Hellbender Education

LESSON 5: APPALACHIAN STREAM CONSERVATION

MIDDLE SCHOOL STANDARDS ADDRESSED:

West Virginia	S.6.LS.2: Students will evaluate competing design solutions for maintaining biodiversity and ecosystem services.
	S.6.LS.7: Students will construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.
	S.8.ESS.1: Students will construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.

HIGH SCHOOL STANDARDS ADDRESSED:

West Virginia S.	.10.LS.
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- S.10.LS.12: Students will evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem.
- S.10.LS.13: Students will design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
- S.10.LS.15: Students will create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.
- S.HS.ENV.9: Students will evaluate the leading causes of species decline and premature extinction: habitat destruction and degradation, invasive species, pollution, human population growth, over exploitation.
- S.HS.ENV.11: Students will relate habitat changes to plant and animal populations and climate influences: variations in habitat size, fragmentation, fluctuation in conditions of abiotic factors, albedo, surface temperature.
- S.HS.ENV.17: Students will debate climate change as it relates to natural forces, greenhouse gases, human changes in atmospheric concentrations of greenhouse gases, and relevant laws and treaties.