Cooperative Ecology
A Worldwide Movement

Fixing Oil Spill Response Systems--How We Move Forward
The following material is an excerpt from the Lawrence Anthony Earth Organization, Science and Technology Committee research paper entitled:

*A Call for a Twenty-First Century Solution in Oil Spill Response* updated September 2014. While it is recommended that the complete research paper is studied, this excerpt is being made widely available as vital information for educational purposes.

Critical to optimizing environmental protection systems and public policy, LAEO conducts global Cooperative Ecology public awareness programs to support environmental solutions implementation.

A current focus:

- To technologically advance oil spill response & maritime pollution protections
- To educate oil spill response professionals on best-system options.
- To help all environmental stakeholders to collaboratively protect and preserve our waters and Earth ecosystems subject to oil and/or hazardous chemical spills.
One of the largest and most abundant interdependent life systems in the world, the Gulf of Mexico, has been devastated by the Deepwater Horizon disaster added to the years of cumulative pollution pouring into the Gulf from various sources. The response required for the BP deepwater blow out was greater than what had been prepared for, and the agencies of response were not equipped with strategies to adequately address it. Constrained by adherence to outdated guidance that advocates the use of dispersants as a preapproved cleanup method, decision makers, especially Coast Guard On-Scene Coordinators were effectively hampered from having any other options for the selection of available alternatives and more workable solutions.

The past is behind and errors can be forgiven if action is taken by government, industry and private sectors to implement nontoxic solutions in oil spill remediation. But will it be done? It sometimes takes courage and a fearless approach to bring about change.

Renowned conservationist Dr. Lawrence Anthony, founder of the Earth Organization\textsuperscript{xix}, had a reputation for bold conservation initiatives, including the rescue of the Baghdad Zoo at the height of the 2003 US-led coalition invasion of Iraq, and his traverse into an off-limits and remote territory deep in the Congo jungle to negotiate with leaders of the infamous Lord’s Resistance Army to get their help to protect the last living Northern White Rhinoceros. As an author of three popular non-fiction books dedicated to raising public awareness of how finite, vulnerable, and interconnected Earth’s integrated systems of plant and animal life are, Anthony coined a new term in which LAEO bases its work: Cooperative Ecology.

Cooperative Ecology\textsuperscript{™} (CoEco) (noun) is defined as the study of the mutual interdependency and cooperation of all life forms and the material world. It is based on the premise that all life forms are interdependent and engaged upon the same objective—to survive—and are acting in mutual support of this objective for their joint perpetuation. The moment life forms, including man, fall away from the concept of mutual cooperation with all other life forms and the material world, their capability to survive diminishes and becomes less effective. CoEco includes the study of man’s sciences in the light of this cooperative relationship of all life forms, and it determines the value of sciences on these principles. Whether sciences bring about a steady improvement for life forms and the material world or whether they create imbalances determines to what degree the sciences themselves are cooperating with life and, thereby, their relative value. The study includes, as well, ecological and economic policy and their impacts based on these principles. It is holistic, by necessity, and requires the interaction with, and study of, 1) the full spectrum of scientific methods and views; 2) all life forms and their interrelationships; 3) micro to macroeconomic and governmental policies; 4) religious influence; and 5) population systems. And it must, inevitably, study the interrelationships of each of the above points as they influence the environment.

\textsuperscript{xix} Earth Organization. The Earth Organization was renamed in memory of Lawrence after he passed away in 2012, now the Lawrence Anthony Earth Organization (LAEO).
Moving Forward

Unless we examine and seek an understanding of true data and engage in a worldwide effort towards truly achieving Cooperative Ecology as a necessity instilled in the minds and behaviors of mankind as a whole, life on earth, as we know it, will not sustain.

The objective of Cooperative Ecology is to generate improved science and policy that increases the survival potential and productivity for all interdependent life to a level of balanced abundance, guaranteeing mutual perpetuity. Positive progress in achieving such an objective would be made by raising pollution removal standards up to the original intent of the Clean Water Act. This would require agreement, planning, and action by all members of industry and commerce that have the potential of creating oil spills, to only name and employ NCP-listed products that are strictly not toxic or otherwise harmful and, to set a standard in their spill countermeasure plans and cleanup protocols that insures these plans do, in fact, utilize methods that swiftly and completely remove oil from a spill area.

Recommended Actions

- All stakeholders in the business of making decisions regarding oil spill countermeasures should adopt the Assessment Criteria on pages 20-23 of the LAEO research paper - (A Call for a Twenty-First-Century Solution in Oil Spill Response) for the identification and implementation of non-toxic oil spill cleanup agents. Such criteria should also be added to regional and area contingency plans and existing plans reviewed to eliminate or replace any products that do not meet the criteria herein.

- All O&G companies and Oil Spill Response Organizations should conduct their own internal audits and reviews of existing spill countermeasure plans associated with their operations to ensure they employ best available technology and practices, guided by the Assessment Criteria, implementing protocols that will meet Clean Water Act standards.

  - Assistance with how to employ best chemical screening practices can be found by consulting with organizations that specialize in finding environmentally safe alternatives such as:
    - Clean Production Action’s GreenScreen Program at: www.greenscreenchemicals.org

- List and include Bioremediation Enzyme Additive Agent Category in spill countermeasure plans as a first response option for removal of oil and other hydrocarbon-based chemical spills in ocean and fresh water environments. References and full technical library reference links are available at: http://protectmarinelifenow.org and https://www.changeoilspillresponse.org/response-tools.html
We care about the health of our beautiful planet,
the animals that inhabit it,
the oceans that surround it,
and the people who populate it.

We care about the economic strength of industry and commerce
and the opportunity, stability and prosperity they can provide.

We weave them together with *real* solutions.

www.TheEarthOrganization.org