

# NGSS Transition Support Guide

<b>FOSS</b>	<b>Beyond Weather and Climate (previously Water)</b>
	<b>Grade 3 – <a href="#">Weather and Climate</a></b>

## IMPORTANT INFORMATION ABOUT CHANGES TO YOUR KIT!

**Beyond Weather and Climate has replaced the FOSS ‘Water’ kit to support NGSS implementation of 3-ESS2-1; 3-ESS2-2; 3-ESS3-1. Teachers should consult the included guide for activities that support these Performance Expectations alongside 3-Dimensional teaching.**

Two activities from the previous ‘Water’ kit have been included in your materials:

- **Investigation 2, Part 1** – ‘Build a Thermometer’  
This activity has been included to support the extensions for learning described in Lesson 1 Weather. Students can use their self-made data collection tools and compare their data to the Vernier probes to compare the reliability of each tool.
- **Investigation 4, Part 2** – ‘Water Wheels’  
This activity has been included as a supplemental engineering design challenge for the task ‘Design and Construct a Water Wheel that can use the energy of moving water to do work.’ This activity is ideal to emphasize both the full engineering design process ([Appendix I](#)) as well as to reinforce or create an anticipatory set for core ideas of energy that will be explored in Models and Designs. *Teachers may opt to keep the materials for this activity beyond the length of their kit, and return materials to the SMC when it is convenient.*

## Learning Progression for this Kit

Patterns of weather across different times and areas can be used to make predictions about what kinds of weather may happen next.

Weather is a short-term description of an area's atmosphere; climate is a description of the long-term pattern in an area.

Natural hazards can include weather-related hazards. Humans can take steps to reduce their impacts through design and engineering.

Common Student preconceptions to be aware of include:

- Weather and climate are the same thing.
- Climate is simply long-term weather and therefore cannot be predicted.
- Patterns and characteristics of weather are the same around the world.

### **For More Information**

If you have questions about this guide or its content, please direct your inquiry to your science materials center, or [Regional Science Coordinator](#).