

An aerial photograph showing a wide river flowing from the mountains in the background towards the ocean in the foreground. The river is surrounded by lush green hills and valleys. Small settlements are visible along the riverbanks. The ocean waves are breaking on a sandy beach in the foreground.

# **Source to Sea: pathway to integrated effective management - Lessons learned and exchange of experiences**

## **Workshop Summary Report**





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## Source to Sea: pathway to integrated effective management- Lessons learn and exchange of experiences

Workshop Summary Report

**October 16 - 18, 2017**

Nadi, Fiji  
Asia - Pacific Region



*Empowered lives.  
Resilient nations.*



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## OVERVIEW

Within the GEF IW: LEARN project, UNESCO and Conservation International (CI) agreed to join efforts to support the project's goal to strengthen global and regional management capacities and knowledge of transboundary water management through the exchange of experiences, tools and methods.

The main objective of this partnership was to conduct a Source to Sea workshop, where GEF-IW projects, Seascapes programs, Regional seas' field practitioners from around the world could share experiences and lessons learned in managing Source to Sea issues. Leveraging from the opportunity to bring together both GEF IW community vision as well as the perspective from others implementing complementary approaches across large scale marine areas, coastal, freshwater and terrestrial ecosystem management.

Building from CI's longstanding experience in seascapes implementation and extensive of global and regional partnerships, the "Source to Sea: pathway to integrated effective management - Lessons learned and exchange of experiences" workshop was prepared. Invitations were sent to global and regional GEF IW and S2S project, S2S platform, UNDP, S2S experts as well as Seascapes field practitioners where invited to the workshop that was going to be held in **Nadi, Fiji** from **October 16 to 18, 2017**.

Besides the exchange of experiences, the workshop also aimed to increase awareness of the benefits of Source to Sea implementation, outline recommendations on how to most effectively provide solutions to S2S issues, and leverage partnerships to support integrated and Source-to-Sea management and the establishment of a network of practitioners.

The workshop was organized in four main sessions: *Introduction to Source to Sea*, *Source to Sea approaches*, *Connecting Upstream and Downstream Communities* and *Monitoring and Adaptive Management of Source to Sea Interventions*. These interactive sessions were guided by a facilitator and a panel of practitioners, who laid ground work to open discussions and activities in breakout groups. To complete the two-day workshop, a technical field visit was organized to three communities: Narara, Nabelasere, and Votua where different projects, led by Conservation International Fiji and local community partners, showed the value of a Source to Sea framework for effective management at sites (See sites' description in Session 5 summary).

Additionally, and in preparation for the workshop, several key scientific literature on Source to Sea management was consolidated and a case study from an ongoing Source to Sea project in New Caledonia was developed, these to provide complementary information and resources to the practitioners and promote discussion.

This workshop is the main activity of the contract (#4500322433) between UNESCO-Conservation International for the implementation of the Activity 3.3: Partner exchanges to promote Knowledge coordination between linked freshwater and marine GEF IW projects and Subactivity 3.3.1 Support a Source-to-Sea Lessons Learned and Dialogue Workshop of the GEF International Waters: Learning Exchange and Resource Network (GEF IW: LEARN) project.

## PARTICIPANTS

### GEF Project Managers

Ta'hirih Hoka fonu	National Project Coordinator Tonga Ridge to Reef: IEMP FLC Project UNDP Supported and GEF financing
Milika Sobey	Secretariat of the Pacific Community (SPC) GeoScience Division (GSD)
Isoa Korovulavula	Manager, Institute of Applied Science (IAS) Environment Unit University of the South Pacific
Floyd Robinson	UNDP Program Associate UNDP Focal Point for IWRM Project United Nations Development Programme
Stuart Banks	GEF-IW5 ETPS Mangrove Project Manager

### Conservation International

Kim Reuter	Kenya- Natural Capital Accounting and Payment for Ecosystem Services
Peter Alele	Kenya- Vital Signs, Africa Field Division
Sebastian Troeng	Senior Vice President Americas Field Division
Scott Henderson	Ecuador/Islands Galápagos - Americas Field Division
Juan Pablo Caldas	Colombia- Eastern Tropical Pacific Seascape, Americas Field Division
Aline Aguiar	Brazil- Abrolhos Seascape, Americas Field Division
Claudio Schneider	Perú- Altamayo Landscape, Americas Field Division
Monica Morales	México- Socioeconomic Manager, Americas Field Division
Tracy Farrel	Cambodia- Greater Mekong Program, Asia-Pacific Field Division
Simon Badcock	Indonesia- Asia-Pacific Field Division
Yance De Fretes	Indonesia- Asia-Pacific Field Division
Robert Baigrie	Singapore- Asia-Pacific Field Division
Jing Wang	China- Asia-Pacific Field Division
Xiaohuai Liou	China- Asia-Pacific Field Division
Mael Imirizaldu	New Caledonia, Pacific Oceanscape, Asia-Pacific Field Division
Cedric Haverkamp	New Caledonia- Pacific Oceanscape, Asia-Pacific Field Division
Schannel van Dijken	Samoa- Pacific Oceanscape, Asia-Pacific Field Division

Trudiann Dale	Timor-Leste - Coral Triangle Initiative, Asia-Pacific Field Division
Enrique Nuñez	Philippines- Coral Triangle Initiative, Asia-Pacific Field Division
I Made Iwan Dewantama	Indonesia- Asia-Pacific Field Division
Augustus (Rex) Montebon	Philippines- Sula Sulawesi Seascape, Asia-Pacific Field Division
Isaac Rounds	Fiji- Forest Ecologist, Asia-Pacific Field Division
Vilikesa Masibalavu	Fiji, Landuse Specialist, Asia-Pacific Field Division
Livai Tubuitamana	Fiji- GEF Project Intern, Asia-Pacific Field Division
Susana W. Tuisese	Fiji- Asia-Pacific Field Division
Ginny Farmer	Center for Oceans- Pacific Oceanscape Director
Eva Schemmel	Hawaii- Center for Oceans
Ana Gloria Guzmán	Center for Oceans- Seascapes Manager
Lindsay Mosher	Center for Oceans
Jorge Ramos	Center for Oceans- Ocean and Climate
Erich Pacheco	Center for Oceans- Ocean Health Index
Keith Lawrence	Center for Oceans- Blue Economies
Johanna Polsenberg	Center for Oceans- Policy and Governance
Aulani Wilhem	Senior Vice President Center for Oceans
Jenny Hewson	Moore Center for Science- Habitat Monitoring and Climate Mitigation
Rachel Neugarten	Moore Center for Science- Conservation Priority Setting
Robin Abell	Moore Center for Science- Freshwater Lead
John Buchanan	Sustainable Production- Center for Environmental Leadership in Business
Agustin Silvani	Ecosystem Finance Division
Fabiano Godoy	Ecosystem Finance Division



*Source to Sea: pathway to integrated effective management workshop participants. CI-UNESCO*



## Source to Sea management: pathway to integrated effective Lessons learn and exchange of experiences

### SUMMARY

Participants were welcomed with a traditional Fijian welcome ceremony called *Qaloqalovi/sevusevu*, led by community members from the Tokaimalo and Rakiraki Districts in Ra Province. Conservation International's Executive Vice President, Sebastian Troeng, represented the workshop delegation as "chief guest" and accepted Kava (a ceremonial drink and the national drink of Fiji), a whale's tooth, and garland on behalf of the delegation to designate the community's acceptance and support for the gathering.



*Welcome ceremony*

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After the welcome, Ms. Guzman and Ms. Farmer from Conservation International's Seascapes program further welcomed the practitioners, presented an overview of the agenda, and stated the objectives of the workshop.





## Session 1 - Introduction to Source to Sea (S2S)

Kim Reuter<sup>1</sup>, Technical Director for Natural Capital Accounting & Payment for Ecosystem Services of Conservation International's Africa Field Division, led the introductory presentation on Source to Sea approaches and described commonalities under different definitions and terminologies applied to this approach. She also addressed the value of Source to Sea across different geographies and contexts.

Key notes:

The session began with a presentation of key findings from a literature review of 108 studies on Integrated Land Sea Management (ILSM), on which Ms. Reuter examined the characteristics of ILSM programs, the myriad of terminology and frameworks that fit under the realm of ILSM (including Source to Sea, Ridge to Reef, Integrated Coastal Management, among others), and top reasons for utilizing ILSM including: biodiversity protection; food security; human well-being; water security-quality; and resource protection.

Ms. Reuter also presented main recommendations for program planning, implementation, and management in comparison to how many ILSM projects are actually implemented. Based on this literature review, it was found that a majority of programs often did not adhere to scientific recommendations, most failed to explicitly name the land-sea connection, did not institute a formal framework and/or governance approach, and had inadequate degrees of stakeholder engagement. Furthermore, more than 80% of projects cited at least one conflict or barrier that decreased overall program success.

*“A **successful ILSM** project is one that is locally and culturally appropriate, adequately aligned with the interlinkages across the ecosystem being managed, suitable to national institutions and capacities, includes legal and policy frameworks, is advised by a multi-disciplinary team (steering committees), supported by scientific evidence, and is cost-effective”.*

Building off of this presentation, participants briefly discussed key challenges including identifying when S2S is needed or appropriate and when it may not be, time limitations for projects, funding, communication, involvement by multiple sectors and stakeholders, and lack of political will and support.

After the presentation and discussion, the delegation broke into small groups for an interactive activity to discuss ‘Why S2S approach is needed’. The participants were divided in eight groups based on ecosystems: ocean, coastal, freshwater, and forest. There were two groups per ecosystem. Additionally, participants were encouraged to be part of groups of which ecosystem they were less knowledgeable, to promote the interaction of S2S from different perspectives. Each group was asked to answer the following questions:

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<sup>1</sup> REUTER, K., JUHN, D., & GRANTHAM, H. (2016). Integrated land-sea management: Recommendations for planning, implementation and management. *Environmental Conservation*, 43(2), 181-198. doi:10.1017/S0376892916000023

- 1). Reasons for employing Source-to-Sea approach for the protection of the system about which they know the most
- 2). Reasons you think a Source-to-Sea approach should be employed for conservation/sustainable management of the system about which they know the least

Groups recorded responses on flip charts and presented results to the delegation after individual discussions. Each ecosystem had individual motivations such as freshwater noting water as a unifier and lends itself to overall resource sharing or “sharing the wealth”; oceans groups highlighted that terrestrial activities may disproportionately impact ocean and coastal ecosystems; and it was noted many times that coastal ecosystems link everything together.

Practitioners most often cited that **reasons for conducting an S2S approach** included: to broaden or amplify the scale of current conservation projects; secure, protect, and manage ecological, social, and economic benefits; improve overall function and efficiency amongst systems that feed into conservation management e.g. economics, financing systems, governance and policy; to make conservation management more aligned with natural ecosystem structures which are often interlinked; and to more seamlessly bring together the many different stakeholders involved in an ecosystem scale conservation project.

During the plenary and after groups reported back, the need to clarify and examine the scale at which S2S is appropriate was also highlighted. For example, the freshwater group discussed how island ecosystems operate differently from continental systems. Impacts and interlinkages are more evident in islands settings as there is very little separation between ecosystems, whereas huge systems such as the Mekong or Amazon may require smaller, discreet boundaries. One of the most important challenges highlighted was the capacity to effectively communicate the ecosystem benefits of S2S interventions in terrestrial systems.

*“There is not a lot of incentive for terrestrial managers to think about S2S from a biophysical standpoint but more from a socio-economic perspective.”*

Other questions that were discussed were: how to define what S2S is specifically and where to draw parameters; What are barriers or challenges to implementing S2S? and who needs to do what differently in a S2S approach?

#### Key inputs

- ✓ S2S is not easy to conceptualize; it is more about an approach or a mindset and is relative to the area where you are working. It requires a good definition
- ✓ Doing a ‘whole system’ approach from a monitoring perspective means an attempt to highlight connections, therefore a new monitoring approach may need to be developed specifically for S2S

- ✓ Possibility of establishing fresh water health indicators as part of a S2S approach
- ✓ Where might success be compromised by not applying an S2S approach? e.g. islands, coastal or riparian forests connections to sedimentation, linking upstream beneficiaries to downstream impacts.
- ✓ Where can we achieve more by thinking about the big picture? A S2S approach might allow practitioners to pursue policies that cut across systems
- ✓ For S2S to succeed, there is need for a much stronger than usual governance system in place; weak governance already causes problems in sector-based approaches let alone when fully connected

## Session 2 - Source to Sea design approaches

### Panel discussion

**Topic:** Largest challenges in designing S2S, key lessons learned, and overall recommendations

Facilitator: Kim Reuter, Technical Director, CI-Africa FD.

#### Panelists:

Ta'hirih Hokafonu, National Project Coordinator Tonga Ridge to Reef: IEMP FLC Project

Mael Imirizaldu, Marine Officer, CI New Caledonia (S2S Case Study provided to participants)

Aline Aguilar, Coastal and Marine Manager Conservation International Brazil

Each panelist delivered a small presentation of their project experience and discussed the specific category of the S2S approach they were implementing.:

- Starting from zero to design an integrated S2S program
- Starting with multiple disparate projects within a single watershed, and working to integrate them into a coherent and impactful S2S program
- Considering impacts from source to sea in design of interventions targeting only one system (e.g. forest or reef)
- Numerous interventions across a watershed and associated sea that are not necessarily designed to address cross-system impacts (not entirely considering true Source to Sea but it is likely the type of work most frequently labeled as such).

Mr. Imirizaldu's presentation focused on a case-study of up-scaling North Province and Loyalty Island Province S2S programs from local to country level in New Caledonia. He discussed S2S as an integrative, non-linear approach, that may encompass many of the same tools, strategies, and techniques already in use. Mr. Imirizaldu raised the challenge of capturing attention, and channeling funding with windows of opportunities.



Ms. Hoka fonu presented on the Tonga Ridge to Reef: IEMP FLC Project, a \$1.7m project to support S2S in Tonga, specifically to address land degradation, waste management, and impact from an invasive pig species. The project spanned 26 villages and focused on establishing an enabling environment for the conservation and management of catchment areas; addressing and mitigating threats; and communication and education across communities. Next steps surround involving communities in monitoring the entire catchment in three different pilot projects which has secured strong political will. Ms. Hoka fonu discussed challenges surrounding attracting attention to such projects and continuing to build motivation.

Ms. Aguilar discussed a S2S adaptation in Bahia, Brazil to conduct a vulnerability assessment to climate change of the Discovery Coast in the Northeast of Brazil. This area contains the largest remaining intact forest in the area. Local communities have a high dependency on fisheries and tourism and also houses the richest coral reef in Brazil. This particular project sought to understand connections among marine, terrestrial and freshwater realms. Massive deforestation has led to erosion, flooding, and sedimentation run-off. The results of this study led to the recommendation of ecosystem-based adaptations in municipal plans for recovery, including adaptation for forest and a plan for diversifying ecotourism sites. Ms. Aguilar further highlighted challenges in getting people to understand the interlinkages across ecosystems.

### **Group activity**

#### **Topic: Challenges to implement S2S at different management scales**

The delegation was broken into six groups based on the potential scale of different S2S projects: whole islands, continental watershed, seascape/landscape, jurisdictional/administrative, key biodiversity areas, and cultural boundaries. The scales used for this activity were proposed previously by the participants.

Each group was tasked with:

- identifying top three challenges from the perspective of the scale they were working from;
- identifying possible (or tested) solutions;
- describing under what circumstance S2S approach may not be necessary.

While the individual groups reported back, two facilitators captured the challenges each group highlighted and recorded on a flip chart. Afterwards, the flip charts were hung on the wall of the conference room. Each individual group was given stickers and was asked to identify their top three challenges from the whole groups list and place a sticker next to that challenge.



S2S design group activity

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Based on these results, the **key challenges** were summarized as:

- ✓ multiple levels of governance and different cultures
- ✓ lack of consistency in stakeholder and government engagement
- ✓ mismatch between boundaries (cultural, jurisdictional, biological)
- ✓ limited resources
- ✓ capacity
- ✓ complicated and complex nature of S2S
- ✓ governance
- ✓ differences and conflicts of priorities amongst different groups involved

The **Jurisdictional** group noted that there may be multiple S2S opportunities within this scale but may also lead way to fragmentation amongst different cultures and/or ecosystems. A single

jurisdiction could exclude multiple threats and potential of benefits and may lead to overall poor governance.

The **Key Biodiversity Areas** group highlighted that focusing solely on biodiversity may limit or exclude other priorities and is not clear how this scale connects to a larger territory. This group also brought attention to the challenge of working with dated information, mismatch of national and local goals for biodiversity protection and challenges in working across jurisdictions.

The **Seascape/Landscape** group highlighted a need for consistency in policy across the whole area as well as a need to bring together stakeholders and long-term engagement throughout the entire S2S process. The Seascapes/Landscape scale likely does not have the appropriate tools to manage coastal and marine areas; Lack of data and staff capacity was also highlighted.

The **Cultural Boundaries** group discussed the issues of different values placed on different aspects of ecosystems as well as administrative boundaries.

The **Whole Island** scale highlighted the sheer complex and complicated nature of S2S. The group noted within an S2S there is not just one landscape, seascape, watershed or key biodiversity area — it's about how they all interact. The group noted small islands in particular have different complications versus larger islands, as well as the challenge of finite resources.

The **Continental Watershed** group discussed the challenge of cross-boundaries issues, especially if it is a large area, highlighting that different jurisdictions means different interests and thus potentially conflicting priorities. The group noted that creating meaningful impact may also come at a high cost and discussed what a timeline would need to look like for maximum impact. The group further examined large companies and their resource use and needs in comparison to local, regional, and national resource use and needs.

Some of the best practices and potential solutions highlighted for the designing S2S session included the need to establish a clear, common understanding of the what the ultimate purpose of the project is before seeking buy-in. Additionally, it was reiterated that the S2S approach can be used as a communications tools to help shift mindsets of practioners and decision-makers. It was noted that S2S does not often involve designing a single project that encompasses an entire island. It is a series of projects linked together by the S2S concept.



## Session 3 - Connecting Upstream & Downstream Communities

### Panel discussion

#### Topic: Connecting Upstream & Downstream Communities

##### Facilitator:

Susana Tuisese, Fiji Country Program Director, Conservation International Fiji

##### Panelists:

I Made Iwan Dewantama, Bali Island Manager, Conservation International Indonesia

Isaac Rounds, Forest Ecologist, Conservation International Fiji

Monica Morales, Socioeconomic Coordinator, Conservation International Mexico



*Ms. Tuisese, CI Fiji Country Director*

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#### Context for the panel:

It is evident that successful implementation of a S2S projects requires engagement of and building connections between upstream and downstream communities. Reuter et al 2016, showed that less than 50% of published projects mentioned community engagement yet community and stakeholder active participation is a critical component of success.

Ms. Tuisese led the panel discussion asking each panelist to touch on:

- category of S2S that best describes their work
- how stakeholders and communities were engaged
- how connections were made between upstream and coastal communities
- key lessons learned and recommendations.

Mr. Dewantama shared an example of the impact of agricultural practices on a local coral reef that drew large amounts of marine tourism to the Island of Bali, Indonesia. They placed a sediment trap near the reef to provide evidence that sediment was running-off land from agricultural practices. However, Mr. Dewantama also noted the disproportionate dispersal of marine tourism benefits impacting coastal communities but not feeding into local communities a few kilometers away. He discussed efforts to make connections between the upstream/inland communities by showing the impact their practices were having (additionally citing that Balinese people believe in Karma) and worked with the communities to change their agricultural practices. Beyond that he also discussed the establishment of the UNESCO Cultural Landscape World Heritage site designation in 2012. By establishing a means to generate more terrestrial tourism, this both helped to alleviate pressures on the marine ecosystem as well as generate benefits for inland communities. Mr. Dewantama and his team focused efforts to **help connect the value of nature with local communities** through establishing plans for local crafts to be sold in a hotel gift shop as well as conflict resolution through engaging communities in leading community-mapping with teenagers, village officers, and a mix of upland communities and coastal community members.

Ms. Morales presented on the “Conservation and sustainable use of biological diversity in Priority Landscapes of Oaxaca and Chiapas” project in Mexico. This site contains priority terrestrial and marine ecosystems as identified by government due to its biological significance, land use for agriculture (particularly coffee), watersheds, and areas that provide ecosystem services, and cultural diversity. Major threats include habitat loss and fragmentation, overexploitation of wildlife, and climate change. The project aims surrounded decision-making to define land use and management of the landscape approach and inclusion of local communities and productive social organizations who are willing to be part of the governance bodies. Ms. Morales highlighted efforts to engage stakeholders from municipal, state, and federal government levels and noted it as an important initiative since it is the first time that these entities have come together to collaborate in a single region. Ms. Morales discussed the critical need to incorporate stakeholders feedback and be transparent with project activities for overall success and noted that the ultimate take away was the need for communities to be empowered and have the capacity to help them through education and knowledge-building and capacity-building.

*“We’re so “romantic” about our conservation initiatives, we want to help everybody. But when we’re really looking at how to make people the owners of the land and the resources, we realize we need to be respectful of what they think about the initiatives, before we make a decision or establish an action with them.”* Ms. Monica Morales, CI Americas Field Division

## Group activity

### Topic: Top challenges on how to engage communities and stakeholders

After the panel discussion, the delegation broke into small-group discussions. This time divided by geographies: Africa, Asia, Pacific/Oceania, and Americas. Groups were tasked with:

- Identify top challenges on stakeholder and community engagement that may be unique to their specific regions.
- Potential solutions to the specific challenges they identified.

The group from **Africa** discussed challenges in stakeholder engagement for S2S projects, specifically trying to change perceptions and reframing the overall context to local needs.

- ✓ The solution was to build extensive engagement from the onset at every scale and stage of the process.

It was also mentioned that with low capacity it is difficult to make the argument to bring a more complicated, approach and could be a scenario to evaluate if S2S is the best approach. There was also a discussion of political will and buy-in and alleging with policy. This introduced the need for both bottom-up and top-down approaches. A unique niche further mentioned was also for climate resilience and looking at S2S as a mess to address some of the impacts from climate change will likely come stronger and faster in the African context.

*“The focus needs to be people. You can focus on the conservation of lions or what have you but if people don’t see the incentives, it’s not going to work. If you don’t frame it right, people will feel ignored at the expense of conservation or wildlife.”* Mr. Peter Alele, CI Africa Field Division.

The **Pacific** region group discussed challenges with conflicts among many different stakeholders, ranging from land tenure issues, resource access, priorities, and inequalities. They also mentioned social, political, and cultural dynamics, as well as governance and political will.

- ✓ The solutions offered were finding a common theme, focused attention on relationship building, and establishing a sense of collectiveness. The Pacific group also highlighted a need for time commitment and patience to endure lasting solutions which requires having an open-mind, building adaptive management techniques and flexibility, and having a local “champion” with more contextual insight. The final solution was in transparent consultation with all those involved with the project.

The **Asia** region group further discussed challenges with conflicts between stakeholder groups, ineffective governance, funding, and a need for improvements within benefit sharing or equity mechanisms.

- ✓ Solutions included collaborative target setting, joint design of initiatives, and NGO-government collaborations.



The **Americas** group challenges in connecting communities ranged from differences in resource dependency amongst communities, how to meet livelihood and conservation objectives simultaneously, and understanding when is the appropriate time to step back is.

- ✓ Solutions included conduction S2S ecosystem services evaluation to identify how community needs are interlinked and connected; identify roles that communities can or cannot play in S2S; inclusion of communities in decision-making bodies and establishing demonstration sites.

## **Session 4 - Monitoring and adaptive management of Source to Sea interventions**

### **Panel discussion**

#### **Topic: Monitoring and adaptive management of Source to Sea interventions**

##### Facilitator:

Johanna Polsenberg, Sr. Director, Oceans Governance & Policy, Conservation International, Center for Oceans

##### Panelists:

Fabiano Godoy, Technical Director, Carbon Fund, Ecosystem Finance Division, Conservation International

Eva Schammel, Science Advisor Conservation International Center for Oceans & Hawaii Program

Stuart Banks, GEF-IW5 ETPS Mangrove Project Manager, Conservation International Ecuador

The discussion was framed around S2S programs and the wide range of monitoring requirements needed. Questions to guide presentation from the panelists were:

- 1) Are there easy ways to monitor, evaluate and report on S2S projects?
- 2) Are there any cost-effective, efficient and repeatable methods to track projects?
- 3) Are we able to identify any universal indicators across S2S projects (things that *must* be measured)?

Mr. Godoy described adaptive management as a trial and error system. He highlighted that the **best set of indicators depends on the overall goal of the project** and the need to identify relevant indicators for different stages of the project and levels of implementation. Mr. Godoy mentioned a need for science to understand the baseline and offer clarity on where the project is starting from and what the goals are so practitioners can move along that pathway. Mr. Godoy further noted that, as much as possible, there needs to be flexibility in order to adapt if a project isn't reaching its goals and for a project to explicitly state goals and objectives of a project early on, including consensus amongst stakeholders, to be able to reference if a project is on the right track.

Ms. Schammel discussed her work in Hawaii starting with community capacity-building to monitor resources and the **use of adaptive management with people responding to real issues in real time**. Ms. Schammel and the Hawaii team worked with 13 communities to assess catch and effort data, trained local fishers to communicate with other fishers, track each day's effort and catch, and map where fish are going, including through the use of social and ecological surveys. Ms. Schammel also discussed the importance of working directly with communities on science, noting that in many times current scientific practices are just catching up with local communities' traditional knowledge. Ms. Schammel discussed a need to look at bigger data sets to understand where information and monitoring gaps exist, and highlighted her work to better understand what metrics are needed, including making sure the metrics are relatable, personal, and doable for governments, fishers, private sector, etc. Ms. Schammel further noted that for any metric used, the data must be replicable, available, and widely publicized and communicated.

Mr. Banks discussed a multi-country mangroves program in the Eastern Tropical Pacific Seascapes Region, which includes four countries and the need for a mechanism for coordination including to assess mangrove cover and condition, standardized monitoring, and tracking participation between countries. Mr. Banks further elaborated on efforts to input technical information, improve monitoring and evaluation, establish standardized indicators, form multi-country focal groups, and create opportunities for knowledge-sharing to amplify on-going work across the region. Mr. Banks also highlighted the need for an exit strategy to evaluate progress and involvement in a project.

Further discussion with the delegation brought up points such as quality and quantity of data use, tailoring data for those who are actually using the data, need for community engagement early and often, and specific challenges in finding resources for monitoring and evaluation, which are already difficult in many cases and could be more so for specific S2S projects operating at larger scales.

**To wrap up the panel** discussion, Mr. Troeng, provided a basic framework of five core categories of monitoring and evaluation that should be consider in every project: performance management, management assessment, impact evaluation, systematic review and social and environmental monitoring

**Final workshop remarks** concluded with the whole group summarizing key take away messages:

- ✓ There are many advantages to taking an integrated approach and examining things in a holistic manger. However, the fact remains that practitioners face many complicated challenges and taking a S2S approach is even more complex. Barriers to implementation must be addressed.
- ✓ In order to make it effective, there needs to be an overarching focus on *why*. For many, there is a clear gap in addressing ocean/marine efforts and the role of terrestrial activities on oceans and communities, and S2S can help address that.

- ✓ There is a need to learn how to deliver the right message of S2S to the right people in order to build success
- ✓ An S2S approach is not one large project, but threads many components together into a comprehensive “big picture” approach to examine and exemplify interlinkages and address threats/impacts that may sometimes lie outside the realm of an individual area or project being managed
- ✓ When projects or stakeholders have a single goal, such as food security, there’s often overlap amongst other projects and stakeholder interests. If the focus is to solve food security problems in a community that fishes and farms, the project must look at all the angles and understand the context, the broader picture of food security and how a project feeds into it (even if a practitioner is not focused on multiple projects that cover many angles – they must understand the bigger picture).

## Session 5 - Technical Site Visits

### Narara Village - Nakauvadra Mountain Range, Ra Province



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Narara Village was one of the first communities that Conservation International (CI) Fiji engaged with under the Nakauvadra Community-based Reforestation Project. The project launched in 2009, as a large-scale reforestation project aiming to:



- Reforest an area of 1,135 ha to restore degraded grasslands adjacent to the Nakauvadra Range;
- Create a buffer area around the Nakauvadra Range rainforest to expand critical habitat for endangered and endemic species, and to create a conservation corridor with adjacent Key Biodiversity Areas;
- Establish a community-based restoration project that enables local landowners to benefit from job creation from reforestation activities (in the short term) and the generation of improved livelihoods from the harvesting of teak and sandalwood (in the long term).

For over 7 years, CI has reforested 1,135 hectares working with more than 28 communities on sustainable livelihoods interventions such as sustainable agriculture, apiculture, and tree nursery cultivation. Under the project, CI has supported 150 local farmers on replanting efforts, developed more than 16 model farms and established six nurseries. Under a complimentary project with the University of the South Pacific (USP), CI has also supported a community tourism project in Narara and supplied cattle fencing to improve land management practices.

In February 2016, Fiji was struck by Tropical Cyclone (TC) Winston, a Category 5 event and the largest cyclone on record in the South Hemisphere. TC Winston significantly impacted CI's project communities across Ra Province. In the storm's immediate aftermath, CI staff have worked closely with NGO and government partners to support humanitarian and aid intervention efforts in Ra. Remnants of the storm's magnitude are still present in country's remote and rural communities.

## Nambalesere Village



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Nambalesere is a village located on the fringes of the Tomaniivi/Wabu protected area. Following the success of the Sovi Basin—CI's flagship project in Fiji which established the largest terrestrial protected area in the country (16,000-ha)—CI is amplifying this model to help protect Fiji's other key biodiversity areas. Through a three-year program under the GEF, CI is working with communities in Nambalesere to expand the boundaries of an existing protected area. The Greater Tomaniivi Conservation Area will cover an approximate 6,200 hectares, encompassing Mt Tomaniivi, the highest peak in the country. Mt. Tomaniivi is approximately 4,344 feet, and divides the island climatically into a wet south-eastern zone and dry north-western zone. Tomaniivi is an extinct volcano and home to many native trees, plants, birds, animals and other wildlife. The area's biodiversity is threatened by extreme weather conditions, human activities such as logging and agriculture, and hydropower dam development. The communities in Nambalesere village have a thriving eco-tourism venture, focused around a beautiful waterfall and the adjacent Wailotua caves, which is supported by a local company called [Talanoa Treks](#).

## Votua Village, Nadroga Province



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Votua Village is located in the heart of the Coral Coast in the Korolevu-i-wai district, consisting of four traditional villages. With a population of almost 2,500 people living in over 400 households, tourism is the main source of income across the district. Resort tourism began in the 1950's, iconized by wide, shallow lagoons filled with colorful fish and corals, which has

developed into the thriving tourism economy that today caters to more than 20% of Fiji's tourists. Korolevu-i-wai Qoliqoli economic valuations indicate total ecosystem services at more than USD20M per year, 80% of which is reef associated tourism (IUCN, 2012).

Votua was one of the very first sites established under the [Fiji Locally Managed Marine Area \(FLMMA\) network](#), a network of NGOs, communities and government practitioners supporting natural marine resources use. FLMMA supports over 400 communities to preserve, protect and sustainably use their marine resources as stewards of their environment. Network efforts have resulted in formal management of 135 of Fiji's marine iQoliqolis (customary fishing areas) and the establishment of 465 fishing reserves or tabu areas covering just over 1000 km<sup>2</sup>. Votua Village has a community reserve/MPA close to the village which is managed by the community. Across the district, roughly 35% of fishing grounds are under no-take status. Votua has also established a waste water treatment project to improve water supply and management, including an upgrade to the existing dam supply, providing water storage, and a wetland treatment system and garden constructed behind the village.



## Lessons Learned and Recommendations:

- ✓ S2S is not easy to conceptualize; it is an approach, a mindset, is relative to the area and scale of where you are working or want to work. It requires a clear definition of the concept that will be applied.
- ✓ S2S approach should always be considered in places where success of management and conservation interventions would otherwise be compromised without applying an integrated approach e.g. islands, coastal or riparian forests connections to sedimentation, linking upstream beneficiaries to downstream impacts
- ✓ For S2S to succeed, there is a need for a much stronger than usual governance system in place as well as on-going and deep community and stakeholder engagement; weak systems already causes problems in sector-based or “silo” approach let alone when fully integrated management is required.
- ✓ Key challenges and barriers that have to be addressed to successfully design and implement S2S approaches:
  - multiple levels of governance and different cultures
  - lack of consistency in stakeholder and government engagement
  - mismatch between boundaries (cultural, jurisdictional, biological) of conservation objectives
  - limited financial resources
  - weak capacity at all levels of management
  - complicated and complex nature of S2S
  - limited or not empowered governance structure
  - differences and conflicts of priorities amongst different groups involved

### Recommendations:

- ✓ conducting ecosystem assessments and ecosystem services evaluation to identify interlinkages
- ✓ inclusion of communities in decision-making bodies and establishing demonstration sites
- ✓ collaborative target setting, joint design of initiatives, and NGO-government collaborations
- ✓ time commitment and patience to endure lasting solutions which requires having an open-mind building adaptive management techniques and flexibility
- ✓ transparent consultation with all those stakeholders involved with the project.
- ✓ performance management, management assessment, impact evaluation, systematic review and social and environmental monitoring must all be applied



## Sustainability plan

This workshop was an important staging post in a longer-term effort to explore and implement source-to-sea interventions across a variety of geographies.

-Internally, CI will follow-up across the organization to track and further progress the efforts to integrate source to sea approaches and tools into the development and implementation of subnational, national and regional conservation initiatives, where within a Seascape or not, and to leverage S2S and transboundary discussion through our partnerships globally. This effort also fits very well within CI's emerging institutional focus on implementing programs in sustainable landscapes and seascapes.

Countries within Asia Pacific Region, has reached out to CI and the partners participating of this workshop, on their interest in elevate S2S approach to develop the whole domain ( from Source to EEZ) management needed to address Island sustainable management. Palau and Cook Island have express direct need to replicate the type of dialogue that this workshop allowed.

Finally, the discussion, outputs and lessons learned from this workshop, as well as the experiences exchanged by the practitioners will be shared with other partners and global initiatives, like the S2S action platform and GEF IW project managers. This not only to inform and enrich the discussions but to promote stronger dialogue and consideration of the various dimensions that S2S approach imply from the perspective of more than 15 countries' field managers, and from the eyes of marine, coastal, terrestrial and freshwater management.

## PRACTITIONERS' PROFILES



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**Isoa Korovulavula**  
*Manager of Environment Unit*  
Institute of Applied Science  
University of the South Pacific

“We’re working in upper and middle catchments as well as coastal areas - and we’re talking about Source to Sea. Our work is quite critical to the Ra province at the moment. We have support from the community and the entire province – it is important to maintain that support and actually provide the communities with what we have promised to deliver. In return, we also expect a commitment from communities to their support. That would be a very important outcome or output from this project to see how to continue to foster this mutually beneficial relationship. As we already have government support, Source to Sea could help us lead cutting edge work in our province.”



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**Milika Sobey**  
*Secretariat*  
Pacific Community (SPC) GeoScience Division  
(GSD)

“For our project, different countries can be grouped into different clusters depending on the results they are focusing on. For some countries, the goal is reducing municipal waste, for others it is reducing pollution to aquifers, and for other countries it is improving catchment management. Some countries are working on two or three results areas.

In a nutshell, Source to Sea is extremely ambitious and complex as it is dealing with science, policy – the whole gamut. Successful S2S can look very different across countries. To me, the critical challenge is keeping project momentum going. I think opportunities such as this are extremely valuable for that. It is so good to meet and learn from the experiences of other people that are working to implement Source to Sea.”

## APPENDIXES

### Example of the Invitation Sent to Practitioners



September 12<sup>th</sup>, 2017

Dear Birgitta,

On behalf of Conservation International (CI) and the GEF International Waters Learning Exchange and Resource Network (IW:LEARN), we are delighted to invite you to the workshop ***"Source to Sea management: Sharing lessons from practical experience"***.

The three-day workshop will take place from **16-18 October, 2017** and will include two working days at the Tanoa Hotel in the city of **Nadi, Fiji**, followed by a field trip to visit nearby projects.

The workshop will bring together approximately 60 CI, GEF and partner Source to Sea (S2S) practitioners from around the world. The goal of this workshop is to promote the exchange of experiences in managing S2S/ Ridge to Reef issues, and to encourage interactions between field practitioners within the GEF community and others implementing integrated management approaches across marine, coastal and freshwater systems, including Seascapes.

We would like to invite you to share your valuable experience on the implementation of Source to Sea approaches. The workshop report will build the case for S2S investments and compile lessons learned and guidance on the design, development and implementation of S2S projects.

Please confirm your availability to participate as soon as possible, but no later than **September 22nd , 2017**. Should you be unable to attend we kindly ask you to send a recommendation for an alternate participant. However, please do not forward the invitation - there is limited capacity for this workshop and we already have a priority waiting list.

We anticipate that this event will be considered a suitable use of travel budgets within existing GEF funded projects. Limited cost sharing support may be available where these budgets are insufficient.

Please direct your RSVP and any questions you may have to Ana Gloria Guzman ([aguzman@conservation.org](mailto:aguzman@conservation.org)) and Lindsay Mosher ([lmosher@conservation.org](mailto:lmosher@conservation.org)). Upon your RSVP, we will follow regarding logistics and your substantial contributions to the workshop.

We hope you will be able to join us, and we look forward to seeing you in Nadi soon.

Sincerely,

A handwritten signature in black ink, appearing to read "Ana Gloria Guzman Mora".

Ana Gloria Guzman Mora

Seascapes Manager | Center for Oceans | Conservation International

## Final Workshop Agenda

### Day 1 Monday October 16th

Time	Session	Responsible
08:30 –08:45	Registration	Lindsay Mosher
08:45 – 9:45	Welcome	Lemeki Lenoa
9:45- 10:00	Opening Remarks	Aulani Wilhelm (CI)
10:00– 10:30	Participants introductions	Kelsey Rosenbaum
10:30-11:00	Review agenda and Meeting Objectives	Ginny Farmer/ Ana Gloria Guzman
<b>11:00 – 11:15</b>	<b>Coffee break</b>	
<b>Topic: Introduction to Source to Sea</b>		
11:15-12:00	Source to Sea: introduction, definitions, terminology	Kim Reuter/ Ginny Farmer
12:00 – 12:45	Why Source to Sea? Break out groups	Ana Gloria Guzman
<b>12:45 – 14:00</b>	<b>Lunch</b>	<b>All</b>
14:00 – 14:45	Why Source to Sea? Report back	Ana Gloria Guzman
<b>Topic: Source-to-Sea design approaches</b>		
14:45 – 15:15	Source to Sea design panel discussion	Facilitator: Kim Reuter <b>Panel:</b> Mael Imirizaldu (CI New Caledonia); Aline Aguiar (CI Brazil), Ta'hirih Hokafonu (UNDP)
<b>15:15 – 15:30</b>	<b>Coffee break</b>	<b>All</b>
15:30 – 16:15	Source to Sea design break out groups	Kim Reuter/ Ginny Farmer
16:15– 17:00	Source to Sea design report back	Kim Reuter/ Ginny Farmer
17:00- 17:20	Wrap up day 1	Ana Gloria Guzman
<b>18:30</b>	<b>Reception Dinner</b>	<b>All</b>

## Day 2 Tuesday October 17th

Time	Session	Institution
<b>Topic: Connecting Upstream and Downstream Communities</b>		
09:00 – 9:10	Review of Day 1; Overview of Day 2	Johanna Polsenberg
9:10- 9:45	Connecting communities panel discussion	Facilitator: Susana Waqainabete-Tuisese <b>Panel:</b> Iwan Dewantama (CI Indonesia); Isaac Rounds (CI-Fiji), Monica Morales (CI-Mexico)
9:45 – 10:45	Connecting communities break out groups	Susana Waqainabete-Tuisese /Ginny Farmer
<b>10:45 – 11:00</b>	<b>Coffee break</b>	
<b>Topic: Monitoring and Adaptive Management of Source to Sea Interventions</b>		
11:00-11:45	Panel discussion or interactive activity: Monitoring and adaptive management of S2S initiatives	Facilitators: Johanna Polsenberg/ Ginny Farmer <b>Panel:</b> Fabiano Godoy (CI); Eva Schemmel (CI Hawaii), Stuart Banks (CI-ETPS)
11:45 – 12:30	Decision tree: on when and how a Source to Sea approach is needed.	Johanna Polsenberg/ Ginny Farmer
<b>12:30 – 14:00</b>	<b>Lunch</b>	<b>All</b>
14:00 – 14:45	Monitoring and adaptive management report back	Johanna Polsenberg/ Ginny Farmer
<b>Topic: Parking lot issues</b>		
14:45 – 15:15	Prioritize parking lot issues to discuss	Ginny Farmer/ Ana Gloria Guzman
<b>15:15 – 15:30</b>	<b>Coffee break</b>	<b>All</b>
15:30 – 16:15	Additional issues break out groups	Ginny Farmer/ Ana Gloria Guzman
16:15– 17:00	Additional issues report back	Ginny Farmer/ Ana Gloria Guzman
17:00- 17:30	Wrap up & next steps	Ana Gloria Guzman



18:30	Dinner	All
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**Day 3 Wednesday October 18th**

**Field trip:** Three field trip sites

**Where:**

- 1) Votua Village, Nadroga
- 2) Narara Village, Ra Province
- 3) Nabalesere Village

**Groups:** Three groups, one for each site, each group will be joined by Local CI- Fiji staff.

We will be visiting local communities and partners with whom we work in each project's site