Kinzua Dam From Past to Present—
Allegany Territory

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A Brief History

The Seneca Nation of Indians is located in Western New York State
In the 1960’s the US Army Corp of Engineers (USACE) was authorized to build the Kinzua dam for flood control for the city of Pittsburgh, Pennsylvania. Authorization of the dam project meant permanent flooding of land and destruction of homes to the Seneca people along the Allegany River.
During this time, the USACE surveyed the lands on the west side of the Allegany Territory, the lands directly affected by the dam project.

Survey information was documented on 40 Mylar maps sized 30x42, covering approximately 21,000 acres.

Additionally assessments of each property were performed. A description and photograph were taken of each homestead impacted.
Utilizing a large format scanner, each map was saved to a TIF format, Grey scale, 300 dpi
Each map contained reference grid coordinates.

The maps were drawn in NAD 1927 Pennsylvania North-Zone Lambert system.

Utilizing an empty point feature class and the Absolute X,Y editing tool, I began creating reference points utilizing the grid coordinates on each map.

Research on the Coordinate system.
Created 680 reference points and labeled them accordingly.
Next Step was Georeferencing the original scans utilizing the Georeferencing Toolbar.
Overlap of the frames and title bar areas.
Because of the excessive overlap with the map frames and title blocks, the images were once again brought into Photoshop and these areas were cropped and the images were saved in a new folder.

All of the cropped images then had to be georeferenced, following the same procedure as before.
Utilized the ArcGIS Help file for ArcScan procedures

Interactive Vectorization method selected

Started the process to clean up the rasters

Used Dilation to thicken up the feature lines
Once the images were enhanced we decided what information we would be able to extract.

Features to be created included:
- Contour Polylines – 1350ft, 1365ft and 1375ft
- Stream Polylines and Polygons
- Railroad Right of Way Polygons
- Road Right of Way Polygons
- Building Footprint Polygons
Reviewed the Help files Exercise 1: Interactive Vectorization example
For the Contour Polylines I used the Vectorization Trace tool with Raster Snapping.
Continued the Interactive Vectorization method for the rest of the features
Attributes were included for each feature digitized, based upon available information.

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These Feature Classes have been used in numerous maps such as those displayed at Public Meetings.
Creation of the Story Maps

Story Map - Allegany Territory Pre and Post Kinzua Dam
This story map presents public GIS data for the Seneca Nation of Indians Allegany Territory. It includes aerial imagery from the 1960's showing the pre Kinzua dam Allegany River location, Homestead footprints and the 1365ft Elevation Contour. You have the ability to "swipe" the 1960's aerials from the map to compare then and now.

Story Map - Allegany Territory Kinzua Dam Removal – Onoville Community
This story map presents public GIS data for the Seneca Nation of Indians Allegany Territory. In the 1960's the US Army Corp of Engineers was authorized to build the Kinzua Dam for flood control for the City of Pittsburgh, Pennsylvania. Authorization of the dam project meant permanent flooding of land and destruction of homes to the Seneca people along the Allegany River. This story map shows the location of impacted homesteads in the Onoville Community.

Story Map - Allegany Territory Kinzua Dam Removal – Red House, Shongo and Jimersontown Communities
This story map presents public GIS data for the Seneca Nation of Indians Allegany Territory. In the 1960's the US Army Corp of Engineers was authorized to build the Kinzua Dam for flood control for the City of Pittsburgh, Pennsylvania. Authorization of the dam project meant permanent flooding of land and destruction of homes to the Seneca people along the Allegany River. This story map shows the location of impacted homesteads in the Red House, Shongo and Jimersontown Communities.
Utilized the previously digitized footprint polygons and the Feature to Point Data Management tool to get polygon center points for the 2,153 Building footprints.
New Feature Classes were created following the Story Map schema structure.

Selected out only the Building footprint points located on the Allegany Territory.
The points were then divided by the Community in which they were located.
Following the Readme file the images were prepared according to ESRI’s recommendations so they would display consistently.
Organize the flex and story maps in the wwwroot folder on our web server while attempting to maintain short URL’s.
Placed a text file in each folder with a description of what the map is and to see what version that map is on.
Each Story Map folder also had an image folder added to organize and simplify the URL’s to each image being displayed in the map.
When creating the ArcGIS online map to place in the Story Map, I took an example shared by ESRI on how to fill in the Item Details.
Tested the Story Maps and reordered the points with the Number field to get a better flow.

We sought out the help of the Seneca Iroquois National Museum Staff.

Presented the idea of the Story Maps to show the location of the removed homesteads.

They were excited about the prospect of utilizing the Story Maps for the Remember the Removal 50th Anniversary happening in September.
The Museum staff went through a Community at a time and wrote up descriptions.

As they were writing the descriptions they would bring up different homesteads that we did not have a location for.

The Museum had another smaller set of 95 Topographic maps done by the USACE.

These were also Scanned and Georeferenced using some existing points from the previous reference grid as well as creating new points.
The Result

- Created 4 Story Maps utilizing the homestead points and descriptions
- Created 1 Swipe Story Map utilizing the homestead polygons, 1365ft contour line and the 1960 - 1961 aerial imagery, in the form of a Mosaic Dataset which was referenced to WGS 1984 Web Mercator Auxiliary Sphere for upload to ArcGIS Online
Onoville was known as "Sugar Point" in early times. In 1810 after Complanter had a dream and burned his belongings, it is said he wandered from house to house until someone could interpret his dream. John Crouse found him and said "You shall henceforth be called O-no-no" (meaning cold). Onoville may have come from this origin.
Allegany Territory Kinzua Dam Removal - Onoville Community

For additional information, please contact S. Gray, Seneca Inquets National Museum (SMN), at (716) 435-1124.

Grace was a daughter of Riley Pierce and Edith (Lee) Pierce Anderson. Her grandparents, George R. Lee and Elizabeth Dowdy, lived on the Complanter grant. Perhaps this house belonged to her father, who died in 1946. There is no description of the house, which was located on the Onoville-Red Wing Road.
Allegany Territory Kinzua Dam Removal - Steamburg Community

For additional information, please contact S. Greer, Seneca Kinzua National Museum (SKNM), at (716)269-1104.

Quaker Bridge Town Hall

Around 1803, several Omendowagee families moved northward off Cumplander’s land in Pennsylvania, some settled south of Cold Spring Creek. This area later became known as “low banks.” There were already people living at a place called Old Town (at the old settlement) as well. This is before the surrounding area became known as Steamburg.

Steamburg Community
Nora was a daughter of Philo and Phoebe (Jackson) Nephew. Nora married Milton, a son of Jennie Eels and Frank Logan. Next she married Torrence Clark, a son of Adam E. and Edith (White) Clark. The house was built in 1927 and had 4 rooms in it.
Allegany Territory Kinzua Dam Removal - Cold Spring Community

For additional information, please contact K. Grey, Seneca Iroquois National Museum (SINM), at 716-394-1104.

Cold Spring Longhouse

Cold Spring was a self-sustaining community. It remained the center of the "Good Word" (Galwiyoh) along the Ohayo'up until the time of the Kinzua Dam, when the longhouse was removed to Steamburg. Some of the families you find in Cold Spring were descendants of early Handsome Lake followers.
Allegany Territory Kinzua Dam Removal - Red House, Shongo & Jimersontown Communities

For additional information, please contact K. Gray, Seneca Trooplick National Museum (SPNM), at 171-8545-1104.

The Red House, Shongo, and Jimersontown Communities were sparse settlements along the Ohio. In the late 1790's to the early 1800's, family members of Mary Jemison traveled to these locations and built homes. Many of the families who lived here in 1964 were descendants of these original Jemison/Jemerson and Shongo families.
3127: Miller Heirs

Charlotte M. Gordon, a daughter of Horatio Gordon and Ethel John married David C. Miller. David was a son of Charles and Mildred Miller. The bungalow type dwelling had 5 rooms on the first floor. A garage was located near the house.
The Kinzua Dam, located on the Allegheny River in Warren County, Pennsylvania, was built to protect the City of Pittsburgh, Pennsylvania from future flood damages. The Army Corp of Engineers and various federal agencies chose to disregard the land of the Seneca's when considering the consequences of the dam. The building of the $108 million dollar Kinzua Dam broke a Federal - Iroquois treaty, the Canandaigua Treaty of 1794, making it the most tragic event of the Seneca Nation's contemporary history.

Article III of the Canandaigua Treaty of 1794 states: "Now, the United States acknowledges all the land within the aforementioned boundaries, to be the property of the Seneca Nation, and the United States will never claim the same, nor disturb the Seneca Nation, nor any of the Six Nations, or of their Indian friends residing therein, and united with them, in the free use and enjoyment thereof, but it..."
Allegany Territory Kinzua Dam Removal - Onoville Community

For additional information: please contact S. Grey, Seneca Iroquois National Museum (SIJM), at (716)945-1104.

For more maps visit the SNI-GIS Homepage located [Here](#).
Also check out the Seneca Iroquois National Museum located [Here](#).
It's QUESTION TIME!!