

**Doug- Introduction:**

1) Introduce us

2) little fundamentally different in the Guidelines with a couple notable additions.

No changes were made in any policy present in the 2008 Guidelines but some additional guidance has been presented.

Additions are minimal, however, overall, this revision focused on presentation, readability, organization, and clarification.

Also, many of the additions are longstanding practices that were just previously not presented formally in the Guidelines.

An example of this is the preservation in place section (pg 19) and avoidance plan section (pg 22). These are standard practices/policies that we have been following for the last at least 10 years.

# Today's Topics

- \* Formatting and Presentation
- \* Highlighted Updates
  - \* Phase II and Phase III Guidelines, Reporting, Submission Procedures
- \* Minor Additions
  - \* Overview of Consultation Process, Monitoring, Avoidance Plan, Addendum Reports
- \* The Predictive Model
- \* Underwater Archaeological Investigation

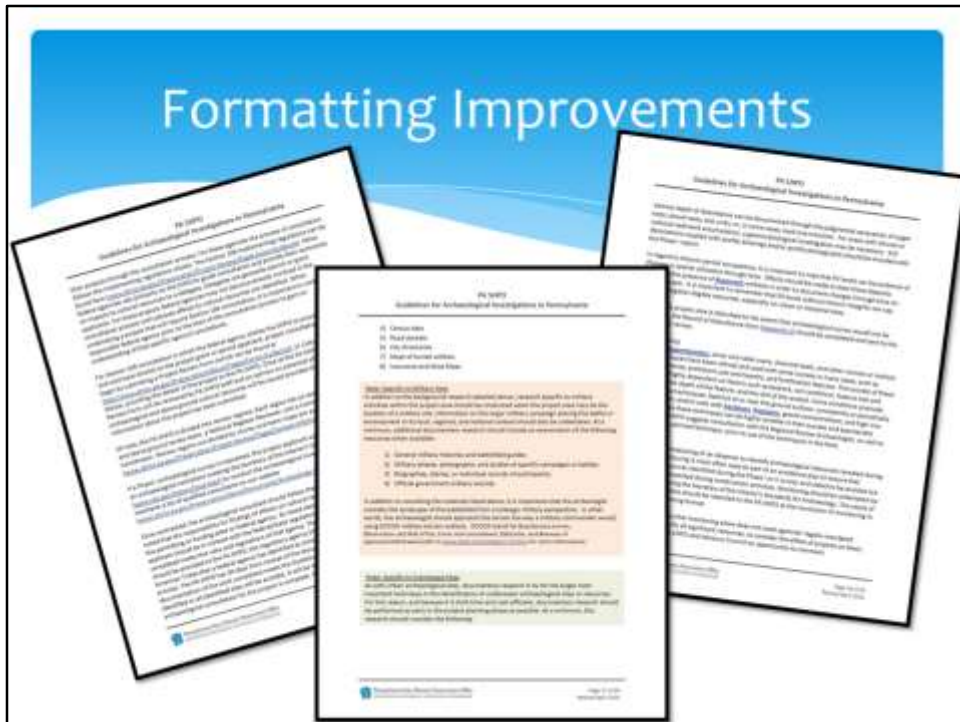


Kira and Steve will be going over these topics today and hopefully answering a lot of your questions. There will be a couple opportunities for questions and at the end we hope some good discussion.

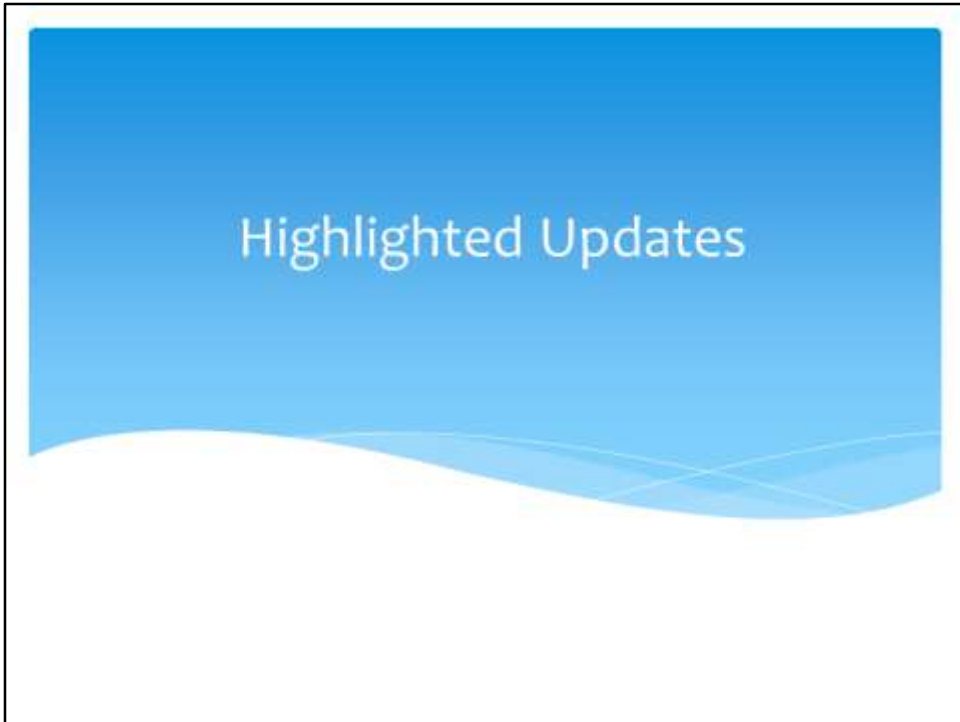


### **1) Kira- Formatting and Presentation:**

Process of the re-write. Old guidelines were quite lengthy and repetitive. They were a result of a series of re-writes over the years – each time attempting to clarify areas where there were questions and issues, but never removing the older sections. To address this Steve and I physically cut up a copy of the old guidelines in order to group section/paragraphs from all over the document into our intended pieces. We then each took a section and sat down with the pieces to re-work it. A little at a time, largely for the last couple hours of the day every Friday afternoon. This process took approximately 8 months. Internal review, editing, and formatting took another 4 months.



- a. Formatting improvements. This resulted in a document that looks and reads totally different from the one before, but is fundamentally in terms of content much the same. Some highlights of the new format (thank Shelby):
- i. Table of Contents – click on section titles and the documents takes you directly to that section.
  - ii. Lots of live links to forms, other guidance, additional information from the ACHP and Park Service.
  - iii. Updated glossary. Just clicking on the words in the text will take you directly to the definition in the glossary.
  - iv. Color blocks – to draw attention to special notes for some topics regarding specific site types. All of this information was previously in the Guidelines, but it was largely buried within the larger text. Site types have been color-coded: Historic is gray, prehistoric pink, Urban Blue, Military peach, Submerged green, etc.



This is for topics in the Guidelines that were already covered, but we added to them (minor) or re-wrote section with a new approach. This will not cover every little change – but will cover the most significant ones.

## Phase II Guidelines



Excavations at Fort Hunter, Dauphin County

- \* Context Development
- \* Eligibility Assessments
- \* Developing Research Questions

Phase II Guidelines. Re-written with new approach. Old guidelines phase II basically said do more Phase I and let us know what you found. By and large that approach did not result in actual evaluation of sites in terms of National Register Criteria even though that is what we always intended. We received a lot of reports that did not provide either a context for the site OR an assessment of eligibility. The re-written section is intended to highlight this approach as the one we are looking for going forward. What does this mean in terms of real reports?

- i. For Phase II the background, or contextual information for a site should be only the information that is needed to put a site in context. i.e. if you are asking for our opinion on eligibility for a small prehistoric site, say Early Woodland, you should not provide information on William Penn, the formation of the township the site is situated within, or even a detailed the prehistory of the area associated with Pre-Clovis and the end of last glaciation.
- ii. You need to provide an eligibility assessment – not just a statement. EXPAND ON THIS.
- iii. This assessment should provide appropriate research questions for the site and an argument for or against this site helping to address

those questions.

## Phase III Guidelines

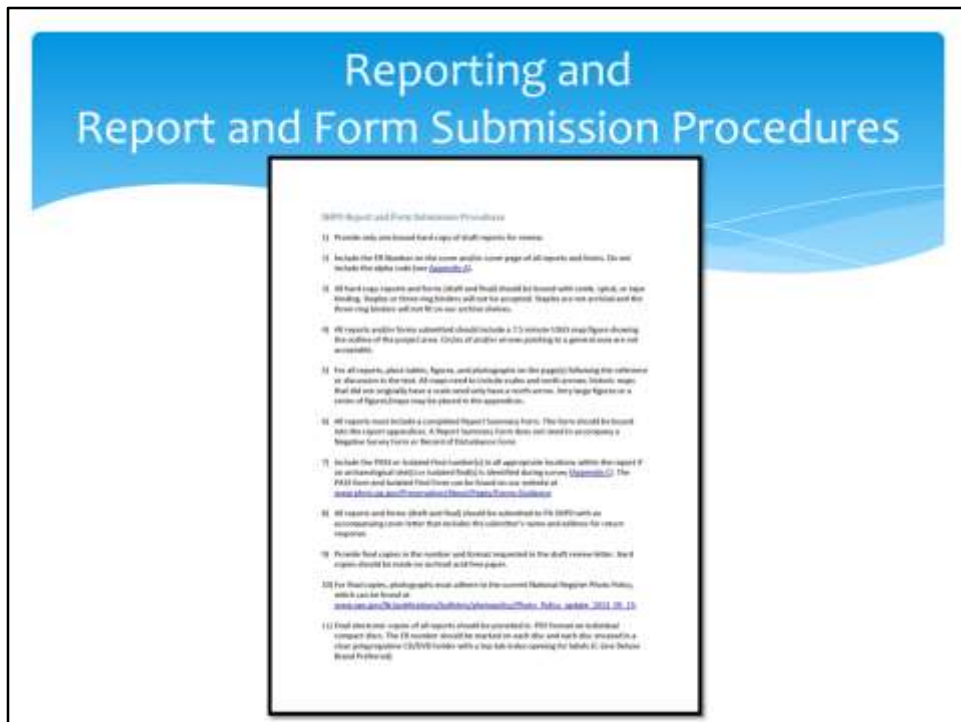
- \* Agreement Documents
- \* Data Recovery Plans
- \* Alternative Mitigation



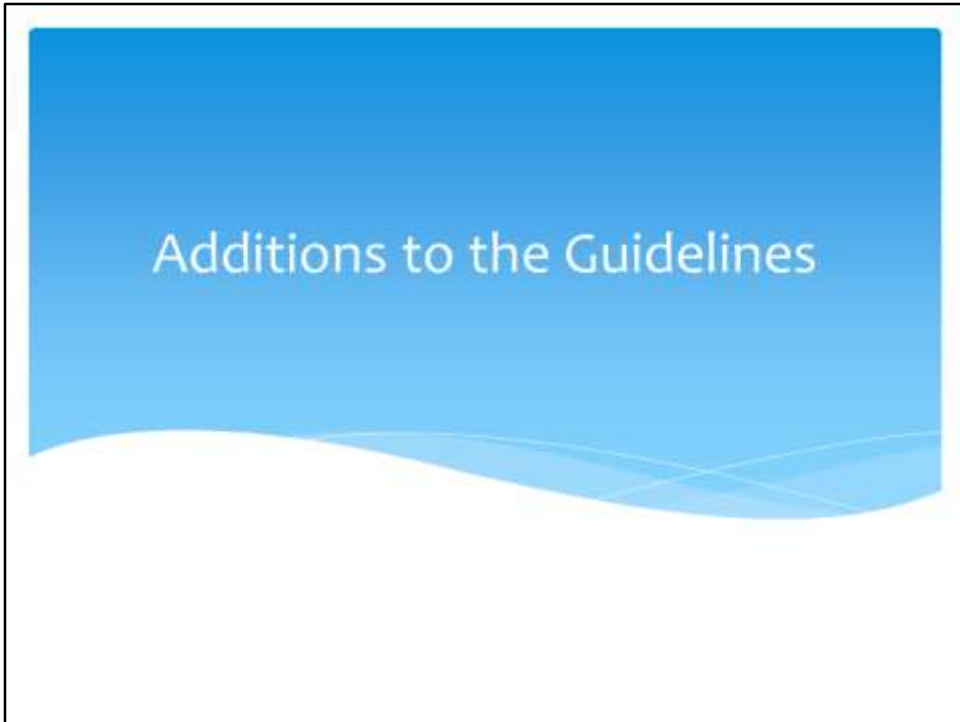
Leetzdale Site, Allegheny County

- a. Phase III Guidelines. For this section the re-write was more cutting out information than adding it in. collectively we thought there was a lot of information in the previous section that was by and large not useful for the majority of circumstances we were encountering. This section was as a result peeled back to the basics and written to encourage the consultation and discussion that we think is integral in the Section 106 process by the time a project reaches this stage.
  - i. Agreement Documents. We added a basic discussion of what these are and what they should include – and most importantly a link to the ACHP website. Emphasize Federal Agency leads this step.
  - ii. Data Recovery Plans. We added information about what we are looking for in terms of data recovery plans to codify the approach to data recovery for each site.
  - iii. Alternative Mitigation. This was hinted at in the old guidelines, but not directly addressed. This goes a step further and provides some additional guidance on how our office thinks about alternative mitigation and the benefit(s) it needs to have for the public(s).





- a. Reporting. This information was really pulled together from various parts of the old guidelines and represented in one location. We did alter the basic format a bit to reflect updates to the Guidelines but no real changes to this section with the exception of adding in Addendum Reports – discussed later. (Slide: TBD).
- b. Report and Form Submission Procedures. This is a new section born out of an old section of the Guidelines called “BHP Report Submission” which was buried in the Report Standards chapter. The intent of this new section is to highlight the procedural things that must be done for a submission to be accepted. No matter how awesome your report is if you miss one of these your report could be sent back. It is intended to function as a checklist. (Slide: Submission procedures).



again, not new to most of you, just newly, formally, in writing in the Guidelines.

# Minor Additions

- \* Overview of the Consultation Process
- \* Monitoring and Monitoring Report
- \* Avoidance Plan
- \* Addendum Reports



- 1) **Kira- Additions:** again, not new to most of you, just newly, formally, in writing in the Guidelines. (Slide: Bullet list of topics).
- Overview of Consultation Process. This is not for consultants, but for their clients. A lot of people call us after they get letter asking for Phase I survey, or take a look at the Guidelines, and ask us what all that that may mean for their projects. we hope this section will give a basic overview of what to expect in most circumstances.
  - Monitoring (monitoring report). We previously had no formal guidance on what we expected from and for monitoring. So we added this section. It is nothing new – what we all have been asking for and doing for the most part for many years. The monitoring report also is an attempt to standardize and streamline reporting back to our office on the results on monitoring. We were getting everything from a two sentence email to a 50 page bound report telling us nothing happened.
  - Avoidance Plan. Same deal as the monitoring report. This section puts in writing what we have been doing for many years.
  - Addendum Reports. This section was specifically added to address pipelines. Pipelines and re-routes go together like ice cream and ice cream cones – you don't have to have one, but more often than not you

do. We have been accepting addendum reports for a long time, but until now there has been no formal guidance. We hope this will provide for some consistency in how they are handled for the future.

## Statewide Pre-Contact Probability Model

- \* Probability Assessment
- \* Testing the Model
- \* Model Comparison and Testing Results



New pieces added to the guidelines for this in these three areas (Phase I). Will touch on all three.

# Probability Assessment



- a. Probability assessment – this is what you as a trained professional think probability is over your project area. This is the same thing you do for every project (in the field or office) to decide how to test the project area.

## Testing the Model

- \* For projects over 50 acres or 15 linear miles
- \* Pre-Contact Model Testing Methodology (PMTM) Form
- \* PennDOT Testing Methodology

- a. Testing the Model – PMTM form. We have this statewide model; lots of time, thought and statistics went into developing it. But no model is useful without testing field testing and refinement. That is where this section comes in.
  - i. We would like to see testing of the model for projects more than 50 acres or 15 linear miles. To be very clear: this is not “SHPO research” this is field testing to prepare for future refinement of the model. The model is available to everyone; everyone will be able to use it to guide testing for any project, so we expect “everyone” to contribute to the refinement of the model: either by comparison for smaller projects or actual field testing for larger projects. This is a statewide asset for the collective cultural resource community. The PMTM form is intended to provide a platform for discussion of the testing plan with the regional reviewer.
    1. This form has intentionally been left open ended and guidance on what testing should consist of has intentionally NOT been given. This is because... Yes, we expect you to discuss your testing plan with us. Preferably ahead of field

work. No one standard testing plan will fit all circumstances. We do not want to put a minimal plan out for testing and have that be the only thing ever done. We want to see creative, well thought out, flexible plans – that comes from you, not from us.

2. Yes, we will comment on your plans and potentially ask for possibly more, less, different, etc. testing.
  3. Yes, you should expect that this form will be under review for 30 days each time it is submitted.
  4. Yes, we will reject your report if 1) this form is not present as an appendix, even if you tested the model appropriately for your project area, or 2) if it is present, has not been approved, and is for a testing methodology that we do not concur with.
  5. No, we will not reject your report if the form is present, has not been approved ahead of time, BUT is for a methodology that we concur is appropriate for your project area.
  6. We anticipate that getting started there will be a lot of discussion about what methodology is appropriate and a fair bit of negotiation over what level of effort should be expended. This is new. There will be changes as we go. Don't forget that we are reasonable people who are looking for reasonable testing and methods!
  7. You should already be thinking about this, planning for it, etc. in your reports and for your projects, but we will begin to put these policies into practice for reports submitted after July 1. If your fieldwork was completed before this date you should still submit a PMTM form but recommend no testing as the fieldwork was completed. You should still do the model comparison (which we will talk about in a minute).
- i. PennDOT will develop their own testing plan. We know testing will be in more situations than we are asking for – may be every project in which archaeology will be undertaken. They will be developing their own guidance for this. We will have no part in that



development – for any questions regarding how PennDOT or the CRP’s will handle the model talk to Ira Beckerman.

# Model Comparison and Testing Results

## Comparison:

Sensitivity Tier	Area within this Tier	Percent of Total Project Area	Method(s) Used to test this tier (Use list from Line 3 of the Negative Survey Form. Include % if multiple.)	Number of Sites Located
High	sq. m.	%		
Moderate	sq. m.	%		
Low	sq. m.	%		

## Testing Results:

- Discuss the approved testing methodology
- Discuss how that methodology differed from the remainder of the testing
- Compare all testing results to the model prediction – did the model work for predicting sites for your project area?
- Provide an analysis of strengths/weaknesses of the model for future refinement.

- a. Model Comparison and Testing Results.
  - i. Comparison – every report/form of investigations submitted should have this starting July 1. This is simple stuff – what did the model say the probability was and what did find through your real life testing? If the results of testing were different than the model – why do you think that is? (Slide: comparison matrix).
    1. The GIS data for the model is available through a data request from our office. The data request paperwork should be requested from and submitted to Noel Strattan of our GIS Section.
  - ii. Testing Results – After July 1 reports for projects larger than 50 acres or 15 miles should have a separate model comparison and testing results section. This section should:
    1. Discuss the approved testing methodology
    2. Discuss how that methodology differed from the remainder of the testing
    3. Compare all testing results to the model prediction – did the model work for predicting sites for your project area?
    4. Provide an analysis of strengths/weaknesses of the model

for future refinement.

## Underwater Survey Guidelines



### We at the PA SHPO Are Not Underwater Archaeologists

- However, we have friends who are. We contacted underwater archaeologists at IUP and the Texas, Ohio, New Jersey, and New York SHPOs. They provided much advice and helped edit the revised underwater section of our guidelines.
- We have provided a link in our guidelines to the Bureau of Ocean Energy Management (BOEM) guidelines for marine archaeological survey on the outer continental shelf. This provides technical specifications we did not include in our guidelines.

STEVE

# Underwater Survey Guidelines



## Qualifications of Investigator

- \* Supervising Archaeologist should have equivalent of Secretary of the Interior Standard qualifications for underwater archaeology
- \* Advanced degree in Anthropology, Archaeology, or closely related field.
- \* At least 3 years of field experience in the field of underwater or marine archaeology with at least a year of supervisory experience.

STEVE



# Underwater Survey Guidelines

## Field Survey

- \* Side-scan sonar, magnetometer or gradiometer, sub-bottom profiler, and recording fathometer – use at least 3 different techniques.
- \* Transect spacing no greater than 30 meters with 100% overlap for 200% coverage. Record transects with Differential GPS.
- \* Ground-truthing of anomalies – preliminary documentation, probing, limited removal of overburden and/or visual assessment using Remotely Operated Vehicle.

STEVE

# Underwater Survey Guidelines



## Reporting

- \* Full report format.
- \* Include both raw and processed remote sensing data.
- \* Present data in GIS format.
- \* Magnetometer and sonar data presented as a contour map and sonar mosaic on a scale not exceeding 800 feet per inch. Use large format or foldout maps.



## Questions and Discussion

- \* **Formatting and Presentation**
- \* **Highlighted Updates**
  - \* Phase II and Phase III Guidelines, Reporting, Submission Procedures
- \* **Minor Additions**
  - \* Overview of Consultation Process, Monitoring, Avoidance Plan, Addendum Reports
- \* **The Predictive Model**
- \* **Underwater Archaeological Investigation**

