As California reels from record-breaking erosion following punishing waves last winter, the federal government is turning to mud and sand from dredging projects to slow land losses and ease flooding nationwide as seas rise and storms intensify. Evidence of the sediment shortage can be seen in the decline of marshlands that ring the rivers and bays of the San Francisco Bay Area, where voters last year approved restoration spending to protect roads and buildings from floods caused by rising seas, and across the Gulf Coast. The problem was severe in the San Francisco Bay Area, where unprecedented beach losses were worsened by a shortage of shore-nourishing mud and sand that flows from mountain valleys to beaches through rivers and bays."Having some good pilot projects around the country that will demonstrate how to best use and how best to fund and plan for beneficial use projects will be very helpful," said Derek Brockbank, executive director of American Shore and Beach Preservation Association, which represents coastal communities. Sign Up "Sediment rebuilds and restores our nation's coastlines and needs to be treated as a valuable resource -- not a waste product to be disposed of as cheaply as possible," Brockbank said. Further south, the city of Pacifica declared a state of emergency last winter and residents were evacuated from neighborhoods atop crumbling cliffs. The natural flow of sediment to the Golden Gate has slowed because of dam building upstream and years of drought, fueling a crisis for agencies charged with protecting coastlines Pacific Ocean storms strengthened by a powerful El Nino and global warming caused yawning erosion from Washington state to California a year ago. ADVERTISEMENT "A depleted beach leaves the communities more vulnerable to storm damages in subsequent winters -- as is happening now," said Barnard, the scientist who led the study. Sediment that reaches the Bay Area is frequently scooped up during ship channeling projects and dumped."I'm pleased to see the WIIN Act encourage the beneficial use of dredged sediment.""The sediment deficit is an acute problem for many beaches throughout California.""What they're hearing from their states is, 'You guys, we have a problem here," said Sam Schuchat, executive director of the California State Coastal Conservancy, an agency that helps protect the state's shores."We don't have a big pot of money that we can just go dip into for different projects," said Theodore Brown, chief of planning and policy at the Army Corps." If we want to complete all the restoration that we want to do in the next 20 or 30 years, we're going to need millions of cubic yards of sediment.""Nobody opposes this," said Larry Goldzband, executive director of the San Francisco Bay Conservation and Development Commission."Everybody wants beneficial reuse. The question is, how can it get done in a way that fits within budgets?"