Part 4: Appendices

Appendix A: Core/Standards Correlations

Idaho Achievement Standards Correlations

These correlations are based on the December 2005 draft of the new proposed Idaho Achievement Standards, retrieved from the Idaho State Department of Education at the following website: http://www.sde.state.id.us/dept/standards.asp.

For reference, column 2 includes is a series of numbers and letters (i.e., 618.01.a) that indicate the concepts, standards, and content and knowledge skills (respectively) for the old achievement standards.

6th Grade Science

Standards		Activities			
New Proposed Standards and Objectives	Old Standards	Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
1.1.1	618.01.a	X	X	X	
1.2.1	618.02.a		X	X	
1.2.2	618.02.b		X	X	
1.2.3	618.02.c		X	X	
1.3.1	618.03.b		X	X	X
1.3.2	618.03.c		X		X
1.4.1	618.05.a			X	
1.5.1	619.02.a				
1.5.2	619.02.b				
1.5.3	619.02.c			X	
1.5.4	619.02.d		X	X	
1.5.5	619.02.e		X	X	
1.5.6	619.02.g			X	
1.6.1	628.01a		X		
2.1.1	620.01.a				
2.1.2	620.01.b				
2.1.3	619.01.c				
2.1.4	620.01.c				
2.1.5	620.01.d				
2.2.1	620.03.d				
3.1.1	621.01.a				
3.1.2	621.01.b				
3.1.3	621.01.c				
4.1.1	624.01.a				
4.1.2	624.01.b				
4.1.3	624.01.c				
5.1.1	626.01.a		X	X	X
5.2.1	626.03.a				
5.3.1	625.01.a				
5.3.2	625.01.b				

7th Grade Science

Standards		Activities			
New Proposed Standards and Objectives	Old Standards	Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
1.1.1	633.01.a	X	X	X	
1.1.2	633.01.a	X	X	X	
1.1.3	633.01.b				
1.2.1	633.02.a		X		
1.2.2	633.02.b		X	X	X
1.2.3	633.02.c		X		X
1.3.1	633.03.a				
1.3.2	633.03.b		X		
1.3.3	633.03.c		X		
1.4.1	634.01.b		X		
1.4.2	634.01.c		X	X	
1.4.3	634.01.d		X	X	
1.4.4	634.01.e			X	
1.4.5	634.01.f				
1.4.6	634.01.g			X	
1.5.1	634.02.a				
3.1.1	636.01.a				
3.1.2	636.01.b				
3.1.3	636.01.c				
3.1.4	636.01.d				
3.1.5	636.01.e				
3.2.1	637.01.a				
3.3.1	633.01.a				
3.3.2	638.01.b				
3.3.3	638.01.c				
3.3.4	638.01.d				
5.1.1	641.03.a				
5.2.1	640.01.a				
5.2.2	640.01.b				

8th Grade Science

Standards		Activities			
New Standards and Objectives	**Old Standards**	**Define Your Watershed**	**How's It Flowing?**	**Hunting for Habitats**	**First Come, First Served**
1.1.1	633.01.a	**X**	**X**	**X**	
1.1.2	633.01.a	**X**	**X**	**X**	
1.1.3	633.01.b				
1.2.1	633.02.a		**X**		
1.2.2	633.02.b		**X**	**X**	**X**
1.2.3	633.02.c	**X**	**X**		**X**
1.3.1	633.03.a				
1.3.2	633.03.b		**X**		
1.3.3	633.03.c		**X**		
1.4.1	634.01.b		**X**		
1.4.2	634.01.c		**X**	**X**	
1.4.3	634.01.d		**X**	**X**	
1.4.4	634.01.e			**X**	
1.4.5	634.01.f				
1.4.6	634.01.g			**X**	
1.5.1	634.02.a				
2.1.1	635.01.a				
2.1.2	635.01.b				
2.1.3	635.01.c				
2.2.1	635.03.a		**X**		**X**
4.1.1	639.01.a		**X**		
4.1.2	639.01.b				
4.1.3	639.01.c				
4.2.1	639.02.a				
5.1.1	641.03.a				
5.2.1	640.01.a				
5.2.2	640.01.b				

8th/9th Grade Earth Science

Standards		Activities			
New Standards and Objectives	**Old Standards**	**Define Your Watershed**	**How's It Flowing?**	**Hunting for Habitats**	**First Come, First Served**
1.1.1	648.01.a	**X**	**X**	**X**	
1.1.2	648.01.a	**X**	**X**	**X**	
1.2.1	648.02.a		**X**	**X**	
1.2.2	648.02.b		**X**	**X**	
1.2.3	648.02.c		**X**	**X**	
1.3.1	648.03.a		**X**		
1.3.2	648.03.b		**X**		
1.3.3	648.03.c		**X**		
1.4.1	649.01.a				
1.4.2	649.01.b				
1.4.3	649.01.c		**X**		
1.4.4	649.01.d		**X**		
1.4.5	649.01.e				**X**
1.4.6	649.01.f			**X**	
1.4.8	649.01.g				
1.5.1	658.02.a		**X**		
1.5.3	656.01.b				
4.1.1	654.01.a				
4.1.2	654.01.b				
4.1.3	654.01.c		**X**		
4.2.1	654.02.a				
5.1.1	655.01.a				
5.1.2	655.01.a				
5.2.1	656.01.a		**X**		**X**
5.3.1	656.03.a		**X**		

9th/10th Grade Biology

Standards		Activities			
New Standards and Objectives	**Old Standards**	**Define Your Watershed**	**How's It Flowing?**	**Hunting for Habitats**	**First Come, First Served**
1.1.1	648.01.a	**X**	**X**	**X**	
1.1.2	648.01.a	**X**	**X**	**X**	
1.2.1	648.02.a		**X**	**X**	
1.2.2	648.02.b		**X**	**X**	
1.2.3	648.02.c		**X**		
1.3.1	648.03.b		**X**		
1.3.2	648.03.b		**X**		
1.3.3	648.03.c		**X**		
1.4.1	649.01.a				
1.4.2	649.01.b				
1.4.3	649.01.c		**X**		
1.4.4	649.01.d		**X**		
1.4.5	649.01.e				**X**
1.4.6	649.01.f				
1.4.9	649.01.g				
1.5.1	658.02.a		**X**		
3.1.1	651.01.a				
3.1.2	651.01.b				
3.1.3	651.01.c				
3.1.4	651.01.e				
3.2.1	652.01.a				
3.2.2	652.01.a				
3.3.1	653.01.a				
3.3.2	653.01.b				
3.3.3	653.01.c				
3.3.4	653.01.d				
3.3.5	653.01.h				
5.1.1	655.01.a				
5.1.2	655.01.a				
5.1.3	656.01.b				
5.2.1	656.01.a		**X**		**X**
5.3.1	656.03.a		**X**		

Wyoming Achievement Standards Science Correlations*

*Correlated to the 2003 Science Content and Performance Standards.

8th and 11th Grade Science

		Activities			
		Define Your Watershed	How's It Flowing?	Hunting for Habitats	First come, First Served
Content Standard	**Benchmark**				
1	1			**X**	
	2	**X**	**X**		**X**
2	1	**X**	**X**	**X**	
	2		**X**	**X**	
	3		**X**	**X**	
	4		**X**		**X**
	5				
3	1				
	2				**X**

8th Grade Social Studies*

*Correlated to Content Standard 5: People, Places and Environments.

		Activities			
		Define Your Watershed	How's It Flowing?	Hunting for Habitats	First come, First Served
Content Standard	**Benchmark**				
5	1	**X**	**X**	**X**	
	2	**X**			
	3	**X**	**X**	**X**	

11th Grade Social Studies*

*Correlated to Content Standard 5: People, Places and Environments.

		Activities			
		Define Your Watershed	How's It Flowing?	Hunting for Habitats	First come, First Served
Content Standard	**Benchmark**				
5	1	**X**	**X**	**X**	
	2				**X**
	3	**X**	**X**	**X**	**X**

Correlations to Utah's Core Curriculum and Intended Learning Outcomes

6th Grade Science

Core Correlations for Standard V

	Objectives	Activities			
		Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
Standard V	1.a			X	
	1.b			X	
	1.c			X	
	2.a				
	2.b				
	2.c				
	2.d				
	2.e				
	3.a				
	3.b				
	3.c				
	3.d				
	3.e				

Intended Learning Outcomes

Intended Learning Outcomes	Activities			
	Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
1.a				
1.b		X		
1.c		X		
1.d	X	X	X	X
1.e	X		X	
1.f				
1.g	X	X	X	X
1.h				X
1.i		X		X
2.a		X	X	
2.b				
2.c				
2.d		X	X	X
2.e		X	X	
2.f		X	X	
3.a	X	X	X	X
3.b				
3.c		X	X	X
4.a		X		
4.b		X	X	
4.c	X	X	X	
4.d				
4.e		X		X
5.a				X
5.b				
6.a				
6.b				
6.c		X		

7th Grade Integrated Science

Core Correlations for Standards IV and V

	Objectives	Activities			
		Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
Standard IV	1.a				
	1.b				
	1.c				
	1.d				
	2.a				
	2.b			X	
	2.c				
	2.d			X	
Standard V	1.a				
	1.b			X	
	1.c				
	1.d			X	
	2.a			X	
	2.b				
	2.c				
	2.d				
	2.e				
	2.f				
	3.a				
	3.b				
	3.c				

Intended Learning Outcomes

Intended Learning Outcomes	Activities			
	Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
1.a				
1.b		X	X	
1.c	X		X	
1.d		X		
1.e				
1.f				
1.g				
2.a				
2.b				
2.c				X
2.d				
2.e		X	X	
3.a				
3.b				
3.c				
3.d				X
4.a				
4.b				
4.c				
4.d				
4.e		X		X
4.f				
5.a				
5.b				
5.c				
5.d				
6.a				
6.b				
6.c		X		
6.d				
6.e				
6.f				

8th Grade Integrated Science

No Core Correlations

Intended Learning Outcomes

Intended Learning Outcomes	Activities			
	Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
1.a		X		
1.b		X		
1.c	X		X	
1.d		X		
1.e				
1.f				
1.g				
2.a				
2.b				
2.c				X
2.d				
2.e		X	X	
3.a				
3.b				
3.c				
3.d				X
4.a				
4.b				
4.c				
4.d				
4.e		X		X
4.f				
5.a				
5.b				
5.c				
5.d				
6.a				
6.b				
6.c		X		
6.d				
6.e				
6.f				

9th Grade Earth Systems Science

Core Correlations for Standards II and IV

	Objectives	Activities			
		Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
Standard II	1.a				
	1.b				
	1.c				
	2.a		X	X	
	2.b		X	X	
	2.c				
	2.d				
	2.e		X		
	2.f				
	3.a				
	3.b			X	
	3.c				
	3.d				
	3.e				
Standard IV	1.a				
	1.b				
	1.c		X		
	1.d				
	1.e				X
	2.a				
	2.b				
	2.c				
	2.d				
	2.e				

Intended Learning Outcomes

Intended Learning Outcomes	Activities			
	Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
1.a		X		
1.b		X		
1.c	X	X	X	
1.d				
1.e				
1.f			X	
1.g	X	X		
1.h		X		
1.i				
1.j				
2.a				
2.b		X		X
2.c				X
2.d		X		X
2.e				
2.f				
3.a		X	X	
3.b				
3.c		X		X
3.d		X		X
4.a				
4.b				
4.c				
4.d				
4.e		X		
5.a		X		X
5.b				
5.c				
5.d				
6.a				
6.b				
6.c		X		
6.d				
6.e				
6.f				
6.g				
6.h				
6.i				X

Biology

Core Correlations for Standards II and IV

	Objectives	Activities			
		Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
Standard I	1.a				
	1.b				
	1.c				
	1.d				
	1.e				
	2.a				
	2.b				
	2.c				
	2.d				
	3.a				
	3.b				
	3.c		X		
	3.d	X	X		
	3.e				
Standard V	1.a				
	1.b				
	1.c				
	1.d				
	2.a				
	2.b				
	2.c				
	2.d				
	2.e				
	3.a			X	
	3.b			X	
	3.c				
	3.d				

Intended Learning Outcomes

Intended Learning Outcomes	Activities			
	Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
1.a		X		
1.b		X		
1.c	X	X	X	
1.d				
1.e				
1.f			X	
1.g	X	X		
1.h		X		
1.i				
1.j				
2.a				
2.b		X		X
2.c				X
2.d		X		X
2.e				
2.f				
3.a		X	X	
3.b				
3.c		X		X
3.d		X		X
4.a				
4.b				
4.c				
4.d				
4.e		X		
5.a		X		X
5.b				
5.c				
5.d				
6.a				
6.b				
6.c		X		
6.d				
6.e				
6.f				
6.g				
6.h				
6.i				X

Chemistry

Core Correlations for Standard VI

	Objectives	Activities			
		Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
Standard VI	1.a				
	1.b				
	1.c				
	1.d				
	1.e		X		
	2.a				
	2.b				
	2.c		X		
	3.a				
	3.b				
	3.c				
	3.d				
	3.e				

Intended Learning Outcomes

Intended Learning Outcomes	Activities			
	Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
1.a		X		
1.b		X		
1.c	X	X	X	
1.d				
1.e				
1.f			X	
1.g	X	X		
1.h		X		
1.i				
1.j				
2.a				
2.b		X		X
2.c				X
2.d		X		X
2.e				
2.f				
3.a		X	X	
3.b				
3.c		X		X
3.d		X		X
4.a				
4.b				
4.c				
4.d				
4.e		X		
5.a		X		X
5.b				
5.c				
5.d				
6.a				
6.b				
6.c		X		
6.d				
6.e				
6.f				
6.g				
6.h				
6.i				X

Utah Studies

Core Correlations for Standard I

	Objectives	Activities			
		Define Your Watershed	How's It Flowing?	Hunting for Habitats	First Come, First Served
Standard I	1.a	X			
	1.b	X			
	1.c				
	2.a				
	2.b				
	2.c				
	2.d	X			
	2.e				
	2.f		X		
	3.a				
	3.b				
	3.c				
	3.d		X		X
	4.a				
	4.b		X		
	4.c		X		X

Geography for Life

Core Correlations for Standards II, III, and V

	Objectives	Activities			
		Define Your Watershed	**How's It Flowing?**	**Hunting for Habitats**	**First Come, First Served**
Standard II	1.a				
	1.b	**X**	**X**	**X**	**X**
	1.c		**X**		
	2.a	**X**		**X**	
	2.b			**X**	
	3.a				
	3.b				
Standard III	1.a				
	1.b		**X**		
	1.c				
	2.a			**X**	
	2.b				
	2.c				
Standard V	1.a				
	1.b				**X**
	1.c		**X**		**X**
	1.d		**X**		
	2.a		**X**		**X**
	2.b				
	2.c				
	2.d				

Appendix B: Glossary

acre-foot. The quantity of water required to cover one acre of land to a depth of one foot (approximately 325,852 gallons).

agriculture. The occupation of cultivating land, raising crops, and feeding, breeding, and raising livestock; farming or ranching.

algal bloom. An overproduction of algae due to nutrient loading.

allocation. The act of apportioning (i.e., water); the share or portion allocated.

appropriation. The act of setting something (water) apart for a specific purpose or use.

aquifer. A geologic formation(s) that is water bearing. A geologic formation or structure that stores and/or transmits water, such as to wells and springs.

arable. Land fit or used for the growing of crops; also, a plot of such land.

arid. Being without moisture; extremely dry; parched; barren or unproductive because of lack of moisture.

basin. (1) A geographic area drained by a single major stream; consists of a drainage system comprised of streams and lakes. Also called a river basin, drainage basin, and watershed. (2) A natural or artificial hollow place containing water.

beneficial use. The use of water for the benefit of the appropriator, other persons, or the public, defined more specifically within each state's water law. It may include (but is not limited to) water used for agricultural, domestic, fish and wildlife, industrial, mining, municipal, power and recreation uses.

biodiversity. Diversity of plant and animal species in an environment.

branching pattern. A figure or marking resembling a tree exhibits a branching pattern. Found in both natural and man-made systems such as neural networks, highways, and rivers.

canal. A constructed open channel for transporting water from the source of supply to the point of distribution.

cfs. (See **cubic feet per second**).

channel. The bed of a stream.

climate. The sum total of all atmospheric or meteorological influences, principal temperature, moisture, wind, pressure, and evaporation, which combine to characterize a region and give it individuality by influencing the nature of its land forms, soils, vegetation, and land use.

closed basin. A hollow or depression in the earth's surface from which water cannot flow (i.e., the Great Salt Lake). Any water trapped in such a basin can be lost through evaporation or filter into the groundwater.

cms. (See **cubic meters per second**).

community (biological). A group of different organisms (plants, animals, microorganisms, etc.) that live and interact together in a particular environment.

compact. A formal agreement between two or more parties, states, etc.

concentration (of a solution). Amount of a chemical or pollutant in a particular volume of water.

condensation. The process by which a gas or vapor changes into a liquid or solid; also the liquid or solid so formed. The opposite of evaporation. In meteorological usage, this term is applied only to the transformation from vapor to liquid.

confluence. (1) The act of flowing together; the meeting or junction of two or more streams; also, the place where these streams meet. (2) The stream or body of water formed by the junction of two or more streams; a combined flood.

conifer. An evergreen tree or shrub that bears both seeds and pollen on dry scales arranged as a cone.

conservation. The use of water-saving methods to reduce the amount of water needed for homes, lawns, farming, and industry, thus increasing water supplies for optimum long-term economic and social benefits.

contaminant. Any substance that when added to water (or another substance) makes it impure and unfit for consumption or use.

cubic feet per second (cfs). Units typically used in measuring stream flow that express rate of discharge. The measurement is equal to the discharge in a stream cross-section one foot wide and one foot deep, flowing with an average velocity of one foot per second; 1 cfs = 44.8 gallons per minute (gpm).

cubic meters per second (cms). Units typically used in measuring stream flow that express rate of discharge. The measurement is equal to the discharge in a stream cross-section one meter wide and one meter deep, flowing with an average velocity of one meter per second; 1 cms = 1,000 liters per second.

cumulative effect. (1) Such as is formed by accumulation or heaping on (as opposed to organic growth). (2) Constituted by or arising from accumulation, or the accession of successive portions or particulars; acquiring or increasing in force or cogency by successive additions.

dam. A structure of earth, rock, or concrete designed to form a basin and hold water back to make a pond, lake, or reservoir. A barrier built, usually across a watercourse, for impounding or diverting the flow of water.

deciduous. Referring to trees and shrubs that shed leaves annually.

delineate. To trace the outline of, sketch or trace in outline, represent pictorially, or portray in words. To describe or outline with precision.

depletion. The loss of water from surface water reservoirs or ground water aquifers at a rate greater than that or recharge.

discharge. The volume of water that passes a given location within a given period of time. Usually expressed in cubic feet (or meters) per second.

diversion. The removal of water from a natural watercourse by canal, pipe, well, or other conduit for transfer to another watercourse or for application on the land; also called withdrawal.

divide. The line or highest elevation(s) separating two or more drainage basins (such as a ridgeline) that distinguishes water flows into each basin. For example, the Continental Divide is the largest drainage divide in North America. From this divide, water flows east into the Atlantic Ocean, west to the Pacific Ocean, or north to Hudson Bay.

downstream. In the direction of a stream's current; in relation to water rights, refers to water uses or locations that are affected by upstream uses or locations.

drainage basin. The land area drained by a river. Also called river basin, basin, catchment, or watershed.

drought. An extended period with little or no precipitation; often affects crop production and availability of water supplies.

ecology. The study of relationships of living things to one another and to the environment.

ecological niche. Total way of life or role of a species in an ecosystem. It includes all physical, chemical, and biological conditions a species needs to live and reproduce in an ecosystem.

ecosystem. A community of animals, plants, and bacteria and its interrelated physical and chemical environment. An ecosystem can be as small as a rotting log or a puddle of water, but current management efforts typically focus on larger landscape units, such as a mountain range, a river basin, or a watershed.

elevation. The variation in the height of the earth's surface as measured by the vertical distance from sea level.

endemic species. An organism or species restricted to a certain area or region.

environment. All of the external factors, conditions, and influences that affect an organism or biological community.

evaporation. (1) The physical process by which liquid (or a solid) is transformed to the gaseous state. (2) When water from land areas, bodies of water, and all other moist surfaces is absorbed into the atmosphere as a vapor.

fauna. The animals characteristic of a region, period, or special environment.

flood. Any relatively high streamflow overtopping the natural or artificial banks of a stream.

flora. Plant or bacterial life characteristic of a region, period, or special environment.

fresh water. Water less than 0.5 parts per thousand dissolved salts.

gage. An instrument used to measure the elevation of a water surface, the velocity of flowing water, the pressure of water, the amount of intensity of precipitation, the depth of snowfall, etc.

gaging station. A site on a stream, lake, reservoir, or other body of water where observations and hydrologic data are obtained. The US Geological Survey measures stream discharge at gaging stations.

generalist species. Species with a broad ecological niche. They can live in many different places, eat a variety of foods, and tolerate a wide range of environmental conditions.

geologic formation or feature. A body of rock of considerable thickness that has a recognizable unity or similarity, making it distinguishable from adjacent rock units.

gradient. A measure of a degree of incline; the steepness of a slope.

groundwater. Water that flows or seeps downward and saturates soil or rock, supplying springs and wells. The upper surface of the saturated zone is called the water table. Also includes water stored underground in rock crevices and in the pores of geologic materials that make up the Earth's crust.

habitat. The environment where a plant or animal grows or lives.

headwaters. The source of a stream or river.

high desert. Desert climate in a high-elevation environment.

hypothesis. A potential explanation for a condition or set of facts that can be tested through further investigation.

instream flow. The minimum amount of water required in a stream to maintain the existing aquatic resources and associated wildlife and riparian habitat.

instream water use. Uses of water within a stream's channel (e.g., by fish and other aquatic life, or for recreation, navigation, and hydroelectric power production).

interstate water compact. An agreement between two or more states dealing with competing demands for a water resource beyond the legal authority of one state alone to solve.

introduced species. Species that are not native to a specific area.

invasive plant. A plant that moves in and takes over an ecosystem to the detriment of other species (often the result of environmental manipulation).

irrigation. The controlled application of water to cropland, hay fields, and/or pastures to supplement that supplied by nature.

irrigation efficiency. The efficiency associated with acquiring water, delivering it to fields, and applying it to crops. Efficiency is determined through a combination of factors, including how much water is lost between the point of diversion and the point of use; the cost of delivering the water and how well the soil holds water once water is applies.

macroinvertebrate. Invertebrate animals (animals without backbones) large enough to be observed without the aid of a microscope or other magnification.

mainstem. The major reach of a river or stream formed by the smaller tributaries that flow into it. Or, the principal watercourse of a river, excluding any tributaries.

marsh. A wetland characterized by soft, wet, low-lying land, marked by herbaceous vegetation.

microorganism. An organism too small to be viewed by the unaided eye.

migration. The periodic movement of animals from one area to another, often in response to seasonal change.

mouth of a stream. The point of discharge of a stream into another stream, a lake, or a sea.

municipal. Of or pertaining to a town or city or its local government.

municipal water system. A network of pipes, pumps, and storage and treatment facilities designed to deliver potable water to homes, schools, businesses, and other water users in a city or town and to remove and treat waste materials.

native species. A species originally living, growing, or produced in a certain place or ecosystem; indigenous.

natural resource. A material source of wealth, such as timber, fresh water, or a mineral deposit, that occurs in a natural state and has economic value.

nonnative species. Species that migrate into an ecosystem or are deliberately or accidentally introduced into an ecosystem by humans.

nonpoint source pollution (nps). Pollution discharged over a wide land area, not from one specific location. Nonpoint source pollution is contamination that occurs when rainwater, snowmelt, or irrigation washes off plowed fields, city streets, or suburban backyards. As this runoff moves across land surface, it picks up soil particles and pollutants, such as nutrients and pesticides.

nutrients. As a pollutant, any element or compound, such as phosphates or nitrates, that fuels abnormally high growth organic growth in aquatic ecosystems.

outlet. An opening through which water is released.

parts per million (ppm). Units typically used in measuring the number of "parts" by weight of a substance in water; commonly used in representing pollutant concentrations. Equal to milligrams per liter (mg/l).

per capita water use. The amount of water used by each person each day, expressed in gallons.

pollution. An alteration in the character or quality of the environment, or any of its components, that renders it less suited for certain uses. The alteration of the physical, chemical, or biological properties of water by the introduction of any substance that renders the water harmful to use.

precipitation. The downward movement of water in liquid or solid form from the atmosphere following condensation in the atmosphere due to cooling of the air below the dew point. Includes rain, snow, hail, and sleet.

prior appropriation. The law dominating water allocation and use in the western United States, basically stating that the first person in time to divert water from a river or stream and put it to a beneficial use is entitled to continue to that use without interference from other users who make subsequent claims. The law says "first in time, first in right" and is based on use rather than land ownership.

reservoir (water). (1) A pond, lake, or basin, either natural or artificial, for the storage, regulation, and control of water. (2) An artificially created lake in which water is collected and stored for future use. (3) Any natural or artificial storage place from which water may be withdrawn as needed.

restoration. The process of bringing back to existence, or reestablishing the original condition of a degraded environment.

return flow. The portion of withdrawn water that is not consumed by evaporation and that returns to its source or another body of water.

ridge line. A point of higher ground that separated two adjacent streams or watersheds; also known as a divide.

riparian. Pertaining to the banks of a river, stream, waterway, or other flowing body of water as well as to plant and animal communities that depend on the waterway for existence. Also commonly used for other bodies of water, e.g., ponds, lakes, etc., although littoral is the more precise term for such stationary bodies of water.

river. A natural stream; a brook or creek.

runoff. That portion of precipitation, which is not intercepted by vegetation, absorbed by the land surface, or evaporated and thus flows overland into a depression, stream, lake or ocean. Often carries sediments or pollutants.

saline. Salty or saltlike; salty water.

salt water. Water that contains a relatively high percentage (over 0.5 parts per thousand) of salt minerals.

sediment. Created from the natural process of erosion, where wind, water, frost, and ice slowly break down rocks into finer and finer pieces. Can also be created by human activities, such as construction and tilling land. Runoff often carries sediment into nearby waterways.

sediment load. Sediment carried by a stream including particles in suspension as well as larger material.

silt. Sediment composed on particles with a diameter of 1/256 millimeter or 1/16 millimeter.

snowmelt. Water from melting snow.

snowpack. A field of naturally packed snow that ordinarily melts in early summer months.

spawn. To produce or deposit eggs; the eggs of aquatic animals.

specialist species. Species with a narrow ecological niche, that may be able to live in only one type of habitat, tolerate only a narrow range of climatic and other environment conditions, or use only one or few types of food.

species. A category of taxonomic classification, consisting of related organisms capable of interbreeding.

stakeholder. Any party that has an interest ("stake") in an issue or resource.

storm drain. Constructed opening in a road system through which runoff from the road surface flows into an underground system of pipes, which lead to a river, stream, treatment plant, etc.

stream. Any body of running water under gravity's influence through clearly defined natural channels to progressively lower levels.

streambed. The channel through which a stream flows or has flowed. The bottom of a stream or river.

streamflow. The discharge of water from a river.

stream channel. A long, narrow depression, shaped and more or less filled by a stream.

sub-basin. Also known as a sub-watershed. A portion of a sub-region or basin drained by a single stream or group of minor streams; the smallest unit into which the land surface is subdivided for hydrologic study purposes.

surface water. Water that is on Earth's surface, such as in a stream, river, lake, or reservoir.

terrestrial. Of or representing the earth; of land as opposed to water; growing or living on land.

topography. A description, model, or drawing of mountains, valleys, hills, rivers, roads, bridges, and other things found on the surface of a place.

tributary. A stream that contributes its water to another stream or body of water.

turbid. Having sediment or foreign particles in suspension or stirred up, creating a muddy look.

turbidity. The cloudy appearance of water caused by the presence of suspended matter. Technically, turbidity is an optical property of the water based on the amount of light reflected by suspended particles.

upstream. Toward the surface of upper part of a stream; against the current. In relation to water rights, refers to water uses or locations that affect water quality or quantity downstream.

wastewater treatment. Any of the mechanical or chemical processes used to modify the quality of wastewater in order to make it more compatible or acceptable to humans and the environment.

water allocation. In a hydrologic system in which there are multiple uses or demands for water, the process of measuring a specific amount of water devoted to a given purpose.

water quality. The chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.

water right. A legal right to use a specified amount of water for beneficial purposes.

water treatment. A series of steps that purify water so that it can be put to a specific use (i.e., drinking, irrigation, industrial use).

water user. Anyone who uses water. Water users include: domestic (e.g., drinking, cooking, washing); public uses (e.g., fire fighting, street cleaning); industry (e.g., producing food products, textiles, paper, and chemicals); commercial (e.g., businesses, motels, restaurants, hospitals); agricultural (e.g., irrigation, livestock); energy production (e.g., hydroelectric power generation); earth systems (e.g., the water cycle, ecosystems); cultures; mining; recreation; fish and wildlife; and navigation.

watershed. The land area that drains water into a particular stream, river, or lake. It is a land feature that can be identified by tracing a line along the highest elevations between two areas on a map, often the ridges. Large watersheds, like the Mississippi River Basin, contain thousands of smaller watersheds.

well. A hole drilled or bored into the earth to obtain a natural deposit or water.

wetland. Land that is covered all or part of the time with salt water or fresh water, excluding streams, lakes, and the open ocean.

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