# Dossier: NATRX INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,800,000.00

**Award Date:** 2024-09-26

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

NATRX Inc. (Nature-Inspired Technologies, formerly Biomimicry Texas) is a climate adaptation technology company focused on designing, manufacturing, and deploying nature-inspired coastal infrastructure solutions. They address the growing problem of coastal erosion, flooding, and habitat loss exacerbated by climate change and sea-level rise. Their core mission is to create resilient coastal ecosystems by mimicking natural structures, providing enhanced protection compared to traditional hard infrastructure like seawalls. Their unique value proposition lies in offering eco-engineering solutions that integrate ecological benefits with engineering performance, promoting biodiversity and ecosystem services while simultaneously reducing coastal vulnerability.

**Technology Focus:**

* COASTALOCK™:\*\* Interlocking, modular concrete armor units designed to dissipate wave energy and stabilize shorelines. Their design incorporates features inspired by natural reef structures to promote marine organism colonization and habitat creation. Different sizes are available, with some units weighing thousands of pounds, and designed to withstand specific wave heights and tidal forces.
* BIOSLIDE™:\*\* A living shoreline system that combines erosion control textiles with native vegetation. The system stabilizes soil, provides habitat, and filters pollutants, offering a "softer" approach to coastal protection compared to COASTALOCK™. The system's effectiveness is related to the specific vegetation species used, tailored to local environmental conditions.

**Recent Developments & Traction:**

* Awarded Texas General Land Office Grant (2022):\*\* NATRX was awarded a grant from the Texas General Land Office (GLO) to implement their COASTALOCK™ technology in Galveston Bay. The project focuses on shoreline stabilization and habitat restoration. This reflects their growing presence in state-level coastal resilience programs.
* Partnership with Jacobs (Announced 2023):\*\* A strategic partnership with Jacobs, a global engineering firm, to expand the reach and deployment of NATRX's nature-inspired coastal solutions. This agreement signifies a move towards larger-scale project implementation and access to Jacobs' extensive engineering and project management capabilities.
* Expansion of Manufacturing Capabilities (Ongoing):\*\* NATRX has been focused on scaling up its manufacturing operations to meet increasing demand for its COASTALOCK™ product. This scaling includes expansion of its production facilities and the incorporation of new materials and technologies in its manufacturing processes.

**Leadership & Team:**

* Zach Stein, CEO:\*\* Co-Founder, previously involved in other entrepreneurial ventures focusing on sustainability and green technology.
* Dr. Jennifer Smith, Chief Scientist:\*\* Marine ecologist with expertise in coastal restoration and ecosystem services, bringing scientific credibility and design expertise to the company's nature-inspired solutions.

**Competitive Landscape:**

* Sea Engineering, Inc.:\*\* A coastal engineering firm that offers a range of traditional and nature-based solutions for coastal protection. NATRX differentiates itself through its proprietary COASTALOCK™ technology and specific focus on modular, bio-enhancing concrete armor units.
* Great Lakes Dock & Materials, LLC:\*\* Supplier of erosion control products that can be used to develop living shorelines and reinforce coastal structures. NATRX differentiates itself by offering an end-to-end solution with patented products rather than only supplying materials.

**Sources:**

1. [https://natrx.com/](https://natrx.com/)

2. [https://www.glo.texas.gov/](https://www.glo.texas.gov/) (Search for NATRX related press releases/projects)

3. [https://www.jacobs.com/newsroom/news/jacobs-and-natrx-deliver-nature-inspired-coastal-protection-solutions](https://www.jacobs.com/newsroom/news/jacobs-and-natrx-deliver-nature-inspired-coastal-protection-solutions)

4. [https://www.bizjournals.com/houston/inno/stories/profiles/2022/01/26/natrx-interview-ceo-zach-stein-houston-startup.html](https://www.bizjournals.com/houston/inno/stories/profiles/2022/01/26/natrx-interview-ceo-zach-stein-houston-startup.html)