

Interagency Appalachian GeoMine Pilot Project Fact Sheet

10-28-2013

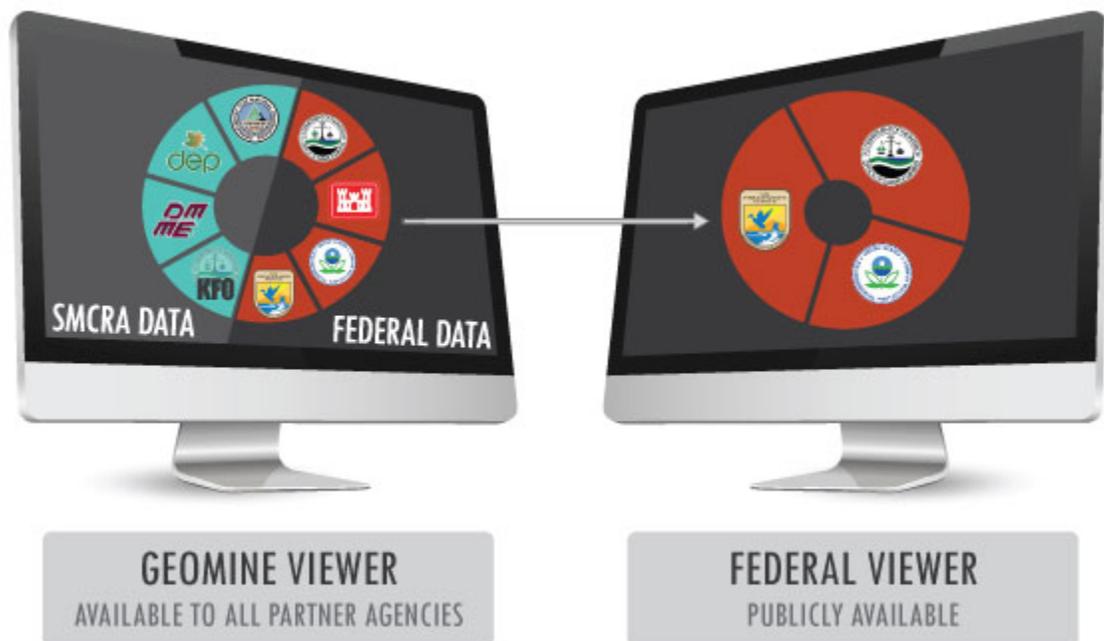
The GeoMine Appalachian Pilot Project is an interagency collaboration that began in August 2009 with the goal to develop and deploy a prototype interactive Internet-based mapping application (GeoMine Viewer), to display and share available State and Federal geo-data among eight partner agencies and eventually the public. Participants include OSM, FWS, USACE, EPA, KY, VA, WV, the TN federal program, and the Interstate Mining Compact Commission.

The GeoMine Viewer is an easy-to-use cloud-hosted web application that allows Federal and state staff and managers to view and share geospatial data in various desktop and mobile computing mapping applications including ESRI software (ArcGIS, ArcGIS Server), Google Earth, iPhone/iPAD apps, etc. Pilot Project geospatial layers were designed using approved American Society for Testing and Material Coal Mining and Reclamation Data Standards.

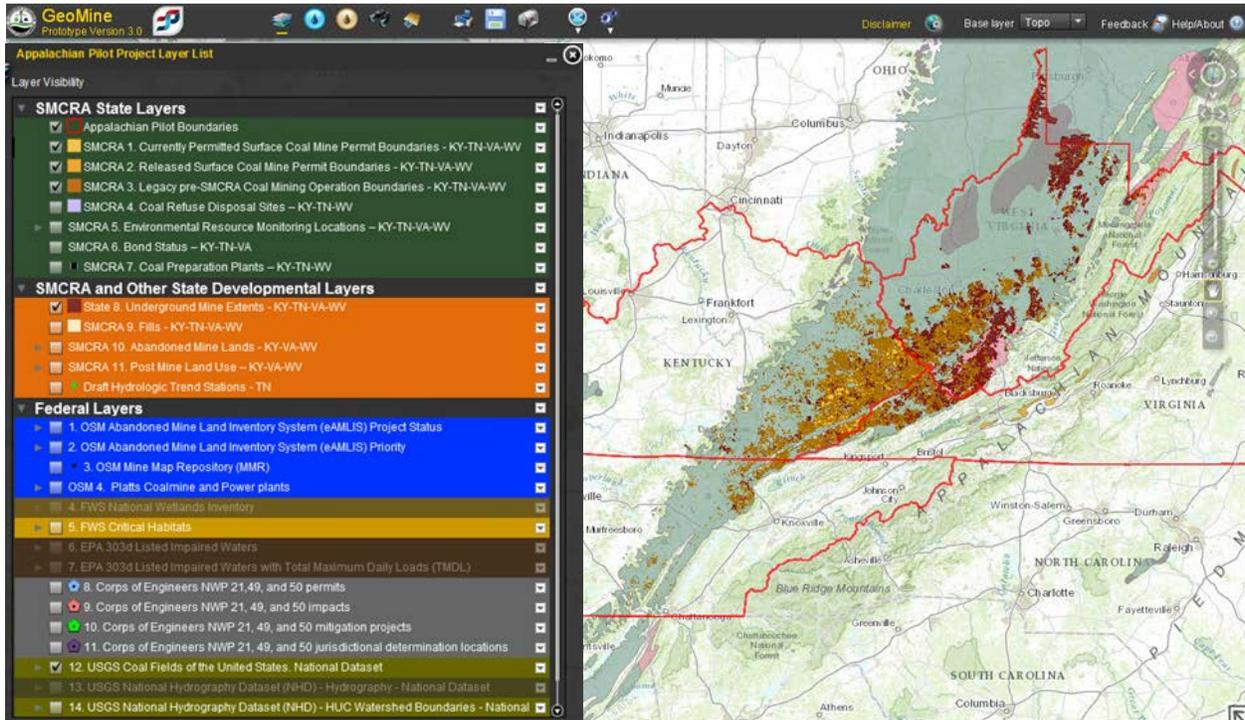
In 2012, OSM seized an opportunity to create a Federal-data-only viewer (Federal Viewer), to accommodate current nationwide data needs within other coal mining States. We are currently in the testing phase of this national Federal data viewer, which will be released to the public upon executive approval. This will serve as a precursor to the eventual implementation of the national GeoMine Viewer that would incorporate both SMCRA state and Federal coal mining geospatial data.

Pilot Project Next Steps

- Launch Federal Viewer for public access upon executive approval. Distribute final draft report for Interagency executive approval (November, 2013)
- Publish final report and recommendations (November, 2013)



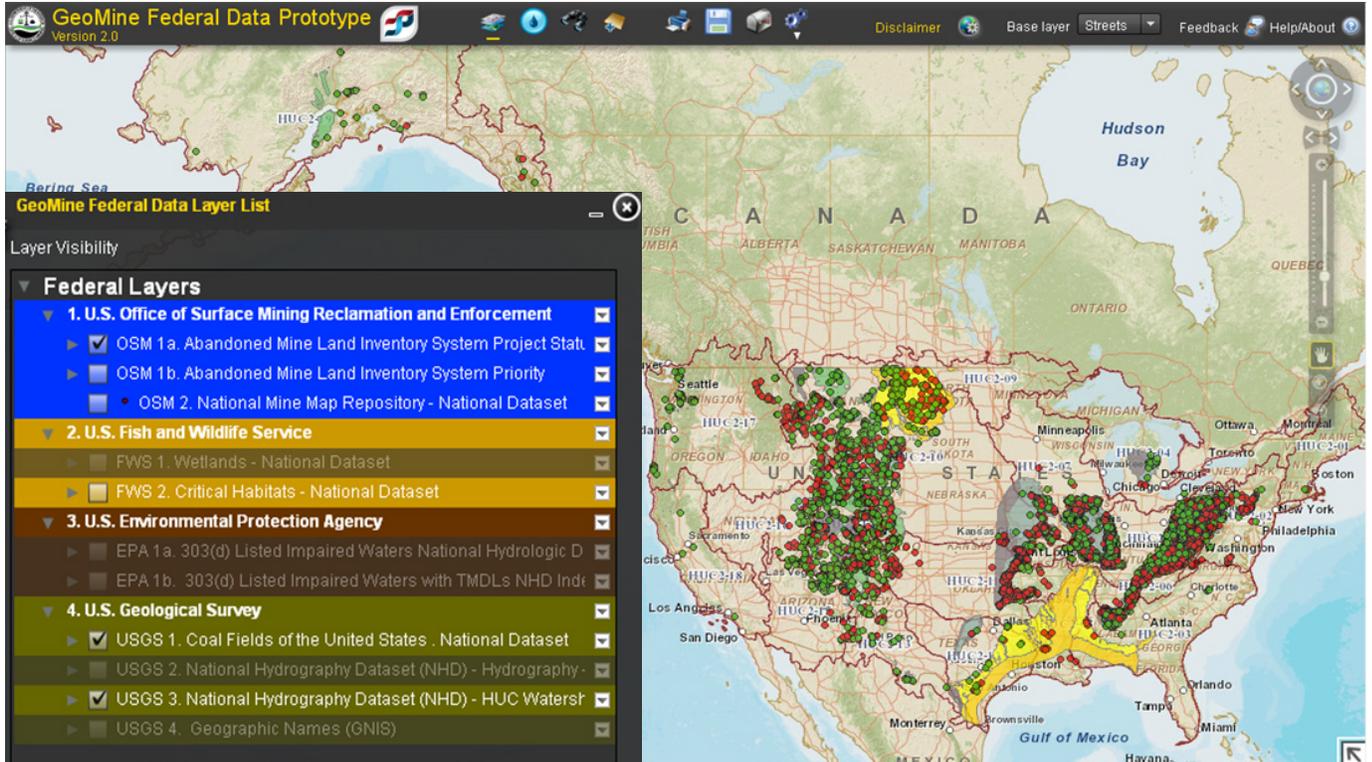
GeoMine Viewer



GeoMine Viewer Features:

- The Pilot Project Viewer 3.0 prototype has 25 geospatial layers and 2 hydrologic tools contributed by State and Federal partners:
 - SMCRA agencies** – 11 SMCRA permit-related layers covering KY, TN, VA, and WV, including: Coal Mine Permit Boundaries, Coal Refuse Disposal sites, Environmental Resource Monitoring Locations, and Hydrologic Trend Station data for WV.
 - OSM** – point locations for the Abandoned Mine Land Information System (eAMLIS) inventory and project sites, and Mine Map Repository underground coal mining map collection.
 - FWS** – 2 layers: National Wetlands Inventory and critical habitat for threatened and endangered species.
 - USACE** – 4 layers associated with Nationwide permits.
 - EPA** – 303d and Storage and Retrieval (STORET)/National Water Information System (NWIS) hydrologic data.
- Federal Cooperative Agreement grants totaling \$1.1 million were awarded in 2011 and 2012 to KY, VA, and WV, which have already facilitated the creation of over 10,500 new digital SMCRA coal mining boundaries.
- Over 128,000 SMCRA coal mining activity sites have been added to the Viewer, including over 3.5 million acres of surface coal mine operation boundaries.
- Over 415,000 Federal agency sites, including hydrologic sampling stations with analytical data.
- ‘Add Data from Web’ tool allows upload of external map service layers for overlay and map-making in GeoMine
- Print, Save, and Email tools allow users to share maps created in the viewer

Federal Viewer



Federal Viewer Features:

- Viewer 2.0 has 7 national geospatial data layers and 1 hydrologic widget from OSM, FWS, and EPA, as well as other tools and USGS base layers present in the GeoMine Viewer.
- OSM – point locations for the Abandoned Mine Land Information System (eAMLIS) inventory and project sites, and Mine Map Repository underground coal mining map collection.
- FWS – 2 layers: National Wetlands Inventory and critical habitat for threatened and endangered species.
- EPA – 303d and STORET/NWIS hydrologic data.
- Phase I and II product testing by GeoMine interagency team, SMCRA GeoCommittee, nationwide SMCRA data stewards, TIPS Steering Committee, and TIPS team is now complete. Over 60 reviews and comments were taken, and appropriate changes and upgrades are now being incorporated into the viewer.



Primary Pilot Project Team Members: *OSM* - Bill Clark, *OSM Sponsor*, Robert Welsh, *Project Manager*, Greg Morlock, *System Administrator*, Chris Benson, *Data Analyst*, *IMCC* - Greg Conrad, *Kentucky* - Daryl Hines, *Virginia* - Daniel Kestner, *West Virginia* – Mike Shank, *FWS* - Christy Johnson-Hughes, *EPA* - Brian Topping, *ACE* - Desiree Morningstar