KOETZ & DUNCAN, LLC

Gulf Coast Industrial Infrastructure Task Force
The Water Institute of the Gulf (TWIG)/US Business Council For Sustainable Development

On August 5, 2016, The Water Institute of the Gulf and the U.S. Business Council for Sustainable Development will convene interested and affected parties to discuss formation of a Gulf Coast Industrial Infrastructure Task Force. Designed to enable collaboration and optimization among scientific experts and the multiple public and private enterprise entities operating in the Gulf of Mexico Region, the Task Force will address the pervasive and daunting degradation of the region's natural capital assets, and the potential for private enterprise to close gaps in recapitalization funding.

The Gulf Coast presents complex economic and ecological conditions fraught with controversial litigation, spill settlements, intra-industry competition for natural asset use, ownership schema, and ongoing loss of public and private land and water assets. Decades of economic productivity in the region have imposed a special brand of wear and tear—including a 1,900 square mile land loss in Louisiana—with further depletion as yet unabated.

Not surprisingly, operational loading and accelerated depreciation from industrial activities is seen as a major cause of the region's declining natural asset capacity and condition. Industrial infrastructure implanted in the Gulf's natural asset systems has modified the coastal hydrology and accelerated erosion, while valuable land-building sediments have been trapped behind locks and dams on upstream river systems. Decades of flood-control engineering has slowed replenishment of the unique land/water ecosystems formed by river sediments and plant growth, reversing centuries of accretion and land gain.

Adding to the strain, scientists predict sea level rise from one to three feet over the next century, multiplying submergence effects of sediment loss. Katrina and Rita storm-surges eliminated hundreds of square miles of coastal wetlands, exposing coastal communities to greater storms and damage; massive oil spills have altered hundreds of miles of delicate shoreline, thousands of acres of coastal marsh, and disrupted the communities, economy and wildlife of the coast; destructive invasive species like nutria consume critical vegetation or damage plants through foraging. A vital natural infrastructure system is in visible decline, but the effects are not simply "environmental."

The built energy infrastructure installed on the Gulf Coast includes rigs and wells, refinery capacity, and thousands of miles of pipelines connecting it all. An Entergy Corporation study values the full spectrum of built infrastructure embedded in the seventy mile strip from the southern Texas to coastal Alabama at $2 trillion. Chemical, transportation, agriculture, fishing,

and tourism industries operate alongside energy enterprise within an intricate alchemy of air, land, water asset capacity providing an array of critical ecological services.

Generally less acknowledged, that same set of natural assets is doing double duty in force protection, residuals absorption, and geospatial hosting for a $650 billion energy industry (in annual GDP) along with myriad additional safety, sanitation, social, and economic activities of the coastal populations and businesses. Without stable and sustained natural infrastructure, risk to assets, operations, livelihoods and people keeps increasing.

A "sustainable" enterprise in today's market can no longer default to outdated and inadequate concepts of "externalities" and "impacts" in managing the natural infrastructure assets integral to operations and productivity across industries. Industry operating requirements for built asset emplacement, residual absorption, materiel supply, and buffer/force protection set up parallel requirements for land, supply water, air emission permits, water discharge allowances, navigation channels, along with barrier land masses and wetlands.

Over 33,000 miles of water-emplaced pipelines, 185,000 miles of onshore pipeline, and more than 4,000 oil and gas platforms are not operating in a vacuum. Direct reliance on increasingly scarce (and degraded) natural asset capacity is forcing reconsideration of natural asset management as a function of operations. Failure to recognize and recapitalize natural infrastructure as an internal function of operations invites infrastructure damage, capacity impairment and loss, business interruption, shareholder dissatisfaction, and reduced productivity and profit.

Impairment of natural infrastructure assets, whether by industrial extraction, production processes, transport, or subsequent consumer use, is also gaining attention when evaluating materiality factors in enterprise valuation. According to the Global Reporting Initiative, "Relevant (or 'material') topics for a reporting organization should include those topics that have a direct or indirect impact on its ability to create, preserve or erode economic, environmental and social value for itself, its stakeholders, the environment, and society at large." Land and water asset impairment in the Gulf Region is ripe for materiality reporting, and could compound valuation concerns already emerging from historic greenhouse gas overloading of airshed infrastructure assets by energy and related industries.

The TWIG/USBCSD proposed Industrial Infrastructure Task Force could provide a unique opportunity for private enterprise to develop effective recapitalization planning and investment for the depleted and declining Gulf Coast natural infrastructure assets critical to its operations. The narrow view that tragedies in the commons are an offloaded risk to be borne by the public is no longer materially viable when operationally vital air, land, and water asset capacity is simply disappearing.

Building Enterprise Value on Sustainable Foundations