NGSS Alignment

NGSS Standards that could be addressed:

By implementing the guided inquiry activities (nutrient holding capacity and water holding capacity):

HS-ESS2-2. Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems. http://www.nextgenscience.org/pe/hs-ess2-2-earths-systems

HS-ESS2-5. Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes. http://www.nextgenscience.org/pe/hs-ess2-5-earths-systems

By implementing other aspects of the AFW Module:

MS-ESS3-1. Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes. http://www.nextgenscience.org/pe/ms-ess3-1-earth-and-human-activity

HS-ESS2-7. Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth. http://www.nextgenscience.org/pe/hs-ess2-7-earths-systems

HS-ESS3-1. 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. http://www.nextgenscience.org/pe/hs-ess3-1-earth-and-human-activity

HS-LS2-4. Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem. http://www.nextgenscience.org/pe/hs-ls2-4-ecosystems-interactions-energy-and-dynamics

HS-ESS2-6. Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere. http://www.nextgenscience.org/pe/hs-ess2-6-earths-systems

HS-ESS3-2. Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. http://www.nextgenscience.org/pe/hs-ess3-2-earth-and-human-activity