

EDITORIAL

Air quality affects oceans

News regarding climate change has largely focused on the increasing carbon dioxide content in the atmosphere and the effects of that increase on the land. Yet as the carbon dioxide in the atmosphere increases, the impact on the ocean environment is greater than it is on land. Carbon dioxide is absorbed by the ocean, where it reacts with other chemicals present in the water, thus making the water more acidic. This process is known as ocean acidification.

A long-overdue meeting on the effects of ocean acidification was held by the Senate Committee on Commerce, Science and Technology earlier this year. After the hearing, Sens. Frank Lautenberg (D- N.J.) and Maria Cantwell (D- Wash.) introduced bill S-1581, the Ocean Acidification Research bill, to begin to address ocean acidification. The House has yet to introduce a similar bill. The Senate's proposed legislation only establishes an interagency committee to "oversee the planning, establishment and coordination of a plan to improve the understanding of the role of increased ocean acidification on marine ecosystems." The bill requires the committee to create a plan to address ocean acidification following its research.

Research has already been conducted and accepted by the scientific community. Bill S-1581, however, does nothing in the immediate short term to address the real causes and effects of ocean acidification.

About the same time that the Ocean Acidification Research bill was introduced, the Center for Biological Diversity petitioned seven states, including New Jersey, to regulate carbon dioxide based on the impaired waters section of the Clean Waters Act. The Center for Biological Diversity provided data to the states showing that their coastal waters are being polluted through carbon dioxide absorption. New Jersey and the six other states should now use the petition as an impetus to declare the coastal waters as an "impaired body." By

doing so, the states would gain the power to regulate how much carbon dioxide is emitted into the air and thus what is absorbed by the water.

The ocean has a worldwide socioeconomic value of more than \$21 trillion annually. More important, ocean ecosystems are some of the most diverse on the planet. Ocean acidification is known to harm marine life in many ways. For example, it prevents calcifying organisms, such as shellfish, crabs and coral from producing shells and skeletons, which may ultimately destroy coral reef ecosystems, the effects of which undoubtedly will ripple down the food chain. Ocean acidification needs to receive as much, if not more, attention from lawmakers, and action must be taken now to prevent further acidification before it is too late to reverse its effects.