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**Economic Commission for Europe****Meeting of the Parties to the Convention on  
the Protection and Use of Transboundary  
Watercourses and International Lakes****Tenth session**

Ljubljana, 23–25 October 2024

Item 9 (a) of the provisional agenda

**Promoting integrated water resources management in transboundary****Basins: Source-to-sea management of transboundary waters****Draft annotated outline of the Guidance note for the  
implementation of source-to-sea management in  
transboundary basins****Prepared by the secretariat, in consultation with Estonia and Slovenia  
and with the support of a drafting group\****Summary*

As part of activity 3.1 of the programme of work for 2022–2024 (ECE/MP.WAT/63/Add.1) of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention), a global workshop on source-to-sea management in transboundary basins was organized (Geneva (hybrid), 14–16 December 2022), under the leadership of Estonia and Slovenia and in cooperation with numerous partners.

The workshop clearly showed the interest and relevance of work on this topic under the Water Convention and the need for further guidance. At its eighteenth meeting, the Working Group on Integrated Water Resources Management (Geneva, 19–21 June 2023), entrusted the secretariat, alongside the co-lead Parties Estonia and Slovenia, with the task of developing a comprehensive Guidance note on source-to-sea management. The Working Group also encouraged partners to cooperate on this effort.<sup>a</sup>

A drafting group was established in January 2024, composed of experts from Governments, academia, partner organizations, joint bodies and regional sea commissions. The drafting group held its first virtual meeting in February 2024. The group presented an initial outline of the Guidance note at the nineteenth meeting of the Working Group on Integrated Water Resources Management (Geneva, 6–8 May 2024). Between May and September 2024, efforts were concentrated on refining the document, culminating in the preparation of this annotated outline. The present document outlines the scope and content

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\* The present document was submitted without formal editing.



of the Guidance note for the implementation of source-to-sea management in transboundary basins.

The drafting, review, and finalization phases of the Guidance note are scheduled to take place from October 2024 through to May 2025. It is anticipated that the Guidance note will be presented at the third United Nations Ocean Conference (Nice, France, 9–13 June 2025) and to the twentieth meeting of the Working Group on Integrated Water Resources Management (Geneva, 13-15 October 2025).

The Meeting of the Parties is invited to:

- (a) Express gratitude to the lead Parties, the lead author, the members of the drafting group, the secretariat, as well as the partners involved, for developing the annotated outline of the Guidance note;
- (b) Provide comments on the present annotated outline of the Guidance note;
- (c) Mandate the lead Parties and drafting group to proceed with the drafting of the Guidance note, based on the annotated outline and comments received, with the objective to present it at the third United Nations Ocean Conference.

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<sup>a</sup> ECE/MP.WAT/WG.1/2023/2, para. 62 (b).

## Foreword

## Acknowledgements

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## Executive Summary/ Main messages

*(Target length: 3-5 pages)*

### Part I. Introduction

*(Target length: 1.5 pages)*

#### A. Background

1. This section presents a brief history of the development of source-to-sea management with early publications (J. Granit et al., 2017, GEF STAP Advisory Document) on the concept, its application (R. E. Mathews et al., 2019, R.E. Mathews and Stretz J., 2019) and its promotion through the Action Platform for Source-to-Sea Management.
2. The Global Workshop on Source-to-Sea Management held in Geneva, 14–16 December 2022, provided a space for practical learning on effective source-to-sea management. A direct outcome from the workshop was the proposal to develop a Guidance note for the implementation of source-to-sea management and transboundary water cooperation. In June 2023, the Working Group on Integrated Water Resources Management decided to develop such a Guidance note in the framework of the Water Convention.
3. The objective of the Guidance note is to enhance the understanding of the need for and benefits of source-to-sea governance in transboundary cooperation, build capacity, facilitate implementation, encourage collaboration and cooperation, and present case studies and best practices.
4. The target audience for the Guidance note includes experts and policymakers covering freshwater, coastal, and marine sectors as well as transboundary basin and large marine ecosystem (LME) organisations. Source-to-sea management can be of interest to a wide audience, as it involves multiple stakeholders and sectors due to its cross-border and collaborative nature.
5. The Guidance note is being developed by the secretariat, in consultation with Estonia and Slovenia as Lead Parties, and with the support of a lead author from the Stockholm International Water Institute (SIWI), and a drafting group.
6. The key milestones for the Guidance note are as follows: A drafting group was formed by the end of January 2024, followed by a first virtual meeting in February. In May 2024, the group presented an initial outline at the nineteenth meeting of the Working Group on Integrated Water Resources Management. From May to September, work focused on preparing an annotated outline for the tenth session of the Meeting of the Parties to the Water Convention, to be presented in October 2024. The drafting, review, and finalization of the Guidance note will take place from October 2024 to May 2025. The Guidance note is expected to be presented at the 2025 UN Ocean Conference.

#### B. Scope of the Guidance note

7. Part II introduces key concepts such as source-to-sea system, and key flows. It also focuses on what source-to-sea management is, why it is needed and its benefits. This section also covers the contributions of source-to-sea management to address the triple planetary crises and how it relates to other systemic approaches.
8. Part III provides an overview of contributions that source-to-sea management can make to the objectives of a selection of global legal frameworks, transboundary agreements and through river basin organizations and regional seas commissions and action plans as well as how these frameworks provide support for source-to-sea management. Strategies to establish source-to-sea management are shared.

9. Part IV will provide practical guidance on a step-by-step approach for incorporating source-to-sea management in transboundary cooperation. It will cover building a shared knowledge base, designing the way forward, co-creating a collaborative action plan, setting up conditions for its successful implementation, and highlighting the strengths of this step-by-step approach.

10. Part V will suggest recommendations for accelerating the adoption of source-to-sea management by strengthening partnerships across actors and initiatives, growing understanding, building commitment, and taking action on the ground.

11. Part VI will summarize the main findings and recommendations.

### **C. How to use this Guidance note**

12. The Guidance note is meant to be a practical guide to be used by a wide range of actors including government officials, basin authorities, regional seas commissions and action plans and sector practitioners working at different levels (local, national, inter-governmental) of governance of shared rivers, lakes and aquifers, deltas, coasts, near shore, and the ocean. It can also be useful to financial investors and donors from public and private sectors at national, regional and international levels.

## **Part II. Understanding Source-to-Sea Management**

*(target length approx. 8 pages)*

### **A. Source-to-Sea Management: What it is and why it is important**

#### **1. Source-to-sea systems and key flows**

13. The source-to-sea system is the land area that is drained by a river system, its lakes and tributaries, connected aquifers and downstream recipients including deltas and estuaries, coasts and near-shore waters, adjoining sea shelf and continental shelf as well as the open ocean. A source-to-sea system can be defined at different scales to reflect the social, economic, and environmental objectives of governance.

14. Source-to-sea systems are often transboundary in nature. Social, cultural, and economic benefits of ecosystem services can travel from upstream to downstream, and vice versa.

15. The segments of source-to-sea systems are linked through six key flows: water, biota, sediment, pollution, materials, and ecosystem services. Alterations to these key flows can have environmental, social, and economic consequences either upstream or downstream of the alteration, or both.

16. Examples of alterations will be presented (e.g. in a table) and their social, economic, and/or environmental impacts to upstream and/or downstream segments of the source-to-sea system discussed.

#### **2. What is source-to-sea management**

17. Source-to-sea management refers to the establishment of governance that increases collaboration and coherence across the source-to-sea system and reduces alteration of key flows (water, pollution, sediment, materials, biota, ecosystem services) resulting in measurable economic, social and environmental improvement across freshwater, coastal, nearshore, and marine environments. It considers the entire source-to-sea system – stressing upstream and downstream environmental, social, and economic linkages and stimulating coordination across sectors and segments.

18. Source-to-sea challenges cannot be solved by one sector only, or in one location only, requiring collaborative action.

19. Source-to-sea management brings together sectors and actors – policymakers, the private and finance sectors, scientists, NGOs, local communities and Indigenous Peoples – to raise their different viewpoints and proactively co-create solutions to address source-to-sea challenges.

20. The objective of source-to-sea management is to enhance inter-institutional coordination, ensuring that actions benefit the entire source-to-sea system, trade-offs are carefully examined, and multiple co-benefits are pursued.

21. Source-to-sea management is:

- Holistic: addressing upstream and downstream linkages across issues, stakeholders, desired outcomes, costs and benefits
- Collaborative: building upon and enhancing existing institutions, established methods and ongoing processes
- Prioritizing: targeting and addressing the issues that hold the greatest potential for generating positive impacts for the entire source-to-sea system while minimizing negative impacts
- Participatory: engaging upstream and downstream stakeholders from the start, including marginalized and vulnerable people, and ensuring equitable sharing of benefits
- Context dependent: derived from, and responsive to, the local context
- Result oriented: targeting intermediate outcomes that contribute to overall improved economic, social and environmental status
- Adaptive: learning-by-doing through pragmatic implementation, monitoring.

### **3. Why is source-to-sea management needed**

22. Governance is often fragmented, organized to respond to societal needs, around segments of the natural systems (e.g. river basins or coastal areas), along administration units (e.g. national and municipal borders and exclusive economic zones), separated by sectors (e.g., energy production, agriculture, transportation, urban planning, ports, etc.), and fits temporal scales much shorter than those of hydrogeomorphic and climate changes. This creates challenges when balancing the diverse and often conflicting development objectives, stakeholder priorities, and institutional arrangements that span social, economic, and natural borders and timescales.

23. The governance functions of policy and strategy; coordination; planning and preparedness; financing; management arrangements; monitoring, evaluation and learning; regulation; and capacity development lack coherence across sectors and segments of the source-to-sea system.

24. Additionally, there are key gaps hindering the connection of coastal zone and basin governance and management (including, but not necessarily limited to, transboundary basins). For example: the ministries and agencies regulating and managing freshwater and marine issues often differ; institutional mandates tend to not overlap or connect; there is inconsistency between freshwater and marine agreements at regional/basin and sea level; lack of back-casting from coastal pollution problems to what policy and regulatory measures are needed on land to reach sufficient coastal water quality; and perverse incentives and hidden subsidies are underlying drivers that need addressing; etc.

25. Financial systems follow economic borders, often focusing on a specific sector or social geography, thereby limiting the assessment of risks and benefits that could incentivize measures that deliver mutual or co-benefits across the source-to-sea system.

26. This sectoral fragmentation also plays out in the research conducted, and data availability and sharing, and the monitoring standards used, that could inform the environmental, social, and economic costs and benefits of addressing linkages across land, freshwater, coastal and marine systems. Integrative management tools are often lacking, e.g. such as integrated modelling systems. Also, the impacts of watershed measures on coastal

and ocean water lack scientific tools and understanding. Without this, it is difficult to demonstrate the upstream and downstream benefits to the extent that trade-offs will be appropriately considered when making investments.

27. Practices, following in line with the segmentation of policies, procedures, and regulations, are often directed toward maximizing local benefits and are blind to upstream-downstream impacts.

28. This fragmentation between institutions within countries and between them delivers suboptimal outcomes that may have unintended negative consequences in other parts of the source-to-sea system.

29. Stakeholder engagement, when it occurs, is also focused on single issues, locations, and/or sectors, limiting the opportunity to increase awareness of linkages across the source-to-sea continuum and identify synergies and co-benefits.

30. The consequences of fragmented governance and mismanaged natural resources are clear, and source-to-sea management is one of the most promising tools to solve these complex challenges. Meaningful change can be created through policy reforms, sustainable financing, and by developing frameworks which engender cross sectoral coordination and facilitate upstream-downstream stakeholder cooperation to reach shared goals and objectives.

## **B. Benefits of source-to-sea management**

31. To address this fragmentation, coordination across administrative and political boundaries at all levels needs to be improved. This is one of the main outcomes of source-to-sea management.

32. This coordination can be fostered through both informal and formal processes and can be supported through existing mechanisms or under new frameworks. Source-to-sea management can lead to economic and administrative benefits by ensuring outcomes of mutual benefit from source to sea.

33. Through bringing sectors together, ecosystem services and their related upstream-downstream benefits can be evaluated alongside the value of economic services, e.g., energy, food production, transportation, etc., to highlight trade-offs and identify optimal outcomes.

34. Source-to-sea management brings together all actors – policymakers, the private sector, scientists, NGOs, local communities, and Indigenous Peoples – to proactively co-create solutions that benefit the source-to-sea system as a whole.

35. Including those who are dependent upon ecosystems for their livelihoods and are most vulnerable to their changes in decision-making will contribute local knowledge that leads to sustainable and enduring outcomes with balanced benefits for land, freshwater, coastal and marine ecosystems. Raising awareness of upstream stakeholders of their impact on downstream environments as well as benefits that move upstream from downstream can strengthen commitments to taking action that preserve those benefits.

36. Addressing source-to-sea challenges requires collaborative action with stakeholders taking co-responsibility for implementation of action plans.

37. Through understanding of the social, economic, and environmental linkages across source-to-sea systems, actions can address multiple issues and create co-benefits.

38. Establishing opportunities for cross-sectoral coordination and upstream-downstream cooperation will build social and economic resilience in the face of rapidly changing conditions. Better understanding of the linkages between sectors and across the source-to-sea continuum can result in responses that result in multiple and co-benefits.

### **C. Contributions to address the triple planetary crises and achieving the 2030 Agenda**

39. The 17 United Nations Sustainable Development Goals (SDGs), agreed to by the General Assembly in 2015, formulate an integrated and indivisible agenda that balances the social, economic and environmental dimensions of development. The interdependency of the SDGs necessitates an integrated approach to governance to achieve all goals. Source-to-sea management addresses these linkages across the SDGs and provides a path for joined-up actions to achieve the 2030 Agenda as a whole. Source-to-sea management approach ensures development challenges are tackled holistically and adequately addresses tradeoffs between upstream and downstream stakeholders and across sectors through open and inclusive dialogues.

40. The health of the ocean and its benefits to society are at risk, largely due to activities taking place upstream, far from its shores. Many factors have led to a cascade of impacts that extend from terrestrial and freshwater ecosystems to coastal zones and the ocean. The interdependency of these goals and their targets demonstrates the need to balance key societal objectives and ensure that the achievement of one goal does not hinder the advancement of the others.

41. The need to control the cumulative effects of multiple sources and causes of deteriorating water quality in a given water body, from what can be a very large geographical area, represents one of the most cumbersome aspects of water quality management. Pollutants that enter water bodies can be deposited in sediments or transported long distances by rivers and currents, resulting in problems that can be local, regional or even global in nature. The importance of good water quality for both human health and ecosystems is recognized and addressed in explicit terms throughout the Sustainable Development Goals (SDGs), not only in relation to water and sanitation, but also in relation to health, cities, consumption and production patterns, and oceans. To address the various sources of pollution and their transport along the land, freshwater, marine continuum requires increased understanding of the environmental, social, and economic costs of pollution along the continuum and action to be taken at the pollution source for downstream benefit.

42. Climate change is one of the defining societal and political challenges of the 21st century. Climate change, and its solutions space, calls for holistic governance approaches as it is deeply interconnected to societal and ecological systems, such as energy, biodiversity, and food systems. The health of freshwater, coasts, and the ocean – from source to sea – is paramount for concerted and ambitious climate action. Water, ocean, and climate communities have for a long time tackled their issue areas individually rather than in unison. The source-to-sea approach, with its holistic focus on the linkages between ecosystems, is well-positioned to be the boundary spanner across sectors and between scales needed to bring these communities together in concerted action on water and ocean health, climate mitigation and adaptation.

43. Terrestrial, freshwater, estuarine, and marine biota have adapted over millennia to the available habitat conditions and may utilize a range of habitats. Ecosystem connectivity is crucial to biodiversity and for maintaining healthy populations of the species that migrate between different habitats as part of their life cycle. Dams and other impediments to movement between habitats risk disrupting these biota flows by reducing connectivity within the source-to-sea system. Habitat loss and degradation, changes in water quantity and quality, overharvesting in one or more segments of the source-to-sea system can also disrupt biota flows. Addressing biodiversity loss requires better understanding of trade-offs between sectoral development priorities and the benefits derived from biodiversity and ecosystem services. To address biodiversity loss, the inter-institutional coordination and understanding of the linkages between social, economic, and environmental objectives across the source-to-sea system is needed.



## **D. Source-to-sea management and other systemic approaches**

44. Existing systemic approaches such as Integrated Water Resources Management (IWRM), Integrated Coastal Zone Management (ICZM), Ecosystem-based Approach (EbA), Ridge to Reef, Area-Based Management, and the Water, Energy, Food, Ecosystem Nexus are all a means for delineating priorities at different scales and across different sectors. Source-to-sea management is a means for harmonizing these priorities and balancing trade-offs across the source-to-sea continuum.

45. Incorporating source-to-sea perspectives into these approaches can lead to research, data, and monitoring that increase understanding of the social, economic, and environmental linkages across the source-to-sea continuum. This will increase understanding of the linkages across geographic segments and sectors.

46. Established mechanisms for coordination developed through these approaches can be built upon to facilitate the cross-sectoral coordination and upstream-downstream cooperation needed for source-to-sea management.

## **Part III. Source-to-sea management and transboundary water cooperation**

*(Target length: approx. 12 pages)*

### **A. Linkages between source-to-sea management and global legal frameworks**

47. The adoption of source-to-sea management can contribute to attaining different global legal frameworks already in place. Consequently, these frameworks support the establishment of source-to-sea management.

48. For example:

- Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention). The Water Convention requires its Parties to prevent, control and reduce transboundary impacts, including on the marine environment. It calls for riparian parties to cooperate with coastal States for the reduction of transboundary impacts on the marine environment (e.g. articles 2.6, 9.3 & 9.4). It also asks joint bodies for freshwater ecosystems to cooperate with those for coastal waters/ marine environment. Source-to-sea management contributes to this by increasing the understanding of the impacts that activities have across the source-to-sea continuum and fostering cooperation to address them.
- Convention on the Law of Non-Navigational Uses of International Waters. The convention calls Watercourse States to individually and when appropriate, jointly, protect and preserve watercourses including estuaries and the marine environment from pollution e.g. articles 20, 21, 22, 23 & 24. Source-to-sea management contributes to these aims by fostering coordination and cooperation between upstream and downstream parties.
- United Nations Convention on the Law of the Sea (UNCLOS). The Convention includes provisions on the protection and preservation of the marine environment, especially from land-based sources of pollution. e.g. articles 198, 199, 200, 201, 207 & 213. Source-to-sea management contributes to these provisions.
- Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention on Wetlands). The Convention contains principles for the protection and conservation of wetlands (e.g. articles 3 & 5) that source-to-sea management can advance.
- The Convention on Biological Diversity and its Kunming-Montreal Global Biodiversity Framework (GBF). The GBF contains targets focused on the restoration

and protection of terrestrial, inland water, marine and coastal areas through equitable management and the reduction of pollution risks and negative impacts on biodiversity and ecosystem functions e.g. 2, 3 & 7. The adoption of source-to-sea management contributes to these targets by increasing understanding of the source-to-sea system and facilitating cooperation to address negative impacts on biodiversity that arise from human activities on these ecosystems.

- Conventions related to pollution across the source-to-sea continuum (e.g. Basel Convention, Stockholm Convention, Rotterdam Convention, Minamata Convention, the development of an international legally binding instrument on plastic pollution, including in the marine environment).
- Source-to-sea management in regional frameworks such as transboundary water agreements and the regional seas conventions and action plans

49. This section will provide an overview of the role of source-to-sea management in the implementation of transboundary water agreements and regional seas conventions and action plans (RSCAP) as well as how these promote source-to-sea management at the intra- or international transboundary levels.

50. The challenges and opportunities for integrating source-to-sea management in institutional cooperation mechanisms such as joint bodies for transboundary water cooperation (including basin organizations) and institutions responsible for marine environment (RSCAPs) will be discussed and examples will be provided.

## **1. Transboundary water agreements**

51. Reducing impacts from freshwater to the marine ecosystem requires States to include provisions on the protection of marine environment within arrangements for transboundary waters, including referring to specific key flows. States sharing transboundary waters may consider two models on how provisions on marine environment could be framed: as a Protocol signed by States sharing a common sea or ocean, specifically addressing minimization of pollution and impacts from land-based sources, e.g. Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities or as an agreement between joint bodies and marine commissions setting up joint activities such as monitoring, or have marine actors as observers to meetings of the river basin organizations, e.g. MoU between the International Commission for the Protection of the Black Sea (ICPBS) and the International Commission for the Protection of the Danube River (ICPDR).

## **2. Regional Seas Conventions and Action Plans, and Large Marine Ecosystems (LMEs)**

52. For example, specific conventions/protocols developed under the UNEP Regional Seas Programme (e.g., 1980 Athens Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Resources or 1990 Kuwait Protocol concerning Pollution from Land-Based Sources, the Nairobi Convention Integrated Programme (2025-2035) which has the source-to-sea approach in the core of its “Environmental Quality component) but also other regional instruments exist, e.g. 1992 OSPAR (also includes land-based sources), HELCOM (Working Group on Source to Sea Management of Nutrients and Hazardous Substances and Sustainable Agricultural Practices and relevant activities between Transboundary River Commissions and HELCOM), and the more than 600 basin treaties and more than 120 basin organizations.

## **B. Establishing source-to-sea management in transboundary cooperation**

53. A diverse number of strategies can be pursued to achieve effective coordination between sectors and collaboration between stakeholders from source to sea.

54. The legal, institutional, or practical implementation linkages between treaties, river basin organizations and RSCAPs/LMEs can provide opportunities to progress towards source-to-sea management.

55. This section will present examples of possible strategies for source-to-sea management and evaluate how source-to-sea management could support in meeting a government's various commitments and develop coherence between them. Additionally, it will present case studies that provide positive examples and highlight where they fall short. Tangible insights into what to work towards will be provided.

56. Examples of strategies to establish source-to-sea management:

- Source-to-sea action plan
- Preparation of a source-to-sea action plan based on an analysis of the biophysical, social, and governance context like the Transboundary Diagnostic Analysis (TDA) used by the GEF. This plan should be the means for countries to comply with multiple legal frameworks that are related to the land, freshwater, coastal, and marine environments and the flows that link them.
- Planning instruments
- Incorporating source-to-sea considerations in planning instruments (river basin management plans, coastal zone plans, sea action plans, climate change adaptation strategies, etc.), strategic environmental assessment, and other practical tools
- Institutional arrangements
- Different arrangements can be implemented according to the context for example integration into one instrument (e.g. agreements, policies, protocols, MoU), coordination between different instruments, and creating joint commissions. E.g. ICPDR-BSC MoU (Danube-Black Sea); transboundary collaboration from source-to-sea in Danube River, Black Sea and Mediterranean Sea launched in 2024, instruments fostering integrated approaches between different institutions

## Part IV. Practical steps toward source-to-sea management

*(Target length: 8 pages)*

### A. Building a shared knowledge base

57. A crucial step towards source-to-sea management is the development of a shared knowledge base of the biophysical system, stakeholders, and governance baseline.

58. This knowledge can come from existing or new research, studies, and monitoring, and draw upon knowledge from local communities and Indigenous Peoples.

59. The objective is to create a shared understanding of the biophysical, social, economic, and governance context within which transboundary cooperation and progress toward source-to-sea management would occur. It is important to note that the knowledge base can continue to develop as the activities progress.

#### 1. Characterize the biophysical system

60. In this step, an understanding of the biophysical system is built by characterizing key flows, alterations to their natural ranges of variability, the sources of those alterations, and their impacts. This information is used to select the priority key flow(s) (water, biota, sediments, pollution, materials, ecosystem services) that will be addressed. It will also be used to select the system boundary.

61. The sharing of data and information exchange across sectors and governance boundaries is important for building a comprehensive understanding of the transboundary system.

#### 2. Identify and engage key stakeholders

62. Stakeholders are mapped across the source-to-sea system to provide a complete picture of the roles of stakeholder groups in relation to the source-to-sea challenge, their

interests, including economic activities, dependencies, including on ecosystem services, and their areas of influence and power dynamics.

63. The stakeholder mapping is done at different scales and scope of engagement to ensure representation across all relevant stakeholder groups.

64. The analysis of stakeholders includes Indigenous and ancestral peoples, marginalized and vulnerable communities, women and youth, other groups commonly excluded from decision making.

65. An engagement plan can be developed to ensure inclusive participation of all relevant stakeholders. Understanding the social organization allows the design of appropriate governance schemes and helps to determine actions and enabling conditions needed to address the source-to-sea challenge.

### **3. Diagnose the policy and governance system**

66. Develop a governance baseline to gain an understanding of the existing institutions, legal and regulatory frameworks, and other forms of governance.

67. The baseline provides a starting point for identifying governance gaps, conflicts, and overlaps. Gaps in enforcement can also be identified. Disconnects between transboundary / regional, national and sub-national levels can be evaluated.

## **B. Taking source-to-sea action**

### **1. Designing the way forward**

68. Stakeholders collectively identify a shared vision, the activities towards that vision and their interrelations, and the role of stakeholders in achieving the vision (theory of change) through an inclusive and participatory process.

69. This includes establishing the enabling conditions that will support the implementation of the action and the changes in policies and practices.

70. The theory of change will provide the basis for monitoring and adaptive management.

### **2. Co-create an action plan and foster an enabling environment**

71. After a shared vision is identified, the next step is to create and agree upon a collaborative action plan and a clear accountability framework of roles and responsibilities for its delivery.

72. Possible resource mobilization and funding mechanisms for implementing the action plan will be proposed.

73. Monitoring and assessment to follow progress on the action plan and to verify the theory of change is determined. As the action plan is implemented, the results and new learning can add to the shared knowledge base, be used to refine the theory of change, and to adapt the action plan.

## **C. Strengths of this approach**

74. The strengths of this step-by-step approach to source-to-sea management are that it is: applicable to a range of objectives, flexible to address different levels of source-to-sea readiness, easy to adapt to the local context, creates value through assembling a shared knowledge base, provides granularity to the stakeholder assessment, expands understanding of the governance system, and builds agreement on the way forward.

## **Part V. Actionable recommendations for accelerating the adoption of source-to-sea management**

*(target length approx. 3 pages)*

### **A. Strengthening partnerships across actors and initiatives**

75. These recommendations will address the ways in which engagement of regional, national and sub-national actors, whether from the public sector, businesses, civil society or academia, is needed to achieve the aims of holistic management from source-to-sea. This includes developing a community of practice comprised of diverse and inclusive partnerships and supporting exchange of lessons learned to improve understanding of the enabling conditions for source-to-sea management.

### **B. Growing understanding**

76. These recommendations focus on the need of building the evidence base of benefits of and bottlenecks through analysis of the successes and failures of establishing source-to-sea management to improve understanding of key bottlenecks and potential avenues for addressing them. It will delve into the need for increasing understanding of source-to-sea linkages to inform science-based policies, management, and investments and steps to be taken to provide the foundations for source-to-sea management in the transboundary context. This will also include the need for further good practices development, experience sharing and capacity enhancement in source-to-sea management.

### **C. Building commitment**

77. This section will present recommendations related to building commitment to source-to-sea management through e.g., incorporating source-to-sea perspectives into prominent global, regional, and national policy processes and through dedicating funding to source-to-sea initiatives and measures that benefit the source-to-sea system as a whole.

### **D. Taking action on the ground**

78. This section will present recommendations related to advancing source-to-sea action in transboundary cooperation by demonstrating the benefits of source-to-sea management in addressing development challenges, raising awareness of source-to-sea challenges, developing capacity in source-to-sea management, and creating the enabling environment for source-to-sea action.

## **Part VI Conclusions**

*(Target length: 1-2 pages)*

79. The chapter will summarize the main findings and recommendations with an emphasis on the importance of collaboration, innovation, and sustained effort in implementing source-to-sea management. It will also recall the main challenges for transboundary cooperation in this regard and how to overcome them.

## References

*(to be further developed)*

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