## Waterways to Reefs Initiative

Taking <u>Liabilities</u> and Transforming them into <u>Assets</u>

**Background:** State and federal governments spend billions of dollars each year on dredging, shoreline stabilization, opening channels, and beach renourishment. This often involves taking additional lands for the impoundment of waste dredge spoils or spoils that need to be dewatered over longer periods. Often these areas can be eroded in large storms and ultimately flow back into waterways to re-clog or fill in the waterway system.

Coastal marine habitats are struggling around the country and world and fish takes continue to drop each year. These issues are further compounded by the degradation of natural reefs due to sedimentation overlay from land washout and runoff from lands into the ocean. There is also more demand on the existing natural reefs due to increased fishing from ever expanding human populations. Any artificial reef that is constructed and successful at supporting fish growth is an Asset as it supports higher fishing takes and restoration of natural fish habitats.

The Initiative: Little Environments LLC and Coastal Hydrology Inc. have formed an initiative to maximize the use of dredge spoil lands by transforming them to marine habitat. The initiative addresses the liabilities of dredge spoils, freeing up government funds spent on dredging and the inconvenient consumption of public marshlands and reduced amenity. This initiative is the Waterways to Reefs Initiative, and is dedicated to utilizing the dredge materials that will inevitably be extracted, and converting them into artificially stabilized natural reefs. With this initiative, reef habitat is created, promoting marine production, and waterways are kept open

**Aims:** Little Environments LLC and Coastal Hydrology Inc. can integrate this approach into existing government and private projects already in the planning pipeline or at project inception, usually resulting in total reduced project cost. We want to work with entities both public and private to optimize environmental outcomes and performance of existing projects by providing unique insights, experience, and expertise.



~Initiative Driven Nationally and Internationally~

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