ESI-1 Week 2 in UP (Day 6)
July 12, 2010
7th Grade Earth Science

GLCE Curriculum Code	
S.IP = Science Processes. Inquiry Process **S.IA** = Science Processes. Inquiry Analysis and Communication **S.RS =** Science Processes. Reflection and Social Implications	**E.ES** = Earth Science. Earth Systems **E.FE** = Earth Science. Fluid Earth **E.ST** = Earth Science. Earth in Space and Time P**.EN** = Physical Science. Energy

Location-Eagle River Bridge	
Inquiry – Investigation-CER	7th Grade Textbook- All Units

Learning Outcomes:	**HSCE**
○ Inquiry involves generating questions, conducting investigations, and developing solutions to problems through reasoning and observation.	S.IP.M.1
○ Inquiry includes an analysis and presentation of findings that lead to future questions, research, and investigations.	S.IA.M.1
○ Reflecting on knowledge is the application of scientific knowledge to new and different situations. Reflecting on knowledge requires careful analysis of evidence that guides decision-making and the application of science throughout history and within society.	S.RS.M.1

Location- Dune Walk	
Fluid Earth Systems and Human Activities	Unit 4- SEPUP- Issues & Earth Science (IAES) Weather and Atmosphere Unit 7th Grade Textbook-Unit E- Weather and Atmosphere Activity on Weather and Climate, pp. E18-E23

Learning Outcomes:	**HSCE**
○ Demonstrate, using a model or drawing, the relationship between the warming by the sun of the Earth and the water cycle as it applies to the atmosphere (evaporation, water vapor, warm air rising, cooling, condensation, clouds).	E.ES.07.11
○ Describe the relationship between the warming of the atmosphere of the Earth by the sun and convection within the atmosphere and oceans.	E.ES.07.12
○ Describe how the warming of the Earth by the sun produces winds and ocean currents.	E.ES.07.13
○ Compare and contrast the difference and relationship between	E.ES.07.71

climate and weather. o Describe how different weather occurs due to the constant motion of the atmosphere from the energy of the sun reaching the surface of the Earth. o Explain how the temperature of the oceans affects the different climates on Earth because water in the oceans holds a large amount of heat. o Describe weather conditions associated with frontal boundaries (cold, warm, stationary, and occluded) and the movement of major air masses and the jet stream across North America using a weather map. o Explain the water cycle and describe how evaporation, transpiration, condensation, cloud formation, precipitation, infiltration, surface runoff and ground water occur within the cycle. o Analyze the flow of water between the components of a watershed, including surface features (lakes streams, rivers, wetlands) and groundwater. o Describe the atmosphere as a mixture of gases. o Compare and contrast the atmosphere at different elevations.	 E.ST.07.72 E.ES.07.73 E.ES.07.74 E.ES.07.81 E.ES.07.82 E.FE.07.11 E.FE.07.12

Location- Beach Activities on Great Sand Bay	
Fluid Earth Systems and Human Activities	Unit 4- SEPUP- Issues & Earth Science (IAES) Weather and Atmosphere Unit 7th Grade Textbook-Unit E- Weather and Atmosphere Activity on Local Weather, pp. E10-E14 7th Grade Textbook-Unit E- Activity on Prevailing Winds, pp. E84-E86, Wind Speed and DirectionE80-E83 7th Grade Textbook-Unit E- Activity on Currents/ Ocean and Climate, pp. E34-E42 7th Grade Textbook-Unit E-Reading on Causes of Climate, E43-E48
Learning Outcomes:	**HSCE**
o Demonstrate, using a model or drawing, the relationship between the warming by the sun of the Earth and the water cycle as it applies to the atmosphere (evaporation, water vapor, warm air rising, cooling, condensation, clouds). o Describe the relationship between the warming of the atmosphere of the Earth by the sun and convection within the atmosphere and oceans. o Describe how the warming of the Earth by the sun produces winds and ocean currents. o Compare and contrast the difference and relationship between climate and weather. o Describe how different weather occurs due to the constant motion	E.ES.07.11 E.ES.07.12 E.ES.07.13 E.ES.07.71 E.ST.07.72

of the atmosphere from the energy of the sun reaching the surface of the Earth.	
o Explain how the temperature of the oceans affects the different climates on Earth because water in the oceans holds a large amount of heat.	E.ES.07.73
o Describe weather conditions associated with frontal boundaries (cold, warm, stationary, and occluded) and the movement of major air masses and the jet stream across North America using a weather map.	E.ES.07.74
o Explain the water cycle and describe how evaporation, transpiration, condensation, cloud formation, precipitation, infiltration, surface runoff and ground water occur within the cycle.	E.ES.07.81
o Analyze the flow of water between the components of a watershed, including surface features (lakes streams, rivers, wetlands) and groundwater.	E.ES.07.82
o Describe the atmosphere as a mixture of gases.	E.FE.07.11
o Compare and contrast the atmosphere at different elevations.	E.FE.07.12