

# Project Guardian: A New Era of Marine Protection

## An Introduction to the Challenge and Platform

The world's oceans are facing a "silent inheritance from a bygone era"—over 8,500 Potentially Polluting Wrecks (PPWs) that contain an estimated 20 million tons of oil and hazardous materials. These decaying vessels are no longer a historical footnote; they are an accelerating environmental crisis demanding proactive, systematic, and preventative action.

Project Guardian is an intelligence platform that identifies, prioritizes, and monitors potentially polluting shipwrecks. It fuses the **WERP protocol** (Wreck Environmental Risk Prioritisation) with **AI**, **expert validation**, and **live data** to turn static dossiers into continuously refreshed, decision-ready intelligence for governments, responders, researchers, and NGOs.

## Key Outcomes

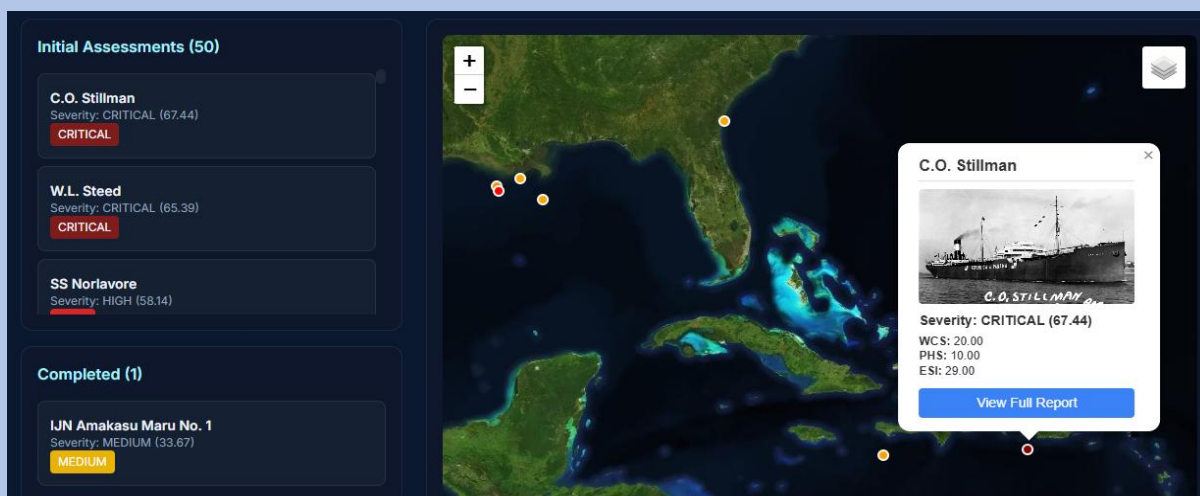
The platform is designed to deliver clear, actionable results:

- **Faster triage:** Provides insights in hours, not weeks of manual synthesis.
- **Consistent, explainable scoring:** Aligns all assessments to the scientifically validated WERP protocol.
- **Live reassessments and change tracking:** Ensures intelligence is always current and ready for action.

## The Three Pillars of Project Guardian

Our platform integrates three core pillars to function as a dynamic, living global management system.

## AI-Driven Assessment Engine

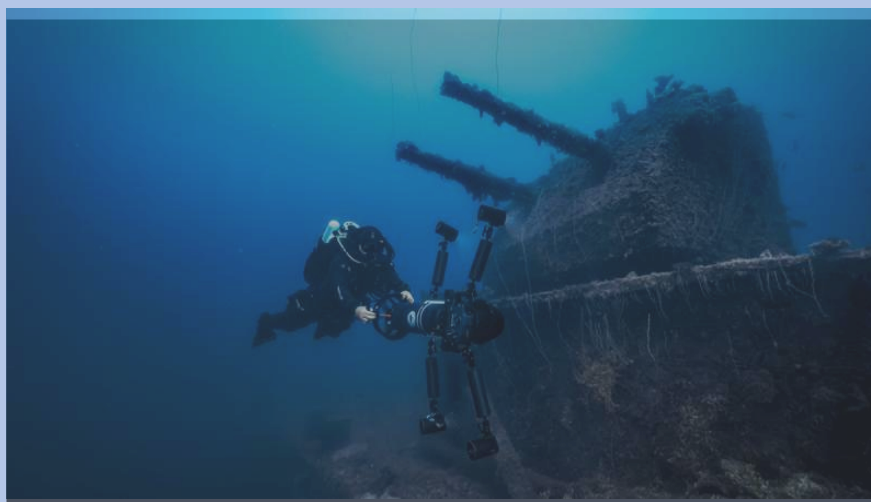


At its heart, Project Guardian utilizes an AI agent to perform rapid, comprehensive Phase 1 (OSINT) risk assessments of wrecks worldwide. Following the scientifically validated WERP protocol, the AI analyzes a wreck's history, construction, pollutant load, and the environmental sensitivity of its

location. This process quantifies the "Likelihood of Release" and "Severity of Impact," generating a prioritized list of threats in minutes, not months. This provides faster triage, consistent scoring, and clear, decision-ready intelligence.

## Expert-in-the-Loop Enhancement

Designed to augment human expertise, the platform allows experts to upload physical, in-situ data gathered from advanced marine technology like Remotely Operated Vehicles (ROVs).



The AI then conducts a secondary analysis, intelligently re-evaluating the WERP scores based on this higher-quality data. This process generates a final, high-confidence "Completed Assessment," seamlessly integrating remote analysis with firsthand intelligence.

## Dynamic Monitoring System

This critical pillar provides real-time intelligence by continuously monitoring external data feeds, such as the USGS Earthquake Catalog API or storm prediction centers. The "Guardian Sentry" automatically cross-references these significant seismic or tropical storm events with the coordinates of every wreck in its database.



If a significant event occurs near a known wreck, it generates an environmental alert, instantly flagging the wreck and prompting re-assessment. This capability transforms wreck management from a reactive "wait-and-see" approach to a proactive, intelligence-led operation.

Seismic Monitor		Tropical Storm Monitor	
Run Time (last 24h): 20 Oct 2025, 12:17		Run Time (last 24h): 20 Oct 2025, 17:13	
Wrecks Assessed:	50	Wrecks Assessed:	50
Seismic Events (24h):	18	Storms Processed:	0
High-Priority Alerts (>0.05g):	0	High-Priority Alerts (RED):	0
Low-Priority Events (>0.02g):	0	Low-Priority Events (AMBER):	0
Total Interactions Checked:	900	Total Interactions Checked:	0

## A Global Journey of Collaboration

The scale of this global challenge necessitates a new model of collaboration. We are seeking to build a global collective of partner corporations, foundations, and governmental agencies to embark on a journey with us to resolve these critical environmental issues. By taking on a threat once thought to be confined to the history books, we can collectively secure our names as the ones who acted to safeguard marine ecosystems for future generations.

## Pioneering a Sustainable Model for Progress

To make this a sustainable, scalable initiative, we are pioneering a groundbreaking financial model. This innovative concept aims to transform participation from a simple contribution into a reportable environmental investment.

We are exploring a two-stage system, where organizations could potentially fund the critical initial assessment work of applying the WERP protocol to broad geographic areas, or the actual remediation efforts to remove verified pollutants. This model would allow organizations globally to fund this vital work and claim the environmental benefit. It is being designed with high integrity and transparency, incorporating lessons from other credit markets, making it an attractive environmental investment for corporate partners with ambitious ESG goals. By proactively addressing legacy marine pollution, we can contribute to safeguarding our marine ecosystems for future generations.