River Unit: Unit Overview

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Essential Question: What is a river and what is its connection to us? (Sites of Engagement)

Enduring Understanding: The river serves many purposes and plays many roles in our community. We form a relationship to the river through our actions and inactions, and through the river's impact on our lives.

Summary: Studying the White River for the Third Grade year allows our students to expand and deepen their study of our South Royalton community (our Social Studies theme for the year). This **year-long river study** (Birds Eye View) also provides further opportunities for cross-disciplinary learning as we explore river science concepts as they relate to social studies concepts as well as reading and writing skills practice. Lastly, focusing on the White River allows us to draw on the river as a learning resource, as well as partnering with the White River Partnership for experience with experts.

Through this unit, students will come to know general knowledge such as what is a river, how and why does a river form. Students will also learn specific information about the White River such as how to find it on a map, and how to trace its path to the Connecticut River and the Atlantic Ocean. Since it is a year-long study, we will also take time to **study other aspects of the river** (Student Work) as a habitat such as collecting and identifying macroinvertebrates in the fall and spring, and searching for animal tracks and signs along the river banks in the winter. This unit also allows for STEM integration as we not only observe the birds living along the river, but we also can try to design bird feeders to attract birds. Our bird study also is tied into a Citizen Science project of participating in the Great Backyard Bird Count as we collect data about the birds we do or don't see and submit that data online as a part of a worldwide effort in February. Finally, in the spring we will tie our river study to a yearly service learning project of riparian planting to protect the health of the White River.

Next Generation Science Standards

Earth Systems: We will be observing the river throughout the year to see the changes brought on by the seasons and the changing weather conditions.

Crosscutting Concepts:

Patterns: As a part of our focus on Animal Tracks and Signs, students will learn to identify and sort the animal tracks of mammals found along the White River.

Cause and Effect: As a part of our focus on riparian planting, students will examine photographs of flood damage from Tropical Storm Irene, as well as investigate the effect of the spring runoff on the creek which runs through our campus and the White River visible from our classroom.