

Vision for the Indian River Lagoon – Vision for 21st Century Coastal Communities

I'm sure you are wondering, why is the president and CEO of a regional economic development commission here at our Nation's Capital to support the National Estuary Program? What might she be able to offer when it comes to the overall vision for our Nation's Estuaries of National Significance?

I'm here because I would like to share three broad economic perspectives with the Congressional House Estuary Caucus as Congress begins to consider appropriations for the NEP and other national coastal programs that focus on ecosystem-human health, science, technology and American innovation:

1. THE FIRST PERSPECTIVE I'D LIKE TO DISCUSS IS THE FACT THAT OUR NATION'S ESTUARIES AND COASTAL AREAS ARE ECONOMIC ENGINES THAT DRIVE THE U.S. ECONOMY.

To my knowledge, NEPs are the only environmental program in America that are non-regulatory, science-driven, and with a management conference business model that fully embraces an integrated plan for a **healthy environment, healthy communities, and a healthy economy**. All three are relevant to the mission of the EDC.

The Indian River Lagoon, which is located within the Space Coast Region, is one estuary in a portfolio of 28 estuaries designated as "Estuaries of National Significance." Each of these 28 Estuaries individually and collectively drive the economies for their local regions and the nation.

Each estuary provides a suite of economic benefits, which I'd like to go over with you today:

- They carry both a high density of population, and economic delivery centers: 30 coastal states border the Atlantic, Pacific, Gulf of Mexico, and the Great Lakes. **In 2014, these states comprised 57% of the U.S. land area but more than four fifths (82%) of the U.S. population and economy.**
- They are critical for commercial fisheries, recreation, and tourism. **In 2014, this sector contributed over \$129 million to the Indian River Lagoon's economy.**
- Coasts also are home to a large share of the nation's energy refining and distribution - making them an essential element to energy infrastructure.
- In transportation and commerce, seaports serve as economic engines and vital freight gateways to the global marketplace for American farmers, manufacturers, and consumers. This expands to aerospace and defense as well - for example, they serve as a critical infrastructure for the U.S. military.
- Finally, a unique attribute of the Indian River Lagoon and Florida's Space Coast, is a complex of 21st Century coastal assets, from Kennedy Space Center and the next generation of leadership in commercial space flight, with companies such as Space X and Blue Origin, to Port Canaveral, Patrick Airforce Base, Cape Canaveral Air Force Station, and the Air Force Space Command 45th Space Wing.

2. THE SECOND PERSPECTIVE TO CONSIDER -- UNHEALTHY ESTUARIES AND DIRTY WATER ARE SIMPLY NOT GOOD FOR BUSINESS.

- Clean water is an essential tool for the attraction of high-tech employers, and the work-force talent needed to sustain their business needs. The Indian River Lagoon, with its many attributes from recreational to real estate, is a catalyst for these high-tech titans to choose or stay on the Space Coast. Companies who have recently relocated to Brevard County include RUAG, Embraer, OneWeb Satellites, and Blue Origin, while other companies continue to expand their roots, including Lockheed Martin, Satcom Direct, Harris Corporation, and others.
- The Indian River Lagoon reached a water-quality tipping point in 2011, and now faces water quality challenges and recurring algal blooms that **threaten a regional economy valued at \$7.6 billion annually, along with our quality of life**. When residents or businesses are unable to use the water – they will leave to find a better alternative. This in turn challenges the EDC's ability to attract and retain businesses, create new jobs, and maintain the level of workforce needed to supply company needs.
- Coastal infrastructure issues drive many of the water quality problems of the Indian River Lagoon. Therefore, environmental and economic interests must work together to improve coastal infrastructure and address these water quality challenges. The EDC is working with the Indian River Lagoon National Estuary Program to find solutions to these challenges by identifying Innovative technologies, which is one important part to solving water quality concerns.
- Between 2015-2016, the Indian River Lagoon National Estuary Program reorganized its organizational structure and business model to address more effectively these ecosystem changes. This was a bold leadership move supported by public, private, and independent sector partners.

3. FINALLY, ONE LAST PRESPECTIVE TO REFLECT UPON- CLEAN WATER FUELS OPPORTUNITY FOR AMERICAN LEADERSHIP AND INNOVATION:

The EDC envisions an opportunity for the Indian River Lagoon National Estuary Program, the region, and our nation. The water quality challenges we face in our nation's estuaries and coastal areas represent an opportunity for innovation, water and wastewater technology R&D, water infrastructure improvements, and job creation.

How is the Space Coast EDC and IRLNEP moving forward with this vision?

- The Indian River Lagoon National Estuary Program is looking to the future with the creation of its Innovator and Investor Network. The IRLI² Network opens a door for industry participation. Today, The IRLNEP is already working with companies such as Harris Corporation, Port Canaveral, and many others, taking their interests and concerns into mind to help advance science and technology solutions.
- We see that Water technology opportunities are everywhere – from nutrient and pollutant remediation, innovation in wastewater and potable water infrastructure, sensors and remote sensing technologies, and disruptive technology innovation that we haven't yet thought of.
- Many of these technology innovations overlap with needs within the Department of Defense, NASA and commercial space exploration. If we are going to place humans on Mars, we will need technology innovations to address waste and pollutant loads and wastewater management. Technology that works for the Lagoon might work for a Moon or Mars colony. On a side bar and speaking of KSC, the Space Coast is home to unique research and development. NASA, using technology developed for the space station, developed a water purification technology which affords at-risk areas to gain access to advanced water filtration and purification systems, making a life-saving difference in these communities.

- We are steps ahead in identifying these technologies - One initiative will be our sponsorship of the “Moonshot Innovation Series” presented by Groundswell Startups (a privately-funded incubator) in an effort to bring today’s most disruptive technologists and creatives together. In January 2018, we will dedicate an event towards technology innovation for Indian River Lagoon water quality and habitat restoration.

In closing, I want us to look at the support of a healthy estuary ecosystem - going beyond the obvious environmental concerns and wide range of economic drivers for the region - but also looking at a chance for a unique and great opportunity.

There is opportunity to turn challenge into growth, the same historical way World War II brought on positive effects to our national economy. Here, one of the greatest war conflicts in modern time was turned into a period for opportunity and numerous areas of economic growth. The US’s role in supplying allies with arms and ammunition ENDED the Great Depression, while new technologies came flooding in, propelling innovation in many areas. From the creation of jet-engine pressurized cabins and huge advancements in navigational systems to microwave ovens, and the technology to put man on the moon – all were advancements that came from technology invented or improved upon during the war.

The opportunity to enhance public/private partnership, that might have been forged, but for the impending adversity between municipalities and county government, between industry and government, between pentagon and military bases and local community.

An opportunity to leverage our skills to create and identify breakthrough technology, using our estuary as a living testing and proving ground.

And perhaps one of the biggest opportunities would be one such as the Ansari X Prize, which was a \$10 million competition designed to discover innovations to lower the risk and cost of going to space, by incentivizing the creation of a reliable, reusable, privately-financed technology. This resulted in innovations in the private space industry worth over \$2 billion today.

That is the opportunity we cannot overlook - if we didn’t have a significant challenge, opportunity would be lost!

The EDC sees our IRLNEP partnership as an opportunity to advance the clean-technology industry sector throughout the Space Coast and Florida. This innovative clean water partnership requires continuing participation of the Indian River Lagoon National Estuary Program and expansion of its IRLI² Network. At the EDC we like to say: “*We Dream Bigger Here*”. Our dream for the Indian River Lagoon is no exception – and we will work to create bigger innovation and bigger opportunities through our partnership, in order to support a healthy environment, a healthy community, and a healthy economy.

Thank you.