

# an inconvenient sequel

## TRUTH TO POWER

EDUCATIONAL COMPANION • WATCH KIT • MIDDLE-HIGH SCHOOL

*Provided by National Wildlife Federation*

### WORKSHEET 1. CLIMATE REALITY - IMPACTS

Use your mental models about climate change to complete the chart below and document your current thinking about the impacts of climate change. What do you know about the following concepts? What do you believe to be true and how do you know it is true. What is the evidence? The first one is done for you as an example.

CLIMATE REALITY	CURRENT MENTAL MODEL WHAT DO I BELIEVE?	EVIDENCE
16 of the 17 hottest years ever measured with instruments have occurred since 2001 and 2016 was the hottest year ever recorded.	True, I believe 2016 was the hottest year ever recorded.	My teacher shared current events with the class; I have read articles online; quote from the film; and I follow @nasaclimate on twitter.
Miami, Florida is the number one city in the world, in terms of assets, that is at risk from impacts associated with sea level rise and number nine in the world in terms of population at risk.		
110 million tons of manmade global warming pollution is released into the atmosphere every 24 hours and is building up and trapping heat.		
The main source and cause of the rising global temperatures we see today is the result of the burning of fossil fuels.		
On a global basis, more than 90% of all the extra heat energy trapped by our atmosphere is going into the oceans.		
The extra heat being trapped in our atmosphere is changing our precipitation patterns causing extreme flooding and drought in places around the world.		
Higher temperatures have a direct effect on the incidence and severity of wildfires.		

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In 2016 extreme weather catastrophes, such as extreme temperatures, droughts, fires, floods, mudslides and storms, caused \$175 billion in losses.		
Heat stress is beginning to decrease crop yields from rice, corn and soybeans and exposure to higher levels of CO2 is decreasing the nutrient content of many staple crops such as rice, wheat and soy.		
As our world gets warmer and wetter, the range of tropical diseases expands, meaning there are more places for tropical diseases to take root. Tropical diseases include, West Nile Virus, Chikungunya, Chagas Disease, Dengue Fever and Zika Virus.		
Climate change, along with other factors such as habitat loss, is contributing to the worst extinction event since the extinction of the dinosaurs 65 million years ago.		
Globally, wind could supply our electricity consumption needs 40 times over.		
Every hour the Earth gets as much energy from the sun as we need to run the entire global economy for a year.		
The Paris Climate Accord is an agreement between most every country in the nation to phase down greenhouse gas pollution to net zero emissions as early in the second half of this century as possible.		

See **References** linking each fact to its primary source.