

CHWA CESU Partners Meeting
June 8, 2018
Glossary of Scientific and Technical Terms

Kathryn Smith, “Tolson's chapel & school national historic landmark nomination”

- **National Historic Landmark:** A nationally significant historic place designated by the Secretary of the Interior because it possesses exceptional value or quality in illustrating or interpreting the heritage of the United States. There are just over 2,500 historic places bear this national distinction. The program is administered by the National Park Service.
- **Era of Reconstruction:** In U.S. history, the period (1865–77 and later) that followed the American Civil War and during which the federal government attempted to redress the inequities of slavery and its political, social, and economic legacy and to solve the problems arising from the readmission to the Union of the 11 states that had seceded at or before the outbreak of war.

Andrew Landsman, “CESU projects at the C&O Canal National Historical Park”

- **Metabarcoding:** analytical method to assess biodiversity by extracting and amplifying multiple DNA sequences in order to identify species
- **LiDAR:** Light Detection and Ranging technology that uses laser pulses to determine the height of structures and vegetation

Maggie Daniels, “Technology-based Visitor Use Counts and Reporting: KOWA Pilot Test:”

- **Axper:** Company that provides 3D people counters
- **GFCI:** Ground-fault circuit interrupter
- **Hotspot:** Physical location for internet access using a router and internet service provider
- **PIA:** Privacy impact assessment
- **Router:** Device that directs data between networks

Ami Riscassi, “The Shenandoah Watershed Study- a long-term stream water quality monitoring program”

- **NADP:** National Atmospheric Deposition Program- A federal program that measures precipitation chemistry and studies its effects on the environment.
- **CASTNET:** Clean Air Status and Trends Network is an EPA program that measures ambient concentrations of sulfur and nitrogen species as well as rural ozone concentrations in the atmosphere.
- **Sulfur dioxide (SO₂):** chemical emitted during combustion of fossil fuels
- **Sulfuric acid (SO₄²⁻):** strong acid that is generated when sulfur dioxide combines with water in air
- **Acid anion:** negatively charged ion (i.e. sulfate, nitrate, chloride) that can associate with hydrogen to form an acid
- **Base cation:** a positively charged ion (i.e. calcium, magnesium, potassium, sodium) that can associate with an acid anion (instead of a hydrogen ion)
- **Acid neutralizing capacity:** ions that have the ability to neutralize a hydrogen ion (i.e. bicarbonate)

- **pH:** a log scale used to specify the acidity or basicity of an aqueous solution. It is the negative of the base 10 logarithm of the activity of the hydrogen ion. Solutions with a pH less than 7 are acidic.

Teresa Mourad, “Ecological Society of America: advancing the understanding of life on Earth”

- **EcoEd Digital Library (EcoEdDL):** An online repository of teaching resources, one of the portals in the LifeDiscoveryEd Digital Library (LDDL). www.lifediscovered.org
- **EcologyPlus:** A Design and Development Launch Pilot (DDL) funded by the NSF INCLUDES program, to provide mentoring, networking experiences and timely career resources for participants from undergraduate through early career years to explore the many exciting facets of ecology and related fields. www.ecologyplus.esa.org
- **Life Discovery: Doing Science Biology Education Conference (LDC).** A conference every 18 months for educators organized by the Life Discovery partners who also curate LDDL. The conference focuses on the goals of Vision and Change in Undergraduate Biology Education www.visionandchange.org www.esa.org/ldc.
- **REEFS: Resources for Ecology Education, Fair and Share.** An annual workshop held at the ESA annual meeting for educators interested in enhancing and sharing their ideas for teaching. www.ecoed.esa.org
- **Strategies for Ecology Education, Diversity and Sustainability (SEEDS):** ESA’s flagship education and diversity mentoring program whose mission is to diversify and advance the ecology profession through opportunities that stimulate and nurture the interest of underrepresented students in college to participate, and to lead in ecology. www.esa.org/seeds
- **Sustaining Biological Infrastructure (SBI):** This ESA initiative helps leaders of biological infrastructure projects (including digital data resources, field stations, labs, and collections) grow their skills in financial management, planning, and communication. SBI’s 3-day Strategies for Success course is offered in June in Maryland and October in Colorado. A 1-day version will be offered at the Organization of Biological Field Stations annual meeting in September. www.esa.org/sbi

Joseph Pitula, “Disease and population structure of the blue crab in the Maryland coastal bays”

- **QPCR:** Quantitative Polymerase Chain reaction
- **FVCOM:** a finite volume, free-surface, 3D hydrodynamic model