

Pipeline 101  
Understanding the Basics  
Natural Gas Pipelines

Association of State Wetland  
Managers

7 November 2018

# Understanding Pipeline Construction

# Clearing



# Trenching



# Pipe String



# Welding



# Lowering



# Grading





# Reclamation



# Special Construction

## Side Slope



# Steep Slope



# Stream Crossings

Wet Trench

Dry Trench

HDD

Direct Pipe

Reclamation

# Wet Trench



# Dry Trench



# Cofferdam



Photo: Portadam

# HDD





# Stream Crossing Reclamation







# Wetland Crossings

Matting

Water Removal

Buoyancy

Reclamation

Conversion

# Matting



# Water Removal



# Buoyancy



# Reclamation





# Conversion



# Other Considerations

HDD

French Mattress

One Pass

Composite Mats

# Not “Just” a Pipeline

Staging Areas

Access Roads

Workspace

Temporary Workspace

Additional Temporary Workspace

# Staging



# Temporary Bridge



# Ford



# “Improved” Ford



# Armored Ford - Concrete





# Armored Ford - Block



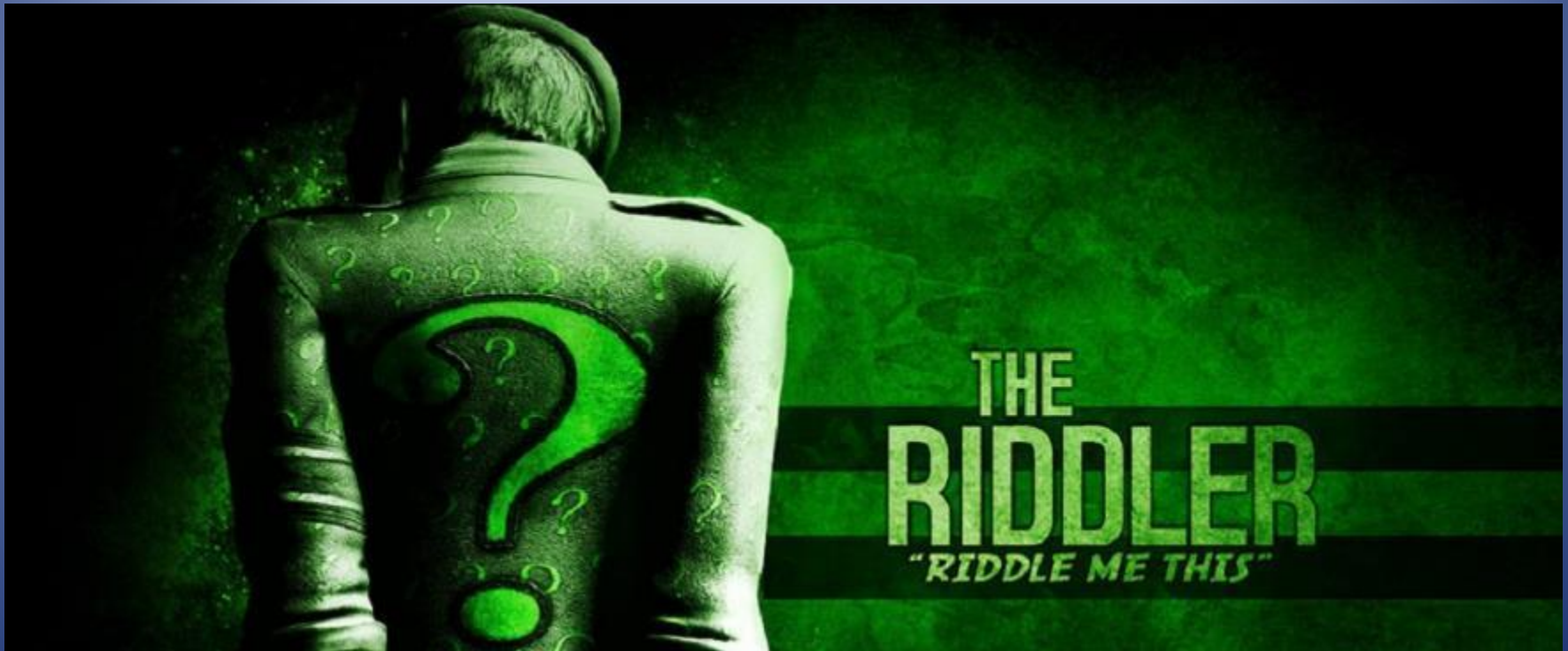
# Temporary Workspace



# Working with FERC

Interstate Transmission of Natural Gas

# FERC



Section 7 Natural Gas Act

Section 7 Endangered Species Act

# Pre-Application

Open House

Scoping

Resource Reports

# Docket e-library

The screenshot displays the FERC website's 'Documents & Filing' section. At the top, the FERC logo and name are visible, along with a search bar. A navigation menu includes links for ABOUT, MEDIA, DOCUMENTS & FILING, INDUSTRIES, LEGAL RESOURCES, MARKET OVERSIGHT, ENFORCEMENT, CAREERS, CONTACT US, and RESOURCES. The main content area is titled 'Documents & Filing' and 'FERC Online', with a sub-header 'FERC Online: our portal to documents and dockets'. Below this, it states 'Interact electronically with FERC' and lists 'What's New at FERC Online' with four bullet points. A central section features four orange boxes for 'Login', 'eRegister', 'Company', and 'eComment', each with a brief description and a 'Read More' link. A note specifies that eRegistering is not required for eComment, P, PF, PT, and CP dockets. A text box indicates that new users must first register to use eFiling. The bottom section, 'Current FERC Online Applications', lists eFiling, eSubscription, eService, and eLibrary, each with a brief description and a 'Read More' link. On the right side, there are sections for 'CONTACT' (FERC Online Support Email and Telephone Numbers), 'WEBINAR' (with a video thumbnail and title 'Webinar on FERC Filing Procedures for Settlements Preparation'), and 'QUICK LINKS' (listing various guides and reports).

**FERC** Federal Energy Regulatory Commission

Enter Search Term(s):

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- **Powered Reset:** Easily reset your password through an automated email sent to your eRegistered email address.
- **The Filing Party will be listed when searching dockets using eFiling, eComment, or eSubscription.**
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REGISTRATION  
Register your company for eEP Filings

**eComment**  
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**eRegister**  
Individuals must register with the Commission to obtain access to all the FERC Online applications. [Read More](#)

**Company Registration**  
Request a new or modify an existing Company Monitor that will permit the registered company to make eEP Filings. [Read More](#)

**eComment**  
A simple method of submitting but only comments for the Public record in P (Public), PF (Pre-Filing), PT (Pre-Filing for Electric Transmission Fac. (see) and CP (Cash/In-Kind Certificate Applications) Dockets. [Read More](#)

Note for eComment (P, PF, PT and CP Dockets only): eRegistering is not required.

**Current FERC Online Applications**

**eFiling** - Electronically submit qualified documents to FERC in lieu of paper filings. [Read More](#)

**eSubscription** - Users subscribe or 'sign up' to specific dockets and are notified via email about future correspondence. Users have immediate access to the correspondence or documents in eLibrary. [Read More](#)


**eService** - View the official mailing list or service list for a docketed proceeding. [Read More](#)

**eLibrary** - Users have access to over two million documents related to specific docketed proceedings with over ten million pages through the FERC Website. [Read More](#)

**CONTACT**

FERC Online Support  
Email: [ferc.onlinesupport@ferc.gov](mailto:ferc.onlinesupport@ferc.gov)  
[Telephone Numbers](#)

**WEBINAR**

  
[CLICK TO PLAY](#)

Webinar on FERC Filing Procedures for Settlements Preparation [PDF](#) | [Transcript](#) [PDF](#)

**QUICK LINKS**

- [Labelling Guidance for Documents filed with Commission](#) [PDF](#)
- [Order No. 759 \(Privileged Matters and Answers to Motions\)](#) [PDF](#)
- [Filing Guide and Qualified Documents List](#) [PDF](#) (Updated 02/01/2017)
- [Quick Reference Guide for Paper Submissions](#) [PDF](#) (Version 01/02/2014)
- [eRegister User Guide](#) [PDF](#) (Updated 03/12/2014)
- [eComment User Guide](#) [PDF](#)
- [eFiling User Guide](#) [PDF](#) (Updated 01/09/2014)
- [FY 2011 \(to Development Fee Report\)](#) [PDF](#)
- [Your Guide to Electronic Information at FERC](#) [PDF](#)
- [eFiling User Guide](#) [PDF](#)

Participating Agency

Cooperating Agency

Intervenor



# Post-Application

Ex Parte

Draft Documents

Bi-Weekley Reports



Federal Energy Regulatory Commission  
Office of Energy Projects  
Washington, DC 20426

# Atlantic Coast Pipeline and Supply Header Project

## *Final Environmental Impact Statement*

### Volume I



Atlantic Coast Pipeline, LLC  
Dominion Energy Transmission, Inc.

Docket Nos. CP15-554-000, CP15-554-001, CP15-555-000, and CP15-556-000  
FERC/EIS-0274F

#### Cooperating Agencies:



U.S. Department of  
Agriculture – Forest  
Service



US Army Corps  
of Engineers



U.S. Environmental  
Protection Agency



U.S. Fish and  
Wildlife Service



West Virginia  
Department of  
Environmental  
Protection



West Virginia  
Division of Natural  
Resources

July 2017

# Certificate of Public Convenience and Necessity

Not a “License”

Order with Conditions

Eminent Domain

# What's Next?

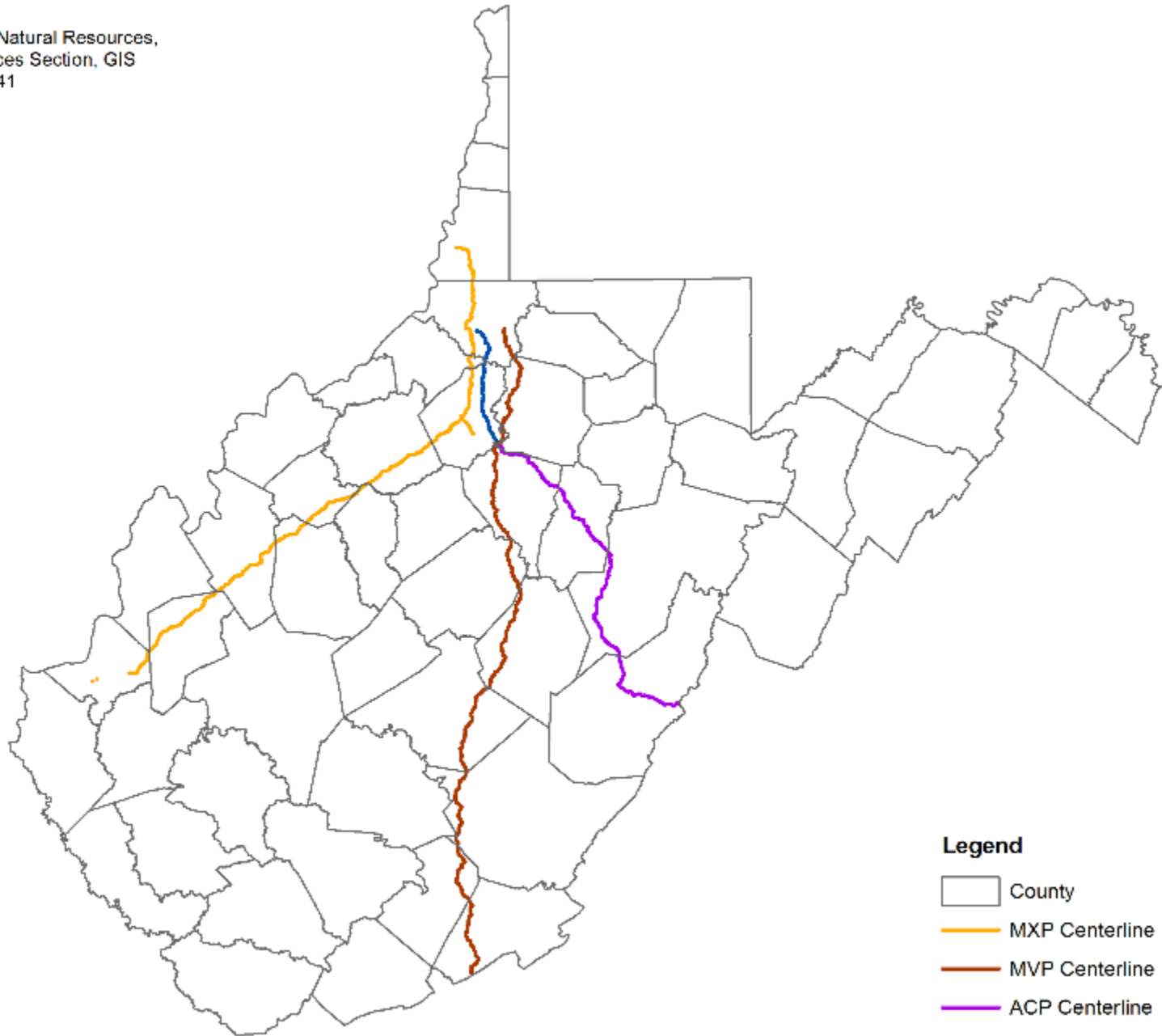


Training  
Experience  
Volume






# West Virginia 2015-2018

Brooke County Access  
Eastern Panhandle Expansion  
Mountain Valley Pipeline  
Equitrans Expansion  
WB Xpress  
Mountaineer Xpress  
Ohio Valley Connector  
Utica Access  
Rover  
WB2VA Integrity  
Leach Xpress  
Atlantic Coast Pipeline  
Supply Header Project

Prepared by  
WV Division of Natural Resources,  
Wildlife Resources Section, GIS  
Elkins, WV 26241



**Legend**

-  County
-  MXP Centerline
-  MVP Centerline
-  ACP Centerline
-  Supply Header Centerline

# 18 CFR

## Part 157, Subpart F –

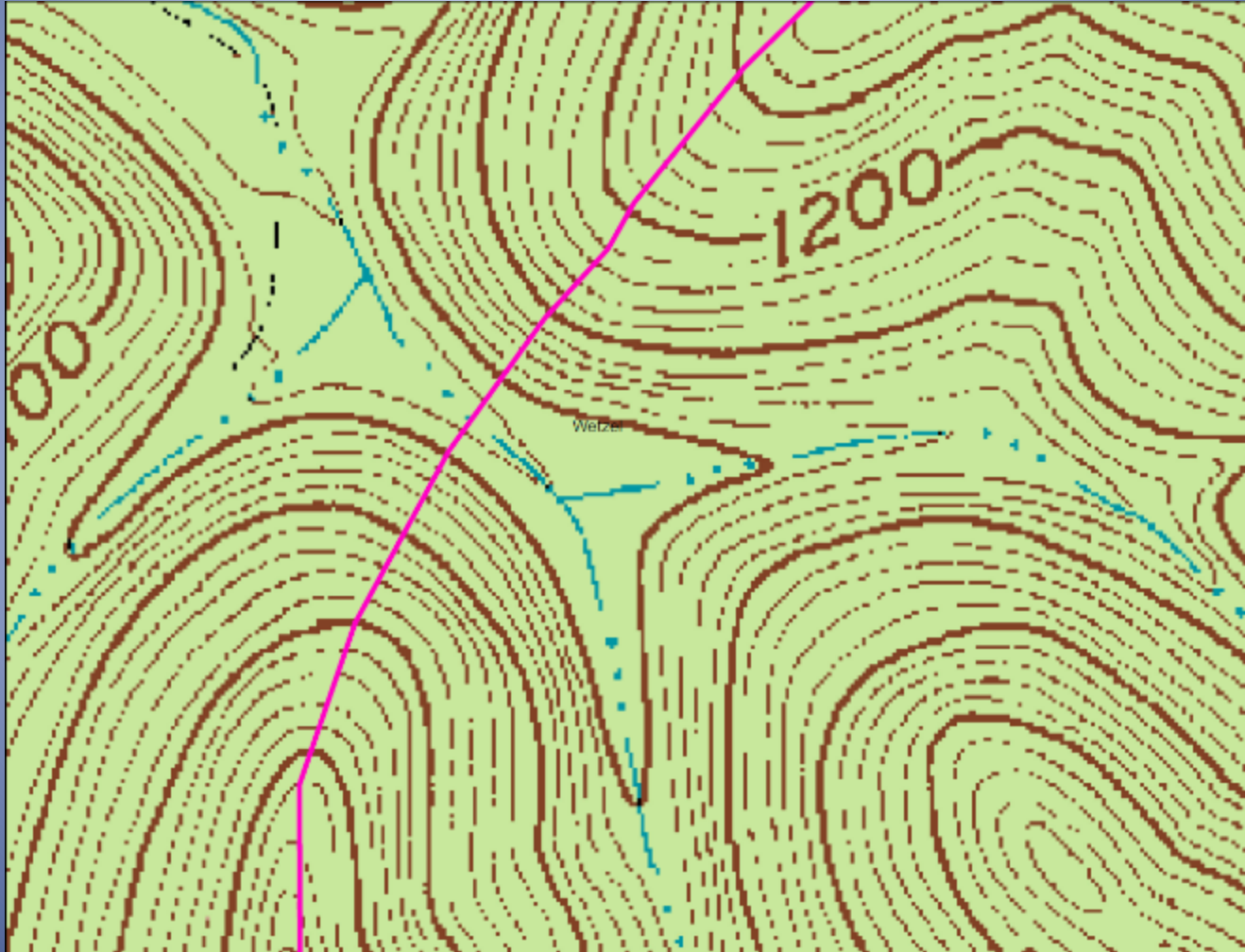
### Interstate Pipeline Blanket Certificates and Authorization Under Section 7 of the Natural Gas Act for Certain Transactions and Abandonment



## §2.55 Auxiliary installations and replacement facilities



# 401 Desk top review



Variance Requests

Legal Challenges

# TERMINOLOGY

**DRIP:** A vessel attached beneath a gas pipeline in which water and liquids accumulate due to gravity.

**LOOPING:** Two or more pipelines running parallel to each other to increase capacity

**MUD:** Drilling fluid circulated through the drill pipe and back to the surface during rotary drilling.

**PIG:** A scraping instrument for cleaning a pipeline.

**SMART PIG:** Inspection devices that record information about the internal conditions of a pipeline.

Flow Reversal

Backhaul Transportation

# Acronyms and Abbreviations

ATWS additional temporary workspace

AMM Avoidance and Minimization Measures

LOD Limit of Disturbance

MLV mainline valve

TOYR time of year restriction

TWS temporary workspace

# USACE

Single and complete project  
Permanent Impact  
Temporary Impact

# USFWS

Informal Consultation

Formal Consultation

Jeopardy

Formal Conference

BA biological assessment

BO Biological Opinion

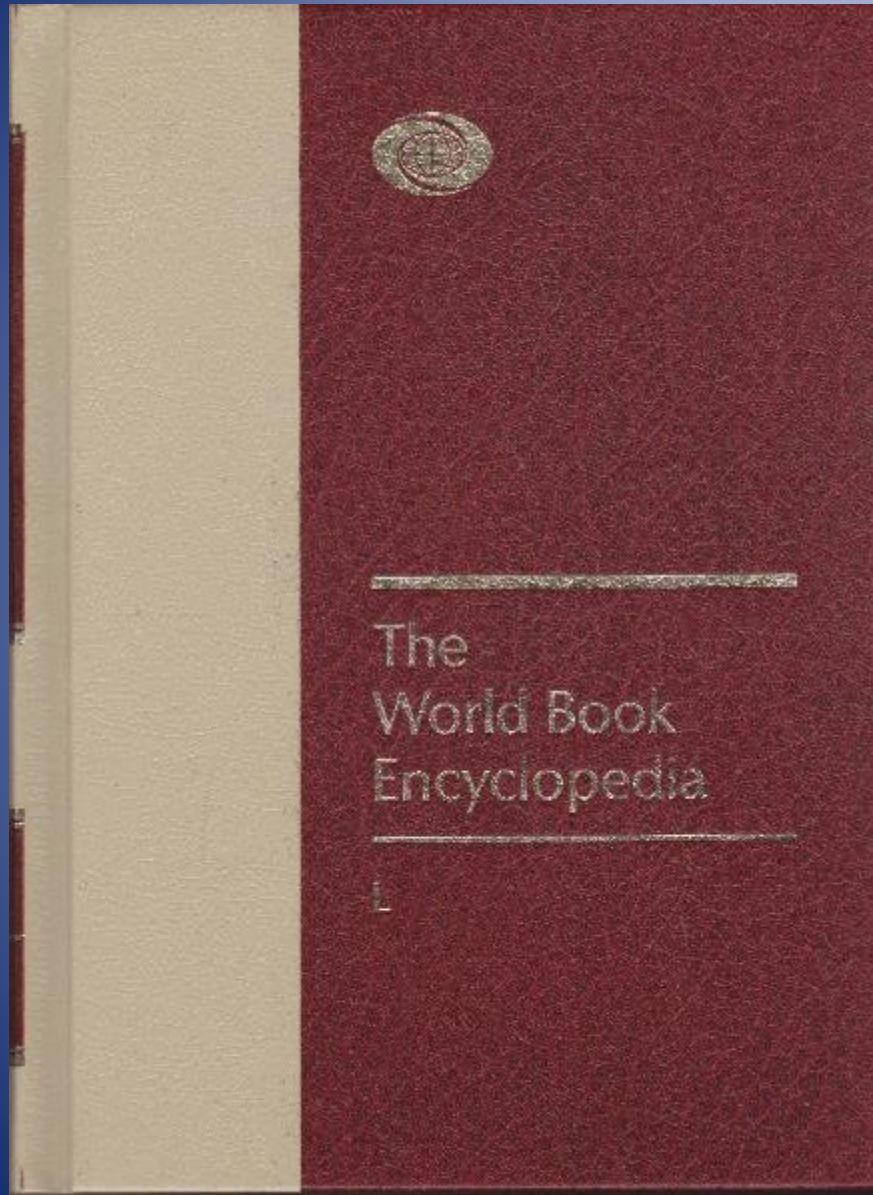
LAA likely to be adversely affected



# EO 13807

“...Federal environmental review  
and permitting...coordinated,  
predictable and transparent”

Identify Sources of Information  
Plan  
Network  
Communicate  
(Early and Often)



urban  
DICTIONARY

# Information Sources & Training

FERC  
ASWM



# Protect the Resource



# Part 157, Subpart F – Blanket Authorization

## Notification Requirements

Limitations – Cost limits, cultural  
resources, significant impact sensitive  
resources

# Carex haydenii

## CVNWR



# Timber Rattlesnake



Photo credit: Paula Waggy

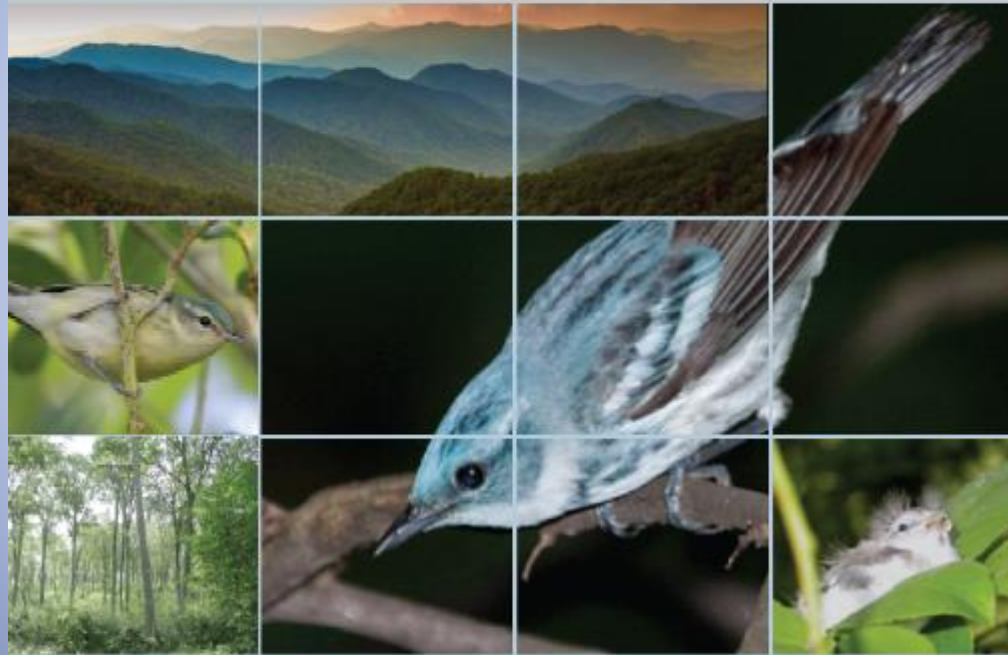


# Small Whorled Pagonia



# CERULEAN WARBLER

Management Guidelines  
for Enhancing Breeding Habitat  
in Appalachian Hardwood Forests



February, 2013



# Mud Bug

## *Cambarus pauleyi*



Photo credit: Zachary Loughman, Ph.D.

# Questions



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