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The Guns of Fort Monroe

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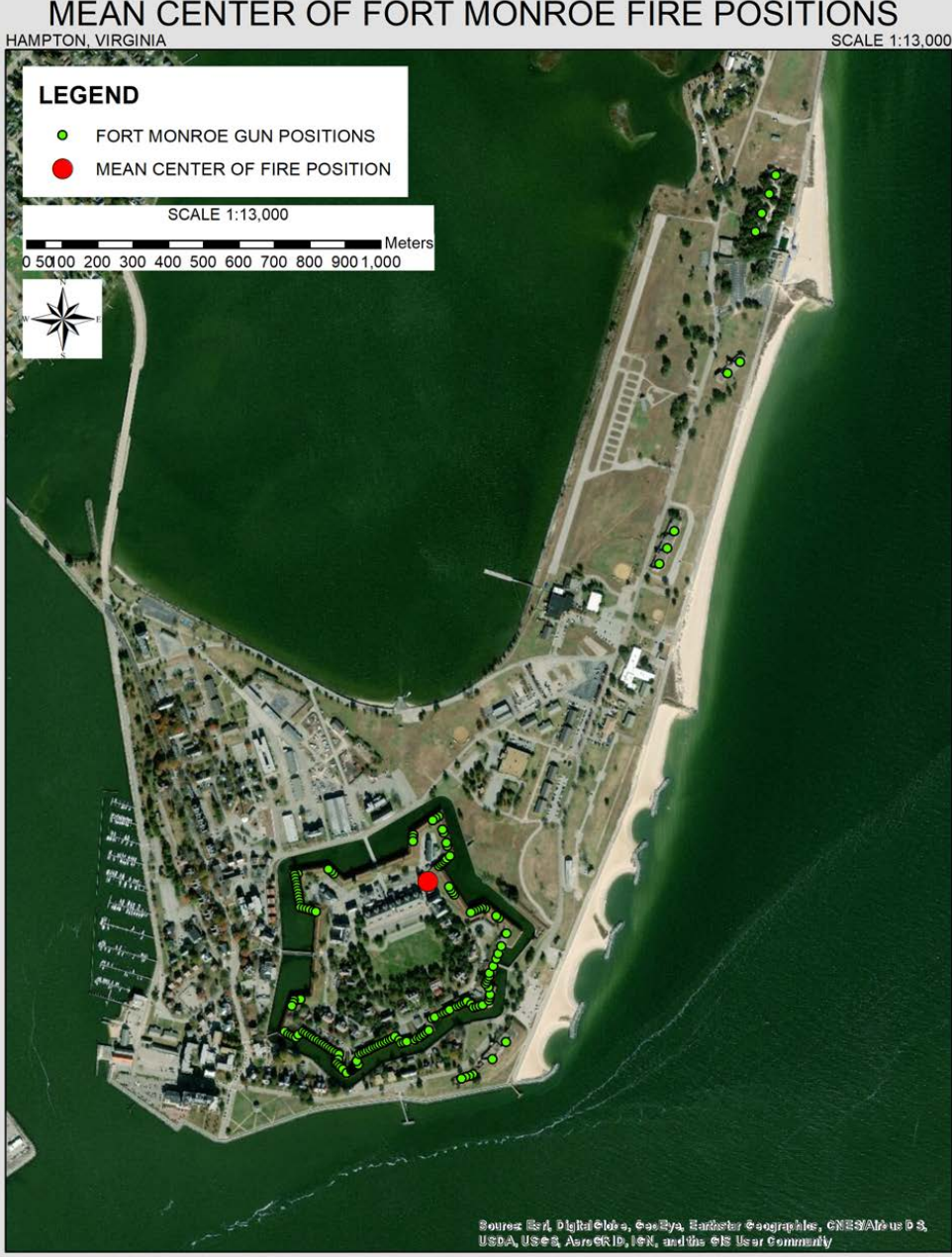
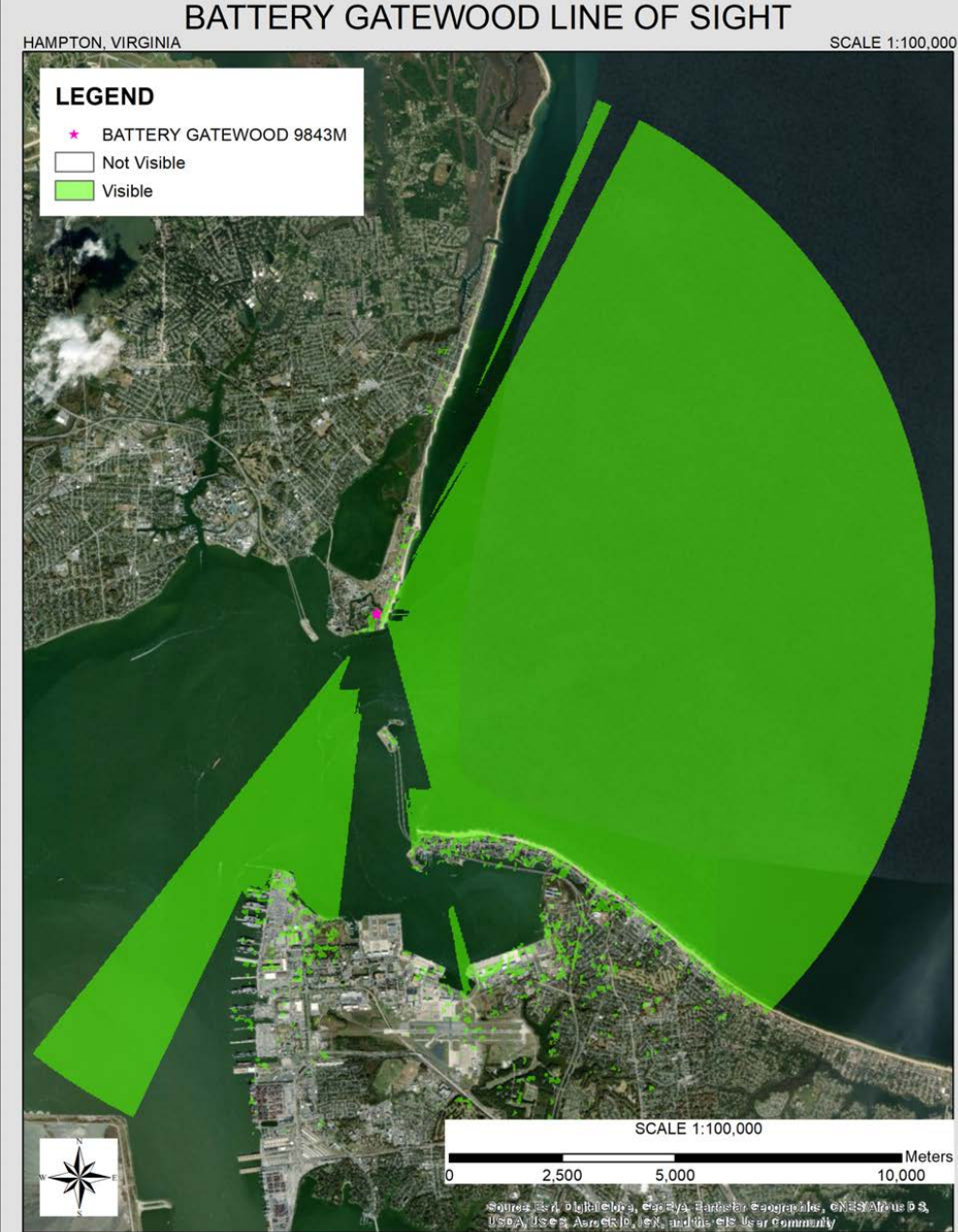
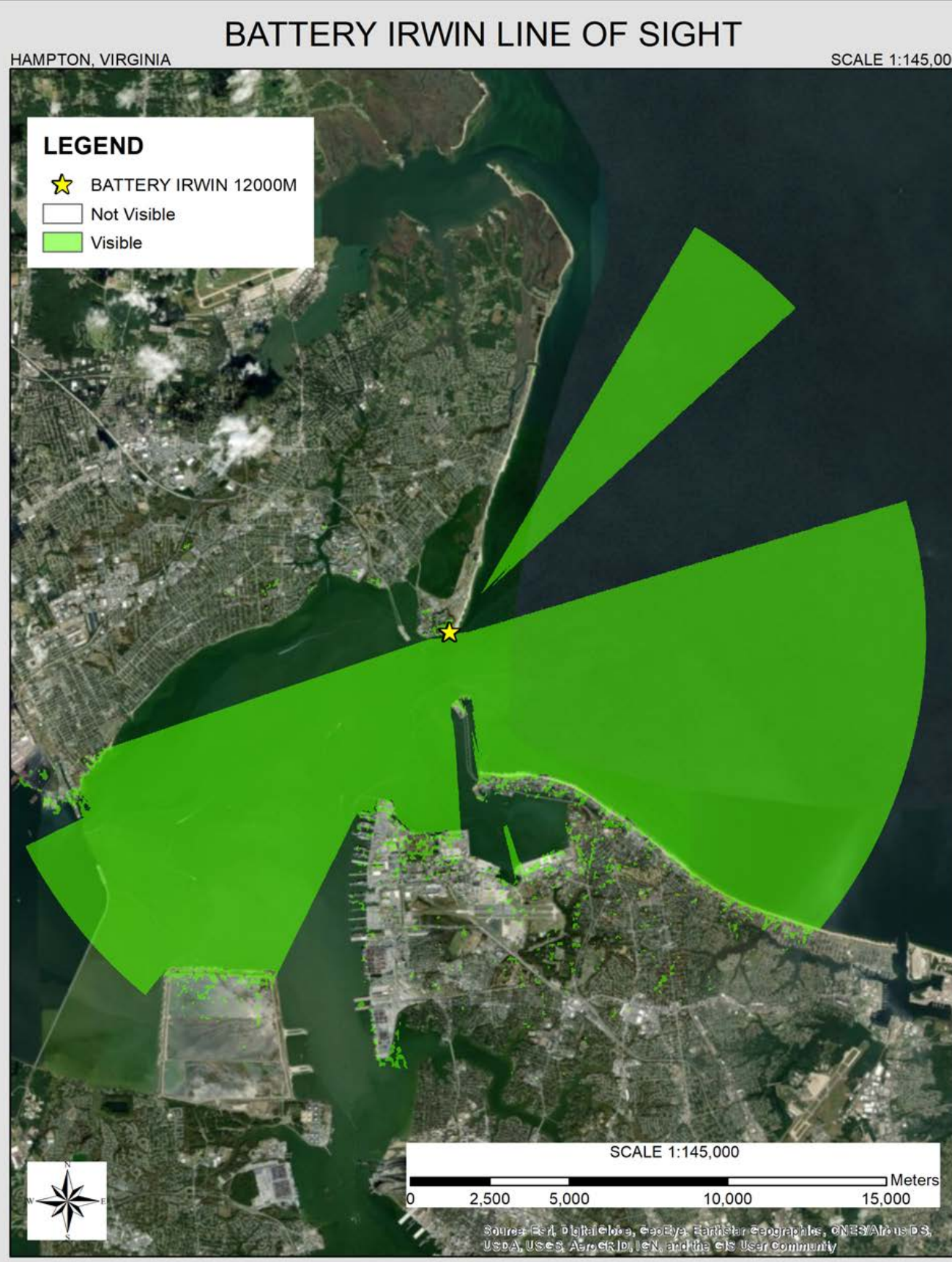
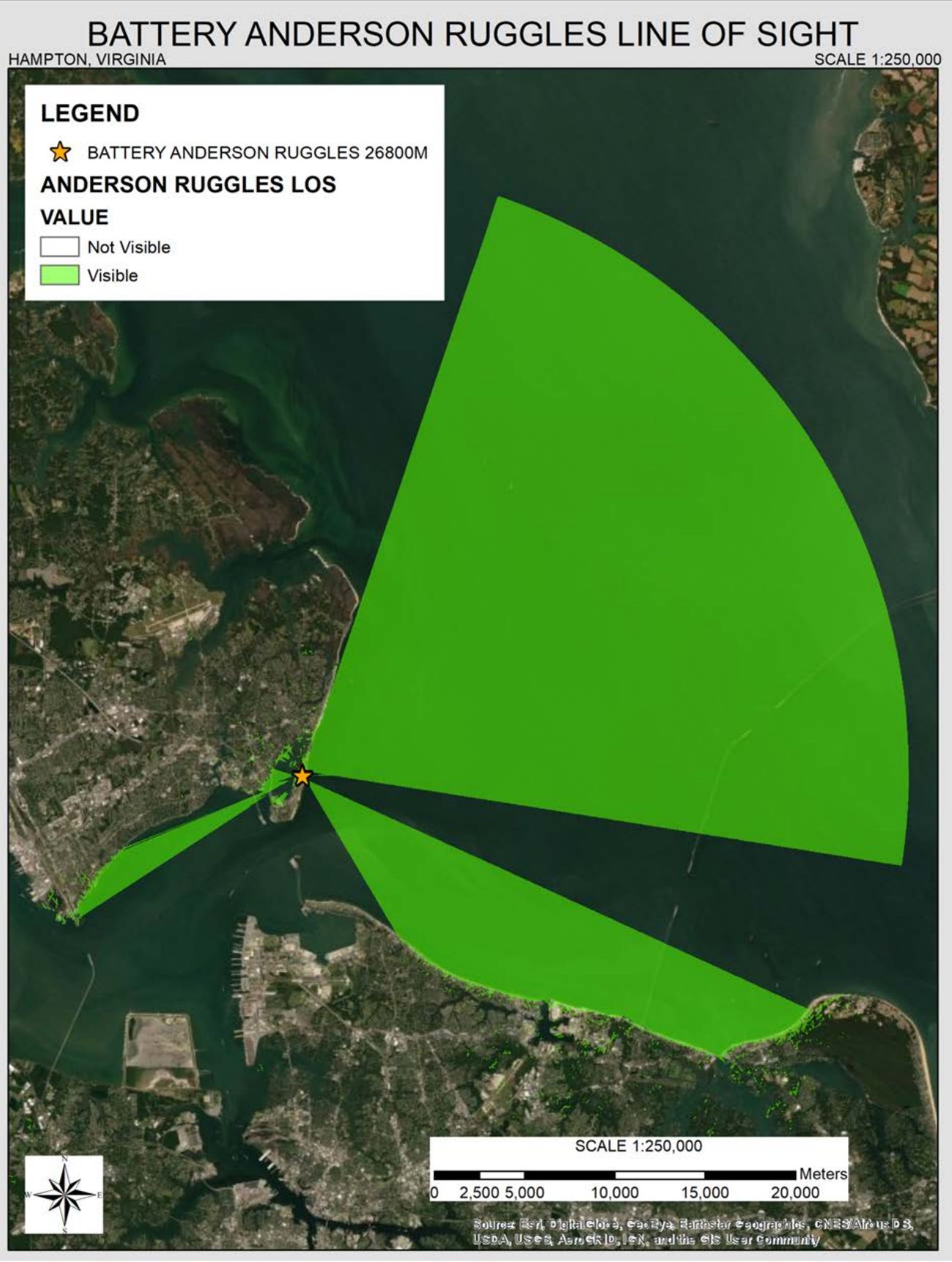
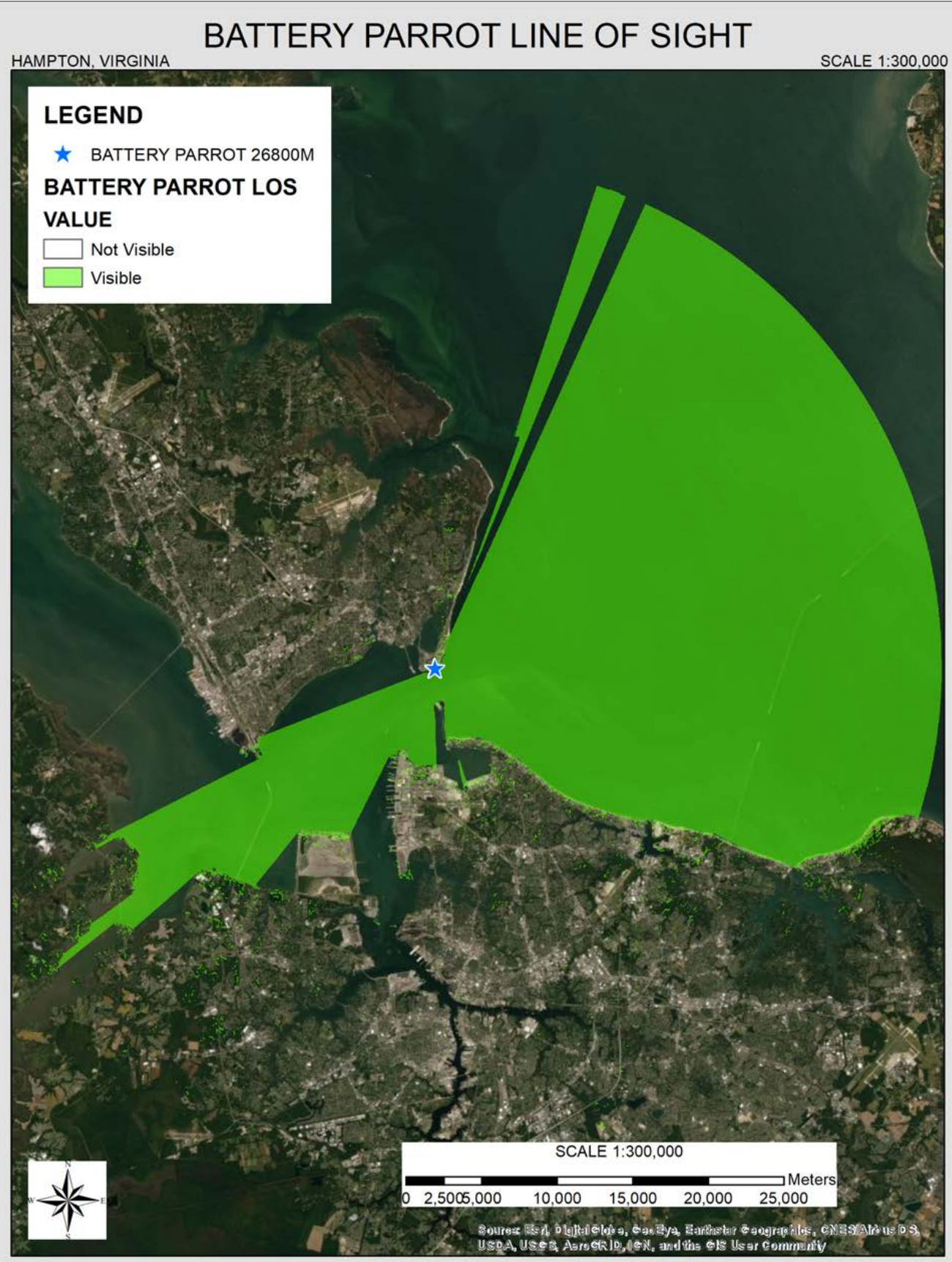
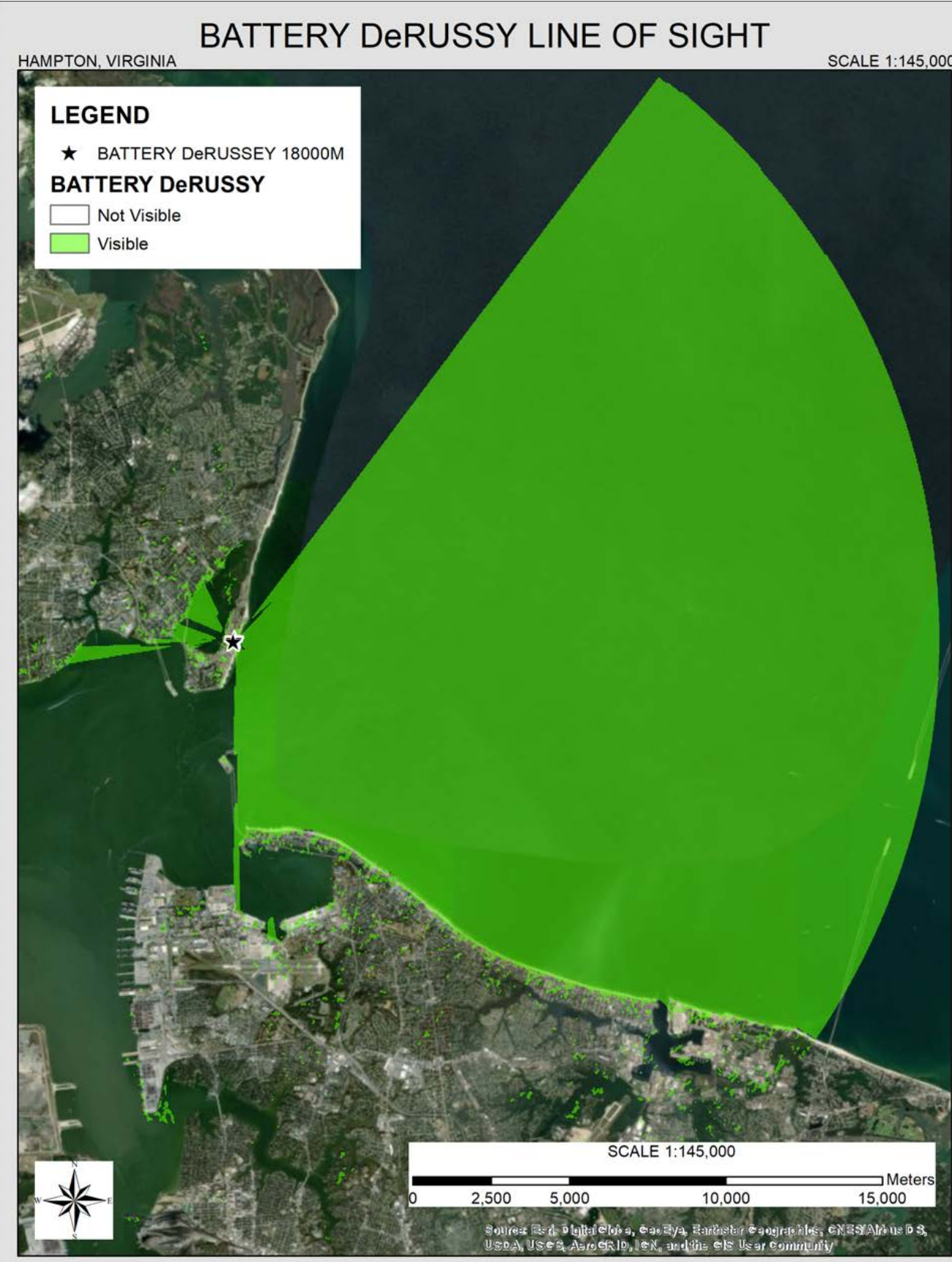
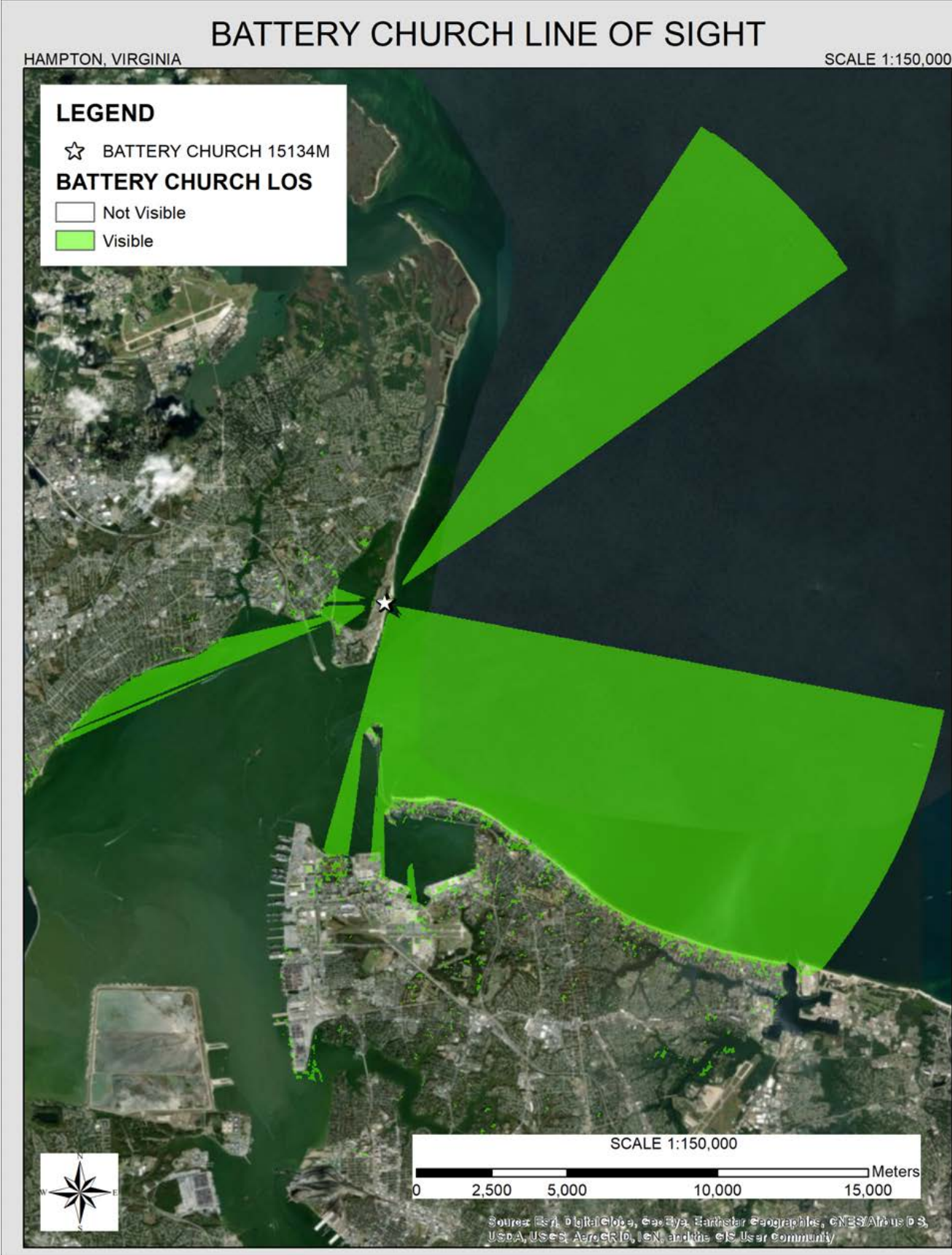
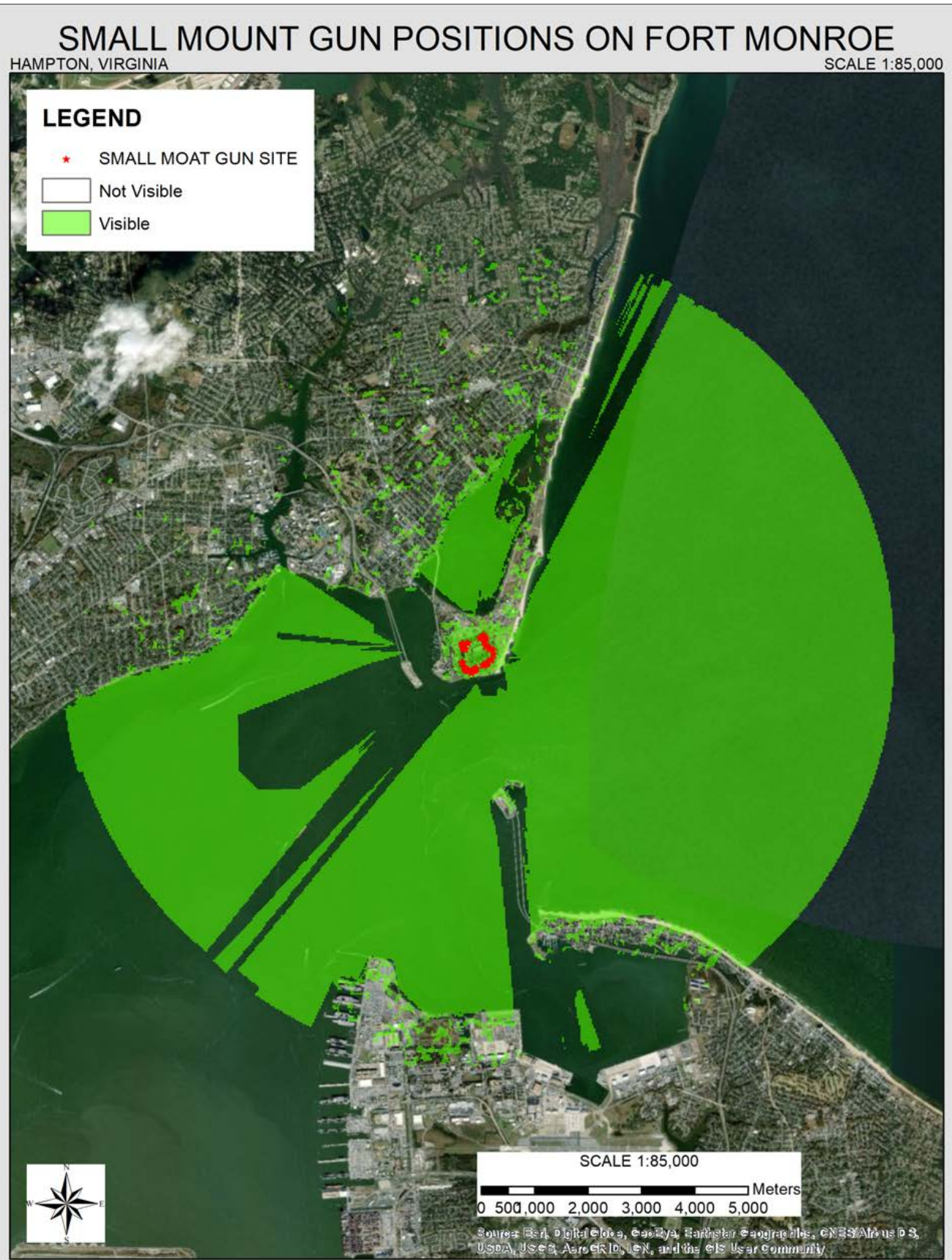
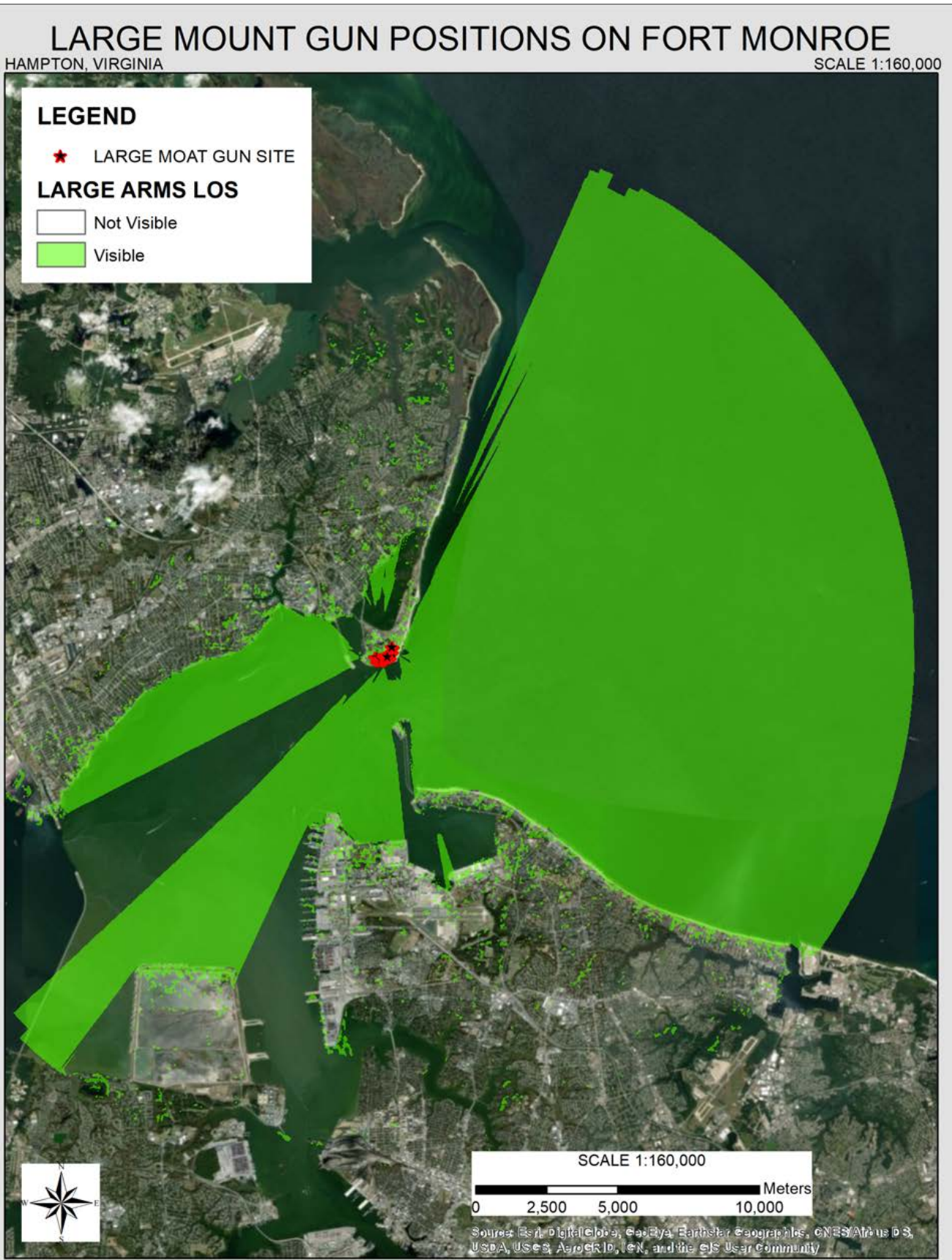
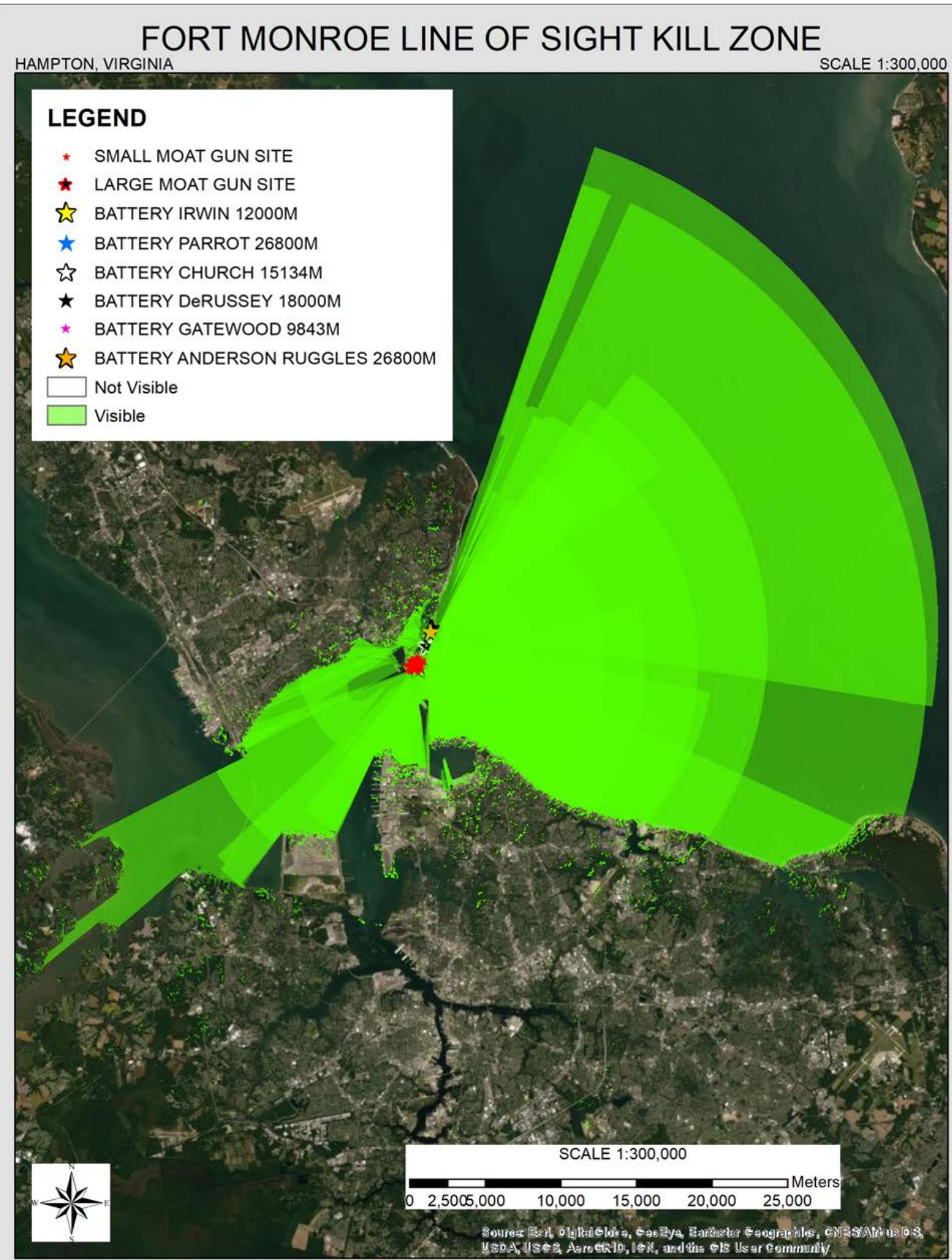
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THE GUNS OF FORT MONROE



Author: Chris Fox

Introduction: The objective of this research project is to analyze the interlocking fields of fire from the field artillery positions around the Bastion known as Fort Monroe located in Hampton Virginia. The research project will allow for the visualization of the artillery positions around the fort in one overview, as well as line of sight analysis from each artillery position within the moat. An analysis and line of sight for the artillery positions outside of the fort was also conducted. The 12 Inch M1895 and M1900 disappearing guns were the largest guns used at the fort and fired a projectile that weighed over a thousand pounds with the main gun weighing approximately 115,000 pounds. This gun had the capability to fire a projectile approximately 16,800 meters in distance and was operated by hand (Weinert,1990).

Purpose: The purpose of this project is to depict the maximum effective range for the military weapons systems used during the Civil War and post civil war time period.

Methodology: Fort Monroe Artillery locations were collected using the Trimble R2 high precision GPS receiver unit and Arc Collector on a handheld collection unit that was used for collecting and saving the Artillery pieces' precise locations and the metadata for each location. Each Artillery location was collected with less than 25 centimeter accuracy and was collected using 25 ground control points in order to maximize accuracy. The DEM was processed using ERDAS Imagine and Arc GIS Desktop.

Results: The outcome of the Line Of Sights processed for each location show that any ill-fated Confederate ship that would be unlucky enough to have a mission past Fort Monroe would find almost certain death within the interlocking fields of Artillery fire.

Acknowledgments: I would like to thank the Fort Monroe Authority and The National Park Service for allowing me to GPS locate the gun locations in the prohibited areas.