
PENNSYLVANIA BAT SPECIES AND BRIDGE PROJECT ASSESSMENTS

TRANSPORTATION PROJECT PLANNING

APRIL 17, 2018



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QUALIFIED BAT SURVEYOR (QBS)

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- Review of Pennsylvania Bat species
 - T/E Species
- Bat Life Cycle and Project Planning
 - PNDI
- Bats and Bridges
 - FHWA Programmatic
- Survey Processes
 - Habitat Surveys
 - Species Surveys
 - Presence Probable Absence Surveys
- Avoidance, Minimization, and Mitigation
 - Seasonal Restrictions

- Example Projects

9 species

- Red bat (*Lasiurus borealis*)
- Hoary bat (*Lasiurus cinereus*)
- Silver haired bat (*Lasionycteris noctivagans*)
- Big brown bat (*Eptesicus fuscus*)
- Little brown bat (*Myotis lucifugus*)
- Eastern Pipistrelle (*Pipistrellus subflavus*)
- *Small-footed bat (*Myotis leibii*)
- **Indiana bat (*Myotis sodalis*)
- ***Northern Long-eared bat (*Myotis septentrionalis*)

*Pennsylvania Threatened species

**Pennsylvania & Federally Endangered species

***Federally Threatened species



SMALL FOOTED BAT

ASHE



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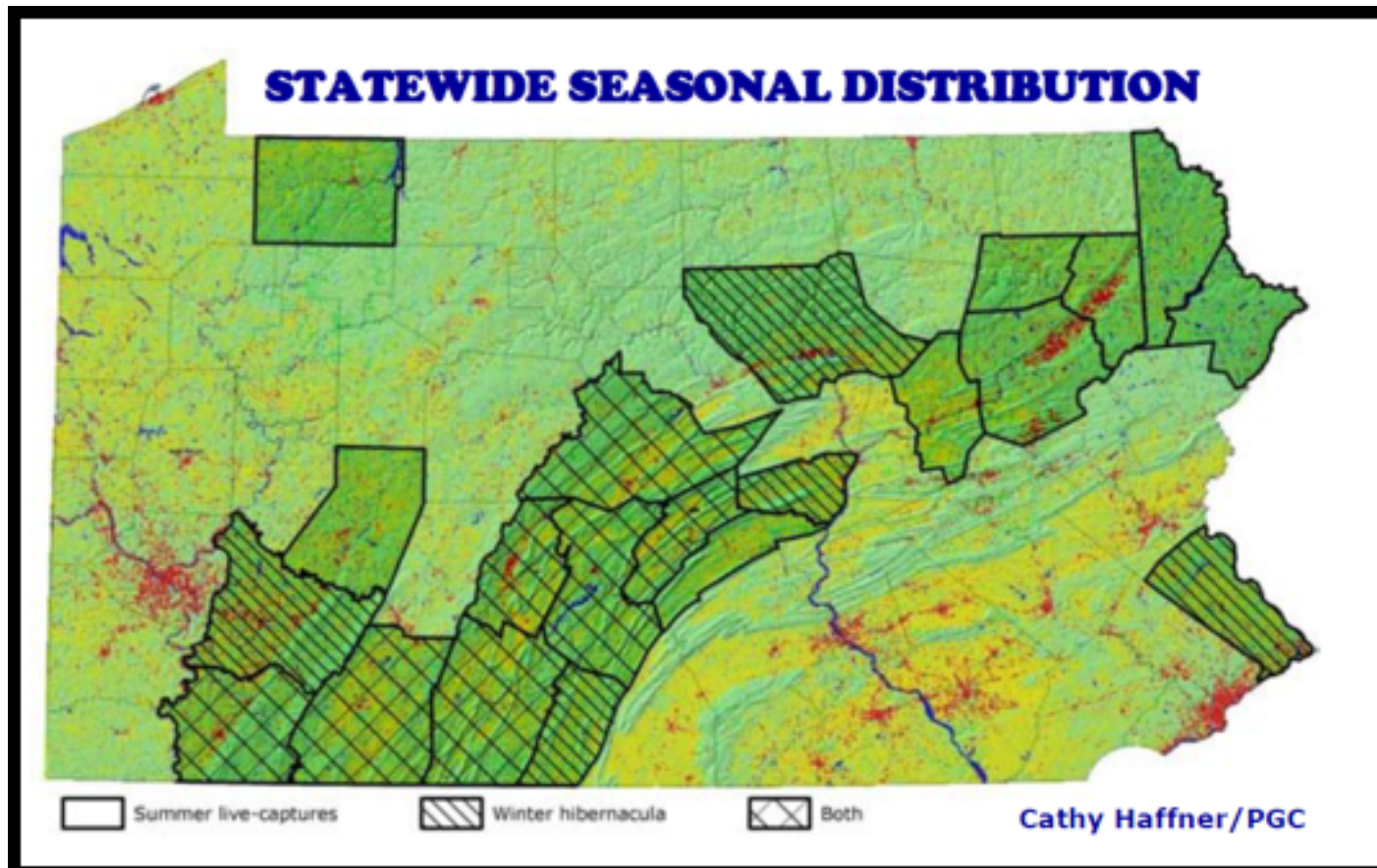
SMALL FOOTED BAT

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SMALL FOOTED BAT

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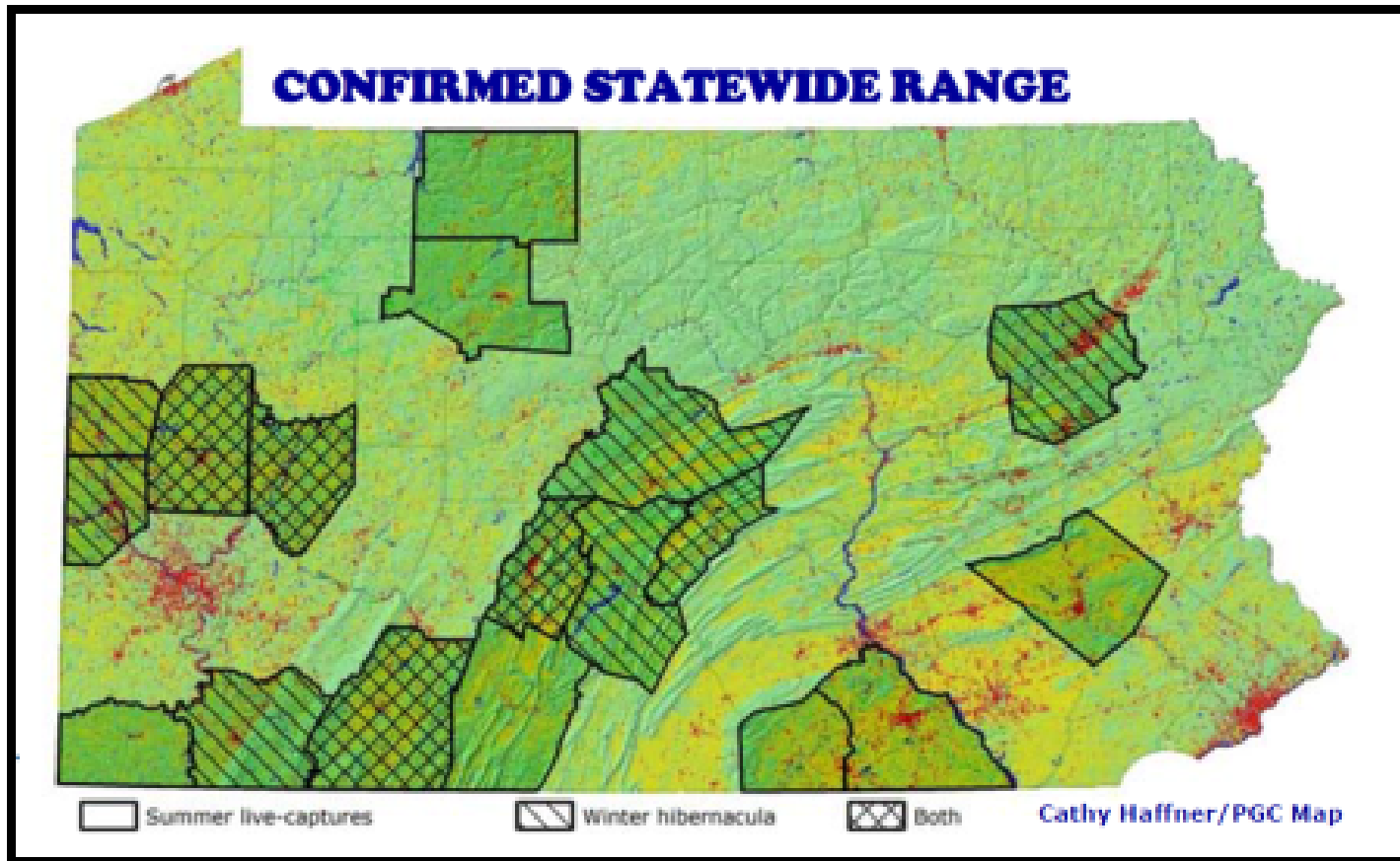
INDIANA BAT

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INDIANA BAT

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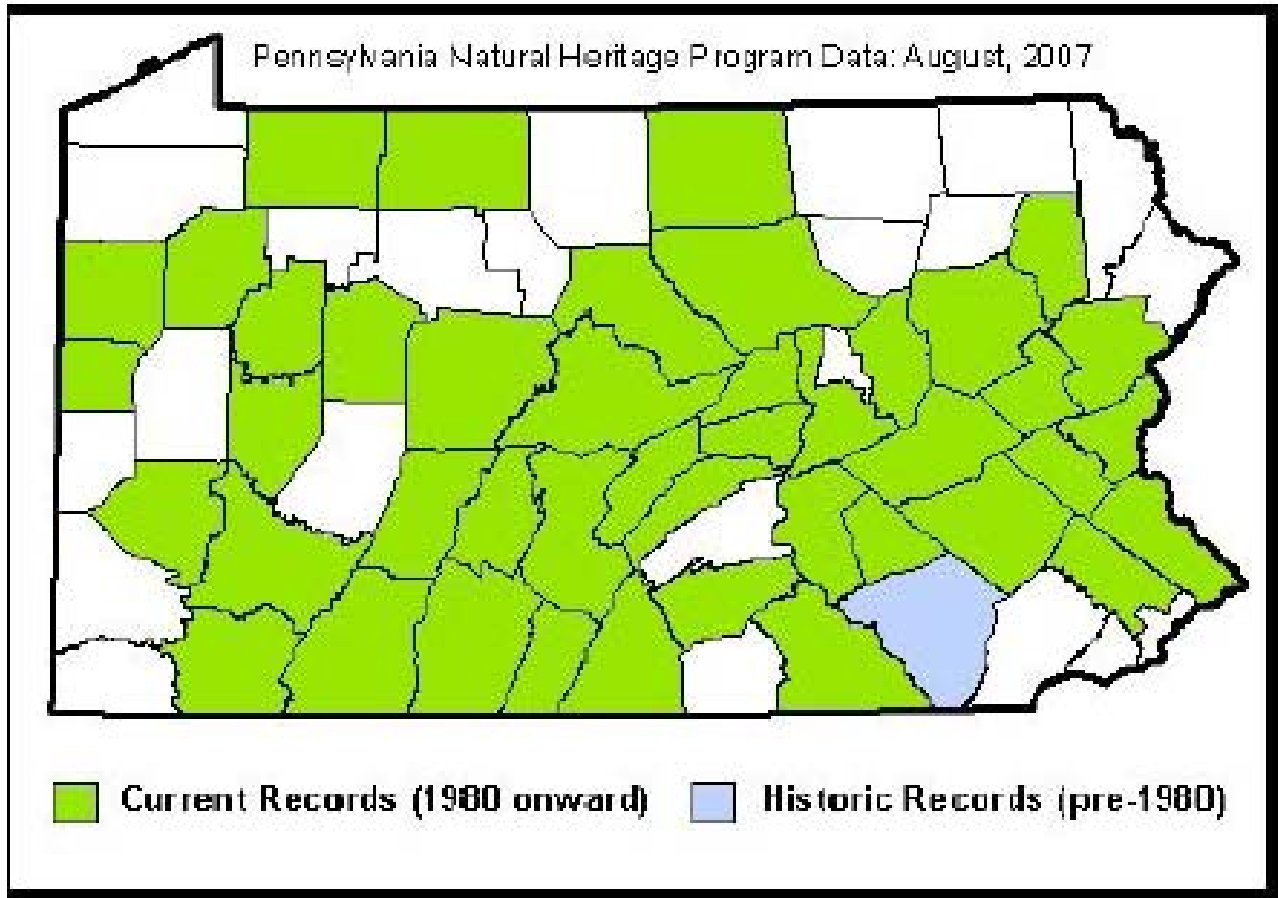


NORTHERN LONG EARED BAT

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NORTHERN LONG EARED BAT



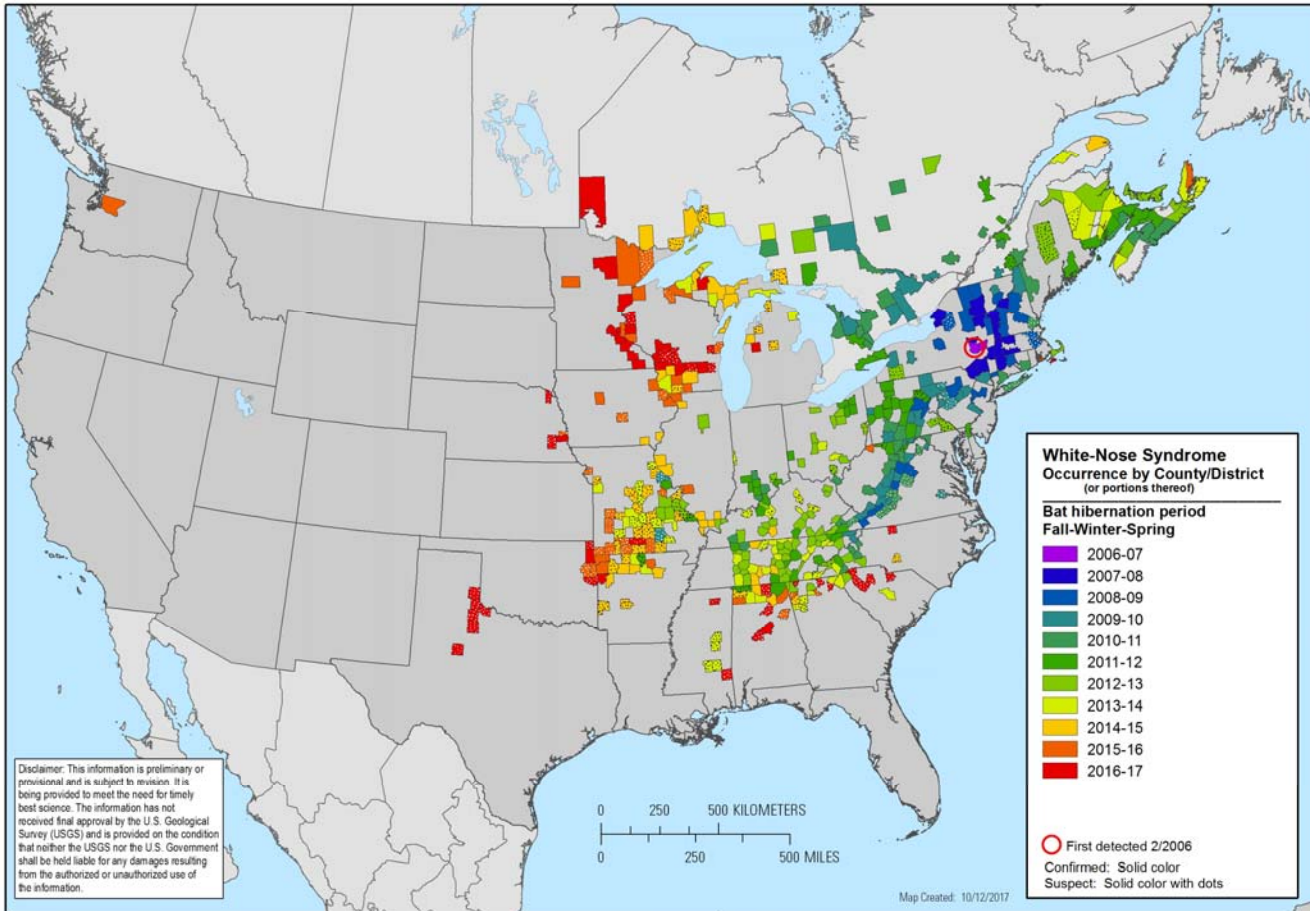
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- January –April: Hibernation
 - April –June: Migration/ Roosting / Foraging
 - June –July: Roosting / Foraging / Birthing / Pup Rearing
 - August –September: Roosting / Foraging
 - September –November: Swarming / Mating/ Migrating
 - November –December: Hibernation

T/E Listings.....

Bat Programmatic.....

Blah Blah Blah

What's all the fuss about???



Citation: White-nose syndrome occurrence map - by year (2017). Data Last Updated: 10/12/2017. Available at: <https://www.whitenosesyndrome.org/resources/map>.

WHITE NOSE SYNDROME



WHITE NOSE SYNDROME

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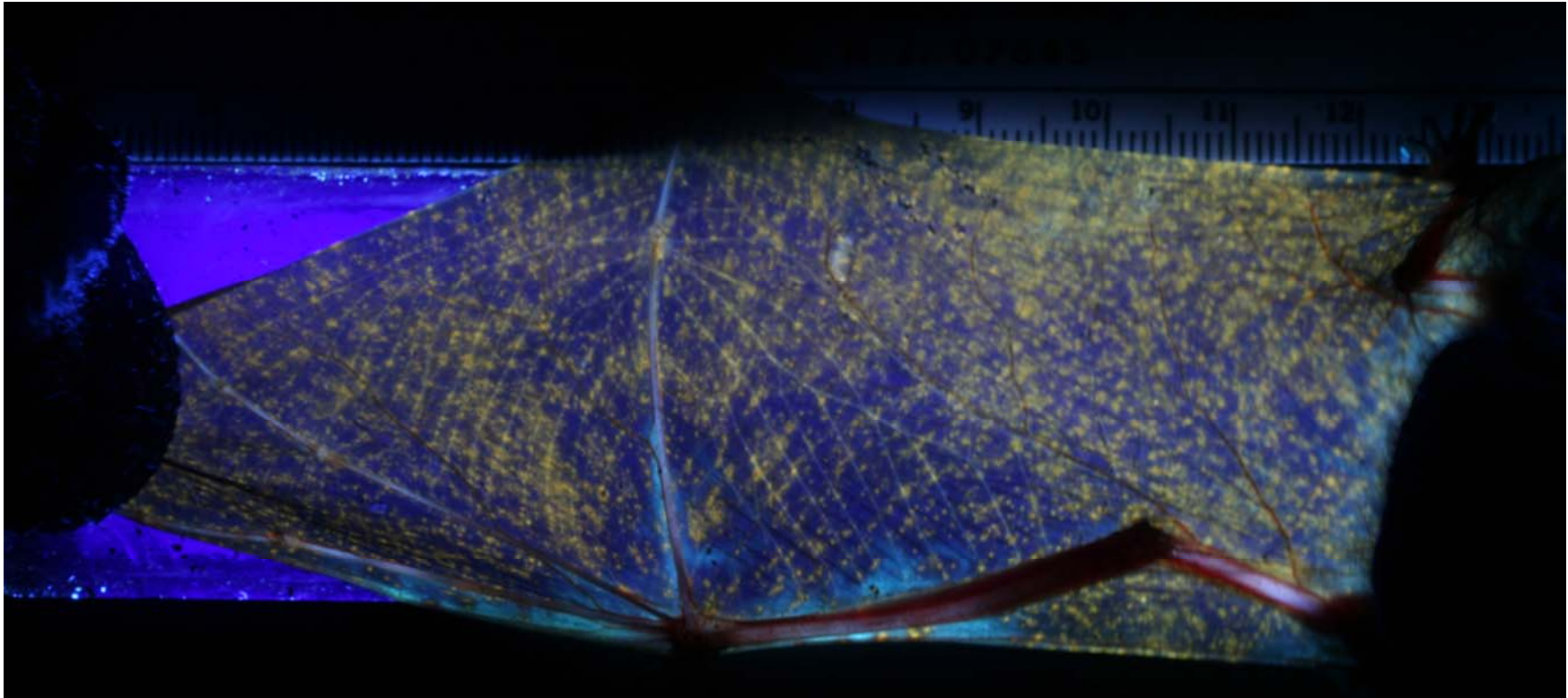
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WHITE NOSE SYNDROME

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- Pennsylvania Natural Diversity Inventory (PNDI)
 - <https://conservationexplorer.dcnr.pa.gov/>
- Typically a bat hit occurs if
 - Project is within 5 miles of a known hibernacula
 - Project is within 2 miles of a known summer site
 - Project involves timber removal/ project size
 - If one of the agencies thinks there may be I-bats or habitat associated with the project(old school paper coordination)
- Start this process early

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- FHWA PROGRAMMATIC
 - Bridge Specific
 - PNDI

- <https://www.fws.gov/Midwest/Endangered/section7/fhwa/pdf/BowFHWAibatAndNLEBvisedDec2016.pdf>

- Habitat Surveys
 - Plan Ahead
 - Bridge Inspection/Bat Assessment
 - RKK approach
 - Engage USFWS/PGC if needed
 - Negative results good for one year
- Revised Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat
 - Appendix D
 - [https://www.fws.gov/midwest/endangered/section7/fhwa/pdf/Appendix D_BridgeAssessmentAugust2016.pdf](https://www.fws.gov/midwest/endangered/section7/fhwa/pdf/Appendix_D_BridgeAssessmentAugust2016.pdf)

- Appendix D
 - Bridge Assessment Data form

Images of Favorable Characteristics and Preliminary Indicators of Bat Presence



Photo 1: Bats hanging from cracks along support beams



Photo 2: Visible bats within an expansion joint



Photo 7: Staining along longitudinal joint.



Photo 8: Staining on underside of expansion joint from bat use.

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Photo 11: Bats roosting & associated staining



Photo 12 and 13: Bridge design mimicking “cave-like” atmosphere

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- Avoidance, Minimization, and Mitigation
 - Bats in my Bridge!!!!
 - Now What???

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- Project Examples
 - Knight Road
 - Hartz Mill Road
 - Harvey Avenue



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- Avoidance, Minimization, and Mitigation
 - No Bats in my Bridge!!!!
 - Now What???



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Questions???

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