Ridge to Reef

IUCN’s framework for managing river basins and coastal areas as a continuum

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Ecosystem connectivity and impacts on ecosystem services from human activities

- **Habitat destruction** leads to:
  - Changes in nutrients, sediments, and freshwater outputs
  - Loss of mangrove and seagrass habitat
  - Increased sedimentation and nutrient input
  - Decreased storm buffering and increased coastal erosion
  - Loss of coral reef habitat

- **Socio-economic changes for coastal populations**
- **Decreased fisheries, decreased revenues from tourism, and decreased storm buffering**

**Seagrasses**
- Binding sediments
- Absorb inorganic nutrients
- Export of organic material and nutrients for nearshore and offshore food webs
- Export of invertebrate and fish larvae
- Storm buffering
- Fish and invertebrate habitat (adult migration)

**Coral reef**
- Storm buffering
- Export of fish and invertebrate larvae and adults
- Export of organic material and nutrients for nearshore and offshore food webs
- Fish and invertebrate habitat

**Mangroves**
- Binding sediments
- Absorb inorganic nutrients
- Export of invertebrate and fish larvae
- Fish and invertebrate habitat (adult migration)

**Land**
- Sediments: Binding sediments
- Nutrients: Absorb inorganic nutrients
- Freshwater discharge: Slow freshwater discharge
- Ecosystem connectivity: Storm buffering
- Impacts: Fish and invertebrate habitat (adult migration)

Source: Silvestri & Kershaw (2010)
Implementation model for an ecosystems approach to water management

- demonstration track for IWRM
- joint action + learning by doing $\rightarrow$ tangible results + knowledge + capacity
- dialogue + policy influencing $\rightarrow$ scaling-up
- Similar to the twin-track approach in the Regional Framework

Phase 1: 2001-2008 – Basin demonstrations
Phase 2: 2009-2013 – Scaling-up

- Latin America, Africa, Middle East, Asia, Oceania
- 30 projects in 25+ countries
- 200+ members and partners
- Funding: $50m+
A transformative, outcome-driven approach for managing river basins and coastal areas as a continuum of interconnected human (uses) systems and ecosystems characterized by improved governance, capacity and learning, and integrated at spatial scales to address emerging risks and ensure livelihood and ecosystem resilience.
### IUCN RIDGE TO REEF FRAMEWORK

<table>
<thead>
<tr>
<th>SO1: Practical Demonstration</th>
<th>1.1 Maintaining freshwater flows to coastal and marine ecosystems</th>
<th>1.2 Clean rivers and lakes lead to healthy reefs and coastal ecosystems</th>
<th>1.3 Improve ability to reduce risks and cope with extreme events through adapting to climate changes</th>
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<tbody>
<tr>
<td>SO2: Improved governance at scale</td>
<td>2.1 Improve Agency coordination between basins and coasts</td>
<td>2.2 Create multi-stakeholder consensus building platforms for coordinated decision making</td>
<td>2.3 Coordinate R2R approaches at transboundary Levels (B2B, B2C, C2C)</td>
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<tr>
<td>SO3: Economic incentives and natural infrastructure</td>
<td>3.1 Economic and institutional investment in natural infrastructure</td>
<td>3.2 Create the business case for private sector involvement in R2R Mgmt to offset climate risks</td>
<td>3.3 Mobilize financing for restoration of ecosystem services between freshwater and coastal systems</td>
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<td>SO4: Improved capacity for delivery</td>
<td>4.1 Communications, discourse and public education</td>
<td>4.2 Leadership across geographic and governance scales</td>
<td>4.3 Learning and knowledge exchange</td>
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</tbody>
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S2S and R2R thinking in Action

- WIO-SAP and WIO-C

- Sustainable management of critical habitats
- Water quality management
- Sustainable management of river flows
- Governance, learning and exchange
Thank You