Term	Definition
Alias	Multiple values with essentially the same meaning. For example, most chemical names can be written in several different ways.
Analyte	The substance, a property of which is to be measured by chemical analysis.
Application programming interface (API)	A system for software applications to talk to each other through a set of defined interfaces.
Attribute	1. Textual or numeric information associated with a piece of data, file, or graphic object such as a well or a block in a drawing. 2. An inherent characteristic, an accidental quality, an object closely associated with or belonging to a specific person, place, or office; a word ascribing a quality.
Audience	A person, group, or organization that is affected, potentially affected, or has any interest in a project or a project's outcome, either directly or indirectly.
Audit	Looking at key metrics to create conclusions about the characteristics and properties of a data set. Specifically, an environmental data audit is an assessment of existing project data to verify quality and completeness.
Authoritative database	A database that is recognized by the organization to be valid or trusted because it is considered to be highly reliable or accurate or from an official publication or reference (for example, the U.S. Postal Service is the official source of ZIP codes in the United States).
Back-end database update	Database update performed using a query on a database table or tables, as opposed to using the application/user interface.
Bathymetric	Topography of a seafloor or lakebed, often displayed on maps as contours to indicate depth below the water surface.
CAS Registry Numbers	Unique and unambiguous identifiers for specific substances.
Cascading style sheets (CSS)	A standardized protocol for adding style (for example, fonts, colors, spacing) to Web documents.
Censored data	Data where the exact value is not known, and only limits at one or both ends of the distribution are quantified by a fixed value such as a detection limit.
Characteristic	A property of something that is to be measured.
Check constraint	CHECK is a SQL statement that is used to limit the value range that can be placed in a column within a database table.
Chemical form	Whether a nutrient is reported in elemental or molecular form. For example, nitrate as NO3 is the molecular form, and nitrate as N is the elemental form reporting only the nitrogen portion.
Column	Vertical delineation within a table.
Comma-separated values (CSV) text file	A type of delimited text file in which the values are separated by commas. Commonly used in data exchange as an electronic data deliverable (EDD).
Commercial-off-the-shelf (COTS)	A software and/or hardware product that is commercially ready-made and available for sale, lease, or license to the general public.
Completeness	The extent to which all relevant data sets are in hand and contain all of the required data.
Computer processor unit (CPU)	The primary processor in a computer that handles interpreting user input, data calculations and program execution.
Consistency	Data quality indicator where the same type of information is always represented in the same way.

Coordinate accuracy	(1) The degree to which the result of a measurement or calculation of a coordinate set conforms to the correct values. (2) The error range of the coordinates identifying how well the location of an observation or object in a GIS data set conforms to the actual location in the horizontal or vertical planes.
Coordinates	Two or three numbers that define the location of a point, such as a location on a map. Coordinates are related to a coordinate system, which defines the scale and units of the coordinates, such as Cartesian (linear XY) or spherical (latitude-longitude).
Correctness	Measurements are accurate and sufficiently precise.
Country food study	Regional Canadian term for food and medicine used by local inhabitants from the local environment, including plants, animals, and fish.
Cross-tab format	Values are split into columns based on one or more associated attribute(s). For example, a table of well sampling results with well names and dates as row headers and analyte names as column headers is considered a wide format. May also be referred to as unstacked format.
Crosswalk	A table that relates valid values from one EDMS to another. Valid value definitions are very important when making a crosswalk.
Data catalog	A listing of data and associated metadata available within an organizational structure.
Data category	Description of data that shares a unique set of defining characteristics that are useful for classifying and using the data, such as geospatial data, unstructured data, sampling data, etc.
Data dictionary	Any place where business and/or technical terms and definitions are stored. Typically, data dictionaries are designed to store a limited set of available metadata, concentrating on the names and definitions relating to the physical data and related objects of systems implemented or in development.
Data exchange	Compiling data into a defined electronic data deliverable (EDD) for the purpose of transferring data to another system. Data exchange should ideally be planned prior to data collection.
Data field	A place within a table where a specific type of data is stored (sometimes referred to as a field, column, or attribute).
Data format	The structure of an electronic data deliverable (EDD), which is used to transfer data from source to target.
Data governance	The exercise of authority, control, and shared decision-making (planning, monitoring, and enforcement) over the management of data assets.
Data lifecycle	A conceptualization of how data is created and used that attempts to define a “birth-to-death” value chain for data, including acquisition, storage and maintenance, use, movement to archive, and destruction.
Data logger	A lightweight, handheld field computer or device used to store data collected by a sensor or GPS receiver. The action is described as “data-logging”.
Data management plan	A formal document outlining how data should be handled throughout the data lifecycle.
Data management team	Group of people tasked with maintaining the integrity of an environmental data management system.
Data migration	A type of data exchange where the two data management systems do not have a pre-existing data export/import process. Data migration is typically a one-time process and often requires transformation of data from the source EDMS before importing to the target EDMS.
Data owner	An individual or organization that is responsible for definitions, policy, and practice decisions about data within their area of responsibility.

Data qualifier	Indicator of remarks from the data provider, usually regarding quality issues, and often written as 1- or 2-digit codes.
Data quality objective (DQO)	A data planning goal that results from a systematic, iterative planning process to establish acceptance criteria for collecting data of sufficient quality and quantity to support the goals of a study. Important overarching questions to consider throughout the process are, for example, what kind of project do you have, why are your data important, who is your audience, and what is the intended use of your data.
Data reporting	Collecting raw data, transforming it into a standard and usable format, and serving it out to users, through an application with a user interface or by direct querying.
Data sharing agreement	An agreement between parties that describes the allowed activities, uses, and restrictions regarding data shared between the parties.
Data sources	The original material from which a data set was obtained, or the underlying data that provides the basis for calculated results. Data sources can include older data sets, field measurements, laboratory analyses, historical maps, published historical or reference material, interviews, Traditional Ecological Knowledge, etc.
Data steward	A person or a group of persons that represents the interests of all stakeholders and must take an enterprise perspective to ensure enterprise data is of high quality and can be used effectively.
Data stewardship	The accountability and responsibility for data and processes that ensure effective control and use of data assets and is enabled by defining data stewards within the organization.
Data type	1. A category of physical data structures with common physical properties and uses, such as numeric, alphanumeric, packed decimal, floating point, datetime, etc. 2. A set of distinct values characterized by properties of those values and by operations on those values.
Database management system (DBMS)	Software that supports the creation of multiple custom databases, most commonly relational databases. Examples include Microsoft Access, SQL Server, PostgreSQL, and Oracle.
Defensible	The ability to withstand any reasonable challenge related to the veracity or integrity of laboratory documents and derived data.
Delimited text file (Delimited file)	A file in which data are separated by a delimiter, including but not limited to commas (.csv), tabs (.txt), or pipes (.psv).
Destructive processes	Processes within the GIS software that convert geospatial data from one spatial data type to a different one; for example, changing a series of points to a line or converting text or images to graphics. Such processes can prevent the user of the GIS data from viewing and understanding the original data. Geospatial models can also modify or remove some of the original programming code used for analyzing the raw data.
Detection condition	Indicator of whether or not a fixed value measurement could be made.
Detection limit (DL)	The lowest concentration or amount of the target analyte that can be determined to be different from zero by a single measurement at a stated level of probability.
Document database	Database in which semi-structured, document-oriented data is stored.
Domain	The set of possible values for a data attribute.
Dynamic data	Data that change on a regular basis.
Dynamic map dissemination	Distribution of geospatial data in a visual format that updates immediately as new data are collected or a user interacts with the application. User interactions can include panning/zooming, turning layers on/off, selecting features, using analytical tools in the application, and changing symbology.
Early adopter	Individuals who are interested in learning about and implementing the use of technology for some purpose.

Electronic data deliverable (EDD)	A data file (or files) in a specified format that is designed to transmit information digitally to another data user or recipient. The data files are generally organized in a readily exportable format (for example, tabular, dbf, xml) that allows the data user to easily import the information into a database.
Enterprise	Term used to refer to an entire organization.
Enterprise GIS software	A geospatial application that is deployed, available, and managed so that potentially all organization members can have, depending on their permissions, access to create, modify, visualize, analyze and share the geospatial information for that organization.
Entity	A class of objects or things about which data or other attributes are recorded. In a database system, entities generally are represented by tables. Typical entities for environmental data include locations, samples, and analytical chemistry results.
Environmental data management system (EDMS)	A system for management of data related to environmental monitoring, research, regulation, remediation, etc. May or may not include databases or other repositories.
Epoch date	A scientific term used to denote a specific period of time. Land surveying and geodesy use a numerical epoch in decimal years to denote a moment at which a given position, in latitude and longitude or plane coordinates (eastings and northings) and ellipsoid heights is valid with respect to the geodetic datum from which the measurement is captured.
Extract, transform, and load (ETL)	In computing, extract, transform, load (ETL) is a three-phase process through which data are first extracted then transformed (cleaned, sanitized, scrubbed), and finally loaded into an output data container.
Factor	Categorical or logical values (as opposed to numeric values).
Feature data sets	Collections of representations for real-world objects on a map or in a GIS that share the same coordinate system and fall within a common geographic area. Real-world objects may be represented by points, lines, polygons, or as grid systems within a GIS. For example, all groundwater monitoring wells within North Carolina may be contained within a single, very large, feature data set.
Field	Distinguishes data from “out in the environment” versus data from other sources such as laboratories. See “Data Field” for the definition of field in a data management system.
Filtration status	Whether or not a water sample has been filtered.
Foreign key	A column or set of columns that appears in two tables and that links the tables together, ordinarily with a constraint that those values may not appear in one table unless they are also present in the other table.
Fraction analyzed	The portion of an environmental sample that is analyzed. For example, a water sample may be filtered and the dissolved fraction and residual fraction analyzed separately.
Geodatabase	Data format used with commercially available GIS software to store data, geospatial data related to observations and physical objects, and spatial relationships between multiple data sets. Also referred to as a geospatial database or spatial database.
Geographic information system (GIS)	The people, hardware, software and data necessary to display and manage information about places, analyze spatial relationships and model spatial processes. GIS integrates geospatial data with descriptive information to help users understand patterns, relationships, and geographic context.
Geohash	A sequence of characters (letters and digits) that uniquely represents a point on the surface of the Earth. Geohashes can represent locations to different levels of accuracy, where greater accuracy requires a longer geohash value. Geohashes can be shorter than equivalent latitude and longitude values.
Geospatial data	Information describing the location of the object or observation within the context of a defined coordinate system. This can be represented as a point, line, polygon or corner(s) of a raster image.

Geospatial database	A file structure used to store, query and manipulate geospatial data. Also referred to as geodatabase or geographic database. Geospatial databases store geometry, a spatial reference system, and behavior rules for spatial data (referred to as topology).
Global Positioning System (GPS)	A network of satellites and receiving devices used to determine the exact location of a point on the Earth.
Graphical user interface (GUI)	A means for users to interact with a software program using windows, menus, buttons, checkboxes, and the like; typically these can be operated by a mouse.
Graphics processing unit (GPU)	Dedicated memory and processor for determining how to visually present data to the computer user.
High-volume data	Data that are generated in short time intervals for continuous monitoring, thus producing a large number of frequent measurements. High-volume data are stored on the sensor device and may be transmitted in real time to an environmental data management system using telemetry to provide database users near real-time data results and alerts. Otherwise, sensor data can be downloaded from sensor devices periodically and incorporated into an EDMS.
Historical data	Data collected in the past, digital or non-digital, structured or nonstructured.
Hydrographic	Information related to water measurements, such as streamflow, water levels, or water chemistry.
Hydrography	The measurement and description of water features and their related land areas
Hypertext markup language (HTML)	A markup language used to format most web pages in application or on the Internet.
HTML5	As of late 2022, the most up-to-date standard for HTML. Extensive documentation for HTML5 is available at https://www.w3.org/TR/2011/WD-html5-20110405/.
Index(es)	A data structure which cross references a set of values from the same domain to the records or rows where each value appears. Often used to optimize and improve record searches and retrieval.
International Conference on Environmental Data Management (ICEDM)	A nonprofit organization that champions environmental data management best practices.
Internet Information Services (IIS)	A flexible, general-purpose web server from Microsoft that runs on Windows systems to serve requested HTML pages or files. The service accepts requests from remote client computers and returns the appropriate response.
Interpretive sample	The material from a specific location, collected on a specific date, and often from a specific depth, that will be used to characterize environmental conditions and support decision-making. Multiple interpretive samples may make up a collection (for example, a soil boring), and interpretive samples may be split into multiple analytical samples.
Intrinsically safe	Equipment that is incapable of releasing sufficient electrical energy to cause ignition of a hazardous atmospheric mixture.
JSON (JavaScript Object Notation)	An open-source, text-based data-exchange format that’s human readable and easy for machines to use. JSON is based on a subset of JavaScript programming language.
Key field	A field in a data set that uniquely identifies the table row.
Key sheets	Printed lists that contain reference values or other information that helps to support data entry in paper field forms.
Late adopter	Individuals who are resistant to learning about or implementing the use of technology to complete a task.
Lifeways	Ways of life, which include but are not limited to hunting, fishing, trapping, agriculture, and forestry.

Listserv	An Internet Information Services (IIS) web server that accepts requests from remote client computers and returns an appropriate response.
Local ecological knowledge (LEK)	Knowledge about local natural resources and humans' relationships to those resources that has been developed by a community over time, but not over many generations.
Long-data format	Typical database/flat style data structure in which each value is listed on a separate row along with associated attributes. May also be referred to as narrow or stacked format.
Lookup tables	Listings of permissible or accepted values established for specific fields in a particular environmental data management system.
Low-volume data	Discrete field or lab data collected at a single point in time during a field sampling event or analysis of a field sample in the lab. The amount of data is low compared to ongoing monitoring done by sensors collecting data every 5-10 minutes.
Main data	Data shared across an organization such as activity locations, contact/customer data, and financial data.
Managed devices	Electronic equipment that is administered and maintained by an organization.
Many-to-many relationship	A relationship between two entities, or database tables, in which each row in each table may be related to more than one row in the other table.
Many-to-one relationship	A relationship between two entities, or database tables, in which each row in one table may be related to many rows in the second table, but each row in the second table is related to only one row in the first table. For environmental data, each sample may have many analytical results, but each analytical result is for only one sample.
Maximum contaminant level (MCL)	The largest concentration allowed in drinking water, as established by the U.S. Environmental Protection Agency.
Metadata	Descriptive information about a data set such as dates that the data were collected, conditions of data collection, data processing steps, scale and accuracy, intended uses, attribute field definitions, and coded values.
Method speciation	Defines whether a nutrient is reported in elemental or molecular form. For example, nitrate as NO3 is the molecular form, and nitrate as N is the elemental form that reports results only for the nitrogen portion of the nitrate compound.
Non-detect	The result for a constituent that was analyzed for but not detected because it was below the detection limit of the instrument. Often assigned an analytic flag of "U" for undetected.
NoSQL (non-structured query language)	A non-relational database. NoSQL can store data using several models, including key store, document store, and graph. Document stores often use JSON or XML.
Nullability	The ability for a data element to have a null or empty value.
Nutrients	Compounds like nitrogen and phosphorous that are found in fertilizers and can stimulate plant and algae growth, and can wash or leach into water sources.
Object	In an object-oriented design, an instance of a class or a population of objects or events. In a database/data set framework, part of the data structure used to store data, such as a table.
Open Geospatial Consortium (OGC)	An international consortium of businesses, governments, research organizations, and universities that develops royalty-free, publicly available, open geospatial standards. See https://www.ogc.org/ for more information.
Optionality	The ability for a data element to not be required.
Parameter	A substance or a property of something that is to be measured.
Parsable	The ability to take data in one format and transform it to another format.
Persistent identifiers	Values in a database table that uniquely identify a main or reference data attribute value (for example, a monitoring point name or system-generated internal identifier)

Plain language	40 attribute value (e.g., a monitoring point name or system-generated internal identifier)
Primary data use	The purpose for which data are collected.
Primary key	A column or set of columns in a table for which the values are unique on every row of the table.
Projection	As used in mapping, the representation of the three-dimensional earth on a two-dimensional surface. Depending on how a surface is wrapped around the earth, different projections can be obtained. Common projections include Mercator, Albers equal area, polyconic, and Lambert Conformal Conic.
Pyramid layers	Preprocessing of the visible presentation of geospatial data at varying scales. For raster data sets the area represented by individual pixels varies based on scale, and the level of detail can vary for more efficient buffering and presentation to the user.
Qualifier code	Shorthand, often just one or two characters, indicating remarks from the data provider, usually regarding quality issues.
Quality assurance (QA)	An integrated system of management activities involving planning, implementation, assessment, reporting, and improvement that ensure a process, item, or service is of the type and quality needed and expected by the end user.
Quality control (QC)	The overall system of technical activities that measures the attributes and performance of a process, item, or service against defined standards to verify that they meet the stated requirements established by the customer; operational techniques and activities that are used to fulfill requirements for quality.
Query	Request for data or information from a database table or combination of tables. Many usages of this term refer to a query of a relational database using Structured Query Language (SQL).
Raster	Data represented as an array of points. Files containing photographs and similar data are raster files. Raster devices include monitors and printers. Differs from vector data, which use line segments instead of dots to represent the image.
Record	Entry in a database that is related to a specific entity and may consist of one or more data fields.
Reference data	Generally, any data used to organize or categorize other data, or for relating data to information both within and beyond the boundaries of the enterprise. Usually consists of codes and descriptions or definitions.
Reference tables	Tables of permissible values established for specific fields in a particular environmental data management system.
Reference values	Defined set of allowable entries that may be entered in a given field.
Relational data model	A representation of the information pertaining to some area of interest (such as environmental conditions) that uses a set of entities that are related by shared data. A relational data model is typically implemented using a relational database.
Relational database	A database in which information is stored in tables for which connections are defined between columns in those tables.
Relationship (database)	Associations between tables that are created using join statements to retrieve data.
Remap	To change one set of values to another set of values without substantive change in the meaning, such as different formatting or spelling of names.
Remark code	Shorthand, often an abbreviation, indicating remarks from the data provider.

Replicate sample	Two or more samples collected from the same location at the same time submitted for laboratory analysis. A replicate may also refer to a single sample submitted for laboratory analysis, from which sample material is extracted and analyzed twice by the same laboratory to assess precision. An adjective or verb referring to the taking of more than one sample or to the performance of more than one analysis. Often incorrectly used as a noun in place of replicate analysis. Replicate is to be used when referring to more than two items.
Reporting limit	The censoring value below which a result cannot be reported as a fixed value.
Representational state transfer (REST)	An architecture for exchanging information between users in a decentralized, distributed environment. REST allows programs on different computers to communicate independently of an operating system or platform by sending a hypertext transfer protocol (HTTP) request to a uniform resource locator and getting data back in a defined format.
Return on investment (ROI)	The benefit received in exchange for an expenditure, typically calculated over a longer term than in a single transaction.
Row	Horizontal delineation within a table.
Sample fraction	The portion of an environmental sample that is analyzed. For example, a water sample may be filtered and the dissolved fraction and residual fraction analyzed separately.
Scalability	The ability to grow in size or complexity without showing negative effects. Growth can be based on database size, increase analysis, increased user base, or a combination of all three.
Scale (geographic)	The ratio of a distance on the map to the corresponding distance on the ground. This can be represented as a graphical scale bar, a representative fraction (for example, 1:20,000) or a verbal scale (for example, 1 inch equals 50 miles).
Schema	A structured framework to organize data, often referring to a relational database, XML/JSON, or other relationships among data.
Secondary data use	Using data for new purposes beyond the specified reason the data were collected (that is, the primary data use).
Secure Sockets Layer (SSL)	An encryption-based Internet security protocol that facilitates secure network communication by identifying and authenticating the server as well as ensuring the privacy and integrity of all transmitted data.
Semi-structured data	Data organized in an undefined or unknown schema.
Server	Computer hardware, software, or a combination of the two that provides (or serves) data to other hardware or software that is typically at some distance, and connected to the server over a local network or the internet.
Shapefile	The shapefile format is a geospatial vector data format for geographic information system (GIS) software. It is developed by Esri as a mostly open specification for data interoperability among Esri and other GIS software products. The shapefile format can spatially describe vector features but does not contain topological information (the relationship of the features to each other): points, lines, and polygons representing, for example, water wells, rivers, and lakes. Each item usually has attributes that describe it, such as name or temperature.
SOAP (Simple object access protocol)	An XML-based protocol developed by Microsoft, SAP, and IBM for exchanging information between peers in a decentralized, distributed environment. SOAP allows programs on different computers to communicate independently of an operating system or platform by using the hypertext transfer protocol (HTTP) and XML as the basis of information exchange. SOAP is used in Web services and is now a web standard specification (WC3). SOAP was originally an acronym for Simple Object Access Protocol, but the acronym has fallen out of use

Software as a service (SAAS)	Method of software delivery and licensing in which software is accessed online via a subscription, rather than bought and installed on individual computers. SAAS can also be referred to as on-demand, web-based, or web-hosted software
Speciation	Pertains to whether a nutrient is reported in elemental or molecular form. For example, nitrate as NO3 is the molecular form, and nitrate as N is the elemental form, reporting only the nitrogen portion.
Split sample	Two or more representative portions taken from a sample or subsample and analyzed by different analysts or laboratories. Split samples are used to replicate the measurement of the variable(s) of interest. Spilt samples are similar to a replicate samples but, instead of sending the replicate to the same laboratory for analysis, the duplicate sample is sent to a different laboratory. This sample may or may not be collected by a second party.
SQL Server Integration Services (SSIS)	A platform for building enterprise-level data integration and data transformation solutions. It can extract and transform data from a wide variety of sources, such as XML data files, flat files, and relational data sources, and then load the data into one or more destinations.
Stakeholder	Any entity interested in a project or program. These may include people or organizations, including responsible parties or agencies that are invested in or impacted by a situation or issue.
Stakeholder analysis	The process of identifying individuals, groups, or organizations that have an interest in an activity or initiative.
Standard operating procedure (SOP)	A set of written instructions that document a routine or repetitive activity followed by an organization.
Static data	Data representing observations or physical objects that do not change or change so slowly that the geospatial representation of them does not need to be revised for the duration of the program or project. (e.g., continent location, roadways, or lake boundaries).
Static map dissemination	Distribution of map products in a format that does not change over time as new data are collected. It may be provided as a hard copy or digital format (e.g., printed map, certain PDF files, embedded image in a website).
Structured data	Data organized in a defined schema and that can easily be transformed or transferred.
Subject matter expert (SME)	A person with special knowledge or skills in a particular area, such as chemistry or geographic data.
Synonym	Multiple values with essentially the same meaning. For example, some chemical names can be written in several different ways, each of which would be a synonym.
Tabular	Information organized in rows and columns; a type of structured data.
Traditional ecological knowledge (TEK)	need definition
Translation table	Method to establish correspondence between a valid value from an external or foreign system and the matching valid value for the local system.
Trigger (database)	A procedural code that is automatically executed in response to certain events on a particular table or view in a database. While there is some standardization as to how this is implemented, some DBMS flavors have specific syntax and the relevant documentation should be carefully consulted.
Unstructured data	Data that are not organized in a structured database schema table. Examples include files that can be organized in a file folder structure, such as video or audio recording files, photograph files, and other hand-written scanned documents or PDF files. Unstructured data may be tagged or transformed to become structured data.

User	A person, organization, agency, or other governmental entity that directly interacts with products or projects. Users may be internal (part of the team within the organization that owns/maintains the data) or external (others outside of the organization that owns/maintains the data).
Valid values	Defined set of allowable entries that may be entered in a given field.
Valid values list	A set of allowable entries established for a particular field in a particular environmental data management system.
Validation	1. Confirmation by examination and provision of objective evidence that the particular requirements for a specific use have been fulfilled. 2. In the context of analytical chemistry data review, data validation is an analyte- and sample-specific process that extends the evaluation of data beyond method, procedural, or contractual compliance (i.e., data verification) to determine the analytical quality of a specific data set. This process is typically prescribed by a regulatory document.
Vector	A geometric unit that has direction and magnitude. Also refers to graphic images that consist of points and lines rather than raster dots.
Vendor-developed	Material (e.g., software or specifications) that was designed and/or implemented by a company that sells that material to users.
Verification	1. Confirmation by examination and provision of objective evidence that specified requirements have been fulfilled. 2. In terms of analytical chemistry data review, data verification is the process of evaluating the completeness, correctness, and conformance/compliance of a specific data set against the method, procedural, or contractual requirements.
Versioning (geodatabase)	Method of allowing multiple users to directly edit a geospatial dataset without explicitly applying data locks or duplicating data. In versioned databases, an alternative state of the database that has an owner, a description, a permission (private, protected, or public), and a parent version.
Virtual environment	A networked common operating space.
Web Feature Service (WFS)	OGC Interface Standard provides an interface allowing requests for geographical features (points, lines, polygons) across the web using platform-independent calls. It can allow query and/or data transformation operations of the underlying data sets.
Web Map Service (WMS)	OGC Interface Standard provides georeferenced images. Images can be either bitmap or vector graphics. There is no editing of images available through WMS.
Web services	A standardized method for propagating messages between client and server applications. A web service is a set of open protocols that allow data to be exchanged between different applications or systems. Web services have the advantage of allowing programs developed in different languages to connect with one another by exchanging data over a web service between clients and servers. A client invokes a web service by submitting an XML request, which the service responds with an XML response.
XML (Extensible markup language)	A markup language and file format for storing, transmitting, and transforming data. XML is human- and machine-readable.
Zoom layers	Predetermined and fixed scales of a web map that can be selected by a user. It may also be used by the software to determine what feature layers are visible.