There will be 5 minute breaks between each back-to-back presentation to facilitate transitions in Zoom.

Zoom links are available on request. Please contact Andrew Grogan - atgrogan@arizona.edu

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Presentation Title</th>
<th>Student Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/04/23</td>
<td><strong>LACKAWANNA RIVER WATERSHED SPATIAL ANALYSIS</strong></td>
<td>Jacob Becker</td>
</tr>
<tr>
<td>08/04/23</td>
<td><strong>Public Works Planning Branch Web Solution</strong></td>
<td>Jessica Gerski</td>
</tr>
</tbody>
</table>
LACKAWANNA RIVER WATERSHED SPATIAL ANALYSIS

Jacob Becker
jacobsbkr@arizona.edu

08/04/23, 10:30 - 10:55 AM

Abstract:
The purpose of this study is to create and display a spatial analysis study on the Lackawanna River Watershed in Northeastern Pennsylvania. Specifically, an analysis that displays data containing contaminants in the air and water within the watershed study area, potentially correlating with the areas heavy use of coal mining historically. Using fugitive emission data to measure air contaminants and water pH, sulfates, and hard metals data to examine potentially polluted waters will show how this small yet essential watershed has been impacted. It is extremely important to run these studies to show the damage that is caused by coal mining and create preventative measures for the future. Protection of watersheds is paramount in conserving the local flora and fauna that feed us and nurture their surrounding ecosystems.

Keywords: analysis, mining, statistics, pollution, spatial, watershed
Public Works Planning Branch Web Solution

Jessica Gerski
laruegerski@arizona.edu

08/04/23, 11:00 - 11:25 AM

Abstract:

In a Marine Corps Installation public works department, the planning branch and Geospatial Information and Services branch needed a solution for collecting geospatial sites and data in a hybrid working environment. In the past, printed maps were passed back and forth between the branches with many details missed or not communicated properly. This project develops a web solution for collecting data and displaying the data at a glance. By using Field Maps, the planning branch can easily create new projects, modify existing information, or archive no longer needed projects. This data is displayed using standardized symbology on a web map and popups are enabled to show additional information as needed. A dashboard was also created to easily show the web map, project information, and number of project sites and project boundaries. Coordination and communication would still need to exist between the branches, but this solution greatly reduces the amount of hours and personnel needed to create and maintain the future project data.

Keywords: Field Maps, Web Maps, Dashboards, Public Works, Data Sharing