



NOAA Report

March 26, 1990

COMING UP

Texas Shrimp Association, Houston, Tx., March 29-31

U.S./Poland Joint Commission Meeting, Washington, D.C.,
Apr. 2-4

Selling Seafood to Europe: Economic Community '92
and Beyond, Seattle, Wash., Apr. 16-17

National Hurricane Conference, Houston, Tx., Apr. 20

Joint Meeting of the Gulf and Atlantic Councils, Tampa,
Fla., Apr. 23-27

NOAA Sues Seattle Companies for Pollution--The Justice Department, acting on NOAA's behalf, filed suit in Federal court in Seattle, charging the city of Seattle and the municipal sewer authority with polluting the natural resources of Elliott Bay and the Duwamish River in Puget Sound.

The lawsuit is the first in a series expected to be filed against the Washington-based companies under a federal law, making NOAA trustee for marine natural resources. The statute allows the agency to collect monetary damages to restore natural resources harmed by pollution. Among the corporations notified by NOAA earlier this year that they are potentially responsible are Weyerhaeuser, a major Pacific Northwest lumber company, and Boeing, an aircraft firm.

NOAA's General Counsel, Thomas Campbell, said the suit was filed last Monday because a statute of limitations was about to expire. Both the city and the sewer authority, known as Metro, had refused to sign an agreement with NOAA, waiving their rights under the statute of limitations. Such a waiver could have allowed NOAA more time to identify other polluters before any lawsuit was filed.

Campbell said NOAA's new aggressive stance in recovering money to mitigate environmental damage is the result of President Bush's "attitude that maintenance of the status quo is not sufficient, that improvement of the environment is what we have to do."

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NOAA's intention is to put a dollar value on the loss of marine life, figure out which companies and agencies contributed to water pollution since 1980 and assess them accordingly, and use the money recovered to restore partially what was lost. Campbell said damages would likely total in the "tens of millions."

Steps that could be taken to restore the environment, Campbell said, include building fish hatcheries, re-establishing wetlands, capping toxic hot spots on the bay bottom, fishing with new water sources, reseeding of underwater vegetation and constructing artificial reefs.

NOAA is involved in similar legal action in Los Angeles and New Bedford, Mass. Other areas on both the east and west coasts are expected to be the targets of future lawsuits aimed at restoring damage to marine natural resources.

Dolphin Capture Halts for 90 Days in Gulf:--NOAA announced this week a halt for at least 90 days to the capture of bottlenose dolphins in the Gulf of Mexico.

With more than 190 dolphins deaths reported since January 1 in five Gulf states, NOAA's Fisheries Service said no collections will take place before June 15 so the agency will have time to evaluate appropriate action.

Dr. William W. Fox Jr. NOAA's Assistant Administrator for Fisheries, said the agency contacted collectors for the 11 permit holders who volunteered to suspend collections during this time period. Dr. Fox declared that the Fisheries Service "will not hesitate to obtain agreement for an extension of the non-capture period or to further protect the dolphins as the situation demands."

The halt of captures, which became effective March 15, took place as intensive efforts continue to collect data to determine why dolphins have stranded at four to five times the usual rate. Tissue samples from a number of dolphins are being examined in laboratories. The Fisheries Service could not estimate how long it would take to determine reasons for the high mortality.

The dolphin toll stands at 118 in Texas, more than 40 on the barrier islands of Louisiana and Mississippi, 21 in the Alabama-Florida panhandle, and 10 in Florida's Tampa Bay. The figures on the barrier islands are not firm since the count must be taken from airplanes.

Land Absorbs More CO₂ Than Oceans:--More than a billion tons of carbon emitted into the atmosphere each year in the form of carbon dioxide, and which cannot be accounted for, probably are being absorbed by land masses in the Northern Hemisphere, a team of scientists has suggested.

Their concept, outlined in a paper in the current issue of Science magazine, disputes conventional scientific wisdom that the oceans of the earth are the major "sink" for carbon dioxide.

To the contrary, claim NOAA scientist Pieter Tans and colleagues Inez Y. Fung of the National Aeronautics and Space Administration (NASA), and Taro Takahashi of Columbia University, the oceans are a smaller sink of carbon dioxide than are land masses.

They arrived at their conclusion following analysis of published CO₂ measurements by NOAA's Geophysical Monitoring for Climatic Change program, including data showing that North Pole air contains three parts per million more carbon dioxide than does South Pole air, extensive computer simulation of varying carbon dioxide source and sink possibilities, and an extensive set of observations of the concentration of carbon dioxide in ocean surface waters.

Simulations in which CO₂ sinks occurred in the Southern Hemisphere, including the oceans, resulted in carbon dioxide concentrations at the South Pole lower than the actual measurements, proving these simulations unrealistic, Tans said. The only simulation which resulted in CO₂ levels close to those actually measured in both hemispheres was one in which the biggest sink for the CO₂ produced by the combustion of fossil fuels was in the Northern Hemisphere, he noted.

Extensive measurements taken in Northern Hemisphere oceans show they are not a major absorber of carbon dioxide, which leaves the land masses as the only alternative sink, Tans explained.

Statistics of the economic activities of the world's nations indicate that about 5.3 billion tons of carbon in the form of carbon dioxide are emitted into the atmosphere annually through fossil fuel burning. Of that amount about 3 billion tons remain in the air, contributing to the global greenhouse effect. In addition, the burning of tropical forests is believed to be adding between 0.5 and 2 billion additional tons to the atmosphere.

Until now, according to Tans, it has been assumed the rest -- between 2.5 and 4 billion tons -- was absorbed largely in the oceans.

This, the researchers maintain, is erroneous; their analyses infer the total CO₂ absorbed by ocean sinks is less than 1 billion tons, leaving at least another billion tons unaccounted for.

New Reporting Technique Aids Flood Forecasting:--The National Data Buoy Center (NDBC) recently standardized water-level reporting for NOAA's Coastal Marine Automated Network (C-MAN) stations to facilitate coastal flood forecasting.

Of the 43 fixed C-MAN stations located throughout the country, six are now used to report routinely real-time water levels along the Gulf of Mexico, Florida, and the Grand Bahamas coasts.

The Buoy Center used available National Ocean Service benchmarks to determine Mean Lower Low Water (MLLW). However, at a few stations where Ocean Service references are not available, the center estimates the MLLW by examining several months of data. Previously, these benchmark values varied from station to station, with no universal value for MLLW.

The new reporting system used a standard value of 1000 at MLLW, reporting water level to hundredths of feet above or below MLLW. This information, critical to coastal flood forecasting, is entered into the Weather Service data bank for immediate dissemination to all Weather Service offices.

Immediate and definite knowledge of certain water level values and their meaning makes it easier for weather forecasters to recognize how high water can rise before it becomes a problem.

Conversion of the six stations began in November 1989 and was completed in early March, according to Eric Meindl, Assistant Chief of the NDBC Data Systems Division. They are located in Dauphin Island, Ala., Lake Worth and St. Augustine, Fla., Port Aransas, Tx., Settlement Point, Grand Bahama Island and Grand Isle, La.

NOAA Corp. Officers Receive Awards:--The following NOAA Corps Officers were recently given NOAA Special Achievement Award Medals:

Commander Frederick J. Jones, Pacific Marine Environmental Laboratory, Newport Oregon.

Commander Nicholas A. Prah, Services, Commander David B. MacFarland, Jr., and Lieutenant Commander George D. Vose, Office of Charting and Geodetic Services.

Lieutenant Commander Alan R. Bunn, Marine Entanglement Program, National Marine Fisheries Service.

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July 23, 2010