

1067-Z8-2097

John W. Day* (johnday@lsu.edu), Dept. of Oceanography and Coastal Sciences, Louisiana State University, Baton Rouge, LA 70803, and **Mathew Moerschbaecher**, Dept. of Oceanography and Coastal Sciences, School of Renewable Natural Resources, Louisiana State University, Baton Rouge, LA 70803. *The BP spill, peak oil, and the search for energy.*

The BP oil spill focused the world's attention on the impact of the spill on the northern Gulf of Mexico coastal ecosystems, especially the Mississippi delta, and the spill's socio-economic impacts. Almost all news reports have been on the impacts on the biota and the fate of the spilled oil. Almost never mentioned in the mainstream media is the larger energy context, especially that of peak oil, the time when world oil production will peak and decline irreversibly. Central to understanding the implications of peak oil is Energy Return On Investment (EROI - energy return on energy invested). Peak EROI was about 100:1 but it has declined to less than 20:1 for domestic oil. Recent analysis of ultra deepwater oil in the Gulf of Mexico suggests that the EROI is significantly less than 10:1. This suggests that this ultra deep oil will not be as significant to world oil supplies as was thought. And ultra deep oil, along with Arctic oil, is the last significant oil to be tapped. As energy gets more expensive, ecosystem services will become more important in sustaining the world's economy. The net natural asset value of ecosystem services of the Mississippi is between 350 billion 1.4 trillion dollars, more than the total worth of the remaining oil in the northern Gulf of Mexico. (Received September 22, 2010)