

Ross S. Lunetta, Research Physical Scientist, in EPA's National Exposure Research Laboratory

Exposure Methods and Measurements Division

[Mailing Address](#)

lunetta.ross@epa.gov

Area of Expertise: Current research interests include the application of advanced airborne and spaced-based remote sensor systems and spatial data analysis tools to characterize landscape condition and monitor changes at watershed to regional scales. The development methods for monitoring vegetation phenology to characterize landscape dynamics, land-cover condition, and identify landscape changes in near real-time using automated approaches. Monitor and characterize annual changes in croplands using phonological categorization methods to assess the potential impacts of land-use activities on valued ecosystem services. Develop strategies, methods, and sampling designs to integrate *in situ* water quality monitoring with satellite remote sensor data to extend and enhance current surface water quality monitoring capabilities. Further the integration of remote sensor derived measurement data with spatially distributed landscape process models for high priority EPA issues including nutrient loading, sedimentation, coral reef habitat diversity, and ecosystem sustainability.

Select Publications:

Lunetta, R., B. Schaeffer, R. Stumpf, D. Keith, S. Jacobs, AND M. Murphy. Evaluation of cyanobacteria cell count detection derived from MERIS imagery across the eastern USA. REMOTE SENSING OF ENVIRONMENT. Elsevier Science Ltd, New York, NY, 157(0):24-34, (2015).

Lunetta, R., D. Davis, AND M. Stege. Validation Of DEM Data Dvied From World View 3 Stero Imagery For Low Elevation Majuro Atoll, Marchall Islands. Presented at ASPRS Annual Conference, Tampa, FL, May 04 - 08, 2015.

Lunetta, R., D. Davis, AND M. Stege. Validation of DEM Data Derived from World View 3 Stereo Imagery for Low Elevation Majuro Atoll, Marshall Islands. Presented at ASPRS Annual Conference, Tampa, FL, May 04 - 08, 2015.

View more research publications by [Ross Lunetta](#).

Education:

- B.S. Biology (Physiology), Northern Michigan University 1977
- M.A. Biology (Limnology/Physiology), Northern Michigan University 1979
- Post Master's (Limnology/Physiology), Wayne State University 1979-81

- Post Master's (Remote Sensing), Eastern Michigan University 1981-83

Professional Experience:

- Research Physical Scientist, USEPA, ORD, NERL, ESD, LCB, RTP, NC 1998-2016
- Embassy Science Fellow, Majuro Embassy (2014) and Jakarta Embassy (2015)
- Acting Branch Chief, USEPA, ORD, NERL, ESD, LCB, RTP, NC 1996-1998
- ORD Regional Science Advisor, ORD, OMMSQA-HQ, DC & R-10 1994-1996
- Environmental Scientist, ORD, OMSQA, Las Vegas, NV 1988-1994
- Ecologist, USACE, Detroit District Office, Detroit, MI 1982-1988
- Research Scientist, Wayne State University, Biology Dept., Detroit, MI 1979-1982