

MWEE Issue	Driving Question	Supporting Questions	Standards
<p>Effects of agricultural land use on water quality</p>	<p>How does agricultural land use impact the quality of the water in our watershed?</p>	<ul style="list-style-type: none"> • How do we describe and define our local watershed? • What are the abiotic and biotic factors within our local watershed and how do they interact? • How does topography influence the flow of water in our local watershed? • How does vegetation affect water runoff? • What is meant by 'water quality?' How is it measured and interpreted? • What factors related to land use impact the quality of water in watersheds in general? What about in our local watershed? • How do human choices (personal and legislative) regarding land-use affect local wetlands? 	<p>Environment & Ecology Standards: Watersheds & Wetlands 4.2.10.A, 4.2.10.B and 4.2.10.C (10th grade)</p> <p>Examine the interactions between abiotic and biotic factors within a watershed.</p> <ul style="list-style-type: none"> • Describe how topography influences the flow of water in a watershed. • Describe how vegetation affects water runoff. <p>Investigate and analyze the effects of land use on the quality of water in a watershed</p> <hr/> <p>Examine how human interactions impact wetlands and their surrounding environments.</p> <ul style="list-style-type: none"> • Describe how land use decisions affect wetlands <hr/> <p>Explain the relationship between water quality and the diversity of life in a freshwater ecosystem.</p> <ul style="list-style-type: none"> • Explain how limiting factors affect the growth and reproduction of freshwater organisms.
		<ul style="list-style-type: none"> • What are natural resources that farmers must manage to engage in agriculture? • What are the environmental consequences of agricultural management and use of natural resources within our local watersheds? • How does consumer demand influence decisions farmers make regarding the management of natural resources? • What technologies are available for management of natural resources within agriculture? (e.g. what are "BMPs?") • What are the local and state agencies that influence the management of natural resources within agriculture and how do they operate? What are the impacts? 	<p>Environment & Ecology Standards: Natural Resources 4.3.10.A. and 4.3.10.B</p> <p>Evaluate factors affecting the use of natural resources.</p> <ul style="list-style-type: none"> • Evaluate the effect of consumer demands on the use of natural resources. • Analyze how technologies such as modern mining, harvesting, and transportation equipment affect the use of our natural resources. <p>Describe how local and state agencies manage natural resources.</p> <hr/> <p>Analyze how humans manage and distribute natural resources.</p> <ul style="list-style-type: none"> • Describe the use of a natural resource with an emphasis on the environmental consequences of extracting, processing, transporting, using, and disposing of it. • Analyze the impact of technology on the management, distribution, and disposal of natural resources.
		<ul style="list-style-type: none"> • What are some of the effects of agriculture on our local and national economy, out watershed and our standard of living? • What are agricultural sciences and technologies and how do they work to increase efficiency while balancing the needs of society with the conservation of our natural resources? 	<p>Environment & Ecology Standards: Agriculture & Society 4.4.10.B and 4.4.10.C.</p> <p>Analyze the effects of agriculture on a society's economy, environment, standard of living, and foreign trade.</p> <hr/> <p>Analyze how agricultural sciences and technologies strive to increase efficiency while balancing the needs of society with the conservation of our natural resources.</p>