewaters flowing to public collection and treatment systems would offset, to a degree, the reductions in flows experienced as a result of the declining population and workforce. Potential impacts attributable to the FBOP workforce and their families are not expected to pose a significant adverse impact to public wastewater systems in the region.

#### ***Potential Impacts – Electrical Service***

Provision of temporary electric service would be necessary during construction and permanent service prior to activation of the proposed FCI/FPC. Although actual energy demands and load estimates depend on a final facility design and selection of mechanical and other equipment, operation of a typical FCI/FPC has an electric service requirement of a 12 to 15 kilovolt (KV) system, three-phase, four-wire components; average annual energy use of approximately 18 to 19 million kilowatt-hours (KWH); a demand load of approximately 4,500 to 5,000 kilowatts (KW), and provision of on-site transformer of 5,000 kilovolt ampere (kVa).

Kentucky Power provides electricity in the vicinity of the Roxana Site and reports that there is sufficient capacity in the system (generation and distribution) to meet the anticipated load from the proposed FCI/FPC. Overhead lines extend along KY 160 and Big Branch-Tolson Creek Road which reportedly have sufficient capacity to supply the power needed to operate the FCI/FPC. Construction contractors would be responsible for extending service to a connection point at the FBOP's on-site utility plant. At this time, improvements to electric substations or other power facilities are not necessary and no significant adverse impacts to electric capacity, service, or customers are expected.

#### ***Potential Impacts - Natural Gas Service***

While projecting natural gas demands and load estimates is dependent upon facility design, operation of a typical FCI/FPC requires approximately 50,000 to 70,000 thousand cubic feet (Mcf) of natural gas annually, a maximum usage of 25,000 to 28,000 cubic feet per hour, and a maximum daily usage of 250,000 to 280,000 cubic feet.

The FBOP does not own or operate gas or oil wells and development at the Roxana Site would require the closure and capping of all operating wells, and closure or relocation of associated equipment and infrastructure located within or adjacent to the site. The FBOP may be able to connect to the natural gas distribution system located adjacent to the Roxana Site where there is sufficient natural gas available. Development of the proposed FCI/FPC is not expected to significantly impact natural gas availability or pose a significant adverse impact to current natural gas services or residential, commercial, or industrial customers in the region.

#### ***Potential Impacts - Telecommunications***

Telecommunication services are provided to residential, business, and other customers throughout Letcher County with customers in Whitesburg and other population centers having access to a wider variety of services and service providers. Available telecommunications infrastructure includes DSL, fiber optic, fixed wireless, and satellite coverage.

Operation of the proposed FCI/FPC will require telecommunications service for internet and security connections for communications with outside correctional officials and facilities. Minimum requirements for new construction, generally coordinated through the local telecommunications providers, include Primary Rate Interface (PRI) T1 for the Federal Telecommunications System (with PRI delivered over copper or fiber infrastructure); Integrated Services Digital Network (ISDN) T1 for local calls; 100 pair copper; and 400 continuous Direct Inward Dialing (D.I.D.) numbers.

Providing the necessary services to the FCI/FPC would be the responsibility of the service provider(s) selected by the FBOP. Depending upon the means to provide services (copper, fiber optic, satellite, etc.) there is the potential for temporary impacts such as noise, dust and traffic controls which may occur while extending telecommunications infrastructure. However, no significant permanent adverse impacts are associated with providing these services. Instead, any permanent upgrades and improvements to telecommunications services may help expanded coverage and service choices to residences and businesses in the Roxana area. The proposed project is not expected to result in significant adverse impacts on telecommunications infrastructure, services, providers, or customers in the Roxana area or Letcher County.

#### ***Potential Impacts - Solid Waste Management***

Construction and operation of the proposed FCI/FPC would generate solid wastes requiring collection and disposal by one or more of the commercial haulers which serve Letcher County and the southeastern Kentucky region. During the initial phase of site preparation, several standing structures, a metal storage tank, compressor station, miscellaneous equipment, and a small area of asphalt will be dismantled and removed from the site for recycling or disposal. The volume of such wastes is small and is not expected to adversely impact waste collection and disposal services available in the region. Waste removal contractors would be responsible for ensuring that all appropriate abatement measures have been performed and that all such debris is properly segregated and stored on-site until transported for recycling or final disposal.

Construction of the proposed FCI/FPC would result in solid wastes of varying types and quantities during the erection of structures, utility installations, interior buildouts and finishes, etc., with collection and disposal of such wastes the responsibility of the contractors involved in construction. Construction contractors would be responsible for ensuring that all construction-derived wastes are properly stored in dumpsters on-site until collected and that all such wastes are transported only to facilities permitted to accept construction wastes for recycling and final disposal.

Based on experience operating other federal correctional facilities, approximately 2.8 tons of solid waste will be generated daily (based on a conservative estimate of four pounds per AIC per day and 1,408 AIC), or approximately 1,000 tons annually and includes wastes generated by the workforce during routine operation. Collection and disposal of solid wastes would be the responsibility of a commercial carter selected by the FBOP to remove and disposal of solid wastes during operation of the proposed facility.

Secondary impacts could occur from the FBOP employees and their families residing in and around Letcher County to operate the proposed facility. For the reasons described earlier, employees and their family members are expected to reside in communities located throughout the southeastern Kentucky/ western Virginia region with only small numbers concentrated in any one location. As a result, the potential impacts attributable to the FCI/FPC workforce and their families would be small and would not pose a significant adverse impact to solid waste collection and disposal services in the region.

#### ***Recommended Mitigation - Water Supply***

The LCWSD system has access to water supply and distribution capacity sufficient to support the demands of the proposed project without disrupting current customers. With water supply infrastructure already in the area of the Roxana Site, typical impacts associated with extending water service, such as noise, dust, soil erosion, and traffic disruptions, would be avoided. Design and construction of the on-site water system from the LCWSD connection point would follow applicable local and state regulations and permitting procedures. No mitigation measures beyond coordination and approvals from the appropriate state and local authorities are warranted.

#### ***Recommended Mitigation - Wastewater Collection and Treatment***

The LCWSD system has access to adequate wastewater collection and treatment capacity to support the needs of current customers and the proposed project. With wastewater collection infrastructure already available to the area of the Roxana Site, temporary impacts associated with extending collection service, such as noise, dust, soil erosion and traffic disruptions, would be avoided. Design and construction of the on-site wastewater collection system and its connection to the LCWSD system would follow applicable local and state regulations and permitting procedures. No mitigation measures beyond coordination and approvals from the appropriate state and local regulatory agencies are warranted.

#### ***Recommended Mitigation - Electrical Service***

With electric power infrastructure already in the area of the Roxana Site, typical impacts associated with extending service, such as noise, dust, soil erosion, and traffic disruptions, would be avoided. Mitigation measures would include ensuring that extension of electric power from the connection point to the utility plant is carried out in conformance with applicable regulations and with a minimum of disruption to service with any such disruptions mitigated through careful coordination between FBOP, the construction contractors, and Kentucky Power. Any other potential impacts resulting from providing electric service to the proposed FCI/FPC would be minimized by ensuring that effective worker safety practices and procedures are implemented. No other mitigation measures involving electric power service are planned or warranted.

#### ***Recommended Mitigation - Natural Gas Service***

Mitigation measures would include ensuring that natural gas wells and infrastructure relocations, alterations, or use is carried out in conformance with applicable regulations.



### ***Recommended Mitigation - Telecommunications***

Providing telecommunications services to the proposed FCI/FPC would not result in significant adverse impacts to current or future customers of the region. However, temporary impacts such as noise, dust, and traffic controls during construction may occur to extend telecommunications infrastructure to the new FCI/FPC. Such impacts would be minimized by ensuring that construction periods are kept to the shortest duration possible and effective traffic safety measures are implemented. Other than communicating the FBOP's telecommunications needs with the appropriate service providers, no other mitigation measures are warranted.

### ***Recommended Mitigation - Solid Waste Management***

Solid wastes generated during construction would be stored on-site and transported for recycling or disposal only to facilities permitted to accept construction wastes. Wastes generated during operation would be stored on-site in self-contained dumpsters until collection (on a regular schedule) and transported by licensed haulers to a transfer station and eventually for final disposal (recycler or landfill).

Any toxic, hazardous, or bio-medical wastes generated would be handled, stored, and disposed of according to applicable regulations.

To minimize the overall volume of solid wastes requiring disposal, a recycling program would be established during FCI/FPC operation. Wastes suitable for recycling (cardboard, tin, aluminum and plastic) would be separated from other wastes and transported to an approved recycling facility. For informational security reasons, paper is routinely shredded and glass is not typically found in a secure correctional setting. Other than coordinating the solid waste storage, collection, disposal and recycling needs of the proposed FCI/FPC with the appropriate collection, recycling and disposal service providers, no other mitigation measures are warranted.

## **3.17 Transportation**

### **3.17.1 Existing Conditions**

The analysis of traffic and transportation systems involves vehicle movements throughout the road and highway network in Letcher County that surrounds and provides access to the Roxana Site. Transportation systems consist of a mix of roadways that are classified based on their function and typically include expressways and interstate highways, principal and minor arterial streets, major and minor collector streets, and local streets. Expressways and principal arterials move traffic regionally and between population and activity centers with only limited access to adjacent properties. Major and minor collector roadways serve to move traffic from population and activity centers and funnel them onto principal arterials with a moderate level of access to adjacent properties. Local roadways provide access to adjacent properties and deliver traffic onto collector and arterial roadways.

Letcher County's transportation infrastructure consists of a network of arterial, collector, and local roadways that provide access and connectivity for vehicular traffic within this predominantly rural county. With approximately 250 miles of designated Kentucky highways (primary and secondary system and rural secondary system), the roadway network connects the county's population enclaves and is sufficiently well developed to serve the ground transportation needs of local residents and travelers passing through the county on their way to final destinations.

Regional access to Letcher County and southeastern Kentucky is provided primarily by KY 15, a principal arterial extending north-south through the county and connecting the Whitesburg area with Hazard, Jackson, Winchester, and eventually the Lexington metropolitan area. Letcher County can also be accessed from Interstate Route 75 (I-75) via KY 80 eastward to KY 15. US 23, another principal arterial highway, also serves eastern Kentucky by connecting I-64 and Huntington, West Virginia to the north with Prestonsburg and Pikeville, Kentucky and eventually Pound, Wise, and Norton, Virginia and Kingsport, Tennessee to the south.

US 119 is a principal arterial roadway connecting southern West Virginia and Pike County to the

north with Letcher County and, in turn, Harlan County to the south. The principal population centers of Whitesburg and Jenkins rely upon US 119 for access to most of the regional highways serving southern and eastern Kentucky and western Virginia. In addition to the principal highways, numerous hard- and gravel-surfaced local roads provide access to the many communities and residential enclaves that are dispersed throughout the county.

Access to the Roxana community and the Roxana Site is via KY 588 extending from Whitesburg to the east to Blackey to the north. KY 588, classified as a minor collector, forms a portion of the site's northern and eastern borders providing access to widely separated residences, commercial establishments, and small farmsteads that line its route. This rural roadway has one travel lane in each direction, narrow grass or no shoulders, a pavement width estimated at 20-22 feet, and a roadway surface in fair condition.

Traffic counts performed in April 2015 (Appendix I) showed Annual Average Daily Traffic (AADT) along KY 588 was approximately 330 vehicles per day. By 2020, traffic volumes had increased slightly to an AADT of 371 vehicles (KTC 2020). Traffic volumes are very low on KY 588 (less than 50 vehicles per hour) and with the low volume, there is considerable additional capacity along this route. However, KY 588 is not a designated truck route and has limiting geometric features including narrow lane widths and turning radii.

Access to the site is also via KY 160 from its connection with KY 15 north of Whitesburg to Roxana and south to Gordon and the Virginia state border. In the vicinity of the site, KY 160 is a two-lane roadway designated as a major collector with one travel lane in each direction, narrow grass or no shoulders, a pavement width estimated at 20-22 feet, and a roadway surface in good condition. Traffic counts performed in April 2015 found AADT associated with KY 160 at 550 vehicles and by 2020, traffic volumes had increased to an AADT of 633 vehicles (KTC 2020). Traffic volumes are also very low on KY 160 (less than 50 vehicles per hour) and with the low volume, there is considerable additional capacity along this route as well.

Regional highways including the KY 15, US 119, among others have no reported restrictions on the height and weight of trucks and other vehicles operating on these roadways. However, local bridges near the site have weight limits ranging from 40 to 60 tons depending upon vehicle type. Local roads in general are unsuited to carrying large volumes of traffic and larger, heavy-duty trucks without upgrades and improvements.

## **3.17.2 Potential Impacts**

### **3.17.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, transportation infrastructure serving the Roxana community and Letcher County would not be affected, and mitigation would not be necessary.

### **3.17.2.2 Preferred Alternative**

Impacts to traffic and transportation networks are analyzed by considering the possible changes to existing traffic conditions and the capacity of area roadways from proposed increases in traffic associated with construction and operation.

#### ***Construction Phase***

To reach the Roxana Site and access the development area, the majority of construction employees and truck traffic would utilize KY 588 to reach a newly constructed entrance to be located approximately 1,000 feet east of the junction with Big Branch-Tolson Creek Road (SE Road). The new entrance would be located away from residences, businesses, and other rural land uses and would be designed and constructed to accommodate traffic during construction and later become the permanent access drive to the FCI/FPC during operation.

For approximately 36 months following groundbreaking, construction activities are expected to increase traffic volumes along KY 588 and KY 160 leading to the site as well as the routes leading

from the region's population centers from which construction workers, equipment, and materials will originate. This includes KY 15 to Whitesburg and Hazard; US 119 to Jenkins; US 23 to Pikeville, Kentucky and Pound, Norton, and Wise, Virginia among other routes to be used by workers and equipment and material suppliers. Auto and truck movements would be distributed throughout the workday typically between the hours of 6:30 AM and 4:30 PM, Monday – Friday with the number of workers on-site at any one time dependent on the phase of construction. During peak construction periods, the number of workers on-site could total several hundred based on past experience constructing similar facilities in Kentucky and elsewhere.

Experience developing other federal correctional facilities in southeastern Kentucky has found that limitations on housing and hotel and motel accommodations and the temporary nature of the work will limit the number of construction workers and their families who will relocate into the county. With the decline in population in Letcher County and elsewhere in southeastern Kentucky and limitations on the availability, suitability and affordability of local housing, the majority of workers are expected to reside in communities throughout eastern Kentucky, southern West Virginia, and western Virginia. The declines in population and employment in the region are also reflected in the volume of traffic experienced during the typical workday, further accommodating the increase associated with construction. With the construction workforce widely distributed, potential traffic impacts in any one location and along any one route are not expected to have a significant adverse effect on transportation network function, system capacity, or the safety of travelers in the region.

As a matter of general practice, permissible traffic movements into and out of the project site and matters of construction access from KY 588 would be coordinated with the appropriate state and county transportation agencies. Although increases in traffic volumes along roadways leading to the site would be expected during FCI/FPC construction, any disruptions to normal traffic operations would be kept to the shortest duration possible. Construction activities involving any off-site utility extensions, installations and/or relocations, including any temporary detours or lane closures, would be coordinated with local law enforcement and traffic control agencies to ensure public safety.

### ***Operational Phase***

Operation of the FCI/FPC would generate traffic on roadways leading to the site, consisting of commuting trips by FBOP employees, visitor trips, service and delivery vehicles trips, and vehicle trips involved with AIC transportation. Although LKLP Community Action operates a Demand Response transport system for the elderly, disabled, veterans, low income, and low-wage individuals, there is no scheduled public transit service operating in Letcher County. Although bicycle transportation to and from the proposed FCI/FPC is an alternative to automobile use, the site's remote location, narrow roadways, elevation changes, inclement weather, and other impediments makes bicycle use highly unlikely. Instead, it is expected that the all trips to the FCI/FPC will be via single-occupancy vehicles.

#### **• Employee Trips**

Overseeing FCI/FPC operation will be approximately 325 employees who will be assigned to one of three shifts to accommodate 24-hour a day operation: 8:00 AM to 4:00 PM (Shift 1); 4:00 PM to 12:00 Midnight (Shift 2); and 12:00 Midnight to 8:00 AM (Shift 3). Based on operating experience, approximately 50 percent of the workforce (162 employees) would be assigned to Shift 1; 35 percent (114 employees) to Shift 2; and 15 percent (49 employees) to Shift 3. Weekdays typically experience the greatest number of employee trips as fewer trips are made by some administrative personnel and service vehicles on weekends.

Employees typically arrive at the facility within 30 minutes of the start of their shifts and depart within 30 minutes following the end of their shifts. Therefore, the AM peak hour is expected to be from 7:30 AM to 8:30 AM, accounting for employees arriving for Shift 1 and departing from Shift 3. The highest projected employee-generated trips would occur between 3:30 PM and 4:30 PM, during which the Shift 1 employees would depart and Shift 2 employees would arrive. Assuming a scenario involving only single occupancy vehicles, approximately 114 vehicles would arrive, and 162 vehicles would depart during the afternoon peak hour (276 vehicles total).

- **Visitor Trips**

The frequency and duration of visits by AIC friends, family members, attorneys and others are based on operating policies set by FBOP administrators. In establishing visitation policies, officials balance many day-to-day management considerations, including public safety, security of the institution, and the physical limitations of an institution's visiting area, resulting in wide latitude in visitation patterns.

Social visiting hours at federal correctional facilities are generally scheduled to avoid shift changes and peak hour traffic. As a result, visitor arrivals and departures are expected to be distributed throughout off-peak hour periods and thus would not contribute to peak-hour traffic volumes. With controls over the number and timing of visitors allowed at the FCI/FPC, no significant adverse impacts from visitor vehicles traveling on KY 588, KY 160 or other routes leading to the facility, are expected.

- **Service and Delivery Vehicle Trips**

Service and delivery vehicle trips include those involving transportation of supplies and provisions necessary for day-to-day functioning, along with mail delivery, equipment repair and maintenance, and waste removal among others. Based on operating experience elsewhere, these trips would occur throughout the workday and confined largely to off-peak travel periods.

As a result, arrivals and departures of service and delivery vehicles are expected to be distributed throughout off-peak periods, and thus would not contribute to peak-hour traffic volumes. With controls over the arrival and departure of service and deliveries to the FCI/FPC, no significant adverse impacts from service and delivery vehicle vehicles traveling on KY 588, KY 160, or other routes leading to the facility, are expected.

- **AIC Transport Trips**

Among the FBOP's responsibilities is to transport AIC for medical treatment, judicial appointments, and to other correctional facilities. Based on operating experience, AIC transports, escorted by FBOP employees utilizing passenger cars, vans, or buses, would also be confined largely to off-peak travel periods with no significant adverse impacts from transport vehicles traveling on KY 588, KY 160 or other routes leading to the facility, are expected.

### **3.17.3 Recommended Mitigation**

#### **3.17.3.1 Construction Phase**

Because traffic volumes are relatively low on access roadways, the temporary increase in construction traffic is not expected to have a significant adverse effect on roadway capacity. However, maintaining traffic flow, minimizing potential damage to local roadways, and ensuring the safety of the traveling public will be high priorities. Therefore, FBOP officials will stress the importance on communication and coordination between the construction contractors, local law enforcement, and the appropriate traffic control agencies and adherence to applicable highway access permits and requirements. This may include requiring the construction contractor to develop a plan for routing traffic to the site so that vehicles do not exceed maximum weight limitations thereby avoiding damage to bridges and roadways. Consideration would also be given to requiring the contractor to provide a bond to ensure that necessary bridge and road repairs can be carried out upon completion of construction.

#### **3.17.3.2 Operational Phase**

Because traffic volumes are relatively low on roadways that provide access to the site, the increase in traffic by employees, visitors, service and delivery vehicles, and AIC transports during FCI/FPC operation is not expected to have a significant adverse effect on roadway capacity or travel safety. Nonetheless, the FBOP will coordinate with the Kentucky Transportation Cabinet and Letcher County concerning plans for construction access and permanent access from KY 588 to ensure that the entrance will be designed in compliance with applicable standards and criteria. This includes consideration to providing a dedicated left turn lane for traffic entering the FCI/FPC from KY 588 to reduce the possibility of a following vehicle rear-ending the turning vehicle.

## 3.18 Air Quality

### 3.18.1 Existing Conditions

#### 3.18.1.1 Definition of Air Pollutants

The USEPA defines ambient air quality in 40 CFR 50 as “that portion of the atmosphere, external to buildings, to which the general public has access.” In compliance with the 1970 Clean Air Act (CAA) and the 1977 and 1990 Amendments (CAAA), USEPA has designated criteria air pollutants in which ambient air quality standards have been established. Ambient air quality standards are intended to protect public health and welfare and are classified as either primary or secondary standards. Primary standards define levels of air quality necessary to protect public health. National secondary ambient air quality standards define levels of air quality necessary to protect public welfare from any known or anticipated adverse effects of a pollutant. Human welfare is considered to include the natural environment (soil, water, vegetation) and the manmade environment (physical structures).

The federal government has established primary and secondary standards for carbon monoxide (CO), one-hour and eight-hour ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), total and inhalable particulates (PM<sub>10</sub> and PM<sub>2.5</sub>), nitrogen dioxide (NO<sub>2</sub>), and lead (Pb). Hydrocarbon standards have been rescinded because these pollutants are primarily of concern only in their role as ozone precursors. In addition to retaining PM<sub>10</sub> standards, the USEPA has adopted 24-hour and annual standards for PM<sub>2.5</sub>, or particulate matter with an aerodynamic equivalent diameter less than 2.5 micrometers (μm). Adoption of the PM<sub>2.5</sub> standard in 1997 was intended to provide increased protection of public health from fossil fuel combustion.

Counties in the U.S. that do not meet the NAAQS for a particular pollutant are described as “non-attainment areas” for that criteria pollutant while areas that meet both primary and secondary standards are known as “attainment areas.” Areas determined to be in recent attainment are known as “maintenance areas”. Under the CAA and the CAAA, state and local air pollution control agencies have the authority to adopt and enforce ambient air quality standards (AAQS) more stringent than the NAAQS. With the exception of lead, which was phased out during 1998, (due to the significant drop caused by eliminating lead compounds in gasoline), Kentucky has adopted the NAAQS that specify maximum permissible short-term and long-term emissions of the criteria pollutants. A description of NAAQS pollutants is provided in Table 3-17 while national and Kentucky ambient air quality standards are provided in Table 3-18.

#### 3.18.1.2 Regulatory Responsibilities

Although the USEPA has the ultimate responsibility for protecting ambient air quality, each state and delegated local agency has the primary responsibility for air pollution prevention and control. The CAA requires that each state submit a State Implementation Plan (SIP), which describes how the state will attain and maintain air quality standards in non-attainment areas. The SIP must be approved by the USEPA for each criteria pollutant. The agency responsible for the SIP and maintaining air quality in Kentucky is the Energy and Environment Cabinet, Division for Air Quality.



### 3.18.1.3 Baseline Conditions

**Table 3-17** Description of NAAQS Criteria Pollutants

<p><b>Sulfur Dioxide (SO<sub>2</sub>):</b> A toxic, colorless gas with a distinctly detectable odor and taste. Oxides of sulfur in the presence of water vapor, such as fog, may result in the formation of sulfuric acid mist. Human exposure to SO<sub>2</sub> can result in irritation to the respiratory system, which can cause both temporary and permanent damage. SO<sub>2</sub> exposure can cause leaf injury to plants and suppress plant growth and yield. SO<sub>2</sub> can also cause corrosive damage to many types of manmade materials.</p>
<p><b>Particulates (PM<sub>2.5</sub>)/(PM<sub>10</sub>)/(TSP):</b> Particulates originate from a variety of natural and anthropogenic sources. Some predominant anthropogenic sources of particulates include combustion products (wood, coal and fossil fuels), automotive exhaust (particularly diesels), and windborne dust (fugitive dust) from construction activities, roadways and soil erosion. Human exposure to inhalable particulate matter affects the respiratory system and can increase the risk of cancer and heart attack. Small particulates affect visibility by scattering visible light and when combined with water vapor can create haze and smog. Micron and submicron particles are those that assume characteristics of a gas and remain suspended in the atmosphere for long periods of time. Particulate pollution had been measured in terms of total suspended particulates (TSP) but those standards were replaced with revised measurements of particulate matter under 10 microns in diameter (PM<sub>10</sub>). Particles less than 10 micrometers in diameter pose a health concern because they can be inhaled into and accumulate in the respiratory system. Particles less than 2.5 micrometers in diameter (PM<sub>2.5</sub>) are referred to as “fine” particles and are believed to pose the greatest health risks. In 1997, USEPA established annual and 24-hour NAAQS for PM<sub>2.5</sub> for the first time and in 2006, it revised the 24-hour NAAQS for PM<sub>2.5</sub>.</p>
<p><b>Carbon Monoxide (CO):</b> A colorless, odorless, tasteless and toxic gas formed through incomplete combustion of crude oil, fuel oil, natural gas, wood waste, gasoline and diesel fuel. Most combustion processes produce at least a small quantity of this gas, while motor vehicles constitute the largest single source. Human exposure to CO can cause serious health effects before exposure is ever detected by the human senses. The most serious health effect of CO results when inhaled CO enters the bloodstream and prevents oxygen from combining with hemoglobin, impeding the distribution of oxygen throughout the bloodstream. This process significantly reduces the ability of people to do manual tasks, such as walking.</p>
<p><b>Nitrogen Dioxide (NO<sub>2</sub>):</b> A reddish-brown gas with a highly detectable odor and is highly corrosive and a strong oxidizing agent. Nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>) constitute what is commonly referred to as nitrogen oxides (NO<sub>x</sub>) which are formed by all combustion and certain chemical manufacturing operations. During combustion, nitrogen (N) combines with oxygen (O) to form NO and when combined with more oxygen, forms NO<sub>2</sub>. Under intense sunlight, NO<sub>2</sub> reacts with organic compounds to form photochemical oxidants. Oxidants have a significant effect on atmospheric chemistry and are gaseous air pollutants that are not emitted into the air directly. They are formed through complex chemical reactions which involve a mixture of NO<sub>x</sub> and reactive volatile hydrocarbons (VOC) in the presence of strong sunlight. Human exposure to NO<sub>2</sub> at high concentrations can cause respiratory inflammation and respiratory irritation at lower concentrations. NO<sub>x</sub> reduces visibility and contributes to haze and exposure to NO<sub>x</sub> can cause serious damage to plant tissues and deteriorate manmade materials, particularly metals.</p>
<p><b>Ozone (O<sub>3</sub>):</b> An oxidant that is a major component of urban smog. O<sub>3</sub> is a gas that is formed naturally at higher altitudes and protects the earth from harmful ultraviolet rays. At ground level, O<sub>3</sub> is a pollutant created by a combination of VOC, NO<sub>x</sub> and sunlight, through photochemistry. Ground-level O<sub>3</sub> is odorless and colorless and is the predominant constituent of photochemical smog. Human exposure to O<sub>3</sub> can cause eye irritation at low concentration and respiratory irritation and inflammation at higher concentrations. Respiratory effects are most pronounced during strenuous activities. O<sub>3</sub> exposure will deteriorate manmade materials and reduce plant growth and yield.</p>
<p><b>Lead (Pb):</b> Lead is in the atmosphere in the form of inhalable particulates. The major sources of atmospheric lead are motor vehicles and lead smelting operations. USEPA estimates that ambient concentrations have decreased substantially largely due to the decreasing use of leaded gasoline. Health effects from lead occur through inhalation and consequent absorption into the bloodstream. Excessive accumulation causes lead poisoning with symptoms such as fatigue, cramps, loss of appetite, anemia, kidney disease, mental retardation, blindness and death.</p>
<p>Source: WSP, 2024.</p>

**Table 3-18** National and Kentucky Ambient Air Quality Standards

Pollutant	Standards	
	Primary Standard	Secondary Standard
<b>Carbon Monoxide</b>		
Maximum 8-hour Average	9 ppm (10 mg/m <sup>3</sup> )	---
Maximum 1-hour Average	35 ppm (40 mg/m <sup>3</sup> )	---
<b>Sulfur Dioxide</b>		
Annual Arithmetic Mean	0.03 ppm (80 µg/m <sup>3</sup> )	---
Maximum 24-hour Average	0.14 ppm (365 µg/m <sup>3</sup> )	---
Maximum 3-hour Average	---	0.5 ppm or 1,300 µg/m <sup>3</sup>
<b>Particulate Matter—PM<sub>10</sub></b>		
Maximum 24-hour Average	150 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>
<b>Particulate Matter—PM<sub>2.5</sub></b>		
Annual Arithmetic Mean	12 µg/m <sup>3</sup>	15 µg/m <sup>3</sup>
Maximum 24-hour Average	35 µg/m <sup>3</sup>	35 µg/m <sup>3</sup>
<b>Ozone</b>		
8-hour Average	0.075 ppm	0.075 ppm
<b>Nitrogen Dioxide</b>		
Annual Arithmetic Mean	53 ppb (100 µg/m <sup>3</sup> )	53 ppb (100 µg/m <sup>3</sup> )
Maximum 1-hour Averaged	100 ppb	---
<b>Lead</b>		
Maximum Arithmetic Mean over a Calendar Quarter (3 months)	0.15 µg/m <sup>3</sup>	0.15 µg/m <sup>3</sup>
Notes: a - Maximum concentration not to be exceeded more than once per calendar year. b - Not to be exceeded by 99th percentile of 24-hour PM <sub>10</sub> concentration in a year (averaged over three years). c - Not to be exceeded by 99th percentile of 24-hour PM <sub>2.5</sub> concentration in a year (averaged over three years). d - Annual 98th percentile value of daily maximum 1-hr concentrations, averaged over 3 years ppm: parts per million. ppb: parts per billion. µg/m <sup>3</sup> : micrograms per cubic meter. Source: 40 CFR 50, and Kentucky Division for Air Quality, 2024.		

Air quality at a particular location is a function of the types, amounts, and dispersal rates of pollutants being emitted into the air locally and throughout the air basin. Major factors affecting pollutant dispersion are wind speed and direction, the vertical dispersion of pollutants (which is affected by inversions), and local topography.

Pollutant emissions typically refer to the volume of pollutants or pollutant precursors introduced into the atmosphere by a source or group of sources. Pollutant emissions contribute to the ambient air concentrations of criteria pollutants, either by directly affecting the pollutant concentrations measured in the ambient air or by interacting in the atmosphere to form criteria pollutants. Primary pollutants, such as CO, SO<sub>2</sub>, lead, and some particulates, are emitted directly into the atmosphere from emission sources while secondary pollutants, such as O<sub>3</sub>, NO<sub>2</sub>, and some particulates are formed through atmospheric chemical reactions that are influenced by meteorology, ultraviolet light, and other atmospheric processes.

In addition to the NAAQS for criteria pollutants, national standards exist for hazardous air pollutants (HAPs) which are regulated under Section 112(b) of the 1990 CAA Amendments. The National Emission Standards for Hazardous Air Pollutants regulate HAP emissions from stationary sources.

HAPs emitted from mobile sources (called Mobile Source Air Toxics or MSATs) are compounds emitted from highway vehicles and non-road equipment that are known or suspected to cause serious health and environmental effects.

Unlike the criteria pollutants, there are no NAAQS for HAPs. The primary control methodologies instituted by federal regulation for MSATs involve technological improvements for reducing their content in fuel and altering engine operating characteristics to reduce the volume of pollutants generated during combustion. MSATs would be the primary HAPs emitted by mobile sources during construction and operation of the proposed FCI/FPC. The earth-moving and other construction equipment expected to be used is likely to vary in age and have a range of pollution reduction effectiveness. Construction equipment, however, would be operated intermittently over a large area and would produce negligible ambient HAPs in a localized area and therefore, MSAT emissions are not considered further in this analysis.

The Kentucky Division of Air Quality operates a statewide network of 24 monitoring stations in 23 counties to measure ambient air quality in the state. The monitoring network focuses on USEPA's list of the most serious health-related air pollutants: O<sub>3</sub>, NO<sub>2</sub>, inhalable particles (PM<sub>2.5</sub>), SO<sub>2</sub>, and CO. The monitoring network is operated under a federally approved network plan to ensure appropriate monitoring as required by federal regulations. Kentucky's ambient air monitoring network also consists of sites and equipment designed to support the criteria pollutant network or to measure air pollutants for which NAAQS do not exist.

In recent decades, average concentrations of air pollutants in the ambient air have steadily declined across the state. Monitoring since 2000 shows reductions in O<sub>3</sub>, NO<sub>2</sub>, inhalable particles (PM<sub>2.5</sub>), SO<sub>2</sub>, and CO concentrations. While there are no air quality monitoring stations in Letcher County, stations are located nearby in Pikeville and Hazard and show PM<sub>2.5</sub> concentrations below NAAQS.

The improvements to Kentucky's air quality are the result of federal and state control programs that have significantly reduced emissions of most directly emitted pollutants and their precursors. According to the Green Book published by the USEPA (last updated December 31 2023), Letcher County and all of southeastern Kentucky is classified as being in attainment for all NAAQS criteria pollutants. In addition, there are no major stationary air pollution emission sources located in proximity to the Roxana Site. Because the area is in attainment for all criteria pollutants, the CAA General Conformity Rule does not apply and is not addressed in this analysis.

#### 3.18.1.4 Greenhouse Gases

Greenhouse gases (GHGs) are chemical compounds found in the Earth's atmosphere that absorb and trap infrared radiation as heat. As incoming solar radiation is absorbed and emitted back from the Earth's surface as infrared energy, GHGs in the atmosphere prevent some of this heat from escaping into space, instead reflecting the energy back to further warm the surface (Center for Sustainable Systems, 2015). Global atmospheric GHG concentrations are a product of continuous release and storage of GHGs over time. In the natural environment, the release and storage of GHGs are recurring. Anthropogenic (originating from human activity) releases, which include deforestation, soil disturbance, and the burning of fossil fuels, disrupt the natural carbon cycle discussed below by increasing the GHG emission rate over the storage rate, resulting in a net increase of GHGs into the atmosphere. The accumulation of increased GHG levels in the atmosphere increases temperatures and warms the planet through a greenhouse effect and is often referred to as climate change (USEPA, 2016).

The GHGs emitted into the atmosphere through human activities are carbon dioxide (CO<sub>2</sub>); methane; nitrous oxide (N<sub>2</sub>O); and fluorinated gases such as hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF<sub>6</sub>) (USEPA, 2016e). N<sub>2</sub>O is emitted during agricultural and industrial activities and during the combustion of fossil fuels and solid waste. Fluorinated gases, particularly SF<sub>6</sub>, are often used as an electrical insulator in high-voltage substation equipment such as circuit breakers, transformers, and ground switches. Although fluorinated gases are emitted in small quantities, they have the ability to trap more heat than CO<sub>2</sub> and are considered gases with a high global warming potential (USEPA, 2016e).

Climate change refers to a suite of changes occurring in the Earth's atmospheric, hydrologic, and oceanic systems. Although climate change is a global phenomenon, it manifests itself differently in different places such as sea level rise, temperature increases, hydrologic changes, increased wildfire activity, shifting ocean currents, extreme weather events, and altered terrestrial and marine ecosystems. While the warming trend has been discernable over the past 100 years, the past four to five decades have exhibited an accelerated warming rate with recent years ranking among the warmest on record.

Most of the observed temperature increase can be attributed to both natural and anthropogenic activities that contribute heat trapping gases to the atmosphere. These GHGs, particularly CO<sub>2</sub> from the burning of fossil fuels, cause the Earth's atmosphere to trap the sun's heat. While the insulating effect (or GHG effect) of the atmosphere is important to living systems, the rapid increase in GHGs since the mid-19th century has adversely affected nature's systems.

## **3.18.2 Potential Impacts**

### **3.18.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, there would be no changes to local and regional air quality, and mitigation measures would not be necessary.

### **3.18.2.2 Preferred Alternative**

Potential air quality impacts may occur from construction activities, routine FCI/FPC operation and maintenance, and motor vehicle traffic associated with facility operation. These potential impacts and mitigation recommendations, if applicable, are discussed below.

#### ***Construction Activities***

Development of the proposed FCI/FPC would involve a wide range of construction activities extending over an estimated 36-month period. Construction methods, sequencing and duration for certain aspects are fairly well known including, for example, site clearing, grading, and excavations, utility extensions and connections, access drive and internal roadway construction, and erection of buildings. Since FCI/FPC design and the selection of building materials and equipment are unknown at this time, reasonable expectations have been made for construction methods, sequencing, and schedule based on FBOP projects of a similar nature and scale.

Direct impacts from emissions from construction would include combustion emissions from fossil fuel-powered equipment and fugitive dust emissions (PM<sub>10</sub> and PM<sub>2.5</sub>) during site clearing, earth moving activities, and operation of equipment on bare soil. Fugitive dust from ground disturbance activities would be the primary source of emissions during construction, with most of the emissions occurring during the initial phase of site preparation.

To understand potential for construction-related air quality impacts, one requires familiarity with the construction process itself. The following provides an overview of the construction process involving a federal correctional facility and would be applicable to the construction process for the proposed FCI/FPC at the Roxana Site.

- **Site Clearing, Grading, and Excavations**

Site clearing, grading, and excavations would involve the use of heavy equipment to remove any standing structures and equipment, pavement, and vegetation within the development zone. To remove previously deposited fill and mine spoil and to use structural fill to establish level building locations, significant volumes of material would be excavated and moved to other locations on-site and/or off-site. Based on conditions within the Roxana Site, the volumes of such materials have been estimated for planning purposes involving approximately 950,000 cubic yards of rock excavation, 9.2 million cubic yards of spoil excavation, and 9.4 million cubic yards of structural fill. Suitable excavated materials would be used on-site for structural fill. Additional geotechnical and engineering investigations would be necessary to develop more precise quantities.

Not included in the estimates is the excavations necessary to construct the access driveway to the building site which could add substantially to the estimates. Other site preparation activities would include installation of soil erosion and sediment control measures, stormwater control measures, installation of temporary construction trailers and temporary power, delivery and stockpiling of construction materials and equipment, and similar activities. The duration of such impacts would extend for the period of time devoted to this initial phase of construction.

- **Footings and Foundations**

Construction of building footings and installation of utilities and other below-grade infrastructure would then commence, typically involving the use of heavy equipment to prepare the site for building erection although at this time a method for supporting building construction has not been determined (i.e., deep piles, etc.). Foundation work would include preparation of forms and the pouring of concrete footings and building slabs. Trenching for installation of new on-site underground utility service lines would also occur at this time. Heavy-duty trucks would deliver concrete and other building materials to the construction site and licensed commercial carters would remove wastes for off-site recycling or final disposal in a licensed disposal facility.

- **Building Construction**

This stage would include erection of the proposed structure (steel, concrete, reinforced concrete, etc.); the building facade (exterior walls and cladding); floors and roof structure. Installation of the structure's core, consisting of systems for mechanical, electrical, and plumbing components, as well as the electrical and mechanical equipment rooms, and plumbing facilities, would occur during this stage and continue through the interior construction and finishing stage. These activities may require the use of cranes, exterior hoists, forklifts, manlifts, and other similar equipment. Cranes would be used to lift structural components, facade elements, large pieces of equipment, etc. Heavy- and medium-duty trucks would continue to deliver materials and licensed commercial carters would continue to remove any construction-related wastes. Construction of the structure's exterior shell could overlap with interior construction. At this time there are no plans to develop a prison industry at the proposed FCI/FPC, however, development of an industry could occur if the opportunity arises in the future.

- **Interior Construction and Finishing**

Installation of interior mechanical, electrical, and plumbing systems would continue during this stage and include heating, ventilation, and air conditioning equipment and ducting, installation of electric lines and water supply and wastewater piping and fixtures. Installation and inspection of life safety systems would also take place at this time as would construction of interior walls systems and interior finishes using low volatile organic compounds (e.g., flooring, carpeting, painting). Employee offices, meeting rooms, kitchen and dining areas, medical/dental unit, mechanical and electrical rooms, storage areas, and other spaces would also be furnished and equipment installed for use during operation.

- **Typical Construction Equipment and Staging**

Typical equipment used for construction includes excavators, bulldozers, backhoes, cranes, and concrete pumping trucks. These would be supplemented by hoists, dump trucks and loaders, and other equipment. Equipment used during construction of structures would include cranes, hoists, compressors, and hand tools. During roof construction, hoists and cranes would be used while heavy-duty trucks would continue to deliver building materials and remove wastes. At this time, one or more staging areas would also be established at the project site. While temporary storage of building materials and equipment would not be determined until a detailed development program and schedule has been prepared, it is expected that all of the construction activity can be accommodated on-site, with no off-site staging.

Construction-related impacts to air quality include fugitive dust in addition to emissions from on-site construction equipment use. Both would occur in and around the development area resulting from site preparation and construction operations.



Fugitive dust emissions typically occur during ground clearing, grading, the stockpiling of materials, on-site movements of construction equipment, and transportation of construction materials to and from the site. The volume of fugitive dust emissions is dependent on the extent of the clearing, grading and excavations necessary, the types of equipment employed, the physical characteristics of the underlying soil, spoil, and bedrock, the speed at which construction vehicles are operated, and the type of fugitive dust control methods employed. Much of the fugitive dust generated by construction activity consists of relatively large-size particles that typically settle within a short distance from the construction work areas. With the project site encircled by dense stands of trees, fugitive dust is not expected to extend beyond the development zone thereby avoiding adversely impacting neighboring properties or residents living in the vicinity of the project site.

The potential for air quality impacts would be temporary, occurring only while construction is underway and during certain meteorological conditions. Fugitive dust emissions can occur during dry weather periods, periods of maximum construction activity, and high wind conditions. Any such impacts would be short-term and can be minimized by maintaining construction equipment, operating in well-ventilated areas, and by following best engineering practices.

Emissions from motor vehicle operations would also occur as a result of the temporarily increase in traffic as the construction workforce commutes to and from the work site each workday. This would be in addition to trucks delivering construction materials and equipment and to haul away excess fill material and/or construction debris. These trips would occur while construction is underway and end when construction is completed. At this time it is not possible to predict the commuting patterns of the construction workforce or the locations of industries, manufacturers, and suppliers providing building materials and equipment. Without such knowledge, accurately projecting the vehicle miles to be traveled by all contributors is not possible. However, the volume of construction-related traffic is not expected to result in a contravention of NAAQS or in a significant adverse impact traffic-related impact.

### **3.18.3 Recommended Mitigation - Construction Activities**

To mitigate potential air quality impacts, BMPs would be incorporated within standard operating procedures for construction activities. BMPs to limit potential adverse air quality impacts include using properly maintained equipment, limiting unnecessary idling of diesel powered engines, using tarp covers on trucks transporting materials to and from the construction site, periodically wetting unpaved surfaces to suppress fugitive dust, and prohibiting the open burning of construction debris and wastes. In addition, construction equipment would be maintained and operated in accordance with the manufacturer's specifications to further minimize air emissions. Stabilization and eventual restoration of areas of ground disturbance by the introduction of native grass or groundcover during and following completion of construction would further limit fugitive dust emissions.

Measures to control fugitive dust are determined based on the site's topography and surroundings, soil conditions, meteorological conditions, site activities, construction equipment, and similar factors. Measures to minimize fugitive dust generation and dispersal would include:

- Applying water to disturbed surfaces that could generate dust.
- Landscaping disturbed areas where no buildings or other development is proposed.
- Covering moving, open-bodied truck transporting materials.
- Regularly cleaning construction access drives in addition to truck tires and truck bodies prior to entering public roadways.
- Covering stockpiled materials or other surfaces which may result in fugitive dust.

#### ***FCI/FPC Operation***

Operation of boiler systems for providing heat and hot water would be the primary stationary source of air emissions. The final choice of fuel to operate the boilers and power the overall facility would be determined during the design phase based on fuel availability, costs, mechanical equipment

selection, and other considerations. With use of modern, highly efficient mechanical equipment, it is not anticipated that the volume of combustion emission by-products would have a significant adverse impact on air quality. See also Appendix J.

Stationary sources of air emissions also include periodic testing and use of diesel-powered emergency generators to provide electricity in the event of a power disruption. The generators would be installed in conformance with applicable regulations and be equipped with aboveground fuel storage tanks. Emissions from generator maintenance, periodic testing, and emergency operation are not expected to exceed New Source Review requirements or result in a significant increase in CO or NO<sub>x</sub> levels or a violation of NAAQS.

Stationary sources will require issuance of an air permit regulated by the Kentucky Division for Air Quality. Analysis of permit requirements based on the final number and specifications of stationary source equipment types would be performed as design requirements are more fully determined. This would ensure that all requisite source registrations are undertaken and regulatory permit compliance achieved prior to initiating operations.

#### **3.18.4 Recommended Mitigation – FCI/FPC Operation**

Other than selection of energy-efficient equipment that meets applicable permitting and emission control standards, no mitigation measures are warranted. Potential air quality impacts during facility operation would be minimized by designing and constructing the new facility to be energy-efficient, thereby minimizing the use of fossil fuels and the emission of air pollutants.

##### *Transportation-Related Activities*

Motor vehicle operations represent another potential source of project-related air quality impacts as the workforce commutes to and from the FCI/FPC each workday and to a lesser degree by visitors traveling to the facility and vehicles delivering goods and supplies needed for operation. The predominant air quality impact associated with motor vehicle operations are emissions of CO, HC, and NO<sub>x</sub> with HC and NO<sub>x</sub> emissions precursors for the formation of ozone.

The proposed FCI/FPC workforce is expected to total approximately 325 employees who will travel to and from the facility over a 24-hour period, seven days a week, with far fewer employees at the facility during weekends and evenings. Assuming a conservative scenario involving use of only single occupancy vehicles and with all employees on site during the typical workday, approximately 325 total employee trips would occur daily during each AM and PM peak travel hour.

At this time it is not possible to predict the commuting patterns of the workforce or the locations of providers of goods and services used during routine operations. Without such knowledge, accurately projecting the vehicle miles to be traveled by all contributors and, in turn the volume of emissions, is not possible. However, the volume of operation-related traffic is not expected to result in a contravention of NAAQS or in a significant adverse impact traffic-related impact. Reductions in vehicular emissions resulting from continually improving emissions-control technology and the growing acceptance of electric vehicles further preclude the likelihood of significant transportation-related air quality impacts.

#### **3.18.5 Recommended Mitigation – Transportation-Related Activities**

Agencies of the federal government, including the FBOP, encourage the formation of carpools and vanpools and, where available, the use of public transit to reduce vehicle miles traveled and minimize the potential for air quality impacts. The federal government is also mandating that federal agencies, including the FBOP, increase the use of electric powered vehicles in its operations, therefore, plans for the proposed FCI/FPC will include installation of electric charging stations. The proposed FCI/FPC will include dedicated on-site government vehicle parking with electric vehicle charging stations. Additional infrastructure will also be provided for future charging stations to be installed for employee and visitor electric power vehicles. Analysis of potential for transportation-related air quality impacts reveals that no mitigation beyond these actions would be warranted.

## ***Greenhouse Gases***

The potential for the proposed project to influence global climatic change has been considered during preparation of this document. This includes the potential for increased emissions of chlorofluorocarbons (CFRs), halons, or GHG and the potential for global climate changes to affect the proposed project. The proposed action addressed by this document is expected to result in no significant emission of CFRs, halons, or greenhouse gases. In addition, the Roxana Site is not located in a coastal environment and, therefore, would not be affected by changes in sea levels.

During normal operations, GHG emissions would result from commuting workers, delivery trucks, visitors, to the new FCI/FPC, energy consumption associated with boiler and other mechanical system operations, and the use of emergency generators during periodic testing and for backup power in the event of a disruption. Climate change is a long-term phenomenon that may result in an increase in extreme weather; however, the facility and surrounding public infrastructure (e.g., electrical power grid, water supply, wastewater treatment, etc.) is expected to continue providing the necessary services despite the possible impacts.

### **3.18.6 Recommended Mitigation – Greenhouse Gases**

The Roxana Site is not located in an area that is considered particularly vulnerable to climate change and associated weather or other physical impacts. The project site is not located within the 100- and 500-year flood zones and, therefore, is not vulnerable to hydrologic changes resulting from climate change.

Furthermore, the proposed site is located in southeastern Kentucky, well inland from the Atlantic and Pacific coastlines and other large water bodies, and therefore is not vulnerable to sea level rise. The impacts on Letcher County from climate change have not been specifically determined, and the actual implications during the lifespan of the proposed FCI/FPC are not fully known. However, the project design will aim to help reduce the impact of construction by pursuing the sustainable green building certification program Leadership in Energy and Environmental Design. Adherence to the program requires use of low VOC materials, elimination of ozone depleting gases, and other air quality conservation measures. Analysis of potential impacts of GHG reveals that no mitigation is warranted.

## ***Radon***

Radon is a colorless, odorless, tasteless gas produced by the natural breakdown of uranium in soil and rocks. Decay of radon, which has a half-life of 3.8 days, results in such by-products as polonium, bismuth, astatine, and lead. When inhaled over a long period of time, these radioactive by-products can cause lung cancer with up to 22,000 lung cancer deaths attributed to radon each year in the U.S.

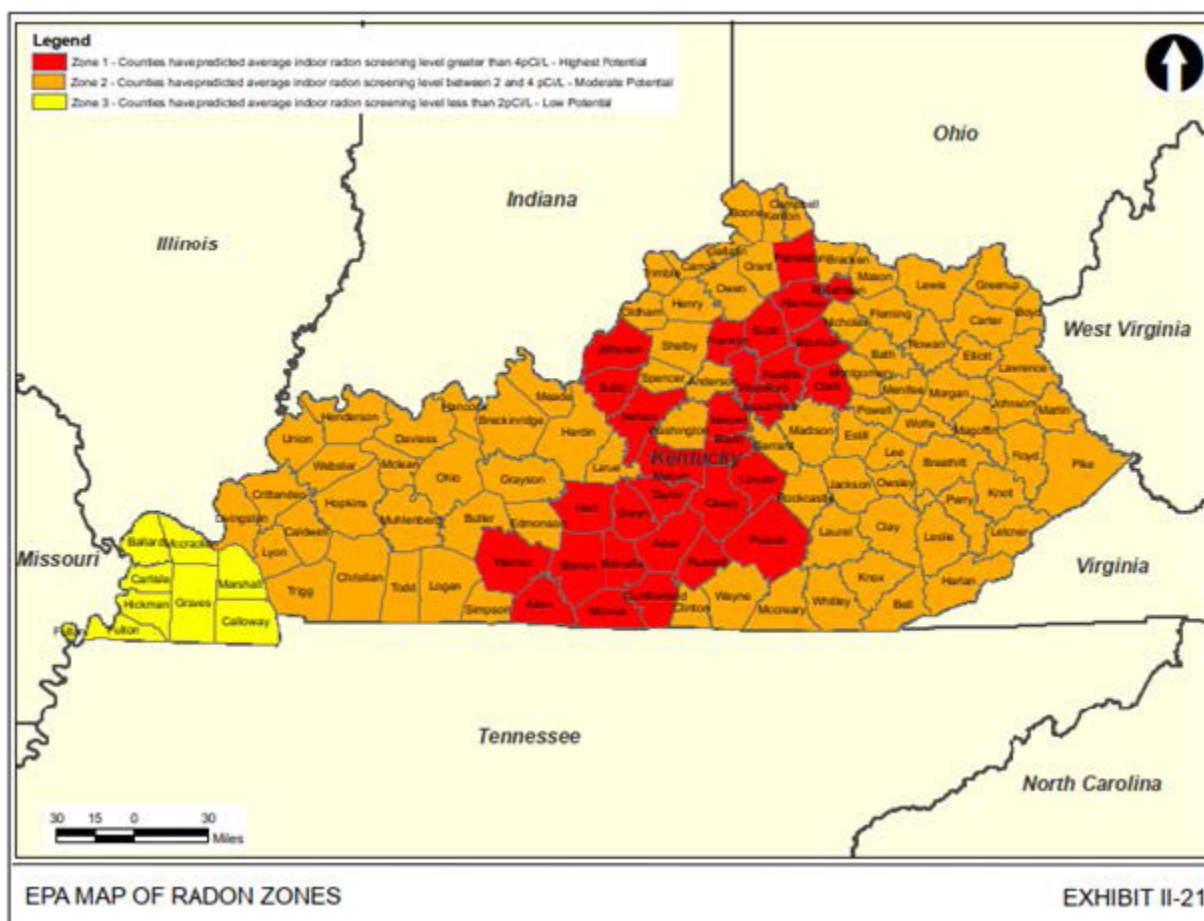
Because radon is a gas, it can migrate through rocks and permeable soils such as sand and gravel, escaping into fractures and openings. Radon moving through soil near the ground surface typically disperses into the atmosphere. However, radon gas may migrate into buildings through construction joints, foundation cracks, etc., and even if soils contain only moderate levels of radon, high concentrations can accumulate.

The amount of radon in the air is measured in picocuries per liter of air or pCi/L. An indoor radon level below 2 pCi/L is considered low risk, between 2 and 4 pCi/L is considered moderate risk, and over 4 pCi/L is considered high risk to an individual's health. The USEPA action level (the level at which measures should be taken to reduce radon concentrations) is 4 pCi/L. Letcher County is among 82 counties located primarily in eastern and western Kentucky that exhibit a potential for indoor radon at levels averaging between 2 and 4 pCi/L while the central portion of the state has a potential for levels greater than 4 pCi/L. Eight counties in the western-most part of the state exhibit the lowest potential for indoor radon levels of less than 2 pCi/L (Exhibit 3-12).

### **3.18.7 Recommended Mitigation - Radon**

While most radon disperses harmlessly into the atmosphere, it can migrate through rocks and soil and accumulate in buildings. The buildings comprising the FCI/FPC will be developed without

basements or other subsurface levels where radon can collect in concentrations that could exceed the USEPA action level. Nonetheless, the FBOP shall ensure that the architects/engineers responsible for building design and construction apply the necessary codes and standards and incorporate features to minimize the potential for radon to accumulate in concentrations exceeding the USEPA action level. This could include ventilation systems and use of active sub slab suction where suction pipes are inserted into crushed rock or soil underneath. During FCI/FPC operation, maintenance employees would be informed of the potential to encounter radon and the availability of testing equipment to ensure concentrations do not accumulate in excess of the USEPA action level.



**Exhibit 3-12** Radon Concentrations in Kentucky

### *Conformity Applicability Analysis*

In order to ensure that federal activities do not hamper local efforts to control air pollution, Section 176(c) of the CAA prohibits federal agencies, departments, or instrumentalities from engaging in, supporting, licensing, or approving any action which does not conform to an approved state or federal implementation plan. With the proposed development of a new FCI/FPC, compliance with federal regulations is necessary. The USEPA developed two major rules for determining conformity of federal activities: conformity requirements for transportation plans, programs and projects ("transportation conformity" C40 CFR, Part 51); and all other federal actions ("general conformity" C40 CFR, Part 93). These rules apply to projects located within NAAQS non-attainment areas. Letcher County, and all of southeastern Kentucky, is designated in attainment for NAAQS pollutants and in an attainment area, conformity regulations do not apply.

### *Federal Operating Permit (Title V)*

New and existing facilities are required, pursuant to the CAA, to obtain a Federal Operating Permit, also known as a Title V air permit, if potential and/or actual emissions of air contaminants exceed

designated “major source” thresholds. For criteria pollutant emissions, 250 tons per year per pollutant and is the value used by the USEPA in their New Source Review standards as an indicator for impact analysis for listed new major stationary sources in attainment areas. If the potential and actual emissions from the proposed FCI/FPC were to exceed the Title V thresholds, then the FBOP would be required to file a Title V application with the Commonwealth of Kentucky.

A review of emissions from other FBOP facilities of a similar nature and scale has revealed that potential emissions would fall below these limits. As such, the proposed FCI/FPC would not be a major source and would not be required to file a Title V permit. However, the FBOP and its construction contractors would file applications for authority to construct and operate as required by federal and state regulations.

## 3.19 Noise

### 3.19.1 Existing Conditions

Noise is traditionally defined as any unwanted sound and is emitted from many sources including aircraft, industrial facilities, railroads, power generating stations, and motor vehicle operations. The volume of sound, whether wanted or unwanted, is usually described by sound pressure, i.e., a dynamic variation in atmospheric pressure. The human auditory system is sensitive to fluctuations in air pressure and these fluctuations are defined as sound when the human ear is able to detect pressure changes within the audible frequency range.

The decibel (dB) is the standard unit for sound measurement and represents acoustical energy present in the environment. Humans are capable of hearing frequencies ranging from 20 hertz (Hz, cycle per sound) to 20,000 Hz; however, they do not hear all frequencies equally well. As a result, a frequency weighting, known as A-weighting, is applied to the sound pressure level, which approximates the frequency response of the human ear by placing most emphasis on the frequency range of 1,000-6,000 Hz. Table 3-19 provides examples of common sounds and noise levels expressed on the A-weighting decibel scale.

**Table 3-19** Common Sounds Expressed in Decibels

A-Weighted Sound Level in Decibels	Overall Level	Noise Environment
120	Uncomfortably loud (32 times as loud as 70 dBA)	Military jet aircraft takeoff at 50 feet
100	Very loud (8 times as loud as 70 dBA)	Jet flyover at 1,000 feet Locomotive pass-by at 100 feet
80	Loud (2 times as loud as 70 dBA)	Propeller aircraft flyover at 1,000 feet Diesel truck at 40 mph at 50 feet
70	Moderately loud	Freeway at 50 feet from pavement edge at 10:00 AM Vacuum cleaner (indoor)
60	Relatively quiet (1/2 as loud as 70 dBA)	Air conditioner unit at 100 feet Dishwasher at 10 feet (indoor)
50	Quiet (1/4 as loud as 70 dBA)	Large transformers Small private office (indoor)
40	Very quiet (1/8 as loud as 70 dBA)	Bird calls Lowest limit of urban ambient sound
10	Extremely quiet (1/64 as loud as 70 dBA)	Just audible
0	--	Threshold of hearing

Source: Federal Agency Review of Select Airport Noise Analysis Issues 1992



Individuals in urbanized/developed areas are often exposed to high noise levels from many sources as they go about their daily activities. The degree of disturbance or annoyance of unwanted sound depends upon several factors: the volume and nature of the intruding noise; the relationship between background noise levels and the intruding noise; and the type of activity occurring where the noise is heard. It is important to note that individuals have different sensitivities to sound. Loud sounds bother some individuals more than others and some patterns of noise also enter into an individual's judgment of whether or not a noise is offensive. For example, noises occurring during evening hours are usually considered to be more objectionable than the same noises during the daytime hours.

With regard to the relationship between background noise and the intruding noise, individuals tend to judge the annoyance of an unwanted noise in terms of its relationship to noise from other sources (background noise). For instance, use of a car horn at night when background noise levels are typically low (about 45 dBA), would generally be more objectionable than use of a car horn in the afternoon when background noises are likely to be higher (60 dBA or higher).

The third factor (the type of activity occurring where the noise is heard) is related to the interference of noises with activities of individuals. In a 60 dBA environment, normal work activities requiring high levels of concentration may be interrupted by loud noises, while activities requiring manual effort may not be interrupted to the same degree.

Since sound is described in a logarithmic scale, (i.e., dBs), sound levels cannot be added by ordinary arithmetic means. In fact, doubling the noise source only produces a three dB increase in the sound pressure (noise) level. Studies have shown that this increase is barely perceptible to the human ear, whereas a change of five dB is readily perceptible. As a general rule, an increase or decrease of 10 dBs in a noise level is perceived by an observer to be a doubling or halving of the sound, respectively.

The Roxana Site lies at elevations ranging from approximately 1,000 to 1,500 feet above msl with the site sloping downward from its peak to the west, north, and east. At the base of the site, where KY 588 and KY 160 and widely scattered residences and commercial uses are found, elevations range from 1,000 to 1,200 feet above msl. Field inspections and examination of aerial photographs found no industrial facilities, power generating stations, major highways, or airports located near the Roxana Site that would influence ambient noise levels in the area. However, paralleling the North Fork of the Kentucky River is a freight rail line operated by CSX Transportation (Class I railroad) which, when active, is a source of noise (Kentucky Transportation Cabinet 2017).

Vacant/undeveloped land, in addition to small scale commercial and residential uses, constitute the predominant land uses surrounding the Roxana Site and none of these uses were observed producing sounds at high or objectionable levels. The planned FCI/FPC development zone also lies approximately 250 to 450 feet above the locations where the CSX rail line and commercial and residential uses are located, further insulating the site from external noise sources.

Given this backdrop, the acoustic environment at the Roxana Site is influenced by ambient sounds from trucks and automobiles traveling along KY 588 and KY 160. While sporadic bird and wildlife calls and occasional aircraft overflights are also rare contributors to the acoustic environment, it is the occasional noise from car and truck traffic using KY 588 and KY 160 that is representative of the area's acoustic environment. However, the occasional noise from motor vehicle traffic on nearby roadways is not substantial and is inaudible within interior portions of the site where development is proposed.

### **3.19.2 Potential Impacts**

#### **3.19.2.1 No Action Alternative**

Under the No Action Alternative, the properties comprising the Roxana Site would remain in their current condition, there would be no changes to noise sources and ambient noise levels, and mitigation measures would not be necessary.

### 3.19.2.2 Preferred Alternative

#### Construction Phase

Potential noise impacts may occur from construction activities, routine operation and maintenance, and vehicle traffic associated with facility operation. These potential impacts and recommendations for mitigation, as applicable, are discussed below.

Elevated noise levels will be experienced in the immediate vicinity of the FCI/FPC development zone with impacts dependent upon the types of equipment and construction methods to be employed, locations where construction is active, and the scheduling and duration of the work. Such details are left to the discretion of the construction contractor to provide flexibility in the use of equipment and personnel as necessary to accomplish the work, maintain the schedule, and control costs. Nonetheless, conclusions can be drawn based on the nature of the construction work anticipated, typical equipment involved in construction, and their associated range of noise levels.

Elevated levels of noise would occur for the duration of the construction period and typically be limited to daylight hours. During construction, elevated noise levels would occur primarily during site preparation as rock excavation takes place using conventional equipment and possibly blasting. Additional noise-generating activities include site grading, pile driving for footings and foundations, erection of the new structures, access driveway construction, internal driveways and parking area paving, trenching for utility installations, and heavy- and medium-duty truck traffic associated with equipment and material deliveries to and removals from the site.

Construction noise dissipates quickly as the distance from the source increases. For example, noise levels from use of an excavator during site clearing/preparation yields a noise level of approximately 80 dBA at 50 feet and 74 dBA at approximately 100 feet (Table 3-20). Noise levels would continue to decrease by approximately three to four dBA with every doubling of distance from the source, dropping to 62 to 65 dBA at 800 feet. Construction noise would also be intermittent and depend on the type of operation, the location and function of the equipment, and the equipment usage cycle.

**Table 3-20** Noise Levels Generated by Construction Equipment

Equipment Type	Maximum Equipment Noise Level at 50 feet (dBA)	Hourly Equivalent Noise Level at 50 feet (dBA1)	Hourly Equivalent Noise Level at 100 feet (dBA1)
<b>SITE CLEARING/PREPARATION</b>			
Excavator	83	80	74
Backhoe	75	72	66
Heavy Duty Dump Trucks	73	70	64
Front Loader	76	73	67
Mounted Impact Hammer	89	86	80
Pile Driver	101	97	92
<b>RETAINING WALLS</b>			
Backhoe	75	72	66
Concrete Pump	74	71	65
Compressor	68	65	59
Ready Mix Trucks	72	69	63
Heavy Duty Dump Trucks	73	70	64
Flatbed Truck	70	67	61

Equipment Type	Maximum Equipment Noise Level at 50 feet (dBA)	Hourly Equivalent Noise Level at 50 feet (dBA1)	Hourly Equivalent Noise Level at 100 feet (dBA1)
<b>PAVING</b>			
Grader	75	72	66
Water Truck	77	74	68
Vibratory Roller	78	75	69
Compactor	76	73	67
Concrete Pump	74	71	65
Ready Mix Trucks	72	69	63
Asphalt Paver	79	76	70
Asphalt Roller	78	75	69
Sweeper	79	76	70
Heavy Duty Dump Trucks	73	70	64
Flatbed Truck	70	67	61
<b>EARTHWORK</b>			
Excavator	83	80	74
Backhoe	75	72	66
Front Loader	76	73	67
Dozer	85	82	76
Trencher	80	77	71
Heavy Duty Dump Trucks	73	70	64
<b>STRUCTURES</b>			
Excavator	83	80	74
Backhoe	75	72	66
Soil Compactor	80	77	71
Crane	78	75	69
Concrete Pump	74	71	65
Compressor	68	65	59
Front Loader	76	73	67
Flatbed Truck	75	72	66
Heavy Duty Dump Trucks	73	70	64
Ready Mix Trucks	81	78	72
Notes: Calculated construction noise levels assume that all equipment operates for six hours during an eight-hour day. Calculations also assume that all equipment are operated at full load 70% of the time. 1 - Predicted noise levels are from the center of the construction activity. Source: Federal Highway Administration, Highway Construction Noise Handbook 2006.			

Sensitive noise receptors are defined as locations or facilities where people involved in indoor or outdoor activities may be subject to stress or interference from noise. Such locations or facilities typically include residential dwellings, hospitals, nursing homes, schools and other educational facilities, houses of worship, and libraries. The nearest sensitive receptors to the Roxana Site consist of the residences found at the base of the site (approximately 250 to 450 feet below the FCI/FPC development zone) and where KY 588 and KY 160 and the CSX Transportation rail line are located. Noise levels at sensitive receptors within 800 feet of construction sites would be expected to intermittently be noticeable above ambient background noise; in the case of the Roxana Site, the nearest sensitive receptors are located approximately 1,500 feet or more from the development zone where construction activities will produce elevated levels of noise.

Noise resulting from FCI/FPC construction is not anticipated to have a significant adverse effect on land uses surrounding the Roxana Site. The site's isolated location, the distances to homes, businesses, schools, churches and other sensitive noise receptors, the change in elevation and vegetative buffers between the development zone and neighboring properties, and background noise from vehicles operating on nearby roadways should allow construction to proceed while avoiding significant adverse impacts to adjoining properties. Following completion of construction, ambient noise levels would return to near pre-construction levels.

Given the volume of rock excavation required to prepare the site for development, blasting methods, in addition to the use of conventional equipment, may be employed. Based on a preliminary engineering analysis performed during previous studies, the duration of blasting activities would likely be completed in 45 to 75 days in those areas where such a method may be necessary; the FCI/FPC development zone, during installation of utility infrastructure, and access road construction. It is anticipated that noise from a blasting event would occur only a few times a day and last for short periods of time.

Prior to the start of any blasting activities, a blasting plan would be prepared to document the types of explosives and size of charges in each area of rock removal, types of blasting mats, sequence of blasting operations, and procedures to prevent damage to adjacent properties. Blasting mats would be utilized to suppress dust, noise, and fly rock. Any proposed blasting activities would be conducted in accordance with Kentucky regulations governing blasting (805 KAR 4) and the maximum noise exposure for the nearest inhabited structure. Techniques found effective during quarry and mining operations to suppress blast noise would be used to ensure noise remains at or below the maximum allowable level.

### ***FCI/FPC Operation***

During routine operation, noise would occur in and around the FCI/FPC during routine grounds maintenance (lawn mowing, leaf blowing, snow removal, etc.) and from periodic testing and operating the emergency generators (an infrequent occurrence). The FCI/FPC would not employ outdoor public address systems or operate any other outdoor noise-producing equipment.

The absence of noise-producing equipment and activities should result in post-construction noise conditions similar to pre-construction conditions. Any increase in ambient noise levels during operation of the proposed FCI/FPC is expected to be slight and imperceptible beyond the boundaries of the site. The distances between the proposed facility and the residences and other sensitive land uses surrounding the site, the change in elevation, and the large vegetative buffers that will remain should go far to attenuate any potential noise impacts during operation. Noise occurring during correctional facility operation is not expected to result in a significant adverse impact.

Development of the proposed FCI/FPC will include a training facility which would be used by FBOP employees to meet various training requirements. Amongst the training provided to all FBOP employees involves the use of small arms weapons including handguns, shotguns, and rifles. Training would occur at an outdoor firing range which would be active five days a week (Monday–Friday), 2–4 hours each day, for six weeks annually and once a month for eight hours during daylight hours. It is estimated that the 325 employees engaged in the six-week annual training would

involve firing approximately 30,000 rounds of 9-mm pistol, 10,000 rounds of 12-gauge shotgun, and 11,000 rounds of 5.56-mm rifle. Monthly training, which occurs on one day, would involve firing approximately 5,000 rounds of 9-mm pistol, 400 rounds of 12-gauge shotgun, 400 rounds of .308 caliber rifle, and 2,000 rounds of 5.56-mm rifle.

From an exposure perspective, the elapsed time of exposure to noise from firearms training is very short. Under this alternative, a total of 59,800 rounds would be used during annual and monthly training. During the annual six-week training, firing would occur five days per week for approximately 2-4 hours per day equating to 433 rounds per hour.

Table 3-21 provides small arms peak noise levels and compatibility with noise-sensitive land uses. Although peak noise levels are not directly comparable to the average noise levels described earlier, peak noise best represents noise levels from small arms firing.

**Table 3-21** Small Arms Peak Noise and Compatible Land Use

Small Arms Peak Noise (dBP)*	Compatibility with Noise-Sensitive Land Uses
Less than 87 dBP	Compatible
87 to 104 dBP	Normally Incompatible
Greater than 104 dBP	Incompatible
* Single event peak level exceeded by 15% of events. Source: Department of the Army 2007	

In a study prepared for the FBOP, the Small Arms Range Noise Assessment Model was used to predict peak noise levels from the proposed firing range (Cardno 2017). The model predicted peak noise contours of approximately 104 dBP within 500 to 1,000 feet of the range and confined entirely within the Roxana Site; peak noise contours of approximately 87 dBP cover much of the southern and western portion of the site while extending approximately 200 to 2,500 feet beyond the boundaries of the site.

There are no noise sensitive receptors located within the 87 to 104 dBP noise contour bands. With the nearest residences located well outside the 87 dBP noise contour, no significant adverse impacts are anticipated from firearms training noise.

**3.19.3 Recommended Mitigation**

Potential noise impacts during construction would be mitigated by confining construction to normal working hours and employing noise-controlled construction equipment to the extent feasible. Measures to mitigate potential construction noise impacts would also include the following provisions:

- Source Control
  - Construction equipment would be equipped with appropriate noise attenuation devices, such as mufflers and engine housings.
  - Exhaust systems would be maintained in good working order. Properly designed engine enclosures and intake silencers would be employed.
  - Regular equipment maintenance would be undertaken.
- Site Control
  - Staging areas for material and equipment and haul routes would be placed away from property boundaries to minimize potential for off-site noise impacts.
  - On-site haul roads would be located to minimize objectionable noise impacts.
  - In the event blasting is used, implement a blasting plan that defines how, when and where



blasting activities would be carried out including measures to ensure compliance with Kentucky regulations governing blasting and the maximum noise exposure for the nearest inhabited structure.

- Time and Activity Constraints
  - Construction activities would be scheduled to coincide with periods when people would least likely be adversely affected. Workdays would be largely confined to normal business hours.
- Community Awareness
  - Notify nearby property owners and the public at large of construction operations and measures to be implemented to minimize noise. Provide contact information for a project representative who would be available to respond to questions or complaints.

While significant adverse noise impacts during FCI/FPC operation are not anticipated, the 300 acres of land to surround the proposed facility, the distance to sensitive receptors, and the vegetative buffers to remain, no mitigation measures to control noise resulting from operation of the proposed FCI/FPC are warranted.

## **4.0 RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY**

## **4.0 RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY**

For approximately 36 months following ground-breaking in 2026, approximately 200 acres of the Roxana Site would be used as a construction site. Construction would involve ground clearing, site preparation including grading, excavating and trenching; erection of FCI/FPC structures; and installation of parking lots, pedestrian walkways, utility services, light fixtures, and signage among other similar activities. While increases in noise levels, fugitive dust, soil erosion, traffic volumes, and similar construction-related impacts can be anticipated, such impacts would be temporary and mitigated to minimize or avoid their potential adverse effects.

Potential short-term construction-related impacts must be contrasted with the positive economic activity that would result from the employment, payrolls, induced personal income, and the purchases of materials, supplies, and services during construction. The long-term productivity of the economies of Letcher County, southeastern Kentucky and western Virginia would also benefit by the FBOP workforce of approximately 325 employees and its estimated \$57 million annual operating budget. These positive productivity gains would be long-term, given the lifespan of the proposed facility, with no long-term adverse impacts from FCI/FPC operation anticipated.

## **5.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

## 5.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Irreversible and irretrievable resource commitments involve use of nonrenewable resources and the effects that use of these resources will have on future generations. Irreversible effects result from use or destruction of a specific resource that cannot be replaced within a reasonable timeframe (e.g., energy and minerals) while irretrievable commitments of resources involve the continued consumption of energy resources and human labor. The use of these resources would be considered enduring, lasting throughout the lifespan of the FCI/FPC or approximately 40 to 50 years.

Construction of the FCI/FPC would result in both direct and indirect commitments of resources. In some cases, the resources committed would be recovered in a short period of time. In other cases, resources would be irreversibly or irretrievably committed by being consumed or by the apparent limitlessness of the period of their commitment to a specific use. Irreversibly and irretrievable commitments of resources can sometimes be compensated for by provision of similar resources with substantially the same use or value.

- **Material Resources:** The preferred alternative would require the commitment of construction materials including cement, aggregate, steel, asphalt, lumber, glass, and other building materials and supplies in addition to equipment, furniture, and finishes. Material resources consumed as a result of FCI/FPC development would be offset by the societal benefits associated with operation of a modern, new facility. A portion of the materials dedicated to FCI/FPC development may also be recycled at some future date.
- **Natural Resources:** In this instance, the approximately 200 acres of land upon which the proposed FCI/FPC would be developed would be irretrievably committed. With a portion of the development zone currently wooded, vegetation and wildlife habitat would also be affected. Mitigation measures would be implemented prior to and during construction to minimize adverse impacts and conform to applicable regulations. No additional natural resources would be consumed during operation of the proposed facility.
- **Energy Resources:** Electricity and petroleum-based products such as gasoline and diesel fuel, would be irretrievably consumed as workers and equipment are transported to the site and equipment is employed during the construction phase. FBOP employees, visitors, service and delivery vehicles, and AIC transports would similarly consume fuels when traveling to and from the facility during routine operation. Natural gas and electricity would also be consumed during operation of the proposed FCI/FPC. Consumption of energy resources would not place a significant demand on their availability in the region, and no significant adverse impacts would be expected.
- **Manpower:** The use of human labor for FCI/FPC construction and operation is considered an irretrievable commitment in that it would preclude such personnel from engaging in other productive work activities. Following development, approximately 325 person-years of employee time would be devoted annual to operating. Providing employment opportunities to residents of Letcher County, southeastern Kentucky and western Virginia is also considered beneficial.



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## **7.0 REFERENCES**

## 7.0 REFERENCES

- Adams, Sam. 2023. Personal communication between Dona Daugherty of WSP USA and Sam Adams on November 15, 2023.
- Alvord, C.W. 1920. *The Illinois Country, 1678-1818*. Illinois Centennial Commission, Springfield, Illinois.
- Anderson, David G., Lisa D. O'Steen, and Kenneth E. Sassaman. Environmental and Chronological Considerations. In *The Paleoindian and Early Archaic Southeast*, edited by David G. Anderson and Kenneth E. Sassaman, pp. 3-15. The University of Alabama Press, Tuscaloosa.
- Anslinger, Michael C. 1988 *Bluegrass: A Middle-Late Archaic Site in Southwestern Indiana*. Paper presented at the 60th Annual Midwest Archaeological Conference, University of Illinois, Urbana.
- Appalachian Regional Healthcare. 2022. Whitesburg ARH Hospital. <https://providers.arh.org/location/Whitesburg%20ARH%20Hospital/LOC0000132862>. Accessed December 19, 2023.
- Arnold, George C. 2002. An Archaeological Survey of a Proposed Coal Mining Operation Overlooking the North Fork of the Kentucky River at Roxana, Letcher County, Kentucky. Cultural Resource Analysts, Inc., Lexington, Kentucky.
- Bestplaces. ND. Economy in Letcher County, KY. <https://www.bestplaces.net/economy/county/kentucky/letcher>. Accessed November 6, 2023.
- Bladen, Wilford A. 1973. The Mountains. In *Kentucky: A Regional Geography*, edited by P. P. Karan, pp. 51-72. Kendall/Hung Publishing Company, Dubuque, Iowa.
- Brann, Steven W. 2017. Phase I Archaeological Survey for the Federal Bureau of Prisons Federal Correctional Facility at the Proposed Roxana/Meade Farm Site in Letcher County, Kentucky. Cardno, Louisville, Kentucky.
- Braun, E. Lucy 1950. *Deciduous Forests of Eastern North America*. Free Press, New York.
- California Department of Transportation, Division of Environmental Analysis. 2016. Technical Guidance for Assessment and Mitigation of the Effects of Highway and Road Construction Noise on Birds.
- Cardno. 2014a. Enhanced Utilities Report Letcher County, Kentucky. Prepared for Federal Bureau of Prisons. October.
- Cardno. 2014b. Historic Architectural Resources Survey for a Proposed Federal Correctional Facility, Letcher County, Kentucky. Prepared for Federal Bureau of Prisons, Washington, D.C. February.
- Cardno 2014c. Draft Supplemental Jurisdictional Delineation Payne Gap and Roxana Sites. Prepared for Federal Bureau of Prisons. August.
- Cardno. 2015. Phase I Environmental Site Assessment for Proposed United States Penitentiary and Federal Prison Camp. Roxana, Letcher County, Kentucky.
- Cardno. 2016. Phase II Environmental Site Assessment for Proposed United States Penitentiary and Federal Prison Camp. Roxana, Letcher County, Kentucky.
- Cardno. 2016. Results of Investigation of Materials to be Excavated at the Proposed United States Penitentiary and Federal Prison Camp. Roxana Site, Letcher County, Kentucky.
- Cardno. 2017. Phase I Archaeological Survey for the Federal Bureau of Prisons Federal Correctional Facility at the Proposed Roxana / Meade Farm Site in Letcher County, Kentucky. Prepared for the Federal Bureau of Prisons, Washington, DC. February.

- Copperhead Environmental Consulting. 2015. Desktop Analysis and Habitat Survey for the Indiana Bat (*Myotis sodalis*), Gray Bat (*Myotis grisescens*), and Northern Long-eared Bat (*Myotis septentrionalis*) at two Sites for a Proposed Federal Correctional Facility in Letcher County, KY. Prepared for the Federal Bureau of Prisons. January.
- Copperhead Environmental Consulting. 2016. Habitat Assessment for the Indiana Bat (*Myotis sodalis*), Gray Bat (*Myotis grisescens*), and Northern Long-eared Bat (*Myotis septentrionalis*) for the Proposed U.S. Penitentiary and Federal Prison Camp, Letcher County, Kentucky. November.
- Copperhead Environmental Consulting. 2017. Biological Assessment Potential Effects on Species under the Jurisdiction of the U.S. Fish and Wildlife Service from Construction and Operation of a Proposed U.S. Penitentiary and Federal Prison Camp Letcher County, Kentucky. Prepared for the Federal Bureau of Prisons, Washington, DC.
- Council on Environmental Quality. 1997. Environmental Justice, Guidance Under the National Environmental Policy Act. December 10, 1997.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31. Washington, DC.
- Department of the Army. 2007. Army Regulation 200-1, Environmental Protection and Enhancement. [https://armypubs.army.mil/epubs/DR\\_pubs/DR\\_a/pdf/web/r200\\_1.pdf](https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/r200_1.pdf). Accessed December 20, 2023.
- Eastern Kentucky University. 2016. Lilley Cornett Woods Appalachian Ecological Research Station. <https://naturalareas.eku.edu/lilley-cornett-woods-appalachian-ecological-research-station>. Accessed January 11, 2024.
- Environmental Data Resources, Inc. 2023. The EDR Radius Map with GeoCheck. Inquiry Number: 7521379.2s. December 14, 2023.
- ESRI Topo Map Service. Accessed 2023.
- Executive Order 11593. Protection and Enhancement of the Cultural Environment, May 13, 1971.
- Executive Order 11988. Floodplain Management, May 24, 1977.
- Executive Order 12898. Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994.
- Executive Order 13175. Consultation and Coordination with Indian Tribal Governments, November 9, 2000.
- Executive Order 13690. Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input, January 30, 2015.
- Executive Order 14057. Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability, December 8, 2021.
- Executive Order 14096. Revitalizing Our Nation's Commitment to Environmental Justice for All. April 21, 2023.
- Federal Bureau of Prisons. 2012. Employment and Business Opportunities with the Federal Bureau of Prisons. March 2012.
- Federal Bureau of Prisons. 2015. Draft Environmental Impact Statement for Proposed United States Penitentiary and Federal Prison Camp, Letcher County, Kentucky. February 2015.
- Federal Bureau of Prisons. 2015. Final Environmental Impact Statement for Proposed United States Penitentiary and Federal Prison Camp, Letcher County, Kentucky. July 2015.



- Federal Bureau of Prisons. 2016. Revised Final Environmental Impact Statement for Proposed United States Penitentiary and Federal Prison Camp, Letcher County, Kentucky. March 2016.
- Federal Bureau of Prisons. 2017. 2017 Draft Supplemental Revised Final Environmental Impact Statement for Proposed United States Penitentiary and Federal Prison Camp, Letcher County, Kentucky. March 2017.
- Federal Bureau of Prisons. 2017. 2017 Final Supplemental Revised Final Environmental Impact Statement for Proposed United States Penitentiary and Federal Prison Camp, Letcher County, Kentucky. September 2017.
- Federal Bureau of Prisons. 2022. Notice of Intent to Prepare a Draft Environmental Impact Statement for the Proposed Federal Correctional Institution and Federal Prison Camp, Letcher County, Kentucky. Federal Register, Vol. 87, No. 187, September 28, 2022.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Federal Emergency Management Agency (FEMA). 2015. FIRM Flood Rate Insurance Map, Letcher County, Kentucky. Map Number 21133C0225D.
- Federal Highway Administration (FHWA), Federal Railroad Administration, and Federal Transit Administration. 2016. Programmatic Biological Assessment for Transportation Projects in the Range of the Indiana Bat and Northern Long-eared Bat.
- FHWA. Highway Construction Noise Handbook, August 2006.
- Federal Interagency Committee on Noise, 1992. Federal Agency Review of Select Airport Noise Analysis Issues.
- Goodfriend n.d., 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. USEPA Office of Noise Abatement and Control.
- Kentucky Natural Lands Trust. Imperiled Bat Conservation Fund. <https://knlt.org/ibcf/>. Accessed February 16, 2024.
- Jung, K. and E.K.V. Kalko. 2010. Where forest meets urbanization: foraging plasticity of aerial insectivorous bats in an anthropogenically altered environment. *Journal of Mammalogy* 91:144– 153.
- Kentucky Atlas & Gazetteer. 2014a. Fleming-Neon. <http://www.uky.edu/KentuckyAtlas/ky-fleming-neon.html>. Accessed November 6, 2023.
- Kentucky Coal Mine Maps. 2023. Kentucky Mine Mapping Information System. Accessed November 13, 2023.
- Kentucky Department for Surface Mining Reclamation and Enforcement Permanent Program Permit No. 867-0298, issued December 31, 1987, effective date of license of April 29, 1988.
- Kentucky Department of Education, School Report Card, Letcher County Schools, 2022-2023.
- Kentucky Department of Fish and Wildlife Resources. 2023. Species Information; Species Observations for Letcher County. <http://app.fw.ky.gov/speciesinfo/countyListSpecies.asp>. Accessed December 18, 2023.
- Kentucky Department of Fish and Wildlife Resources. Wetland/stream in-lieu fee mitigation program. <https://fw.ky.gov/Fish/Pages/Stream-Team-Program.aspx>. Accessed February 15, 2024.

- Kentucky Department of Natural Resources, Division of Mine Permits, Surface Mining Information System.
- Kentucky Division of Mine Permits (2011, July 14); Kings Creek – North Fork Kentucky River, Cumulative Hydrologic Impact Assessment (HUC12:051002010105). Accessed from: <http://eec.ky.gov/SearchCenter/Results.aspx?k=867-0298>.
- Kentucky Energy and Environment Cabinet. 2021. Kentucky Administrative Regulations. Blasting Regulations and Statutes, Title 85, Chapter 4.
- Kentucky Energy and Environment Cabinet. 2023. Kentucky Administrative Regulations. Water Quality Regulations and Statutes, Title 401, Chapter 5.
- Kentucky Energy and Environment Cabinet. 2023. Division of Waste Management Annual Report. Fiscal Year 2023.
- Kentucky Energy and Environment Cabinet. 2017. Kentucky Coal Facts, 17th Edition. Kentucky Energy and Environment Cabinet, Department for Energy Development and Independence. Accessed November 6, 2023. [https://eec.ky.gov/Energy/Coal%20Facts%20Annual%20Editions/Kentucky%20Coal%20Facts%20-%2017th%20Edition%20\(2017\).pdf](https://eec.ky.gov/Energy/Coal%20Facts%20Annual%20Editions/Kentucky%20Coal%20Facts%20-%2017th%20Edition%20(2017).pdf).
- Kentucky Energy and Environment Cabinet. 2022. Total Maximum Daily Load Program. <https://eec.ky.gov/Environmental-Protection/Water/Protection/TMDL/Pages/default.aspx#:~:text=The%20Total%20Maximum%20Daily%20Load,as%20rivers%2C%20lakes%20and%20streams>. Accessed December 18, 2023.
- Kentucky Geological Survey. 2020. Kentucky Geologic Map Information Service. University of Kentucky. <http://kgs.uky.edu/kgsmap/kgsgeoserver/viewer.asp>. Accessed December 18, 2023.
- Kentucky Geological Survey. 2023. Kentucky Mineral Resources Information. University of Kentucky. <https://kgs.uky.edu/kymineral/>. Accessed December 18, 2023.
- Kentucky Transportation Cabinet, Division of Planning. Functional Classification, Letcher County. 2022.
- Kentucky Transportation Cabinet, Division of Planning. Traffic County Reporting System. 2024.
- Kentucky Transportation Cabinet, Division of Planning.
- Kricher, J. C. 1988. A Field Guide to Eastern Forests: North America. Houghton Mifflin, Boston. MA.
- Larkin et al. 1996. Effects of Military Noise on Wildlife: A Literature Review. <https://apps.dtic.mil/sti/pdfs/ADA305234.pdf>. Accessed December 19, 2023.
- Letcher County Public Schools. 2024
- McIntosh, Jackie D. 2004. Soil Survey of Knott and Letcher Counties, Kentucky. U.S. Department of Agriculture. Natural Resources Conservation Service.
- Mountain Comprehensive Health Corporation. 2020. <https://www.mchcky.com/>. Accessed December 19, 2023.
- Munsell. 2000. Munsell Soil Color Charts. Year 2000 Revised.
- National Center for Education Statistics (NCES). 2022. Public School Data. [https://nces.ed.gov/ccd/schoolsearch/school\\_list.asp?Search=1&DistrictID=2103360&ID=210336000892](https://nces.ed.gov/ccd/schoolsearch/school_list.asp?Search=1&DistrictID=2103360&ID=210336000892). Accessed December 19, 2023.
- NCES. 2023. Public School Data. [https://nces.ed.gov/ccd/schoolsearch/school\\_list.asp?Search=1&DistrictID=2103360&ID=210336000892](https://nces.ed.gov/ccd/schoolsearch/school_list.asp?Search=1&DistrictID=2103360&ID=210336000892). Accessed February 13, 2024.

- National Park Service. 2023. National Natural Landmarks. <https://www.nps.gov/subjects/nlandmarks/>. Accessed January 11, 2024.
- NatureServe. 2023a. *Myotis grisescens*. [https://explorer.natureserve.org/Taxon/ELEMENT\\_GLOBAL.2.104746/Myotis\\_grisescens](https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.104746/Myotis_grisescens). Accessed December 18, 2023.
- NatureServe. 2023b. *Myotis sodalis*. [https://explorer.natureserve.org/Taxon/ELEMENT\\_GLOBAL.2.100428/Myotis\\_sodalis](https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.100428/Myotis_sodalis). Accessed December 18, 2023.
- NatureServe. 2023c. *Plethodon wehrlei*. [https://explorer.natureserve.org/Taxon/ELEMENT\\_GLOBAL.2.1115240/Plethodon\\_wehrlei](https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.1115240/Plethodon_wehrlei). Accessed December 18, 2023.
- NatureServe. 2023d. *Corvus corax*. [https://explorer.natureserve.org/Taxon/ELEMENT\\_GLOBAL.2.103734/Corvus\\_corax](https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.103734/Corvus_corax). Accessed December 18, 2023.
- NatureServe. 2023e. *Sorex dispar*. [https://explorer.natureserve.org/Taxon/ELEMENT\\_GLOBAL.2.802276/Sorex\\_dispar](https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.802276/Sorex_dispar). Accessed December 19, 2023.
- Occupational Safety and Health Administration (OSHA). 2022. OSHA Technical Manual (OTM) Section III: Chapter 5. <https://www.osha.gov/otm/section-3-health-hazards/chapter-5#:~:text=The%20standard%20states%20that%20exposure,to%20hearing%20than%20continuous%20noises>. Accessed December 20, 2023.
- Parsons. 2015. Federal Correctional Facility Environmental Impact Statement, Draft Traffic Impact Study. April.
- Russel, A., C. Butchkoski, L. Saidak, and G. McCracken. 2009. Road-killed bats, highway design, and the commuting ecology of bats. *Endangered Species Research* 8:49–60.
- Sanders, Thomas N., editor. 2017. Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports. Edition 2.5 (revised June 2017). Kentucky Heritage Council/State Historic Preservation Office, Site Protection Program, Frankfort.
- Sebestyen, Kimberly M., and Steven W. Brann. 2011. Phase I Archaeological Survey for the Federal Bureau of Prisons Feasibility Study at Three Proposed Sites in Letcher County, Kentucky. Cardno, Louisville, Kentucky.
- Sebestyen, Kimberly M., and Steven W. Brann. 2014. Phase I Archaeological Survey for the Federal Bureau of Prisons Feasibility Study. Cardno, Louisville, Kentucky.
- Siemers, B.M., and A. Schaub. 2011. Hunting at the highway: Traffic noise reduces foraging efficiency in acoustic predators. *Proceedings of the Royal Society B: Biological Sciences* 278:1646–1652. <https://doi.org/10.1098/rspb/2010.2262>.
- Sparks, D.W., C.M. Ritzi, J.E. Duchamp, and J.O. Whitaker, Jr. 2005. Foraging habitat of the Indiana bat (*Myotis sodalis*) at an urban-rural interface. *Journal of Mammalogy* 86:713–718.
- TEC, Inc. 2011a. Architectural Resource Reconnaissance Survey, Letcher County, Kentucky. Prepared for Federal Bureau of Prisons, Washington, D.C. August.
- TEC, Inc. 2011b. Draft Wetland Identification and Delineation Report, Payne Gap/Lawson Site, Letcher County, Kentucky. Prepared for Federal Bureau of Prisons. August.
- TEC, Inc. 2011c. Draft Wetland Identification and Delineation Report, Roxana/Meade Farm, Letcher County, Kentucky. Prepared for Federal Bureau of Prisons. August.
- Transportation Research Board. 2016. Highway Capacity Manual, A Guide for Multimodal Mobility Analysis. Washington, D.C., ISBN 978-0-309-36997-8.
- USA Facts. 2024. Climate in Letcher County, Kentucky. <https://usafacts.org/issues/climate/state/kentucky/county/letcher-county/>

- U.S. Census Bureau. 2020. Explore Census Data. <https://data.canary.census.gov/>. Accessed December 19, 2023.
- U.S. Census Bureau. 2022. Families and Households. <https://www.census.gov/topics/families/families-and-households.html#:~:text=News,-View%20More&text=Census%20Bureau%20releases%20new%20estimates%20on%20America's%20Families%20and%20Living%20Arrangements.&text=In%202022%2C%20there%20were%2083.3,to%20the%20American%20Community%20Survey>. Accessed December 19, 2023.
- U.S. Army Corps of Engineers (USACE). 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-20. U.S. Army Engineer Research and Development Center, Vicksburg, MS.
- USACE. 1999. Small Arms Range Noise Assessment Model (SARNAM). Construction Engineering Research Laboratory.
- USACE. 2020. National Wetland Plant List, version 3.5. <http://wetland-plants.usace.army.mil/>.
- U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH.
- USACE. 1987. Wetland Delineation Manual. Technical Report Y-87-1. Vicksburg, Mississippi.
- USACE and U.S. Environmental Protection Agency. "Clean Water Rule: Definition of 'Waters of the United States,' Final Rule," 80 Federal Register 37054-37127, June 29, 2015.
- U.S. Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS). 2023. Custom Soil Resource Report for Knott and Letcher Counties, Kentucky.
- USDA-NRCS. 2020. Staff Web Soil Survey, Soil Mapping and Official Soil Series Descriptions. <http://websoilsurvey.nrcs.usda.gov/app/>. Accessed May/June 2023.
- USDA-NRCS. 2017. Field Indicators of Hydric Soils in the United States. A Guide for Identifying and Delineating Hydric Soils. Version 8.1, 2017.
- U.S. Environmental Protection Agency (USEPA). 1982. Guidelines for Noise Impact Analysis. Office of Noise Abatement and Control. EPA Report No. 550/9-82-105. April 1982.
- USEPA. 2024. Environmental Justice: Environmental Justice Screening and Mapping Tool Available at: <https://ejscreen.epa.gov/mapper>.
- USEPA. 2023a. Green Book National Area and County-Level Multi-Pollutant Information. Available at: <https://www.epa.gov/green-book/green-booknational-area-and-county-level-multi-pollutant-information>. Accessed January 10, 2024.
- USEPA. 2023b. Overview of Greenhouse Gases. <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>. Accessed January 10, 2024.
- USEPA. 2023c. Waters GeoViewer. <https://www.epa.gov/waterdata/waters-geoviewer>. Accessed December 18, 2023.
- USEPA. 2023d. Cleanups in My Community. <https://www.epa.gov/cleanups/cleanups-my-community>. Accessed January 10, 2024.
- USEPA. 2006. Rapanos v. U.S. [http://www.epa.gov/owow/wetlands/pdf/Rapanos\\_SupremeCourt.pdf](http://www.epa.gov/owow/wetlands/pdf/Rapanos_SupremeCourt.pdf).
- USEPA 2024. <http://www.epa.gov/radon/>. Accessed February 1, 2024.

- U.S. Fish and Wildlife Service (USFWS). 2016a. Endangered and Threatened Wildlife and Plants; Threatened Species Status for Kentucky Arrow Darter With 4(d) Rule. . Accessed December 18, 2023.
- USFWS. 2016b. Revised Conservation Strategy for Forest-dwelling Bats in the Commonwealth of Kentucky. <https://www.fws.gov/sites/default/files/documents/Revised-Conservation-Strategy-for-Forest-Dwelling-Bats-June-2016.pdf>. Accessed January 17, 2024.
- USFWS. 2020. Northern Long-Eared Bat Final 4(d) Rule: White-Nose Syndrome Zone around WNS/Pd Positive Counties/Districts. <https://www.fws.gov/sites/default/files/documents/WNSZone.pdf>. Accessed December 18, 2023.
- USFWS. 2022. National Wetland Inventory. U.S. Department of the Interior, Washington, DC. Available at: <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>.
- U.S. Geological Survey (USGS). 2023. Hazards. <https://www.usgs.gov/programs/earthquake-hazards/hazards>. Accessed December 18, 2023.
- USGS. 1976. 7.5-Minute Quadrangle Series, Roxana, Kentucky.
- USGS. 2009. 7.5-Minute Quadrangle Series, Roxana, Kentucky.
- USGS. 2022. Interactive U.S. Fault Map. <https://usgs.maps.arcgis.com/apps/webappviewer>. Accessed January 4, 2024.
- West Virginia Department of Environmental Protection. 2006. Report of Potential Effects of Surface Mine Blasts upon Bat Hibernaculum. Office of Explosives and Blasting, Charleston, West Virginia. December 31.
- White-nose Syndrome.org. 2023. <https://www.whitenosesyndrome.org>. Accessed December 18, 2023.



## **8.0 DISTRIBUTION LIST**

## 8.0 DISTRIBUTION LIST

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## **APPENDIX A: PUBLIC SCOPING**

## **APPENDIX B: AGENCY CONSULTATION AND COORDINATION**

## **APPENDIX C: CULTURAL RESOURCE SURVEY REPORTS**

## **APPENDIX D: WETLAND DELINEATION REPORT**

## **APPENDIX E: PHASE I ENVIRONMENTAL SITE ASSESSMENT**



## **APPENDIX F: ADDITIONAL GEOTECHNICAL STUDY – ROXANA SITE (2016)**

## **APPENDIX G: RESULTS OF INVESTIGATION OF MATERIALS TO BE EXCAVATED (2016)**

## **APPENDIX H: USFWS ENDANGERED SPECIES ACT CONSULTATION (2017)**

## **APPENDIX I: TRAFFIC IMPACT STUDY (2015)**

## **APPENDIX J: AIR EMISSION CALCULATIONS (2017)**