

ESTUARY CONSERVATION ASSOCIATION, INC.

Serving Community & Nature

Florida Ocean Forum # 1

January 7, 2010

At La Playa Beach and Golf Beach Resort

ECA President, Joe Moreland, welcomed those in attendance at this, the first of four Florida Ocean Forums to be presented by ECA in the next few months, all with the purpose of a “quest for knowledge and understanding.” The format for the first Forum will be an information-sharing panel session, with a facilitator and three panelists, followed by time for questions from the floor.

Moreland introduced Collier County Commissioner Frank Halas, who then thanked all those attending for their interest in learning more about how to care for our precious Estuary and Gulf resources.

Gary Litton, Director of the Rookery Bay National Research Reserve and South Florida Regional Manager of Florida Aquatic Preserves, spoke about his commitment to Coastal Stewardship and balancing the needs of humans and the environment. Litton then introduced the panel facilitator.

Dr. Ellen Prager, panel facilitator, is a marine scientist and author who is nationally recognized for her passion for the ocean and science. She is involved with writing the Ocean Commission Reports, taking policy and science and putting it into layman’s terms. Litton called her recent book, *Chasing Science and Seas*, “a must-read book filled with great stories about scientists and their work with the sea.”

Dr. Prager stated that the economy, our health and our security in South Florida are all directly linked to the sea. And that, in the years ahead, Naples will face many challenges concerning coastal stewardship, but with challenges come opportunities. She said that “for too long, we’ve put too much waste into the sea and taken too much out.” She pointed out that climate changes are for real, and they are a huge problem for the oceans, especially the reality that ocean chemistry is changing and getting more acidic. But, she said, “the good news is that the ocean is resilient, and can come back if we plan better and work to solve the problems.”

Panelist Rob Kramer, president of the International Game Fish Association, pointed out that recreational fishing in Florida represents more licensed anglers and licensed boats than in any other state in the USA. Florida is the #1, top-ranked state for fishing, with some 885,000 fishermen, including visitors from other countries, who come to Florida to fish each year. Fishing in Florida represents \$2.9 billion in retail sales each year and \$1.5 billion in salaries. Kramer stated that more people fish in the USA than play golf and tennis, combined—the overall economic impact of fishing in the USA is \$125 billion; if it were a corporation it would be #47 out of the top 500. He pointed out that fishing also helps people connect with the outdoors. His organization, the International Game Fish Association, “emphasizes working with the next generation, and that we all must do everything we can to understand the complex coastal eco-systems, to give back and to be good coastal stewards.”

Panelist Dr. Barbara Kirkpatrick, Manager of the Environmental Health programs at the Mote Marine Laboratory in Sarasota, is a “Red Tide” specialist who has written over 70 pamphlets on the subject. She calls Red Tide a harmful, toxic algae bloom, that is very dense, with one million cells in a liter of water. Sometimes it is red in color and sometimes it’s brown, and it’s a microscopic organism that is a little bit plant and a little bit animal. It’s a very clever, versatile and adaptable

organism that can eat organic or non-organic food material. It is not a new phenomenon, but has been a matter of record since the 1840s. The 100 different world-wide species can be found in tropical waters, sub-polar waters and fresh waters, such as the Great Lakes. The harmful algae bloom produces brevetoxin, a very potent neuro-toxin which can kill marine life and animals, and causes us to cough. She pointed out that we have an incredibly good monitoring system in Florida, so our fish and shellfish are safe to eat; you don't have to worry about getting neuro-toxic shellfish poisoning from fish and shellfish from Florida waters.

She said that people ask if Red Tide is getting worse, and the answer is that worldwide, it is, but in Florida we don't not for sure because the sampling in past years was more random, and not regulated, as it is now. She also said that people ask why we don't just "kill it," but the trick is to find an agent that is specific to Red Tide, and won't kill everything else in the water.

Panelist Dr. Jim Murley, formerly with the National Atmospheric and Oceanographic Administration in Coastal Zone Management, is currently the Director of the Center for Urban and Environmental Solutions at Florida Atlantic University in Southeast Florida. Dr. Murley said that Southwest Florida residents are very interested in both energy and climate issues.

Florida primarily is an energy importing state. We import fuel, or electricity and electrons through very long lines from Georgia and Alabama, through northern Florida. We import oil from Port Everglades and Fort Lauderdale. We generate electricity by natural gas through pipelines by land and the Gulf. We also have three nuclear plants in Florida, and are currently considering adding three more. Right now, our energy "mix" is basically 78 percent carbon fuels, 20 percent nuclear energy and 2 percent renewable energy, such as solar power, etc.

Energy: the question is, how much are we willing to pay for a different energy mix in the future? Right now, renewable energy is expensive. But, maybe, in the future, we can use the oceans, maybe we can use the tides, currents and waves to create energy; maybe we can drop turbines off the east coast of Florida to create energy from the Gulf Stream.

Climate: the other question is about climate and weather changes. Are they debatable? Yes. But there is a preponderance amount of evidence that CO2 emissions are increasing in the atmosphere and causing the climate and weather changes, and carbon fuels produce 78 percent of the CO2.

Sea level rise: Dr. Murley called the anticipated 3-foot sea level rise in Florida, over several years, a climate phenomena, a really "big deal." He said that it won't be caused by waves rolling in over the barrier islands, but rather by fresh water being pushed up by rising salt water, causing estuary-like conditions in interior lowland areas throughout the state.

Citizens' three choices: 1. Look at the way you use energy—and CONSERVE it. Reduce your energy usage by at least 10 percent. 2. Use more efficient appliances, cars, etc. During April, 2010, Florida citizens will have the opportunity to gain cash rebates by buying energy-saving appliances. 3. Each citizen needs to answer the question "how much are we willing to pay for a different energy mix in the future? And, citizens need to organize, look at climate and energy issues locally and help gather local information to assist in proper recommendations about how to deal with these important issues in our state.

QUESTIONS:

(Dr. Prager): The problems raised tonight aren't just natural science problems; they're also social and political problems. We need to come together to mitigate these problems and find solutions!

Q: Should Fishery Management manage people, not fish?

A: (Kramer): Fishery Managers don't manage fish, they manage people and how people interact with the resource. The data we gather will be used to educate and modify human interaction.

Q: What about the possibility of Wind farms on lakes and oceans?

A: (Murley): We don't appear to have consistent wind patterns on the coast; we're not projecting that, with current technology, they would be part of the mix at the commercial level.

Q: What about Red Tide issues and Florida's tourism?

A: (Kirkpatrick): Florida has a large tourism industry. Obviously, Red Tide blooms, which typically develop 40-50 miles offshore and then move onshore, affect our residents and tourists. We need to get out good public information to help our visitors have the best vacation possible. In 2006 Mote Marine started a Beach Condition reporting system from lifeguards and rangers right on the beach. It was started in Sarasota, and it answers beach goers' main question, "Is Red Tide on the beach today?" Tourists are checking our beach conditions each and every day, deciding whether or not they will come to Florida on their vacations.

Q: What causes Black Water? Is it a "dead zone"?

A: (Kirkpatrick): The ocean water is not actually "black;" when two large algae blooms overlap each other, they appear as "Black Water." At this time, we have no dead zones in Florida waters.

Q: Has the downturn in the economy had an affect on fishing?

A: (Kramer): The real danger is that some people are leaving the fishing sport for good. The fewer people that are involved, the fewer who care very much about it.

Q: Would a decrease in fertilizer usage affect Red Tide?

A: (Kirkpatrick): Decreasing fertilizer probably won't affect the beginning of Red Tide, which originates 40-50 miles offshore, but it may help with their onshore development. That said, anything we can do to clean up our waters is a good thing!

Q: Why don't we use more solar panels in Florida?

A: (Morley): The fundamental issue is that Florida's energy is cheap. The cheapest thing is to burn coal, and if we don't factor in other things such as CO2 build-up, then cheap wins out. In France, they depend on nuclear energy, and they made that decision some time ago. Germany is a huge solar user; that is the decision that they made.

A: (Prager): Our political leaders have not made the decision to focus on energy, the cost of energy, CO2, etc. Call your Congressman and tell him it is important!!

Q: What are the current big problems in the fishing industry?

A: (Kramer): Gathering data and sharing the data is a problem. Working with fisherman about newer fish catching technology is another problem; there are new types of hooks that are safer to use for "catch & release" fishing, for example.

Another problem is with the ocean predators—the lions, tigers and bears in the ocean are blue fin tuna, blue marlin and billfish—and they are just about gone. Go to the website:

www.takemarlinoffthemenue.org to learn more about why you shouldn't eat endangered fish.

Q: Please explain the Southeast Florida Climate Compact.

A.: (Morley) In dealing with various counties, such as Broward, Miami-Dade and Monroe, we're doing assessments of how much energy is being used in their own businesses. And, we're working with the federal government. Florida is trying to protect the Everglades Fresh Waters Storage—which is really important, especially in the future when looking at the possibility of rising sea levels.

(Prager) In wrapping up the evening's presentations, the message that the panel hoped that the attendees would take home was that good ocean stewardship is needed, that each person should become a great conservationist, and that each person in Florida should get outside and explore the wonderful resources that Florida provides—kayak in the waters, go fishing, do research, hike a trail, do whatever you prefer to get to know more about this wonderful state of Florida!