**INFOGRAPHIC BLUEPRINT**

***MAIN HEADING:* THE GUARDIANS OF THE HARBOUR**

**Visual Hook:** Two high-contrast circular "portals."

* **Left (1991):** The Stagnant Graveyard (Sepia-toned aerial of a choked, stagnant lagoon).
* **Right (2026):** Magical Mangawhai (Vibrant drone shot of the estuary and dunes).

**Section 1: The Delicate Balance**

Mangawhai Harbour Restoration Society (MHRS) is the guardian of the equilibrium between our "sand and salt" lifestyle in Mangawhai and the environment. We ensure a sustainable balance of recreation, maritime safety and ecological integrity.

**The Urgent Reality:** Recent LiDAR data reveals the Distal Sandspit has lost 420,000 tonnes of sand - equal to 170 Olympic pools. Without intervention, a breach is high-risk within 15 years. Stabilising the Spit and ongoing dredging will keep the **"tidal heartbeat"** strong, prevent erosion and keep the channel and entrance open.

**Integrated Value:**

* ⚓ **Access:** A safe, navigable channel and open harbour entrance for Coastguard and boaties.
* 🏊 **Community Wellbeing:** Clean water and sandy shores for our community.
* 🌿 **Ecological Integrity:** Preventing harbour stagnation I Sustaining salt marshes I Preserving sand-flat foraging and dune nesting grounds essential for the endangered *tara iti* (fairy tern) and other at-risk birdlife.

**Section 2: The Legacy of Grit**

* **The Crisis (1978–1991):** After a massive storm breach of the Distal Spit and the final blow of Cyclone Bola, the harbour mouth and channel choked. The vital tidal flow was diverted, the harbour lagoon became a "stagnant graveyard”, the "rogue" breach was almost unnavigable and the ecosystem was dying.

**The Rebellion (Feb 11, 1991):** Faced with institutional inertia, 100+ **"Big Dig Rebels"** and 40 machines took a stand. In four days of community grit, they carved a new channel, reopened the harbour mouth and rebuilt the rock groyne. Subsequently, they hand-filled 5,000 sandbags and used heavy machinery to build a sand bund wall, closing the breach and restoring the vital tidal flush.

* **Stewardship Today:** That rescue mission led to the formation of MHRS and evolved into sophisticated stewardship. Today, MHRS works with Te Uri o Hau, councils, DOC and Mangawhai Matters to turn the 1991 "fix" into a legacy of expert care.

**Section 3: Our 4 Pillars of Guardianship**

*(Design Note: Grouping Pillars into Land vs. Water mission)*

[ICON: THE SHIELD] **Protecting the Distal Spit Land**

**Pillar 1: Spit Stabilisation**

* **The Threat:** Erosion has created "low points" at high risk of a catastrophic breach.
* **Our Move:** Maintaining the 1991 Bund Wall and using LiDAR data to target sand replenishment in vulnerable zones.

**Pillar 2: People & Plants**

* **The Threat:** Bare sand is defenceless against wind and rising seas.
* **Our Move:** "Modern Rebel" volunteers have planted 150,000+ natives and installed 5km of sand fencing, to date, to create a living barrier.

**Managing the Water (Flow & Health)**

**Pillar 3: Strategic Dredging**

* **The Threat:** 20,000m³ of sand chokes the channel annually, threatening 24/7 Coastguard and boatie access.
* **Our Move:** Precise annual dredging to keep the "pulse" of the tide moving – maintaining a navigable channel while directing erosive energy away from vulnerable shorelines.

**Pillar 4: Ecological Balance**

* **The Threat:** Mangrove monocultures can strangle salt marshes, bury shorebird foraging grounds and prevent recreational use of the harbour.
* **Our Move:** Consented management of 70+ hectares, equal to 80+ rugby fields, to prevent encroachment.
* **Success:** Lincoln Street - where a salt marsh now thrives alongside sandy shores for the community and foraging birds, proving that ecological health and recreation can go hand-in-hand.

**Section 4: Stewardship in Action**

**MHRS is the community’s voice and operational engine.**

Supported by Mangawhai Matters and our dedicated volunteers - in partnership with **Te Uri o Hau, local councils and DOC** - we protect the shared space where community life and environmental health meet.

**JOIN THE LEGACY.** Stand with the Modern Rebels. Help us stay ahead of the tide. **[Join for Free |** [**mhrsoc@gmail.com**](mailto:mhrsoc@gmail.com)**]**

**DESIGNER’S STYLE & LAYOUT GUIDE**

**1. Tone & Aesthetic: "The Modern Rebel"**

* Vibe: Professional but gritty. High-end environmental report meets a community-led revolution.
* Palette: Deep maritime blues, turquoise (healthy lagoon), and sand/gold. Use "caution orange" or red sparingly for "Urgent Reality" sections.
* Typography: Bold, authoritative Sans Serif headers with clean, readable body text**.**

**2. Visual Hierarchy**

* The Hook: The two circular portals (1991 vs. 2026) are the focal point.
* The Split Layout (Section 3): Visually divide the 4 Pillars:
  + LEFT (The Land): Pillars 1 & 2. Focus on "Protection & Stability."
  + RIGHT (The Water): Pillars 3 & 4. Focus on "Flow & Health."
* The Map: In the centre of the Pillars, include a stylized map of the Mangawhai estuary highlighting the Spit, the Main Channel, and the Lincoln Street Success Story area.

**3. Key Icons**

* Pillar 1 (Shield): A stylized dune or bund wall with a shield.
* Pillar 2 (Anchor): A seedling or a pair of hands planting, symbolizing volunteer hours.
* Pillar 3 (Pulse): A dredging symbol or a rhythmic wave showing tidal flow.
* Pillar 4 (Balance): A scale balancing a mangrove leaf with a salt marsh succulent or shorebird.

**Section 1: The Delicate Balance**

MHRS is the guardian of Mangawhai Harbour’s delicate equilibrium. We operate at the careful intersection of community life and environmental health, ensuring a sustainable balance between recreation, maritime safety and ecological integrity.

**The Urgent Reality:** The Distal Spit is at risk. Recent LiDAR data shows a loss of over 420,000 tonnes of sand - equivalent to 170 Olympic swimming pools. With a high risk of a breach within 15 years. To prevent this, we must stabilise the Spit; alongside our ongoing dredging efforts, this work ensures the harbour tidal flow remains strong, the entrance remains open, and our upper waterways stay healthy and vibrant.

**Integrated Value:**

* ⚓ **Access & Safety:** A reliable, navigable channel and open harbour entrance for Coastguard, boaties, and fishers.
* 🏊 **Community Wellbeing:** A stable harbour ecosystem sustains our "sand and salt" lifestyle, preserving the clear water and clean shores that make Mangawhai a vibrant recreation hub.
* 🌿 **Ecological Integrity:** Protecting the Spit (from breaches and sand loss) secures the "tidal heartbeat" - the vital flushing of seawater that prevents stagnation, sustains critical salt marshes and preserves the sand-flat "supermarkets" and dune nesting grounds essential for the endangered tara iti (fairy tern) and other at-risk birdlife.

**Section 2: The Legacy of Grit**

* **The Crisis (1978–1991):** Mangawhai harbour began to decline in 1978 when storm tore a 450m breach through the Spit, diverting the vital tidal flow. After the final blow of Cyclone Bola in 1988. The entrance and channel choked completely. The harbour lagoon became a "stagnant graveyard” and the "rogue" breach a treacherous hazard to navigate in/out of the harbour.
* **The Rebellion (Feb 11, 1991):** Faced with institutional inertia, a band of locals - the Big Dig Rebels - refused to let their harbour die. In a legendary display of community grit, 100+ volunteers and 40+ heavy machines worked around the tides for four days to carve a new channel and re-open the harbour mouth. Subsequently they hand-filled 5,000 sandbags - and using heavy machinery – built a sand bund wall to close the breach and restore the vital tidal flush.
* **Stewardship Today: From Rescue to Restoration** The momentum of the Big Dig led to the formation of MHRS. The community “rescue mission” has matured into sophisticated stewardship. Today, MHRS works in lockstep with Te Uri o Hau, local councils, DOC and Mangawhai Matters to protect the Spit and manage the waterway - ensuring a stable coastline and a healthy, open harbour for everyone.

**Section 3: Our 4 Pillars of Guardianship**

*(Design Note: Group Pillars 1 & 3 under "Protecting the Spit & Dunes" and Pillars 2 & 4 under "Managing the Harbour")*

**Pillar 1: THE SHIELD (Spit Stabilization)**

* **The Fact:** Mass sand loss at low points creates a breach risk within 15 years.
* **The Action:** Maintaining the 1991 Bund Wall and prioritizing stabilisation and sand replenishment at vulnerable zones identified by LiDAR.
* **The Impact:** Prevents catastrophic inundation and keeps the "tidal heartbeat" directed through the current harbour entrance.

**Pillar 2: THE PULSE (Strategic Dredging)**

* **The Fact:** 15,000-20,000m³ (8 Olympic pools) of sand must be moved annually to keep the channel and entrance from choking.
* **The Action:** Annual dredging to maintain the navigation channel and redirect tidal flow away from vulnerable areas.
* **The Impact:** Ensures 24/7 access for Coastguard, boaties and fishers; protects the Spit and prevents harbour erosion; while preserving a clean lagoon for swimming and family fun.

**Pillar 3: THE ANCHOR (People & Plants)**

* **The Fact:** Bare sand is defenceless against wind and high seas.
* **The Action:** Powered by "Modern Rebel" volunteers, we continue to plant native seedlings (150,000+ to date) and install sand fencing (5km+ to date).
* **The Impact:** A "living barrier" armouring the dunes against the elements.

**Pillar 4: THE BALANCE (Ecological & Social Integrity)**

* **The Fact:** Mangrove monocultures can strangle salt marshes, bury shorebird foraging grounds and prevent recreational use of the harbour.
* **The Action:** Consented management of 70+ hectares to prevent encroachment on open sand-flats and recreational areas.
* **The Impact:** Protects high-value salt marshes and "supermarket" foraging grounds for the endangered tara iti (fairy tern) and other threatened shorebirds, while ensuring clear, open water for the community.
* **Success Story:** The Lincoln Street lagoon area. By managing encroachment, we’ve seen the return of a thriving salt marsh - the "top of the ecological pyramid" - alongside sandy shores for the community and foraging birds.

**Section 4: Stewardship in Action**

MHRS is the community’s voice and operational focus required to manage the harbour’s long-term health. Supported by Mangawhai Matters, our dedicated volunteers and our partners at Te Uri o Hau, local councils and DOC, we protect the shared space where community life and environmental health meet.

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