FACTS Standards Alignment

**Unit: Matter & Energy**

NGSS:

HS-PS1-4. Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy.

HS-PS1-7. Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

**Unit: Cell Biology & Carbon Cycling**

NGSS:

HS-LS1-2. Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

HS-PS1-4. Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy.

HS-PS1-7. Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.

HS-LS1-6. Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules.

HS-LS1-7. Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy.

HS-LS2-5. Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and geosphere.

HS-LS1-5. Use a model to illustrate how photosynthesis transforms light energy into stored chemical energy.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.03. Apply ecological concepts and principles to atmospheric natural resource systems.

**Unit: Biodiversity, Ecosystem Services, and Ecosystem Resilience & Fragility**

NGSS:

HS-LS2-1. Use mathematical and or computational representations to support explanations of factors that affect carrying capacity of ecosystems and different scales.

HS-LS2-2. Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems at different scales.

HS-LS2-4. Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem.

HS-LS2-5: Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and geosphere.

HS-PS1-7. Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.

HS-ESS2-6. Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.

HS-LS4-2 Biological Evolution: Unity and Diversity. Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment.

HS-LS4-3 Biological Evolution: Unity and Diversity. Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait.

HS-LS3-1 Heredity: Inheritance and Variation of Traits. Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.

HS-LS4-4 Biological Evolution: Unity and Diversity. Construct an explanation based on evidence for how natural selection leads to adaptation of populations.

HS-LS4-5 Biological Evolution: Unity and Diversity. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.02. Classify different types of natural resources in order to enable protection,

conservation, enhancement and management in a particular geographical region.

NRS.01.03. Apply ecological concepts and principles to atmospheric natural resource systems.

NRS.01.05. Apply ecological concepts and principles to terrestrial natural resource systems.

NRS.01.06. Apply ecological concepts and principles to living organisms in natural resource

systems.

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

**Unit: Biodiversity & Habitats**

NGSS:

HS-LS2-1. Use mathematical and or computational representations to support explanations of factors that affect carrying capacity of ecosystems and different scales.

HS-LS2-2. Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems at different scales.

HS-LS2-4. Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem.

HS-LS2-5: Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and geosphere.

HS-PS1-7. Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.

HS-ESS2-6. Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.

HS-LS4-2 Biological Evolution: Unity and Diversity. Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment.

HS-LS4-3 Biological Evolution: Unity and Diversity. Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait.

HS-LS3-1 Heredity: Inheritance and Variation of Traits. Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.

HS-LS4-4 Biological Evolution: Unity and Diversity. Construct an explanation based on evidence for how natural selection leads to adaptation of populations.

HS-LS4-5 Biological Evolution: Unity and Diversity. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.02. Classify different types of natural resources in order to enable protection,

conservation, enhancement and management in a particular geographical region.

NRS.01.03. Apply ecological concepts and principles to atmospheric natural resource systems.

NRS.01.05. Apply ecological concepts and principles to terrestrial natural resource systems.

NRS.01.06. Apply ecological concepts and principles to living organisms in natural resource

systems.

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

NRS.03.02. Demonstrate cartographic skills, tools and technologies to aid in developing,

implementing and evaluating natural resource management plans.

**Unit: Extinctions**

NGSS:

HS-LS4-5 Biological Evolution: Unity and Diversity. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.02. Classify different types of natural resources in order to enable protection,

conservation, enhancement and management in a particular geographical region.

NRS.01.06. Apply ecological concepts and principles to living organisms in natural resource

systems.

NRS.02.01. Examine and interpret the purpose, enforcement, impact and effectiveness of

laws and agencies related to natural resource management, protection, enhancement and

improvement (e.g., water regulations, game laws, historic preservation laws, environmental

policy, etc.).

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

NRS.02.04. Examine and explain how economics affects the use of natural resources.

NRS.04.03. Prevent or manage introduction of ecologically harmful species in a particular

region.

**Unit: Habitat Loss**

NGSS:
HS-LS4-5 Biological Evolution: Unity and Diversity. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

HS-ESS2-2 Earth's Systems. Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems.

HS-ESS3-4 Earth and Human Activity. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.02. Classify different types of natural resources in order to enable protection,

conservation, enhancement and management in a particular geographical region.

NRS.01.05. Apply ecological concepts and principles to terrestrial natural resource systems.

NRS.01.06. Apply ecological concepts and principles to living organisms in natural resource

systems.

NRS.02.01. Examine and interpret the purpose, enforcement, impact and effectiveness of

laws and agencies related to natural resource management, protection, enhancement and

improvement (e.g., water regulations, game laws, historic preservation laws, environmental

policy, etc.).

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

NRS.02.03. Analyze how modern perceptions of natural resource management, protection,

enhancement and improvement change and develop over time.

NRS.02.04. Examine and explain how economics affects the use of natural resources.

**Unit: Invasive Species**

NGSS:
HS-LS4-5 Biological Evolution: Unity and Diversity. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

HS-ESS3-4 Earth and Human Activity. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.02. Classify different types of natural resources in order to enable protection,

conservation, enhancement and management in a particular geographical region.

NRS.01.05. Apply ecological concepts and principles to terrestrial natural resource systems.

NRS.01.06. Apply ecological concepts and principles to living organisms in natural resource

systems.

NRS.02.01. Examine and interpret the purpose, enforcement, impact and effectiveness of

laws and agencies related to natural resource management, protection, enhancement and

improvement (e.g., water regulations, game laws, historic preservation laws, environmental

policy, etc.).

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

NRS.02.03. Analyze how modern perceptions of natural resource management, protection,

enhancement and improvement change and develop over time.

NRS.02.04. Examine and explain how economics affects the use of natural resources.

NRS.04.03. Prevent or manage introduction of ecologically harmful species in a particular

region.

**Unit: Land & Water Pollution**

NGSS:

HS-LS4-5 Biological Evolution: Unity and Diversity. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.
HS-ESS2-5 Earth's Systems. Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

HS-ESS2-2 Earth's Systems. Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems.

HS-ESS3-4 Earth and Human Activity. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

HS-ESS3-6 Earth and Human Activity. Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.02. Classify different types of natural resources in order to enable protection,

conservation, enhancement and management in a particular geographical region.

NRS.01.04. Apply ecological concepts and principles to aquatic natural resource systems.

NRS.01.05. Apply ecological concepts and principles to terrestrial natural resource systems.

NRS.01.06. Apply ecological concepts and principles to living organisms in natural resource

systems.

NRS.02.01. Examine and interpret the purpose, enforcement, impact and effectiveness of

laws and agencies related to natural resource management, protection, enhancement and

improvement (e.g., water regulations, game laws, historic preservation laws, environmental

policy, etc.).

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

NRS.02.03. Analyze how modern perceptions of natural resource management, protection,

enhancement and improvement change and develop over time.

NRS.02.04. Examine and explain how economics affects the use of natural resources.

NRS.02.05. Communicate information to the public regarding topics related to the

management, protection, enhancement, and improvement of natural resources.

**Unit: Air Pollution**

NGSS:
HS-LS4-5 Biological Evolution: Unity and Diversity. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

HS-ESS2-2 Earth's Systems. Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems.

HS-ESS2-4 Earth's Systems. Use a model to describe how variations in the flow of energy into and out of Earth’s systems result in changes in climate.

HS-ESS2-6 Earth's Systems. Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.

HS-ESS3-4 Earth and Human Activity. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

HS-ESS3-5 Earth and Human Activity. Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.

HS-ESS3-6 Earth and Human Activity. Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.02. Classify different types of natural resources in order to enable protection,

conservation, enhancement and management in a particular geographical region.

NRS.01.03. Apply ecological concepts and principles to atmospheric natural resource systems.

NRS.01.05. Apply ecological concepts and principles to terrestrial natural resource systems.

NRS.02.01. Examine and interpret the purpose, enforcement, impact and effectiveness of

laws and agencies related to natural resource management, protection, enhancement and

improvement (e.g., water regulations, game laws, historic preservation laws, environmental

policy, etc.).

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

NRS.02.03. Analyze how modern perceptions of natural resource management, protection,

enhancement and improvement change and develop over time.

NRS.02.04. Examine and explain how economics affects the use of natural resources.

**Unit: Overharvesting**

NGSS:
HS-LS4-5 Biological Evolution: Unity and Diversity. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

HS-ESS3-4 Earth and Human Activity. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.02. Classify different types of natural resources in order to enable protection,

conservation, enhancement and management in a particular geographical region.

NRS.01.05. Apply ecological concepts and principles to terrestrial natural resource systems.

NRS.01.06. Apply ecological concepts and principles to living organisms in natural resource

systems.

NRS.02.01. Examine and interpret the purpose, enforcement, impact and effectiveness of

laws and agencies related to natural resource management, protection, enhancement and

improvement (e.g., water regulations, game laws, historic preservation laws, environmental

policy, etc.).

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

NRS.02.03. Analyze how modern perceptions of natural resource management, protection,

enhancement and improvement change and develop over time.

NRS.02.04. Examine and explain how economics affects the use of natural resources.

NRS.02.05. Communicate information to the public regarding topics related to the

management, protection, enhancement, and improvement of natural resources.

NRS.03.01. Sustainably produce, harvest, process and use natural resource products (e.g.,

forest products, wildlife, minerals, fossil fuels, shale oil, alternative energy, recreation, aquatic

species, etc.).

**Unit: Natural Resources Management**

NGSS:
HS-LS4-5 Biological Evolution: Unity and Diversity. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

HS-ESS3-4 Earth and Human Activity. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.02. Classify different types of natural resources in order to enable protection,

conservation, enhancement and management in a particular geographical region.

NRS.01.05. Apply ecological concepts and principles to terrestrial natural resource systems.

NRS.01.06. Apply ecological concepts and principles to living organisms in natural resource

systems.

NRS.02.01. Examine and interpret the purpose, enforcement, impact and effectiveness of

laws and agencies related to natural resource management, protection, enhancement and

improvement (e.g., water regulations, game laws, historic preservation laws, environmental

policy, etc.).

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

NRS.02.03. Analyze how modern perceptions of natural resource management, protection,

enhancement and improvement change and develop over time.

NRS.02.04. Examine and explain how economics affects the use of natural resources.

NRS.02.05. Communicate information to the public regarding topics related to the

management, protection, enhancement, and improvement of natural resources.

NRS.03.02. Demonstrate cartographic skills, tools and technologies to aid in developing,

implementing and evaluating natural resource management plans.

NRS.04.01. Demonstrate natural resource protection, maintenance, enhancement and

improvement techniques.

**Unit: Societies & Sustainability**

NGSS:
HS-LS4-5 Biological Evolution: Unity and Diversity. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

HS-ESS3-1 Earth and Human Activity. Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.

HS-ESS3-2 Earth and Human Activity. Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.

HS-ESS3-3 Earth and Human Activity. Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.

HS-ESS3-4 Earth and Human Activity. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

HS-ESS3-6 Earth and Human Activity. Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.02. Classify different types of natural resources in order to enable protection,

conservation, enhancement and management in a particular geographical region.

NRS.01.04. Apply ecological concepts and principles to aquatic natural resource systems.

NRS.01.05. Apply ecological concepts and principles to terrestrial natural resource systems.

NRS.02.01. Examine and interpret the purpose, enforcement, impact and effectiveness of

laws and agencies related to natural resource management, protection, enhancement and

improvement (e.g., water regulations, game laws, historic preservation laws, environmental

policy, etc.).

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

NRS.02.03. Analyze how modern perceptions of natural resource management, protection,

enhancement and improvement change and develop over time.

NRS.02.04. Examine and explain how economics affects the use of natural resources.

NRS.02.05. Communicate information to the public regarding topics related to the

management, protection, enhancement, and improvement of natural resources.

**Unit: Individual Sustainability**

NGSS:
HS-LS4-5 Biological Evolution: Unity and Diversity. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

HS-ESS3-1 Earth and Human Activity. Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.

HS-ESS3-2 Earth and Human Activity. Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.

HS-ESS3-3 Earth and Human Activity. Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.

HS-ESS3-4 Earth and Human Activity. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

HS-ESS3-6 Earth and Human Activity. Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.02. Classify different types of natural resources in order to enable protection,

conservation, enhancement and management in a particular geographical region.

NRS.01.04. Apply ecological concepts and principles to aquatic natural resource systems.

NRS.01.05. Apply ecological concepts and principles to terrestrial natural resource systems.

NRS.02.01. Examine and interpret the purpose, enforcement, impact and effectiveness of

laws and agencies related to natural resource management, protection, enhancement and

improvement (e.g., water regulations, game laws, historic preservation laws, environmental

policy, etc.).

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

NRS.02.03. Analyze how modern perceptions of natural resource management, protection,

enhancement and improvement change and develop over time.

NRS.02.04. Examine and explain how economics affects the use of natural resources.

NRS.02.05. Communicate information to the public regarding topics related to the

management, protection, enhancement, and improvement of natural resources.

**Unit: Personal Campaigns**

NGSS:
HS-LS4-5 Biological Evolution: Unity and Diversity. Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

HS-LS4-6 Biological Evolution: Unity and Diversity. Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.

HS-ESS3-1 Earth and Human Activity. Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.

HS-ESS3-2 Earth and Human Activity. Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.

HS-ESS3-3 Earth and Human Activity. Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.

HS-ESS3-4 Earth and Human Activity. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

HS-ESS3-6 Earth and Human Activity. Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

AFNR:

NRS.01.01. Apply methods of classification to examine natural resource availability and

ecosystem function in a particular region.

NRS.01.02. Classify different types of natural resources in order to enable protection,

conservation, enhancement and management in a particular geographical region.

NRS.01.04. Apply ecological concepts and principles to aquatic natural resource systems.

NRS.01.05. Apply ecological concepts and principles to terrestrial natural resource systems.

NRS.02.01. Examine and interpret the purpose, enforcement, impact and effectiveness of

laws and agencies related to natural resource management, protection, enhancement and

improvement (e.g., water regulations, game laws, historic preservation laws, environmental

policy, etc.).

NRS.02.02. Assess the impact of human activities on the availability of natural resources.

NRS.02.03. Analyze how modern perceptions of natural resource management, protection,

enhancement and improvement change and develop over time.

NRS.02.04. Examine and explain how economics affects the use of natural resources.

NRS.02.05. Communicate information to the public regarding topics related to the

management, protection, enhancement, and improvement of natural resources.