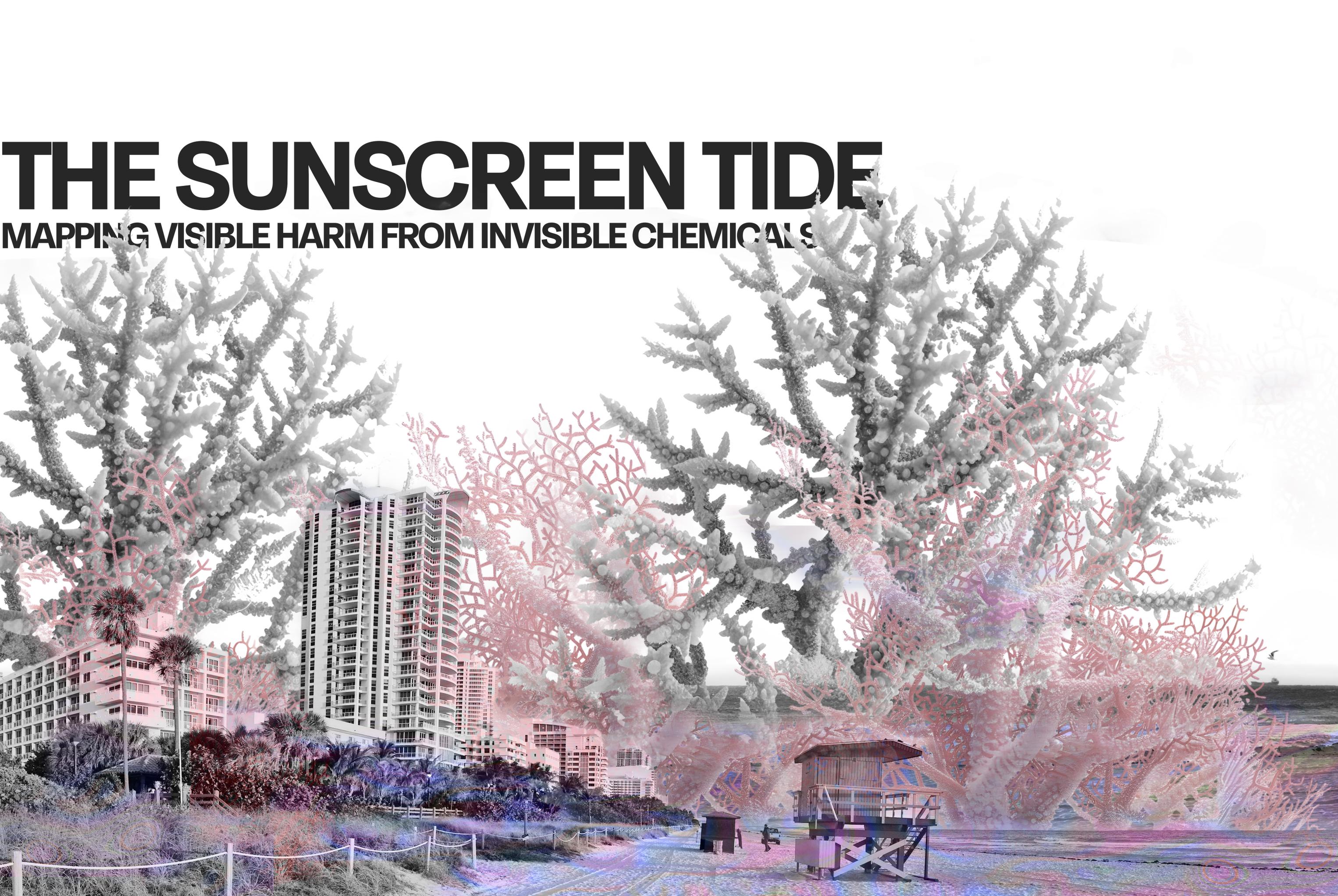


THE SUNSCREEN TIDE

MAPPING VISIBLE HARM FROM INVISIBLE CHEMICALS





THE SUNSCREEN TIDE IS A 100-FOOT-LONG, SITE-SPECIFIC ENVIRONMENTAL INSTALLATION THAT STAGES THE DAILY CYCLE OF SUNSCREEN RUNOFF ENTERING THE ATLANTIC OCEAN. EACH SUNRISE, A THIN BAND OF REEF-SAFE MINERAL OIL IS HAND-MISTED ACROSS A STRETCH OF SOUTH BEACH SAND, CREATING A SHIMMERING, IRIDESCENT STRIPE THAT MIRRORS THE CHEMICAL FILM HUMANS DEPOSIT IN THE WATER EVERY DAY.

AS MORNING BECOMES AFTERNOON, THE LINE DISAPPEARS—ERASED BY HEAT, WIND, FOOTPRINTS, AND TIDE. LIKE CORAL BLEACHING, THE VIOLENCE IS BEAUTIFUL, INVISIBLE, AND CONSTANT.

THIS PROJECT USES TIME, EROSION, SUNLIGHT, AND HUMAN PRESENCE AS COLLABORATORS. THE INSTALLATION BECOMES A MATERIAL ARCHIVE OF HARM, WHERE THE SURFACE IS BOTH WITNESS AND VICTIM.

THE TIDE IS NOT AN OBJECT BUT A DAILY PERFORMANCE, AN INDEX OF OUR ECOLOGICAL COMPLICITY.

SYNOPSIS+SITE



CORAL REEFS ARE AMONG THE MOST BIOLOGICALLY DIVERSE AND ECONOMICALLY VALUABLE ECOSYSTEMS ON EARTH, YET THEY ARE RAPIDLY DECLINING DUE TO A CONVERGENCE OF STRESSORS INCLUDING CLIMATE CHANGE, OVERFISHING, HABITAT LOSS, AND POLLUTION. **ONE OFTEN-OVERLOOKED CONTRIBUTOR TO REEF STRESS IS SUNSCREEN POLLUTION: CHEMICAL UV FILTERS USED IN SUN PROTECTION PRODUCTS THAT WASH OFF SWIMMERS AND ENTER COASTAL WATERS DAILY.**

RESEARCH HAS SHOWN THAT COMMON SUNSCREEN INGREDIENTS—ESPECIALLY OXYBENZONE (BENZOPHENONE-3) AND OCTINOXATE—CAN BE TOXIC TO CORAL EVEN AT VERY LOW CONCENTRATIONS. **THESE CHEMICALS HAVE BEEN IMPLICATED IN CORAL BLEACHING, DNA DAMAGE, ENDOCRINE DISRUPTION, AND IMPEDED REPRODUCTION AND LARVAL DEVELOPMENT IN REEF ORGANISMS.** LABORATORY EVIDENCE SUGGESTS THESE UV FILTERS MAY DAMAGE THE SYMBIOTIC ALGAE (ZOOXANTHELLAE) CRUCIAL TO CORAL HEALTH, TRIGGERING BLEACHING AND COMPROMISING CORAL RESILIENCE IN A WARMING OCEAN

THE SUNSCREEN TIDE INTERVENTION SEEKS TO MAKE THIS INVISIBLE POLLUTANT VISIBLE THROUGH AN EXPERIENTIAL COASTAL ART INSTALLATION. BY TRACING A SHIMMERING BAND OF HARMLESS MINERAL OIL ACROSS THE SAND EACH MORNING AND ALLOWING IT TO FADE UNDER HUMAN AND ENVIRONMENTAL FORCES, THE PROJECT EMBODIES THE DAILY CYCLE OF CHEMICAL INPUT AND ECOLOGICAL EROSION THAT CORAL REEFS EXPERIENCE. IN DOING SO, IT TURNS A ROUTINE ACT—APPLYING SUNSCREEN—INTO A MOMENT OF REFLECTION.

HOWD WE GET HERE



THE SUNSCREEN TIDE IS AN INTERVENTION THAT USES TIME, LANDSCAPE, AND HUMAN MOVEMENT AS MATERIALS TO MAKE VISIBLE AN ECOLOGICAL CRISIS THAT IS NORMALLY INVISIBLE.

THE PROJECT BEGINS WITH A SIMPLE QUESTION:
WHAT FORCES ARE ACTUALLY HARMING THE REEF—AND HOW CAN WE REVEAL THEM WITHOUT ADDING MORE HARM?

BY **WORKING DIRECTLY ON THE SAND**—THE THRESHOLD BETWEEN MIAMI'S URBAN COASTLINE AND THE CONTINENTAL UNITED STATES' ONLY LIVING CORAL REEF—THE PROJECT **TRANSFORMS THE BEACH INTO AN ACTIVE, LIVING CANVAS. A THIN, REEF-SAFE IRIDESCENT LAYER IS SPRAYED ACROSS THE SAND, CREATING A SURFACE THAT RECORDS EVERYTHING THAT TOUCHES IT.**

THE WORK HAS NO FIXED FORM. IT IS DRAWN BY THE TIDE, RESHAPED BY WIND AND HEAT, AND COMPLETED BY THE PARTICIPANT. EVERY FOOTPRINT BECOMES A MARK; EVERY MOVEMENT BECOMES A GESTURE; **EVERY PASSERBY BECOMES AN ACCIDENTAL ARTIST. THE PIECE MATERIALIZES THE HUMAN IMPACT ALREADY PRESENT ON THIS COASTLINE.**

THE IRIDESCENCE FADES AS THE DAY PROGRESSES. IT ERODES, DISPERSES, AND DISAPPEARS, MIRRORING THE DISAPPEARANCE OF CORAL SYSTEMS THEMSELVES. THE WORK IS NOT BUILT TO LAST; ITS EPHEMERALITY IS THE MEDIUM. WHAT REMAINS IS NOT AN OBJECT, BUT AN EXPERIENCE: A SHARED CHOREOGRAPHY BETWEEN PEOPLE, SAND, AND SEA.

ULTIMATELY, **THE SUNSCREEN TIDE REFRAMES THE BEACH AS AN ECOLOGICAL INSTRUMENT.**

A PLACE WHERE MATERIAL CAN VANISH, BUT MEANING CAN ACCUMULATE. WHERE THE LANDSCAPE BECOMES THE ARTWORK, AND THE ARTWORK BECOMES A LESSON IN LOSS, IMPACT, AND RENEWAL.

CONCEPT



TIME FUNCTIONS AS THE PRIMARY MATERIAL OF THIS INTERVENTION.

FIRST, THROUGH EROSION: THE IRIDESCENT LAYER BEGINS FULLY VISIBLE, THEN SLOWLY THINS AND DISAPPEARS THROUGH SUN EXPOSURE, HEAT, WAVES, AND HUMAN MOVEMENT. TIME SCRAPES THE SURFACE, MARKING AND UNMARKING IT. WHAT THE VIEWER SEES IS NOT A STATIC OBJECT BUT A TEMPORAL GRADIENT—A TRACE OF WHAT WAS, AND A FORESHADOW OF WHAT WILL NO LONGER BE.

SECOND, THROUGH CYCLE: THE WORK RESETS WITH EVERY HIGH TIDE. THE BEACH CLEARS ITSELF, THE SAND RETURNS TO NEUTRAL, AND THE INTERVENTION CAN BEGIN AGAIN. THIS CYCLICAL NATURE MIRRORS THE FRAGILITY OF CORAL ECOSYSTEMS—CONSTANTLY SHIFTING, REGENERATING, DISAPPEARING. THE PIECE LIVES AND DIES DAILY, HOLDING DISAPPEARANCE AS A FORM OF MATERIAL EXPRESSION.

MATERIAL ONE: TIME



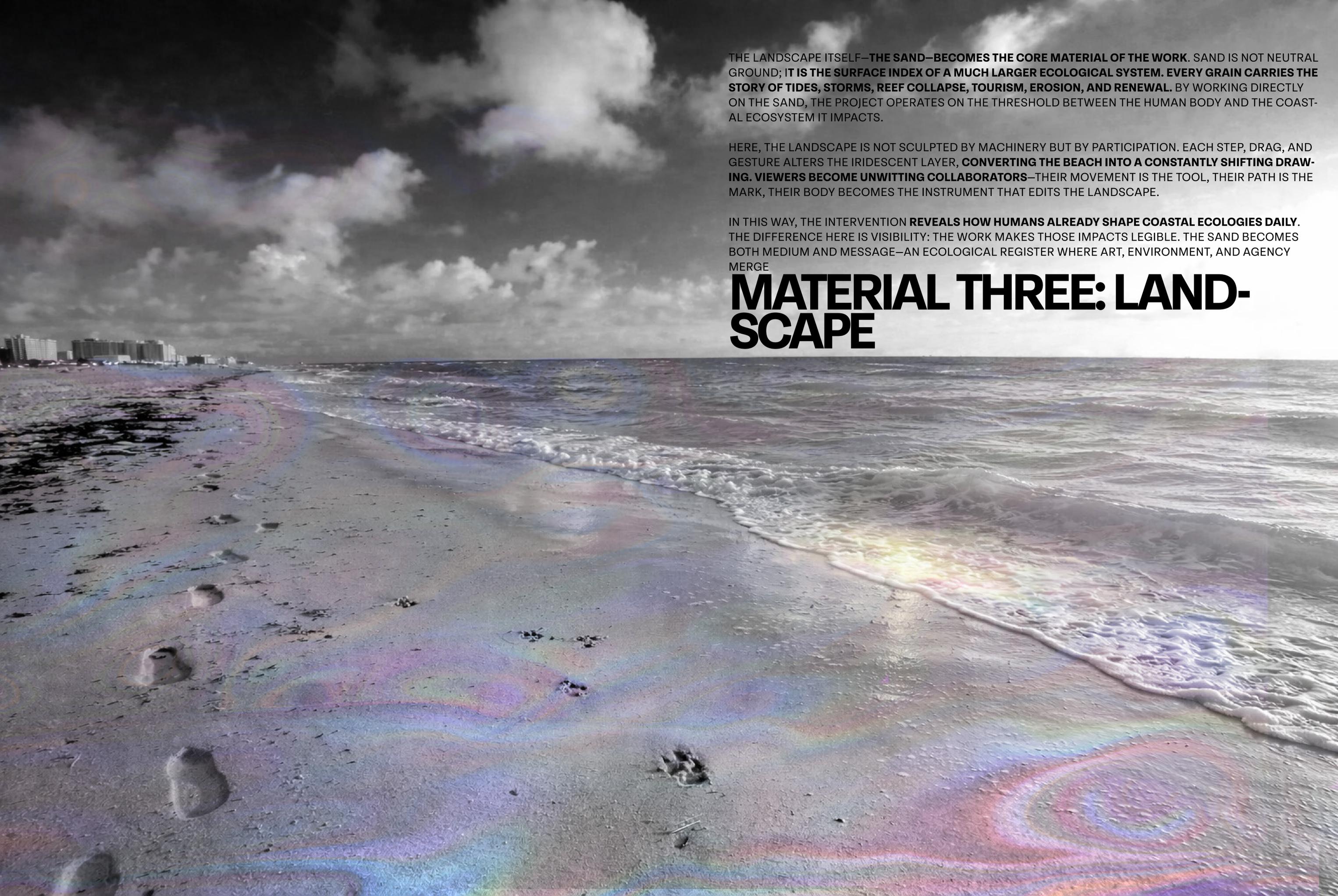
South Beach sits at the northern edge of one of the most significant marine ecologies in the world: the Florida Reef, **the only living coral barrier reef in the continental United States**. Stretching roughly 350 miles, it runs from the Dry Tortugas, past the Florida Keys, and continues north along the Atlantic coast toward St. Lucie Inlet, placing Miami directly adjacent to the country's largest coral reef system.

This means South Beach is not just a recreational shoreline but a **threshold condition**—where urban density meets one of the largest, most endangered reef structures in the world (third only to the Great Barrier Reef and the Mesoamerican Reef). Miami's coastline sits only a few miles from this fragile ecosystem, making it one of the closest major U.S. cities to a barrier reef.

The site is therefore not neutral: every action on the beach—chemical, material, or human—has a direct ecological consequence on a reef system already under severe stress from rising temperatures, pollution, erosion, and, notably, chemical sunscreens.

This adjacency between tourism-driven coastline and ecologically sensitive reef forms the core tension of the project. Here, the **beach becomes not just a site of leisure, but a zone where environmental responsibility, visibility, and disappearance collide**.

MATERIAL TWO: SITE



THE LANDSCAPE ITSELF—THE SAND—BECOMES THE CORE MATERIAL OF THE WORK. SAND IS NOT NEUTRAL GROUND; IT IS THE SURFACE INDEX OF A MUCH LARGER ECOLOGICAL SYSTEM. EVERY GRAIN CARRIES THE STORY OF TIDES, STORMS, REEF COLLAPSE, TOURISM, EROSION, AND RENEWAL. BY WORKING DIRECTLY ON THE SAND, THE PROJECT OPERATES ON THE THRESHOLD BETWEEN THE HUMAN BODY AND THE COASTAL ECOSYSTEM IT IMPACTS.

HERE, THE LANDSCAPE IS NOT SCULPTED BY MACHINERY BUT BY PARTICIPATION. EACH STEP, DRAG, AND GESTURE ALTERS THE IRIDESCENT LAYER, **CONVERTING THE BEACH INTO A CONSTANTLY SHIFTING DRAWING. VIEWERS BECOME UNWITTING COLLABORATORS**—THEIR MOVEMENT IS THE TOOL, THEIR PATH IS THE MARK, THEIR BODY BECOMES THE INSTRUMENT THAT EDITS THE LANDSCAPE.

IN THIS WAY, THE INTERVENTION **REVEALS HOW HUMANS ALREADY SHAPE COASTAL ECOLOGIES DAILY.** THE DIFFERENCE HERE IS VISIBILITY: THE WORK MAKES THOSE IMPACTS LEGIBLE. THE SAND BECOMES BOTH MEDIUM AND MESSAGE—AN ECOLOGICAL REGISTER WHERE ART, ENVIRONMENT, AND AGENCY MERGE

MATERIAL THREE: LANDSCAPE

THE IRIDESCENT LAYER IS NOT PAINT, PIGMENT, OR CHEMICAL SUNSCREEN. IT IS A THIN-FILM SURFACE, CREATED BY LIGHTLY COATING THE TOPMOST GRAINS OF SAND WITH A REEF-SAFE, BIODEGRADABLE OIL BLEND. THE MIXTURE IS DESIGNED TO:

SIT ON THE SURFACE

PRODUCE INTERFERENCE-BASED IRIDESCENCE WHEN STRUCK BY SUNLIGHT

RESPOND TO HEAT, TIDE, AND FOOT TRAFFIC

FADE NATURALLY WITHIN HOURS

LEAVE NO HARMFUL RESIDUE

THE MIXTURE BEHAVES LIKE A TEMPORARY SKIN—PRESENT, SHIMMERING, AND THEN GONE. ITS DISAPPEARANCE IS INTENTIONAL: A VISUAL METAPHOR FOR REEF LOSS, BLEACHING, AND ECOLOGICAL FRAGILITY.

PROTOTYPE MIXTURE

2 QUARTS FRACTIONATED COCONUT OIL

1 QUART ALOE WATER

½ QUART MICA (PEARL OR INTERFERENCE BLUE)

½ QUART JOJOBA OIL

MIXTURE: THE ADDED MATERIAL

