

United States Department of the Interior

U.S. Geological Survey National Geospatial Program

12201 Sunrise Valley Dr., MS 511 Reston, VA 20192

10/3/2019

Warren Swartz Jr., President Keweenaw Bay Indian Community 16429 Beartown Road Baraga, MI 49908

Dear Mr. Swartz,

The purpose of this correspondence is to provide notification and information regarding a U.S. Geological Survey (USGS) nationwide initiative, the 3D Elevation Program (3DEP), led by the National Geospatial Program (NGP). We are reaching out to you to provide information about 3DEP, invite your feedback and questions, and offer the opportunity to request formal government-to-government consultation regarding the program.

The USGS is the earth and natural science bureau within the U.S. Department of the Interior. The USGS mission is to provide impartial scientific information on the health of our ecosystems and environment, the natural hazards that threaten us, and the natural resources that sustain us. The USGS does not create regulations and does not have land management responsibilities.

In 2015, the USGS, along with other Federal, state, local and private agencies, established the 3DEP to respond to the growing need for three-dimensional mapping data of the United States. The program uses lidar (Light Detection And Ranging) technology to collect high-resolution elevation data. Lidar data are collected at high altitude from a fixed-wing aircraft using an instrument that sends a pulsed beam of light toward the ground. Reflections from this light beam are detected and collected by a sensor, forming a point cloud that is used to develop precise three-dimensional maps of the Earth's surface as well Digital Elevation Models (DEMs) of the bare earth surface.

From the lidar collection, 3DEP produces a range of products that are placed in the public domain. These include the lidar point cloud, 1-meter DEM, and a national 10-meter and 30-meter seamless DEM. USGS publishes the 3DEP data products on the USGS National Map website (<u>https://nationalmap.gov/</u>). USGS also provides a copy of the data to our federal, state, and local project partners. A 3DEP fact sheet is included with this letter that provides more information.



30-meter resolution DEM

10-meter resolution DEM

1-meter DEM

3DEP data can be used to support multiple applications, including flood-risk management, natural resources conservation, agriculture and precision farming, aviation safety, geologic mapping, and renewable energy development. As these data offer a precise depiction of the Earth's surface, unobscured by vegetation, they can also be used to identify and describe man-made changes to the Earth's surface, including archaeological and cultural sites. Lidar cannot detect any information below the ground surface.

3DEP's goal is to complete lidar coverage for the Nation by 2023. Over the next 5 years, we will be working with federal, state and local partners to acquire and publish data over the entire U.S. including your lands. We recognize the importance of reaching out prior to undertaking a project that may impact your Nation.

**Project Status:** 

- A recent lidar data collection by the Federal Emergency Management Agency included your tribal lands in Ontonagon County. We plan to release these data on The National Map. A map showing your lands in relation to the project area (shown in yellow) is attached to this correspondence, Attachment A.
- 2) In 2015, the State of Michigan and the Federal Emergency Management Agency completed a data collection that included your lands in Baraga and Marquette Counties. The USGS published these data through The National Map in January of 2018. We did not offer consultation on the publication of this project as required by our DOI Tribal Consultation Policy. The map in Attachment A shows this project area in pink.

If you have questions or concerns, want additional information, would like to discuss how the resulting data could be utilized by your Nation, or require formal government-togovernment consultation on the public release of the data, please contact me at 3DEPtribal@usgs.gov or 703-648-5000. If we do not receive a response from you within 45 calendar days of the date of this letter, we will assume 1) you have no questions or concerns about the recent project and we will proceed in making the data public, and 2) you have no questions or concerns about the 2015 project and we will continue to make the data available to the public. We welcome the opportunity to discuss and ultimately to share the resulting product with you. The USGS greatly values its relationships with Tribal Nations and we hope that this letter can help us begin a dialogue with you about how lidar can support tribal needs. We would be happy to provide a digital copy of the data to you upon request.

Respectfully,

Soil tril

Michael Tischler, PhD Director, USGS National Geospatial Program

CC:

Tribal Historic Preservation Officer, Gary F. Loonsfoot

Keweenaw Bay Indian Community Natural Resources Department

USGS Regional Director, Midcontinent Region, Scott Morlock (acting)

USGS Regional Tribal Liaison, Midcontinent Region, Bryan Richards

USGS National Map Liaison, Charles Hickman

USGS Office of Tribal Relations Head, Chris Hammond

USGS National Geospatial Technical Operations Center Deputy Director, Darcee Killpack

## Attachment A: Project Areas

