

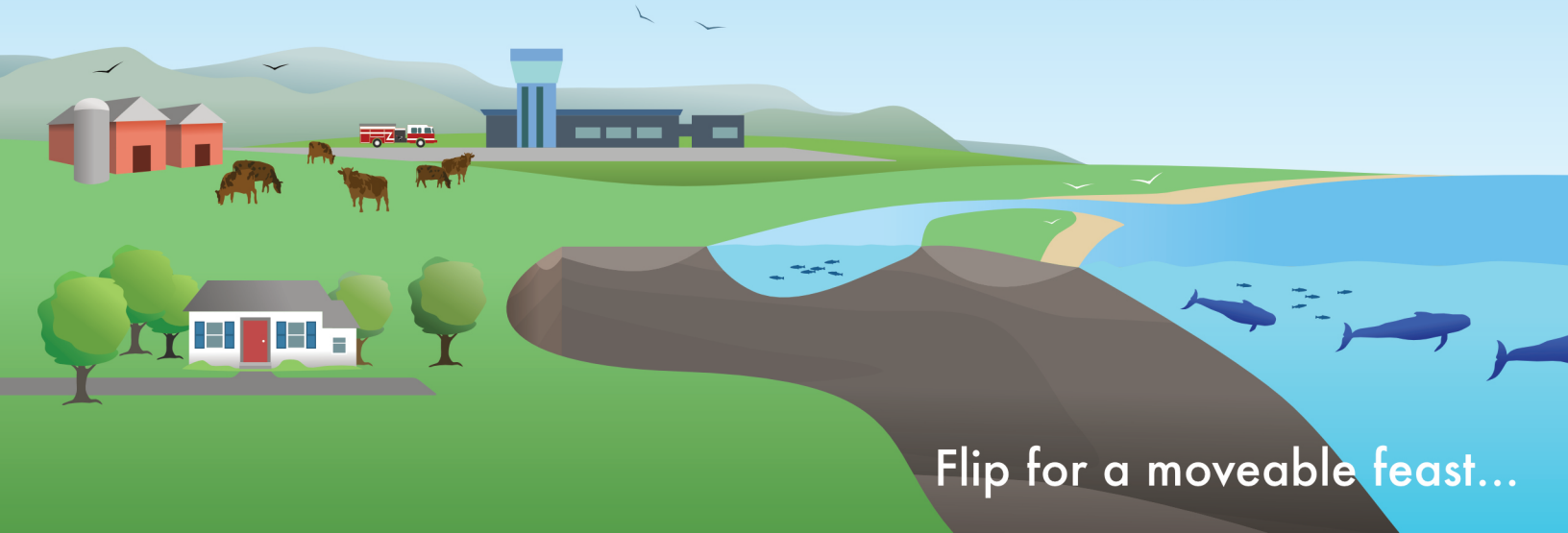
TABLE TIPS: FOOD FOR THOUGHT



How do PFAS get into the food web?



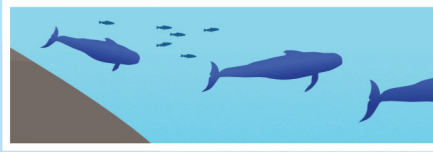
PFAS in soils enter plants that are eaten by animals. PFAS in water enter plankton and small fish that become food for larger fish, marine mammals, and seabirds. Through these pathways, PFAS travel the globe including the far reaches of the Arctic.



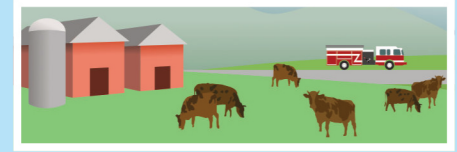
Flip for a moveable feast...



PFAS accumulate in fish in different ways. These chemical compounds enter fish through their gills in contaminated water. Larger fish – and people – are exposed when they eat PFAS-contaminated fish. And fish with the highest PFAS levels are unsurprisingly found in PFAS-contaminated waters. What to do? Don't eat local catch from waters where PFAS are prevalent. As fish swim from PFAS-contaminated waters into cleaner areas, they disperse some of the PFAS from their bodies – again through their gills.



Marine animals – like whales and seabirds – are exposed to PFAS when they eat contaminated fish and plankton. Unlike fish, these animals do not disperse PFAS when they breathe. As a result, when they eat PFAS-contaminated food and then travel to less contaminated areas, they transport the PFAS in their bodies. Pilot whales foraging off the North Atlantic coast of the Faroe Islands retain high PFAS levels even though there is no local PFAS production. Historically, pilot whales were a part of the Faroese diet, thereby accelerating PFAS accumulation in people.



PFAS are found in cattle (think steak), hogs (think BBQ ribs), and chickens (think omelets) far from PFAS-contaminated sites. How do they get there? Wastewater treatment facilities that handle PFAS-contaminated water generate PFAS-laden biosolids. These biosolids can then be used to fertilize crops not intended for direct human consumption. However, they are used to fertilize crops fed to farm animals, which are then eaten by people, making a perfect PFAS pathway that can reach far from the contamination source.

Learn more about PFASs in the food web. Visit www.uri.edu/steeep

