

The EPA Remote Sensing Archive: A Unique Agency Resource

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Healthy Communities and Ecosystems

Often environmental issues need to be explored through a historical perspective, to look back into the past to discover what happened at a particular location and when. Remotely sensed imagery is one way to see the landscape and what transpired in a previous time. The EPA is often responsible to look into the past to facilitate a better future for the environment and all of its inhabitants. There is a little known facility located in Las Vegas, Nevada, which can open up this window to the past.

The EPA Remote Sensing Archive had its beginnings in 1973 when the Environmental Photographic Interpretation Center (EPIC) was formed to fulfill EPA Regional and Program Office requests for remote sensing data and technical support.

EPIC has been customizing both analog and digital geospatial products for the regions for over 30 years. The primary product requested is a historical analysis report. This type of report tracks the environmental and anthropogenic changes visible at a site over many decades through the use of historical aerial photographs. The materials and products generated from this effort and many other geospatial research projects completed throughout the years are housed in this facility. The data is available to be used by EPA employees to support other projects with the need for geospatial data in the same geographic area.

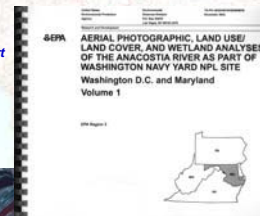
What does the Archive contain?

The Archive contains imagery dating back to the early 1900s. The original sources and dates of this data are as varied as the format and scales of the imagery housed at the facility. Imagery has been flown by the EPA and acquired from the USGS and other government agencies, state and local offices, state DOTs, and private firms.

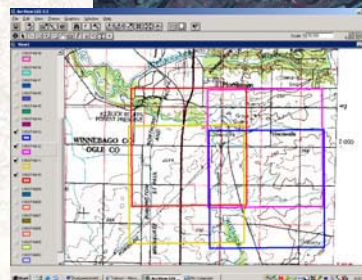
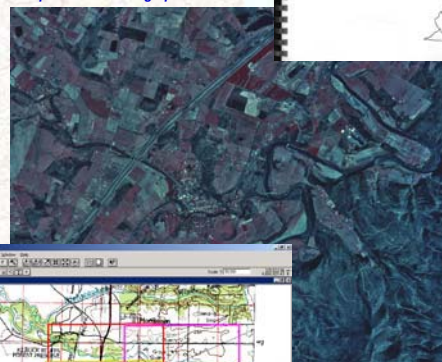
The EPA Remote Sensing Archive is a rare and unique collection of geospatial data, which spans almost a century. Some of the film is unique to EPA and exists nowhere else.

- 5,500 rolls of aerial photography
 - In a variety of formats, mostly 9"x9"
- 90,000 individual frames of film
- 4,150 EPIC-generated reports
- 85 map flats full of maps, oversize documents, and enlarged photos
- 4,000 CD/DVDs containing digital imagery
 - DOQQs and scanned images, including data from various sensors like Landsat, IKONOS, Hymap, AVIRIS, and Hyperion
- Soil Surveys
- And more!

Sample: Report



Sample: Aerial Photograph



Sample: Footprints in the On-Line Database

Uses of the Archive holdings

- GIS
- Remote Sensing
- Time series analysis
- Landuse change detection
- Litigation for environmental suits
- Aerial photographic interpretation
- Photogrammetry
- Documents historical conditions

Ongoing projects and tasks

- Analog-to-digital conversion – reports & film
- On-line searchable database for Agency-wide access - metadata generation and footprint generation
- Inventory control and management
- Technical and research support



The Report Collection

The Roll Film Collection



**SEND US YOUR
GEOSPATIAL DATA!!!!**

The Future

Remote Sensing Data Portal

2006 initiative proposal to transform the Archive into the centralized, high bandwidth, digital geospatial data facility for the Agency. This would involve the download, storage, and retrieval of any geospatial data, including GEO data.

What can the EPA Remote Sensing Archive do for you?

Ask for information on how to access this valuable resource.

Fact sheets and EPIC order form for services available at <http://intranet.epa.gov/epicrest/default.htm>