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## LETTERS

edited by Jennifer Sills

### Making Waves with the Clean Water Act

THE LETTER OF R. E. DODGE *ET AL.*, "A CALL TO ACTION FOR CORAL REEFS" (10 OCTOBER, P. 189), lists actions needed to reverse the decline of coral reefs. Although a primary management tool in nearshore environments, marine protected areas (MPAs) are not designed to protect coral reefs from land-based activities or threats that originate outside MPA boundaries (1).

In contrast, the objective of the U.S. Clean Water Act (PL 92-500, Sec. 101, 33 U.S.C. 1251) is to "restore and maintain the ... biological integrity of the Nation's waters" for all "territorial seas ... measured from the line of ordinary low water ... and extending seaward a distance of three miles" [Sec. 502, 33 U.S.C. 1362(8)]. Under the Clean Water Act, and with approval of the U.S. Environmental Protection Agency (EPA), states and territories could define biological thresholds for reef condition as part of their water quality standards. Although thresholds have been defined for coral reefs (e.g., coral cover is greater than 10%), states and territories have yet to adopt them as biological criteria (2). Failure to meet defined criteria can trigger regulatory actions to support restoration.

So why has the Clean Water Act never been used specifically to protect coral reefs? Many scientists and managers still mistakenly associate the Clean Water Act with a narrow focus on end-of-pipe chemical contaminants (3), but the law actually calls for reduction of all human actions that degrade water resources. Recently, EPA and the states have embraced assessments of fish, invertebrates, and plants as measures of environmental condition (4).

Actions taken under the Clean Water Act have vastly improved freshwater and estuarine environments (5); similar actions can answer Dodge *et al.*'s call to conserve reefs and nearshore environments. Successful use of the Clean Water Act and biological criteria in U.S. jurisdictions could provide a template for countries with analogous legislation.

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### The State of Global Hunger

WITH THE PASSING OF ANOTHER WORLD DAY Against Hunger (on 30 October), it is time to take stock of the state of global hunger. Sadly, Millennium goals are still far from being reached, and over 800 million people suffer from malnutrition in the world. The latest core health indicators from the World Health Organization show that many countries still have high rates of chronic malnutrition (>30%) and under-five mortality (>20%) (1). Humanitarian aid is insufficient and is hindered even more by wars, political instability, dictatorships, and corruption.

There are two major obstacles to collecting food aid from developed countries. One is cost: World Food Programme activities are extremely expensive. The other is motivation: People only think to donate during emergencies such as wars and tsunamis, when in fact aid is needed at all times.

I have two suggestions that may help us move in the right direction. First, to avoid increases in the price of basic food, the Food and Agriculture Organization should buy low-cost arable lands for agriculture production and use the food grown to help populations suffering from hunger. Second, to provide aid more consistently, Western countries that produce surpluses should send extra food to the World Food Programme for distribution. For instance, in Spain in 2007 there were thousands of tons of surplus oranges that were not harvested (2–4). It is wrong to limit agricultural productivity when there are millions of people dying of hunger in other countries.

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