



2026 NEW JERSEY COASTAL AND CLIMATE RESILIENCE CONFERENCE

Session: Unlocking Funds to Power Progress

Blue Bonds for NJ Coastal Resilience

Lessons from Global Issuances to Scale Nature-Based Solutions

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New Jersey's Coastal Imperative

Blue bonds are suitable for nature-based solutions (NbS) because they provide a dedicated, **long-term financing** mechanism specifically for aquatic and marine ecosystems.

Unlike green bonds, they ensure that capital is strictly earmarked for projects that restore and protect the “water” environment, which is **often underfunded** compared to land-based initiatives.

The Funding Gap

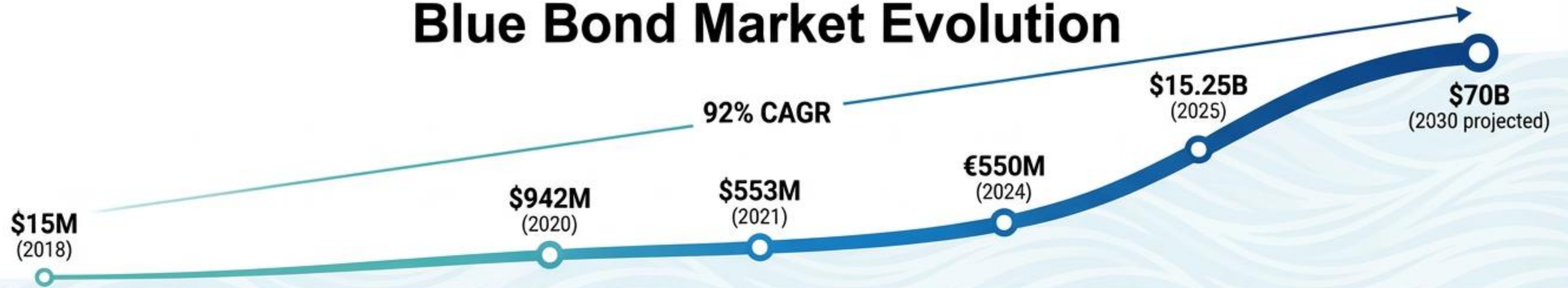
Traditional public funding and grants are insufficient. Federal programs (NOAA, FEMA) provide critical but limited resources. Local municipalities face budget constraints and competing priorities.

The Opportunity

Blue Bonds are ideal for NbS like mangrove restoration, coral reef protection, and wetland management, which directly improve ocean health and coastal resilience.

What Are Blue Bonds? Blue Bonds are innovative, thematic, debt-financing instruments used to raise capital specifically for projects that protect marine ecosystems, manage water resources sustainably, and reduce pollution. (IFC, 2022)

Blue Bond Market Evolution



Phase 1: Proof of Concept (2018-2019)

- 2018: Seychelles sovereign blue bond**
\$15M (World Bank, GEF) - marine protection, fisheries
- 2019: Nordic Investment Bank**
SEK 2B - Baltic Sea health
- 2019: World Bank**
\$10M - plastic waste reduction

Sovereign Leadership

Phase 2: Regional & Institutional Scaling (2020-2022)

- 2020: Bank of China**
\$942M - first private sector/commercial bank
- 2021: Asian Development Bank**
\$100M - regional expansion
- 2021: Belize**
\$553M - debt-for-nature swap (The Nature Conservancy)

Private Sector Entry

Phase 3: Market Diversification (2023-Present)

- 2023: Ørsted**
€100M - corporate entrance
- 2024: Saur Group**
€550M - water management
- 2025: Banco do Brasil**
\$95M - blue repos (innovation)
- 2025: BNP Paribas** - private banking products

APAC dominant, Latin America (Chile BancoEstado), supranational growth

Instrument Innovation

92% CAGR (2018-2022) | \$15.25B Cumulative (June 2025) | \$70B Projected (2030) | \$3T Blue Economy (2030)

Global Lessons from Blue Bond Issuances

Issuance (Year)	Structure	Innovation & Lesson for NJ
Seychelles (2018) Sustainable fisheries, Marine Protected Areas	World Bank provided a \$5 million partial guarantee, and the Global Environment Facility extended a \$5 million concessional loan, \$5 million came from international investors (Calvert Impact Capital, Nuveen) seeking both financial returns and conservation impact	Credit enhancement (guarantees) can derisk first-of-their-kind sovereign bonds for marine conservation
Nordic Investment Bank (2019) Baltic Sea biodiversity, water quality improvements	€200M multilateral owned by Denmark, Finland, Iceland, Norway, Sweden, and the Baltic states	Multi-country framework for shared environmental goals ,applicable to multi-state NJ region
Indonesia (2023) Mangrove rehabilitation, coastal protection, biodiversity	a \$150 million sovereign blue bond in the Japanese yen market, diversifying its sustainable financing sources	Directly funds nature-based solutions in a climate-vulnerable context
Ecuador (2024) Amazon & marine ecosystem conservation	\$1B debt-for-nature swap, structured as a debt-for-nature swap with credit enhancement from the Inter-American Development Bank and U.S. International Development Finance Corporation	Links debt restructuring to concrete conservation targets, model for large-scale ecosystem protection

Key Success Factors from Global Issuances

Strong Governance

Seychelles: Multi-stakeholder oversight with World Bank, government, and local communities → Establish NJ Blue Bond Task Force (DEP, EDA, academia, NGOs, community reps)

Verifiable Impact Metrics

ICMA Harmonized Framework: Coastal Protection Index, Marine Biodiversity Index → Develop NJ-specific KPIs: wetland acres restored, flood risk reduction, jobs created

Financial Innovation

Ecuador: Debt-for-nature swaps; NIB: Blended finance models → Explore state-level resilience bonds with credit enhancement from federal/state funds

Policy Alignment

Indonesia: Alignment with National Ocean Agenda and SDG 14 → Integrate with NJ Coastal Management Program, Energy Master Plan, and climate resilience goals



Critical Risks to Mitigate

Learning from global challenges to build a credible, effective NJ framework.

Risk	Description	Mitigation Strategy for NJ
"Blue-Washing"	Funds not directed toward meaningful conservation; lack of credibility	Adopt ICMA Green Bond Principles and IFC Blue Finance Guidelines; require third-party verification
Market Immaturity	Blue bonds <0.5% of sustainable debt market; limited liquidity	Start with pilot projects; use blended finance to attract anchor investors; build track record
Poor Impact Reporting	Inadequate monitoring undermines environmental outcomes	Mandate transparent, auditable reporting aligned with international standards
Governance Gaps	Exclusion of local communities from decision-making	Ensure inclusive stakeholder engagement; prioritize community benefits and equity
Regulatory Uncertainty	Lack of standardized definitions and frameworks	Develop NJ-specific regulatory guidance aligned with emerging federal/global standards

Recommended Impact Metrics for New Jersey Blue Bonds

Aligning with International Standards (ICMA, IFC)



Coastal Protection

Coastal Protection Index to quantify flood risk reduction for communities and infrastructure



Socio-Economic

Jobs created; property value protected; households and infrastructure safeguarded



Ecosystem Health

Marine Biodiversity Index to assess species richness and ecosystem health in restored areas



Shoreline Stability

Monitor erosion reduction from nature-based solutions; sustainable fisheries yield



Carbon Sequestration

Quantify through wetland restoration and seagrass meadow recovery



A Blue Bond Framework for New Jersey

Four Pillars for Success



Pillar 1: Cohesive Governance

Form multi-stakeholder task force: NJ DEP, EDA, Rutgers, Stockton, The Nature Conservancy, financial institutions, and community reps. Align with NJ Coastal Management Program.



Pillar 2: Rigorous Impact Metrics

Adopt international KPI frameworks. Establish baseline data, monitoring protocols, third-party verification, and public reporting.



Pillar 3: Innovative Finance

Explore state-level resilience bonds; utilize blended finance leveraging NOAA, FEMA, BPU funds; pilot resilience-linked bonds; attract pension funds, insurers, and foundations.



Pillar 4: Strategic Pilots

Select high-impact, visible projects to demonstrate proof of concept. Align with resilience needs and investor interests. Build a template for statewide scaling.

Policy Alignment and Enabling Environment

Leveraging existing frameworks at every level of government.

Federal Alignment

- NOAA Coastal Zone Management Program
- FEMA BRIC Program
- EPA water quality and restoration programs
- DOE offshore wind initiatives

State Alignment

- NJ Coastal Management Program
- NJ Energy Master Plan
- NJ Climate Change Resilience Strategy
- DEP wetland and water quality programs

Local Alignment

- Municipal resilience plans
- County planning and economic development
- Community-based restoration initiatives

Recommended Policy Actions

- Explore tax incentives for blue bond investors
- Streamline permitting for nature-based solutions
- Provide state credit enhancement for pilot bonds
- Integrate blue bonds into state climate finance strategy

Investor Value Proposition

Why Invest in New Jersey Blue Bonds?

Institutional Investors

- Diversification with environmental impact
- Alignment with ESG mandates and climate commitments
- Risk-adjusted returns with credit enhancement
- Growing demand for blue investment opportunities

Impact Investors

- Direct, measurable environmental outcomes
- Community resilience and social equity benefits
- Transparent reporting aligned with global standards

Public Sector Partners

- Leverage limited public funds to attract private capital
- Accelerate resilience project implementation
- Demonstrate climate leadership

The Value Proposition: New Jersey offers political stability + strong regulatory framework + clear resilience needs + commitment to innovation + partnership-ready environment.





Conclusion: Catalyzing a Resilient Coast

The Opportunity

Blue bonds offer a **transformative opportunity** to unlock private capital at the scale needed to power New Jersey's coastal resilience.

The Approach

By learning from global pioneers — **Seychelles, Nordic nations, Indonesia, Ecuador** — and building a robust, transparent framework, NJ can mitigate risks and maximize impact.

The Vision

This is not just about funding projects; it is about building a new model for **public-private partnership** that values our natural infrastructure as a critical economic asset.

The Call to Action

New Jersey has the expertise, the need, and the opportunity to become a **national leader in blue finance** for coastal resilience. The time to act is now.

Questions & Contact

Selected References

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Appendix: Key Definitions

Blue Bonds

Debt instruments issued to raise capital for ocean-friendly projects that promote sustainable marine and coastal development while providing economic returns (IFC, 2020).

Nature-Based Solutions

Actions to protect, sustainably manage, and restore natural ecosystems that address societal challenges, providing human well-being and biodiversity benefits simultaneously.

Blended Finance

The strategic use of development finance and philanthropic funds to mobilize private capital flows to emerging and frontier markets.

Debt-for-Nature Swap

A financial transaction in which a portion of a developing nation's foreign debt is forgiven in exchange for local investments in environmental conservation.

Resilience-Linked Bonds

Bonds where financial returns are tied to the achievement of specific resilience metrics, such as wetland restoration or flood defense infrastructure completion.

Blue Washing & ICMA Principles

Blue washing: Risk that funds are not directed toward meaningful conservation due to lack of governance. **ICMA Green Bond Principles:** Voluntary guidelines promoting transparency and integrity in green/blue bond issuance.