08.02.02. Landsat 7 – 18 September 1999

1.0 File Format

Multiband ERDAS Imagine (img) or geotif format. Includes bands 1, 2, 3, 4, 5, and 7.

2.0 Theme Metadata

Metadata provided by USGS for the original image.

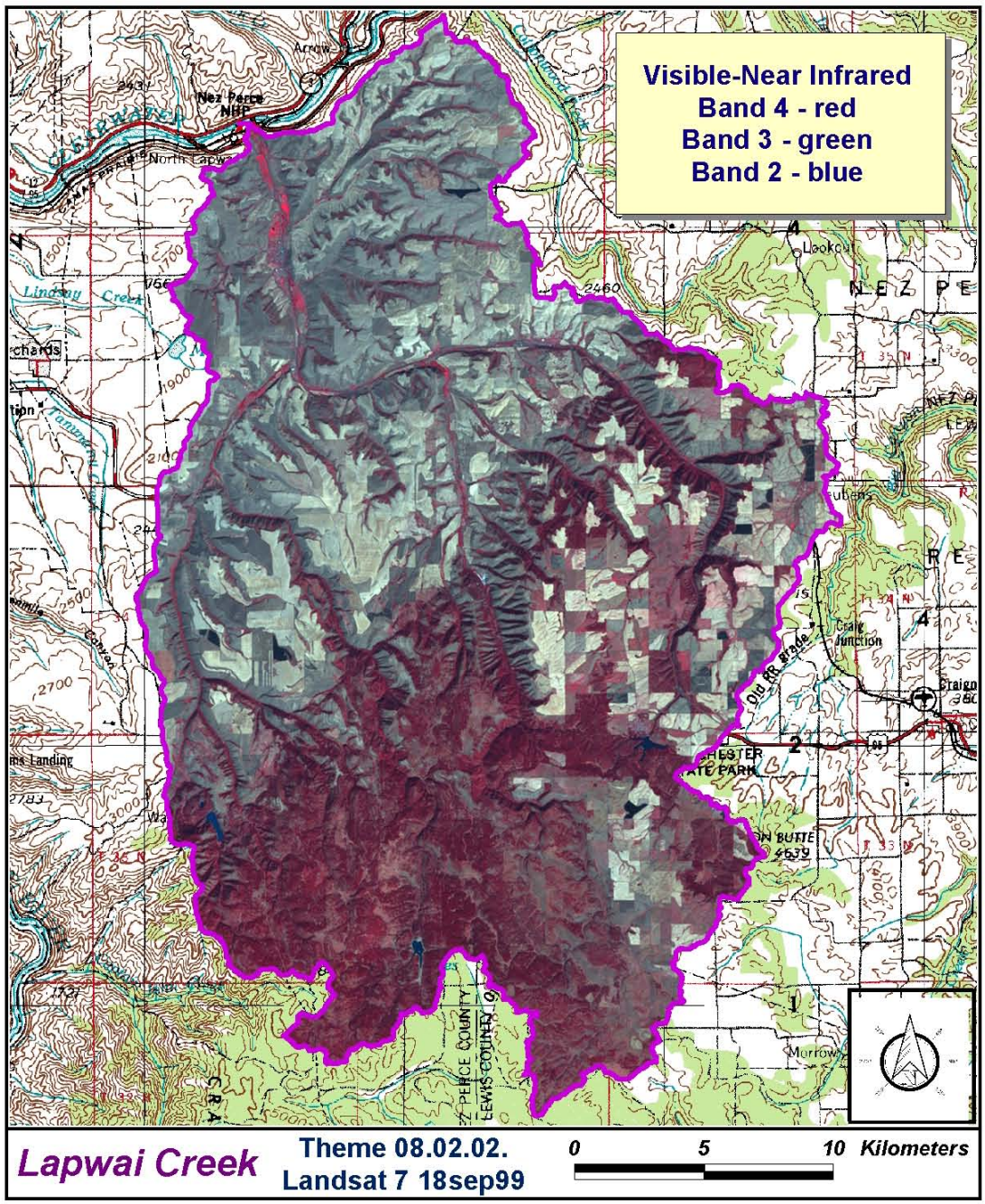
3.0 Description

Landsat 7 provides repetitive coverage of continental U.S. on a 16-day cycle and less frequent coverage of other regions. Landsat 7 carries the Enhanced Thematic Mapper Plus (ETM) sensor that records six bands of reflected energy in the visible, near-infrared, and shortwave spectral regions at a ground pixel resolution (GPR) 30 meters (nominal). Emitted thermal imagery is recorded in a single band (band 6) at 60-meter resolution. The ETM sensor also records a higher resolution (15 GPR) panchromatic image (band 8) that helps to visually enhance detail in the other bands. Images are georeferenced by USGS and may be viewed with most GIS and remote sensing software packages.

Landsat imagery is useful for many watershed scale assessment tasks. Spatial and spectral information in the visible and near infrared bands (1,2,3,4) helps characterize land cover. Surface areas of large water bodies may be delineated from the near and shortwave infrared bands (4,5,7,8). The thermal band (6) shows relative temperatures of land and water surfaces.

4.0 Projection

Original imagery reprojected Universal Transverse Mercator Zone 11 North, North American Datum of 1927.



Bonneville Power Administration

Satellite and Aerial Imagery Demonstration Project

Teasdale Environmental Associates, PLLC © 2003