



AP DAILY VIDEOS

AP Environmental Science

AP Daily is a series of on-demand, short videos—created by expert AP teachers and faculty—that can be used for in-person, online, and blended/hybrid instruction. These videos cover every topic and skill outlined in the AP Course and Exam Description and are available in AP Classroom for students to watch anytime, anywhere.

Unit 1

Video Title	Topic	Video Focus	Instructor
1.1: Daily Video 1	Introduction to Ecosystems	Predator-prey relationships; basic background information on ecosystems; how the availability of resources influences species interactions.	Lisa Bagley
1.1: Daily Video 2	Introduction to Ecosystems	Symbiotic relationships (mutualism, commensalism, and parasitism); how the availability of resources influences these relationships.	Lisa Bagley
1.1: Daily Video 3	Introduction to Ecosystems	Competition between species and within a single species; how resource partitioning helps reduce the negative impact of competition on species' survival.	Lisa Bagley
1.2: Daily Video 1	Terrestrial Biomes	The global distribution and principal environmental aspects of major terrestrial biomes.	Chad Scholten
1.2: Daily Video 2	Terrestrial Biomes	The global distribution and principal environmental aspects of major terrestrial biomes.	Chad Scholten
1.2: Daily Video 3	Terrestrial Biomes	Human impact on terrestrial biomes.	Chad Scholten
1.3: Daily Video 1	Aquatic Biomes	Freshwater biomes (streams, rivers, ponds, and lakes); freshwater biomes as a vital resource for drinking water.	Chad Scholten
1.3: Daily Video 2	Aquatic Biomes	Marine biomes (oceans, coral reefs, marshland, and estuaries).	Chad Scholten
1.3: Daily Video 3	Aquatic Biomes	Human impact on aquatic biomes.	Chad Scholten
1.4: Daily Video 1	The Carbon Cycle	The movement of carbon between sources and sinks and through photosynthesis and respiration.	Lisa Bagley
1.4: Daily Video 2	The Carbon Cycle	Carbon cycling and sequestration; the role of decomposition and the burning of fossil fuels on the storage and release of carbon.	Lisa Bagley
1.5: Daily Video 1	The Nitrogen Cycle	The movement of nitrogen between sources and sinks through the processes of fixation, ammonification, nitrification, assimilation, and denitrification.	Lisa Bagley
1.5: Daily Video 2	The Nitrogen Cycle	The major processes of the nitrogen cycle, with a focus on reservoir interactions.	Lisa Bagley
1.6: Daily Video 1	The Phosphorus Cycle	The movement of phosphorous between terrestrial and aquatic sources and sinks; the concept of phosphorous as a limiting factor in biological systems.	Lisa Bagley
1.7: Daily Video 1	The Hydrologic (Water) Cycle	Following water through its cycle transformations of solid, liquid, and gaseous states; identifying sources, sinks, and transformation processes through the use of visual models.	Lisa Bagley
1.8: Daily Video 1	Primary Productivity	Primary productivity: The rate at which solar energy (sunlight) is converted into organic compounds via photosynthesis over a unit of time.	Chad Scholten
1.8: Daily Video 2	Primary Productivity	Comparing the primary productivity of biomes.	Chad Scholten
1.8: Daily Video 3	Primary Productivity	How to measure solar energy that is acquired and transferred by living organisms.	Chad Scholten
1.9: Daily Video 1	Trophic Levels	How energy flows and matter cycles through trophic levels.	Chad Scholten

Video Title	Topic	Video Focus	Instructor
1.9: Daily Video 2	Trophic Levels	How biogeochemical cycles are essential for life; how each cycle demonstrates the conservation of matter.	Chad Scholten
1.10: Daily Video 1	Energy Flow and the 10% Rule	How energy decreases as it flows through ecosystems.	Chad Scholten
1.11: Daily Video 1	Food Chains and Food Webs	Depicting the flow of energy and nutrients in two or more food chains; understanding a food web as a model of an interlocking pattern of food chains.	Chad Scholten
1.11: Daily Video 2	Food Chains and Food Webs	How a trophic cascade results in both positive and negative impacts on food webs.	Chad Scholten
1.11: Daily Video 3	Food Chains and Food Webs	Human impacts on food webs.	Chad Scholten

Unit 2

Video Title	Topic	Video Focus	Instructor
2.1: Daily Video 1	Introduction to Biodiversity	This video will explain the three levels of biodiversity and their importance to ecosystems.	Chad Scholten
2.1: Daily Video 2	Introduction to Biodiversity	This video will explain the impact of environmental stress on the biodiversity of a population of species.	Chad Scholten
2.1: Daily Video 3	Introduction to Biodiversity	This video will explain how habitat loss affects species differently based on habitat biodiversity.	Chad Scholten
2.2: Daily Video 1	Ecosystem Services	This video will explain the environmental worldviews that place value on ecosystem services.	Chad Scholten
2.2: Daily Video 2	Ecosystem Services	This video will describe and compare the four categories of ecosystem services.	Chad Scholten
2.3: Daily Video 1	Island Biogeography	This video will explain the impact of habitat fragmentation on species diversity and habitat biodiversity.	Chad Scholten
2.3: Daily Video 2	Island Biogeography	This video will provide examples of habitat fragmentation on a large scale and its impact on species diversity and habitat diversity.	Chad Scholten
2.3: Daily Video 3	Island Biogeography	This video will provide an example of a local investigation involving a field study to measure the impact of habitat loss on biodiversity.	Chad Scholten
2.4: Daily Video 1	Ecological Tolerance	This video explores ecological tolerance, the range of conditions such as temperature, salinity, and flow rate that an organism can endure before injury or death results.	Amy Fassler
2.4: Daily Video 2	Ecological Tolerance	This video will demonstrate how ecological tolerance determines species distribution. We will practice identifying an author's claim from a reading passage.	Amy Fassler
2.5: Daily Video 1	Natural Disruptions to Ecosystems	Natural Earth processes can occur quickly or over long periods of time. This video will describe patterns or trends in data that show changes in Earth's climate over geologic time.	Amy Fassler
2.5: Daily Video 2	Natural Disruptions to Ecosystems	This video will explore how natural disruptions can lead to animal migration. Migration is an adaptive response that is usually triggered by seasonal changes in resources.	Amy Fassler
2.6: Daily Video 1	Adaptations	This video will explore how organisms adapt to changes in their environment through incremental changes at the genetic level.	Amy Fassler
2.6: Daily Video 2	Adaptations	This video will examine data to show how environmental changes may threaten a species' survival, requiring individuals to alter behavior, move, or perish.	Amy Fassler
2.7: Daily Video 1	Ecological Succession	This video will compare and contrast primary and secondary succession. We will examine how indicator species and keystone species are important in understanding ecosystem structure.	Amy Fassler
2.7: Daily Video 2	Ecological Succession	This video will explain how ecological disturbances can set the stage for species to move into the habitat and adapt to the new conditions.	Amy Fassler

Unit 3

Video Title	Topic	Video Focus	Instructor
3.1: Daily Video 1	Generalist and Specialist Species	This video explains why specialists have an advantage in habitats that remain constant, while generalist species tend to have the advantage in habitats that are changing.	Amy Fassler
3.2: Daily Video 1	K-Selected r-Selected Species	This video describes characteristics of K-selected species that produce few offspring, and r-selected species whose populations are determined by their biotic potential.	Amy Fassler
3.2: Daily Video 2	K-Selected r-Selected Species	This video examines species that are not uniquely r-selected or K-selected and the impact of invasive species on populations with different reproductive strategies.	Amy Fassler
3.3: Daily Video 1	Survivorship Curves	This video will examine survivorship curves to explain the differences in survival rate between K-selected and r-selected species.	Amy Fassler
3.4: Daily Video 1	Carrying Capacity	In this video we will interpret a graph of population growth to explain how resources are depleted when a population overshoots the carrying capacity.	Amy Fassler
3.5: Daily Video 1	Population Growth and Resource Availability	This video will illustrate how the unequal distribution of resources can result in changes in population.	Amy Fassler
3.6: Daily Video 1	Age Structure Diagrams	In this video we will interpret the parts and vocabulary involved in an age structure diagram.	Antonio (Tony) Villarreal
3.6: Daily Video 2	Age Structure Diagrams	In this video we will examine trends in age structure diagrams in various economic and societal situations.	Antonio (Tony) Villarreal
3.7: Daily Video 1	Total Fertility Rate	In this video we will explain total fertility rate (TFR) and discuss the social and cultural factors that can affect it.	Antonio (Tony) Villarreal
3.8: Daily Video 1	Human Population Dynamics	In this video we will discuss how human populations change in reaction to a variety of factors, including social and cultural factors.	Antonio (Tony) Villarreal
3.8: Daily Video 2	Human Population Dynamics	In this video we will analyze environmental problems through graphs and trends to determine factors affecting population growth and decline.	Antonio (Tony) Villarreal
3.8: Daily Video 3	Human Population Dynamics	This video will discuss the rule of 70, used to approximate doubling time of human populations. Calculation practice will also be provided.	Antonio (Tony) Villarreal
3.9: Daily Video 1	Demographic Transition	In this video will discuss the concept of demographic transition and the different social and cultural aspects of a country's population growth.	Antonio (Tony) Villarreal

Unit 4

Video Title	Topic	Video Focus	Instructor
4.1: Daily Video 1	Plate Tectonics	This video will focus on recognizing the three different plate boundaries and the mechanisms of how these boundaries move.	Antonio (Tony) Villarreal
4.1: Daily Video 2	Plate Tectonics	This video will explore how geologic formations can be found at plate boundaries, with a focus on earthquake formations.	Antonio (Tony) Villarreal
4.1: Daily Video 3	Plate Tectonics	This video will explore how plate tectonics and earthquakes can cause environmental issues and review AP-style free-response questions.	Antonio (Tony) Villarreal
4.2: Daily Video 1	Soil Formation and Erosion	This video will explore the process of soil formation and the different layers of soil after formation.	Antonio (Tony) Villarreal
4.2: Daily Video 2	Soil Formation and Erosion	This video will explore the various ways soil can be eroded and how this can connect to water quality.	Antonio (Tony) Villarreal
4.3: Daily Video 1	Soil Composition and Properties	This video will explore soil particle size and its connection to water holding capacity. There will be practice using a soil triangle.	Antonio (Tony) Villarreal
4.3: Daily Video 2	Soil Composition and Properties	This video will explore the variety of methods to test the chemical, physical, and biological properties of soil. A sample of these tests will be presented.	Antonio (Tony) Villarreal
4.4: Daily Video 1	Earth's Atmosphere	This video will describe the structure and composition of the Earth's atmosphere and explore how to read a diagram of the layers of the atmosphere.	Antonio (Tony) Villarreal
4.5: Daily Video 1	Global Wind Patterns	This video will explore how environmental factors result in atmospheric circulation through density differences and the Coriolis effect.	Antonio (Tony) Villarreal
4.6: Daily Video 1	Watersheds	This video will identify the characteristics of a watershed, and discuss the environmental impacts of human activity within watersheds.	Katherine (Kati) Morris
4.7: Daily Video 1	Solar Radiation and Earth's Seasons	This video will define insolation, explain how it varies at different Earth latitudes, and describe how these differences are related to the shape of the Earth.	Katherine (Kati) Morris
4.7: Daily Video 2	Solar Radiation and Earth's Seasons	This video will identify why the Earth has seasons and will describe the variability of insolation at different latitudes throughout a full year.	Katherine (Kati) Morris
4.8: Daily Video 1	Earth's Geography and Climate	This video will explain the influence large bodies of water and coastal mountains have on terrestrial climate.	Katherine (Kati) Morris
4.8: Daily Video 2	Earth's Geography and Climate	This video will explain the influence large bodies of water and coastal mountains have on terrestrial climate.	Katherine (Kati) Morris

Video Title	Topic	Video Focus	Instructor
4.9: Daily Video 1	El Niño and La Niña	This video will define El Niño/La Niña and their impacts on ocean currents, then describe the oceanic environmental problems associated with this weather phenomenon.	Katherine (Kati) Morris
4.9: Daily Video 2	El Niño and La Niña	This video will recap the El Niño/La Niña weather patterns, then describe the terrestrial environmental problems associated with them.	Katherine (Kati) Morris
4.9: Daily Video 3	El Niño and La Niña	This video will recap the El Niño/La Niña weather patterns and their environmental effects, then evaluate both multiple-choice and free-response questions based on this material.	Katherine (Kati) Morris

Unit 5

Video Title	Topic	Video Focus	Instructor
5.1: Daily Video 1	The Tragedy of the Commons	This video will define the tragedy of the commons, then evaluate different methods that can be used to mitigate or prevent the phenomenon.	Katherine (Kati) Morris
5.2: Daily Video 1	Clearcutting	This video will discuss the ecosystem services and economic benefits provided by forests, then define clearcutting.	Katherine (Kati) Morris
5.2: Daily Video 2	Clearcutting	This video will explore the impacts of clearcutting on terrestrial and atmospheric environments.	Katherine (Kati) Morris
5.2: Daily Video 3	Clearcutting	This video will explore the impacts of clearcutting on aquatic environments, and evaluate test questions based on this material.	Katherine (Kati) Morris
5.3: Daily Video 1	The Green Revolution	This video will define the Green Revolution, detail its strategies and practices, and discuss general benefits and drawbacks to this agricultural approach.	Katherine (Kati) Morris
5.3: Daily Video 2	The Green Revolution	This video will focus on defining genetically modified organisms (GMOs), then discussing the benefits and drawbacks of their use.	Katherine (Kati) Morris
5.3: Daily Video 3	The Green Revolution	This video will evaluate author perspective and assumptions related to the Green Revolution.	Katherine (Kati) Morris
5.4: Daily Video 1	Impacts of Agricultural Practices	This video will describe and discuss the negative impacts agricultural practices like tilling, slash-and-burn farming, and long-term intensive farming have on the environment.	Katherine (Kati) Morris
5.4: Daily Video 2	Impacts of Agricultural Practices	This video will describe and discuss the negative impacts agricultural practices like pesticide and fertilizer overuse have on the environment.	Katherine (Kati) Morris
5.5: Daily Video 1	Irrigation Methods	This video will define and discuss the benefits and drawbacks of using flood irrigation and furrow irrigation.	Katherine (Kati) Morris
5.5: Daily Video 2	Irrigation Methods	This video will define and discuss the benefits and drawbacks of spray irrigation and drip irrigation.	Katherine (Kati) Morris
5.5: Daily Video 3	Irrigation Methods	This video will explore the impacts of using freshwater sources for agricultural irrigation, then discuss remediation for the negative impacts of irrigation.	Katherine (Kati) Morris
5.6: Daily Video 1	Pest Control Methods	This video will explore the use of traditional pesticide use, discuss both the benefits and drawbacks of traditional pesticide use, then evaluate claims related to pesticide use.	Katherine (Kati) Morris
5.6: Daily Video 2	Pest Control Methods	This video will explore the use of genetic engineering as a pest control method, then discuss the benefits and drawbacks of using genetic engineering as a pesticide.	Katherine (Kati) Morris
5.7: Daily Video 1	Meat Production Methods	This video will explore the topic of meat production, and evaluate the benefits and drawbacks inherent to meat production.	Katherine (Kati) Morris
5.7: Daily Video 2	Meat Production Methods	This video will define what concentrated animal feeding operations (CAFOs) are, then explore the benefits and drawbacks of using this method for meat production.	Katherine (Kati) Morris

Video Title	Topic	Video Focus	Instructor
5.7: Daily Video 3	Meat Production Methods	This video will define what free-range grazing is, then explore the benefits and drawbacks of using this method for meat production.	Katherine (Kati) Morris
5.8: Daily Video 1	Impacts of Overfishing	This video will explore techniques used in commercial fishing, then how they contribute to overfishing.	Katherine (Kati) Morris
5.8: Daily Video 2	Impacts of Overfishing	This video will explore potential methods to curtail overfishing, then apply content to a free response prompt.	Katherine (Kati) Morris
5.9: Daily Video 1	Impacts of Mining	This video will define mining, then describe different types of mining and when each type is used.	Katherine (Kati) Morris
5.9: Daily Video 2	Impacts of Mining	This video will discuss the environmental impacts of natural resource extraction through mining.	Katherine (Kati) Morris
5.9: Daily Video 3	Impacts of Mining	This video will explore remediation techniques used to address the impacts mining has on the environment, then apply content knowledge to a free response prompt.	Katherine (Kati) Morris
5.10: Daily Video 1	Impacts of Urbanization	This video will define what an urban area is, and describe the benefits of urbanization.	Katherine (Kati) Morris
5.10: Daily Video 2	Impacts of Urbanization	This video will focus on the disadvantages of urbanization for both humans and the environment.	Katherine (Kati) Morris
5.10: Daily Video 3	Impacts of Urbanization	This video will discuss remediation of the effects of urbanization, then apply content knowledge to a free response prompt.	Katherine (Kati) Morris
5.11: Daily Video 1	Ecological Footprints	This video explains the variables measured in calculating an ecological footprint. It will also compare resource demands and waste production required for an individual or society.	Ricardo Viteri
5.12: Daily Video 1	Introduction to Sustainability	The video will focus on explaining the concept of sustainability with regards to environmental indicators.	Ricardo Viteri
5.12: Daily Video 2	Introduction to Sustainability	This video will explain sustainable yield, which is the amount of a renewable resource that can be taken without reducing the available supply.	Ricardo Viteri
5.13: Daily Video 1	Methods to Reduce Urban Runoff	The video will describe methods for mitigating problems with urban runoff, which include permeable pavement, planting trees, increasing public transportation, and building up, not out.	Ricardo Viteri
5.14: Daily Video 1	Integrated Pest Management	This video will describe how integrated pest management is a combination of methods used to control pest species, while minimizing the disruption to the environment.	Ricardo Viteri
5.14: Daily Video 2	Integrated Pest Management	This video describes the benefits and drawbacks of IPM. It will also focus on the effect of IPM on wildlife, water supplies, and human health.	Ricardo Viteri
5.15: Daily Video 1	Sustainable Agriculture	This video describes soil conservation practices as well as strategies that are used to improve soil fertility.	Ricardo Viteri
5.15: Daily Video 2	Sustainable Agriculture	This video will describe how rotational grazing between different pastures will prevent overgrazing in particular areas.	Ricardo Viteri

Video Title	Topic	Video Focus	Instructor
5.16: Daily Video 1	Aquaculture	This video will focus on sustainable use of water resources and mitigation of human-caused environmental impacts through discussion of the benefits and drawbacks of aquaculture.	Lisa Bagley
5.16: Daily Video 2	Aquaculture	This video will explore the advantages, disadvantages, and unintended consequences of aquaculture through practice with multiple choice and free response-style questions.	Lisa Bagley
5.17: Daily Video 1	Sustainable Forestry	This video will focus on sustainable forestry, including methods of mitigating deforestation, protecting forests from pests, and the benefits of prescribed burns on forest health.	Lisa Bagley
5.17: Daily Video 2	Sustainable Forestry	This video will focus help justify sustainable forestry as a solution to deforestation through practice with multiple choice and free response-style questions.	Lisa Bagley

Unit 6

Video Title	Topic	Video Focus	Instructor
6.1: Daily Video 1	Renewable and Nonrenewable Resources	This video will focus on identifying the differences between nonrenewable and renewable energy sources.	Ricardo Viteri
6.2: Daily Video 1	Global Energy Consumption	This video will describe the trends in energy consumption between developed and developing countries and how fossil fuels are the most widely used source of energy globally.	Ricardo Viteri
6.2: Daily Video 2	Global Energy Consumption	This video covers the increased reliance developing countries have on fossil fuels as they become more developed. It will also describe the factors that influence which energy sources people use.	Ricardo Viteri
6.3: Daily Video 1	Fuel Types and Uses	This video will identify and describe the different types of fuels such as wood, charcoal, peat, and the three different types of coals such as lignite, bituminous, and anthracite.	Ricardo Viteri
6.3: Daily Video 2	Fuel Types and Uses	This video will describe how crude oil can be recovered from tar sands, the cleanest fuel, and cogeneration. It will also explain how fossil fuels are made into specific fuel types.	Ricardo Viteri
6.4: Daily Video 1	Distribution of Natural Energy Resources	This video will describe the global patterns of distribution of natural energy sources, as well as the geologic conditions under which these sources form.	Antonio (Tony) Villarreal
6.5: Daily Video 1	Fossil Fuels	This video will explain the process of combustion of fossil fuels and describe how burning them allows for the production of electricity.	Antonio (Tony) Villarreal
6.5: Daily Video 2	Fossil Fuels	This video will explore the variety of methods humans use to extract fossil fuels from the earth for the generation of energy and electricity.	Antonio (Tony) Villarreal
6.5: Daily Video 3	Fossil Fuels	This video will explain the process of hydrologic fracturing in more detail and describe the effects of this process on the air, land, and water resources.	Antonio (Tony) Villarreal
6.6: Daily Video 1	Nuclear Power	This video will describe the steps of how nuclear energy generates electricity and other outputs of nuclear power generation.	Antonio (Tony) Villarreal
6.6: Daily Video 2	Nuclear Power	This video will discuss the environmental issues caused by radioactive isotopes and the disposal of nuclear waste left over from the generation of nuclear energy.	Antonio (Tony) Villarreal
6.6: Daily Video 3	Nuclear Power	This video will describe the half-life of radioactive elements. Case studies of past nuclear accidents will be discussed and analyzed.	Antonio (Tony) Villarreal
6.7: Daily Video 1	Energy from Biomass	This video will focus on the use of biomass in developing countries and the environmental costs associated with their use.	Catherine (Cat) Trouteaud
6.7: Daily Video 2	Energy from Biomass	This video will investigate the advantages and disadvantages of using biofuels as a substitute for gasoline.	Catherine (Cat) Trouteaud

Video Title	Topic	Video Focus	Instructor
6.8: Daily Video 1	Solar Energy	This video will identify three types of solar energy transformations and explain how each can best be utilized to meet global energy needs.	Catherine (Cat) Trouteaud
6.8: Daily Video 2	Solar Energy	This video will investigate trends in data for solar energy in order to draw conclusions.	Catherine (Cat) Trouteaud
6.9: Daily Video 1	Hydroelectric Power	This video will explain how moving water can be utilized to produce electricity in reservoirs, rivers, and the ocean.	Catherine (Cat) Trouteaud
6.9: Daily Video 2	Hydroelectric Power	This video will investigate the advantages and disadvantages of using hydroelectricity from an economic and environmental angle.	Catherine (Cat) Trouteaud
6.10: Daily Video 1	Geothermal Energy	This video will explain how electricity is generated from geothermal energy and the environmental consequences of its use.	Catherine (Cat) Trouteaud
6.11: Daily Video 1	Hydrogen Fuel Cell	This video will explain how a hydrogen fuel cell functions to produce electricity from hydrogen and oxygen.	Catherine (Cat) Trouteaud
6.11: Daily Video 2	Hydrogen Fuel Cell	This video will discuss the viability of hydrogen as a fuel source based on its environmental and economic impacts.	Catherine (Cat) Trouteaud
6.12: Daily Video 1	Wind Energy	This video details the energy conversions in producing electricity from wind and discusses the consequences of utilizing wind energy.	Catherine (Cat) Trouteaud
6.13: Daily Video 1	Energy Conservation	This video will describe methods for conserving energy on an individual scale and from a larger policy perspective.	Catherine (Cat) Trouteaud
6.13: Daily Video 2	Energy Conservation	This video will focus on accurately performing calculations to find rates of energy use and conservation.	Catherine (Cat) Trouteaud

Unit 7

Video Title	Topic	Video Focus	Instructor
7.1: Daily Video 1	Introduction to Air Pollution	This video introduces primary versus secondary air pollutants and discusses how the Clean Air Act has improved air quality in the U.S. for criteria air pollutants.	Catherine (Cat) Trouteaud
7.1: Daily Video 2	Introduction to Air Pollution	This video will investigate how the burning of coal and diesel fuels can affect air quality and the consequences of combustion on the atmosphere.	Catherine (Cat) Trouteaud
7.1: Daily Video 3	Introduction to Air Pollution	In this video, we will discuss the primary and secondary pollutants that result from the combustion of fossil fuels.	Catherine (Cat) Trouteaud
7.2: Daily Video 1	Photochemical Smog	This video will detail the formation of photochemical smog, including the chemical reactions that transform primary into secondary pollutants.	Catherine (Cat) Trouteaud
7.2: Daily Video 2	Photochemical Smog	This video will discuss the human health impacts of photochemical smog and provide solutions for its reduction.	Catherine (Cat) Trouteaud
7.3: Daily Video 1	Thermal Inversion	This video will explain the phenomenon of thermal inversions and how these events increase pollution's effects for regions with specific topography.	Catherine (Cat) Trouteaud
7.4: Daily Video 1	Atmospheric CO ₂ and Particulates	This video will identify and describe natural sources of carbon dioxide and particulate matter in the atmosphere.	Catherine (Cat) Trouteaud
7.5: Daily Video 1	Indoor Air Pollutants	This video will introduce the sources and classifications of indoor air pollution found in homes, schools, and buildings.	Kim Parfitt
7.5: Daily Video 2	Indoor Air Pollutants	This video will investigate human-made indoor air pollutants that can be in our homes and schools.	Kim Parfitt
7.5: Daily Video 3	Indoor Air Pollutants	This video will describe how radon can infiltrate homes and other buildings and the human health consequences of radon exposure.	Kim Parfitt
7.6: Daily Video 1	Reduction of Air Pollutants	This video will introduce how regulations like the Clean Air Act, conservation, and alternative fuels can reduce air pollutants at the source.	Kim Parfitt
7.6: Daily Video 2	Reduction of Air Pollutants	This video will explain two technologies used for reducing air pollution associated with transportation.	Kim Parfitt
7.6: Daily Video 3	Reduction of Air Pollutants	This video will explore how scrubbers and electrostatic precipitators are technologies used to reduce emissions from industry and energy production.	Kim Parfitt
7.7: Daily Video 1	Acid Rain	This video describes how acid deposition is formed from natural and anthropogenic sources.	Kim Parfitt
7.7: Daily Video 2	Acid Rain	This video describes how acid rain damages forest and aquatic systems and man-made structures and how those impacts vary regionally.	Kim Parfitt
7.8: Daily Video 1	Noise Pollution	This video will describe activities that result in noise pollution and its effect on humans.	Kim Parfitt
7.8: Daily Video 2	Noise Pollution	This video will describe effects of noise pollution on animals in ecological systems.	Kim Parfitt

Unit 8

Video Title	Topic	Video Focus	Instructor
8.1: Daily Video 1	Sources of Pollution	This video describes point and nonpoint source pollution and the differences between those sources.	Kim Parfitt
8.2: Daily Video 1	Human Impacts on Ecosystems	This video examines how aquatic organisms, like coral reefs, have a tolerance range for conditions like dissolved oxygen and pollutants.	Kim Parfitt
8.2: Daily Video 2	Human Impacts on Ecosystems	This video describes the impacts of oils spills and sedimentation in aquatic ecosystems and economies.	Kim Parfitt
8.2: Daily Video 3	Human Impacts on Ecosystems	This video describes the sources and impacts of heavy metals, mercury, and litter in aquatic environments.	Kim Parfitt
8.3: Daily Video 1	Endocrine Disruptors	This video describes chemicals known as endocrine disruptors and examines their effects on ecosystems.	Kim Parfitt
8.4: Daily Video 1	Human Impacts on Wetlands and Mangroves	This video defines the characteristics of wetlands while exploring their ecological services.	Kim Parfitt
8.4: Daily Video 2	Human Impacts on Wetlands and Mangroves	This video describes sources and impacts of human associated threats to wetland and mangrove communities.	Kim Parfitt
8.5: Daily Video 1	Eutrophication	This video describes the human activities that lead to eutrophication of our surface waters.	Kim Parfitt
8.5: Daily Video 2	Eutrophication	This video explains the processes that create low dissolved oxygen levels that can be deadly to aquatic organisms.	Kim Parfitt
8.6: Daily Video 1	Thermal Pollution	This video discusses sources and impacts of thermal pollution.	Kim Parfitt
8.7: Daily Video 1	Persistent Organic Pollutants (POPs)	This video will define what a persistent organic pollutant is, then discuss common types of persistent organic pollutants.	Katherine (Kati) Morris
8.7: Daily Video 2	Persistent Organic Pollutants (POPs)	In this video, we will discuss the impacts of persistent organic pollutants on nontarget organisms.	Katherine (Kati) Morris
8.8: Daily Video 1	Bioaccumulation and Biomagnification	This video will explain the processes of bioaccumulation and biomagnification, then identify common substances that can bioaccumulate.	Katherine (Kati) Morris
8.8: Daily Video 2	Bioaccumulation and Biomagnification	This video will discuss the impacts bioaccumulation and biomagnification have on the environment and on human health.	Katherine (Kati) Morris
8.8: Daily Video 3	Bioaccumulation and Biomagnification	This video will apply content knowledge of bioaccumulation and biomagnification to a free-response question.	Katherine (Kati) Morris
8.9: Daily Video 1	Solid Waste Disposal	This video will identify different types of solid waste and discuss management of solid waste via sanitary landfills.	Katherine (Kati) Morris
8.9: Daily Video 2	Solid Waste Disposal	This video will discuss alternative methods of solid waste management.	Katherine (Kati) Morris
8.9: Daily Video 3	Solid Waste Disposal	This video will describe the effects of solid waste disposal methods.	Katherine (Kati) Morris

Video Title	Topic	Video Focus	Instructor
8.10: Daily Video 1	Waste Reduction Methods	This video will discuss the removal of materials from the solid waste stream via reuse, recycling, and composting, then identify potential drawbacks to these methods.	Katherine (Kati) Morris
8.10: Daily Video 2	Waste Reduction Methods	This video will discuss strategies that mitigate the impact of landfills on the environment.	Katherine (Kati) Morris
8.10: Daily Video 3	Waste Reduction Methods	This video will apply content knowledge of waste reduction methods to a free response question.	Katherine (Kati) Morris
8.11: Daily Video 1	Sewage Treatment	In this video, we will describe the process of sewage treatment, then explain primary, secondary, and tertiary treatment.	Katherine (Kati) Morris
8.11: Daily Video 2	Sewage Treatment	In this video, we will apply content knowledge of sewage treatment to a free response question.	Katherine (Kati) Morris
8.12: Daily Video 1	Lethal Dose 50% (LD50)	This video will define lethal dose 50%, then explain how LD50 differs between substances.	Katherine (Kati) Morris
8.13: Daily Video 1	Dose Response Curve	This video will define dose response curve, then interpret data given on a dose response curve.	Katherine (Kati) Morris
8.14: Daily Video 1	Pollution and Human Health	This video describes how pollutants can contribute to human health issues.	Kim Parfitt
8.15: Daily Video 1	Pathogens and Infectious Diseases	This video examines factors that promote the occurrence and movement of pathogens and infectious diseases.	Kim Parfitt
8.15: Daily Video 2	Pathogens and Infectious Diseases	This video will describe conditions that lead to viral and bacterial infections that can spread via contaminated water and human contact.	Kim Parfitt
8.15: Daily Video 3	Pathogens and Infectious Diseases	This video will explore infectious diseases associated with the bite of mosquitoes or other vectors organisms.	Kim Parfitt

Unit 9

Video Title	Topic	Video Focus	Instructor
9.1: Daily Video 1	Stratospheric Ozone Depletion	This video will identify the location and purpose of the ozone layer, then detail the natural formation and depletion of ozone.	Katherine (Kati) Morris
9.1: Daily Video 2	Stratospheric Ozone Depletion	This video will explain how ozone can be anthropogenically depleted, then identify the chemicals that lead to this depletion.	Katherine (Kati) Morris
9.1: Daily Video 3	Stratospheric Ozone Depletion	This video will discuss the effects of ozone depletion, then apply topic content to a practice question.	Katherine (Kati) Morris
9.2: Daily Video 1	Reducing Ozone Depletion	This video will describe mitigation steps that have been taken to reduce ozone depletion.	Katherine (Kati) Morris
9.3: Daily Video 1	The Greenhouse Effect	This video will describe the natural greenhouse effect, then explain its purpose.	Katherine (Kati) Morris
9.3: Daily Video 2	The Greenhouse Effect	This video will identify different greenhouse gases and their sources, then explain residence time.	Katherine (Kati) Morris
9.3: Daily Video 3	The Greenhouse Effect	This video will define global warming potential (GWP), compare greenhouse gases based on their GWPs, then apply content knowledge to a practice question.	Katherine (Kati) Morris
9.4: Daily Video 1	Increases in the Greenhouse Gases	This video will explain the link between an increase in greenhouse gases and climate change.	Katherine (Kati) Morris
9.4: Daily Video 2	Increases in the Greenhouse Gases	This video will provide an overview of environmental problems associated with climate change, then discuss resulting changes in population dynamics and movements.	Katherine (Kati) Morris
9.4: Daily Video 3	Increases in the Greenhouse Gases	This video will apply content knowledge about greenhouse gases to a practice problem.	Katherine (Kati) Morris
9.5: Daily Video 1	Global Climate Change	This video will discuss historical and modern evidence of climate change, then discuss climate change's impacts on air circulation patterns and soil quality.	Katherine (Kati) Morris
9.5: Daily Video 2	Global Climate Change	This video will discuss the impacts of climate change on Earth's polar regions.	Katherine (Kati) Morris
9.5: Daily Video 3	Global Climate Change	This video will discuss the impacts of climate change on Earth's marine systems.	Katherine (Kati) Morris
9.6: Daily Video 1	Ocean Warming	This video will describe the causes and effects of ocean warming, including coral bleaching events, within the framework of global climate change.	Lisa Bagley
9.6: Daily Video 2	Ocean Warming	This video will focus on free response and multiple choice practice questions concerning the causes and effects of ocean warming.	Lisa Bagley
9.7: Daily Video 1	Ocean Acidification	This video will explain the causes and effects of ocean acidification, emphasizing anthropogenic contributions to the phenomenon.	Lisa Bagley
9.7: Daily Video 2	Ocean Acidification	This video will model a math-based free response question related to causes and effects of ocean acidification.	Lisa Bagley

Video Title	Topic	Video Focus	Instructor
9.8: Daily Video 1	Invasive Species	This video explains what makes a species invasive, general characteristics of invasives, and strategies to control or mitigate the spread of invasive species.	Lisa Bagley
9.8: Daily Video 2	Invasive Species	This video will build on our knowledge of invasive species to model an FRQ response that focuses on making a claim that proposes a solution to this environmental problem.	Lisa Bagley
9.9: Daily Video 1	Endangered Species	This video will explore various factors that can lead to species loss, and how these factors differentially affect species based on their ability to adapt to environmental change.	Lisa Bagley
9.9: Daily Video 2	Endangered Species	This video will explain how selective pressures and interspecific competition in an environment may lead to species endangerment or extinction.	Lisa Bagley
9.9: Daily Video 3	Endangered Species	This video will explore various strategies to protect animal populations, and will include exam practice using data/evidence to support such strategies.	Lisa Bagley
9.10: Daily Video 1	Human Impacts on Biodiversity	This video will explain the acronym HIPPCO, and explore the causes and consequences of habitat fragmentation on species biodiversity.	Lisa Bagley
9.10: Daily Video 2	Human Impacts on Biodiversity	This video will explore the role of climate change in habitat loss, and describe how domestication of species for economic return may negatively impact biodiversity.	Lisa Bagley
9.10: Daily Video 3	Human Impacts on Biodiversity	This video will explore some mitigation strategies for biodiversity loss, and will include free response practice evaluating the advantages and disadvantages of such strategies.	Lisa Bagley