

Lesson	Essential Question: How are the earth's resources important to us and to what extent does our local human activity affect these resources?
1	Introductory activity: How will students respond to the essential question? <ul style="list-style-type: none"> Ask students in an outdoor setting to reflect: What is a natural resource? Pose questions about changes in this place over time (Human and Natural History). How has this environment been changed by humans, climatic, and other earth processes? <u>Homework:</u> "Voices for Our Town Survey"
2	Understanding natural resources: Components of a habitat-food, water, shelter, and space <ul style="list-style-type: none"> "Habitat Lap Sit" to show the significance of a missing component. "Where has all the Water Gone?" <u>Project Seasons</u> p. 281 <u>Formative Assessment:</u> Half page response to "What is the most important component of a habitat and why?"
3	"Old Water" activity from <u>Project Wet S5-6</u> : 49 p. 171 <u>Formative Assessment:</u> Indicate correct geologic event on time line.
4	Students investigate service learning opportunities for the town <ul style="list-style-type: none"> Students investigate potential projects and get involved Highlight natural areas: wetlands, forest, pond, field, fill area, and hedgerows <u>Formative Assessment:</u> Journal reflections on issues that matter to them as a steward of the environment and Lake
5	"A Drop in the Bucket" activity- <u>Project Wet</u> p. 238 <u>Formative Assessment:</u> Construct a circle graph showing percentages of earth's water. <u>Follow-up activity:</u> Students conduct a Water Usage Inventory at home (<u>Project Seasons</u> p. 285)
6	Understanding the Water Cycle: Draw diagrams and see demonstrations of evaporation, condensation, and precipitation. <u>Formative Assessment:</u> Acting out water cycle vocabulary through movement in groups. Vocabulary quiz.
7	<u>Activity:</u> Students create a design for the place based service learning using ideas from <u>Greening the Grounds</u> <u>Formative Assessment:</u> Are students seeing the benefits of the habitat as a natural resource before they decide on the benefits of changing it?
8	Understanding our Lake Champlain Watershed: <ul style="list-style-type: none"> Watershed Model: Teach how human activity create pollution in the lake. Activity: "Marsh Mystery," from Wow! The Wonders of Wetlands p. 116. <u>Formative Assessment:</u> "Build a Wetland" activity from the Flynn "Words Come Alive" program (See Activity #4)
9	"Wetland Metaphors" from Wow! The Wonders of Wetlands p.85 Types of wetlands-swamps, bogs, marshes, meadows, and ponds and why they are considered wetlands. "Wetland Soils in Living Color" activity -- <u>Project WET</u> p. 212. <u>Formative Assessment:</u> wetland word game
10	Water Purification: Students understand where the water we drink at school comes from. The Willy Wetsworth story www.epa.gov/Region1/students/pdfs/ww_drain.pdf Create a travel guide for water droplets who would be traveling through the cycle. <u>Final Water Cycle Assessment:</u> "Wet Jeans" assessment from <u>Uncovering Student Ideas In Science</u> p. 155.
11	"The Dirty Water Challenge" (See Activity #5) Students explore natural methods of cleaning water from Lake Champlain. (See "Pollution Solutions" from <u>Project Seasons</u> p. 289 Create model water filters using sand, gravel, coffee filters, etc. Read <u>The Magic School Bus At the Waterworks</u> Field trip to local water treatment plant
12	Follow up on place based service learning: <ul style="list-style-type: none"> Compilation of survey for project Create a scale model for project Research wetland regulations
13	Culminating Activity: Create a persuasive pamphlet: options for wetland recreation
14	Final Written Assessment: Design a path through the wetlands near school. List all the considerations in designing and implementing this path.
15	End of unit "Voices of Our Town" post assessment.
16	<u>Follow Up Activity:</u> Students learn about the process for taking water samples as part of the volunteer water monitoring program at the state department.