

## Rubric for “Who Polluted the Merrimack”

Question: List examples of various challenges to the health of our watershed, and propose solutions to these problems.

### 5<sup>th</sup> Grade

	1	2	3
Describe everyday human activities that can affect earth’s resources or the environment	Lists an example of point-source pollution (sewage from a treatment plant, pollutants from a factory and/or smokestack) OR an example of non-point source pollution (e.g. agricultural runoff)	Lists at least one example of point-source <i>and</i> one example of non-point source pollution	In addition to 1 & 2, also lists one or more daily activities of individuals which directly or indirectly lead to pollution (household use of water, school bus, rides in a car, production of food)
Ways to reduce a community’s impact or an individual’s impact on earth’s resources or the environment	Describes a way to better handle or reduce amount of sewage (water conservation, separate storm-water from sewers). Design a cleaner operating factory or way to trap pollutants from manufacturing. OR describes a solution to reduce or filter non-point pollution (e.g., swales)	Lists at least one solution for point <i>and</i> one solution for non-point pollution	In addition to 1 & 2, also describes ways to reduce an individual’s household pollution or reducing amount of materials used by society

### 7<sup>th</sup> Grade

	1	2	3
Describe everyday human activities that can affect earth’s resources or the environment	Lists an example which ties a challenge faced by the earth’s natural resources or ecosystems to human population growth /urbanization or overconsumption of resources	In addition to 1., also lists the negative effects such as reduced water quality, depletion of mineral resources, or climate change	In addition to 1 & 2, describes how evidence, such as historical (or other) data could be used to support their answer
Ways to reduce a community’s impact or an individual’s impact on earth’s resources or the environment	Describes and evaluates a current design solution that is being used to address a current challenge	describes and evaluates two or more design solutions	Proposes a new design solution or anticipate a future challenge caused by human activity to the earth’s natural resources