



9. East Asian Seas (Indonesian Sea, Gulf of Thailand, Sulu-Celebes Sea, South China Sea, East China Sea, Yellow Sea)¹⁰

Governance/Institutional setting

The main regional organizations include:

- [Partnerships in Environmental Management for the Seas of East Asia](#) (PEMSEA) for effective management of coasts and oceans across the shared seas of East Asia¹¹;
- The [Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region](#) (NOWPAP), which covers China, Japan, Korea and Russia;
- The [Action Plan for the Protection and Development of the Marine Environment and Coastal Areas of the East Asian Seas Region](#) (the East Asian Seas Action Plan) which includes Indonesia, Malaysia, Philippines, Singapore, Thailand, Cambodia, People's Republic of China, Republic of Korea and Vietnam;
- The [Southeast Asian Fisheries Development Centre](#) (SEAFDEC), comprising 11 member countries: Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.

Status of TDA and SAP: TDAs and SAPs have been developed for the South China Sea and Gulf of Thailand - TDA (2000) and SAP (2008), the Yellow Sea - TDA (2007) and SAP (2009), and the Sulu-Celebes Sea (SAP in 2013).

Key databases

Supported by a GEF LME Project: In addition to the SAP implementation, several GEF IW projects supported implementation of the [Sustainable Development Strategy for Seas of East Asia](#) (SDS-SEA), adopted in 2003 and updated in 2015, with an agreed implementation plan for 2018-2022.. A full repository of all technical reports is available at the [PEMSEA website](#). Through the support of PEMSEA, an Integrated Information Management System (IIMS) and network linking ICM sites and pollution hotspots, including GIS have been developed in 2005 ([PEMSEA, 2005](#)), as well as experience note on the use of Data/Information in ICM ([PEMSEA, 2009](#)).

The “Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand” project (*GEF ID 885*), developed a [South China Sea GIS](#) and [repository of knowledge documents](#). Currently still under implementation, the “Establishment and Operation of a Regional System of Fisheries Refugia in the South China Sea and Gulf of Thailand” project (*GEF ID 5401*) has developed a knowledge portal on [Fisheries Refugia in the South China Sea](#), including maps and publications.

¹⁰ The majority of regional projects in the East Asian Seas include more than one LME region, and are therefore grouped together

¹¹ Cambodia, PR China, Indonesia, Japan, DPR Korea, Lao PDR, Philippines, RO Korea, Singapore, Timor-Leste, Vietnam

Also, in support of the Yellow Sea SAP implementation (*GEF ID 4343*), a Regional Working Group on Monitoring and Assessment Group was established ([UNDP/GEF, 2017](#)) including the establishment of a comprehensive regional monitoring system.

Additional initiatives and projects:

- NOWPAP has an established monitoring program with data and reports through its [Data and Information Network Regional Activity Center](#);
- SEAFDEC has several databases including the [Fishery Statistic in Southeast Asia](#), with statistics since 1976, and the [SEAFDEC Repository](#), the official institutional repository, containing publications and materials produced by SEAFDEC Secretariat and Departments; and
- PEMSEA has also developed regional, national and some local State of the Coasts reports which is useful as a planning and monitoring tool that countries use to map, measure and monitor the state of their marine ecosystems goods and services as well as develop policies and programs implementing blue economy approach. A SeaKnowledge Bank is also being used as an online interactive platform to manage and share knowledge about the coastal and marine initiatives in the EAS region (www.pemsea.org).

Project websites and links to information, data and GIS

GEF ID	Project title	Dates	IA	Project and other information websites	Databases, GIS and reports
EAST ASIAN SEAS (INDONESIAN SEA, GULF OF THAILAND, SULU-CELEBES SEA, SOUTH CHINA SEA, EAST CHINA SEA, YELLOW SEA)					
1. 396	Prevention and Management of Marine Pollution in the East Asian Seas ¹²	1993-1999	UNDP	Project - http://www.pemsea.org IW:LEARN - https://iwlearn.net/iw-projects/396	Developed a regional network of stations for marine pollution monitoring and information management. Report on Sharing Lessons and Experiences in Marine Pollution Management (1999) ¹³
2. 597	Building Partnerships for the Environmental Protection and Management of the East Asian Seas ¹⁴	1999-2006	UNDP	Project - http://www.pemsea.org IW:LEARN - https://iwlearn.net/iw-projects/597	Development of an Integrated Information Management System (IIMS) and network linking ICM sites and pollution hotspots, including GIS. Sustainable Development Strategy for Seas of East Asia (SDS-SEA) adopted in 2003 See http://www.pemsea.org/publications/reports
3. 790	Reducing Environmental Stress in the Yellow Sea Large Marine Ecosystem (YSLME) ¹⁵	2004-2011	UNDP	Project - IW:LEARN - https://iwlearn.net/iw-projects/790	Yellow Sea TDA (2007) and SAP (2009) Regional co-operative cruises were organized by the project. Through the surveys and observations of the cruises, new scientific data was collected, analyzed and published. See http://dinrac.nowpap.org/
4. 885	Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand (SCS) ¹⁶	2002-2009	UNEP	Project - http://www.unepscs.org/ IW:LEARN - https://iwlearn.net/iw-projects/885	TDA (2000) and SAP (2008) South China Sea GIS - http://gis.unepscs.org/ and Knowledge documents and GIS - http://www.unepscs.org/remository.html
5. 2188	East Asian Seas Region: Development and Implementation of Public Private	2004-2009	UNDP	Project - http://www.pemsea.org	Training on GIS and marine pollution monitoring

¹² East China Sea LME

¹³ <http://www.pemsea.org/publications/reports/sharing-lessons-and-experiences-marine-pollution-management>

¹⁴ Indonesian Sea (LME) , Gulf of Thailand (LME) , Sulu-Celebes Sea (LME) , South China Sea (LME) , East China Sea (LME) , Yellow Sea (LME)

¹⁵ Yellow Sea (LME)

¹⁶ Gulf of Thailand (LME) , South China Sea (LME)

GEF ID	Project title	Dates	IA	Project and other information websites	Databases, GIS and reports	
	Partnerships in Environmental Investments ¹⁷			IW:LEARN - https://iwlearn.net/iw-projects/2188	Integrated Information Management System (IIMS) and network linking ICM sites and pollution hotspots, including GIS. IIMS User Manual (2005) ¹⁸ PEMSEA's Experience in the Use of Data/Information in ICM (2009) ¹⁹	
6.	2454	World Bank/GEF Partnership Investment Fund for Pollution Reduction in the Large Marine Ecosystems of East Asia (Tranche 1 of 3 tranches) ²⁰	2005-present	WB	Project - http://www.pemsea.org IW:LEARN - https://iwlearn.net/iw-projects/2454	Waste management in key pollution hotspots
7.	2700	Implementation of Sustainable Development Strategy for the Seas of East Asia ²¹	2007-2012	UNDP	Project - http://www.pemsea.org IW:LEARN - https://iwlearn.net/iw-projects/2700	Knowledge and experience in innovative approaches to ecosystem-based management of watersheds, estuaries and the adjacent coastal seas, such as Chesapeake Bay, Seto Inland Sea, Bohai Sea, Manila Bay, Masan-Chinhae Bay and Jakarta Bay Report on "Implementation of the SDS-SEA 2003-2015" ²²
8.	2758	Coastal Cities Environment and Sanitation Project - under WB/GEF Partnership Investment Fund for Pollution Reduction in the LME of East Asia ²³	2005-2014	WB	Project - http://www.pemsea.org IW:LEARN - https://iwlearn.net/iw-projects/2758	Vietnam City of Quy in Binh Province into the Ha Thanh river and Thi Nai marine lagoon – wastewater treatment
9.	2750	Ningbo Water and Environment Project - under WB/GEF Partnership	2006-2011	WB	IW:LEARN - https://iwlearn.net/iw-projects/2750	Best practices in constructed wetland for municipal wastewater treatment

¹⁷ Indonesian Sea (LME) , Gulf of Thailand (LME) , Sulu-Celebes Sea (LME) , South China Sea (LME) , East China Sea (LME) , Yellow Sea (LME)

¹⁸ <http://pemsea.org/sites/default/files/IIMS%20User%20Manual.pdf>

¹⁹ <http://www.pemsea.org/publications/reports/pemseas-experience-use-datainformation-icm>

²⁰ Indonesian Sea (LME) , Gulf of Thailand (LME) , Sulu-Celebes Sea (LME) , South China Sea (LME) , East China Sea (LME) , Yellow Sea (LME)

²¹ Indonesian Sea (LME) , Gulf of Thailand (LME) , Sulu-Celebes Sea (LME) , South China Sea (LME) , East China Sea (LME) , Yellow Sea (LME)

²² <http://www.pemsea.org/publications/reports/regional-review-implementation-sustainable-development-strategy-seas-east-asi-0>

²³ Vietnam, South China Sea

GEF ID	Project title	Dates	IA	Project and other information websites	Databases, GIS and reports
	Investment Fund for Pollution Reduction in the LME of East Asia ²⁴				
10. 2759	Manila Third Sewerage Project (MTSP) - under WB/GEF Partnership Investment Fund for Pollution Reduction in the LME of East Asia ²⁵	2007-2014	WB	Project - http://www.pemsea.org IW:LEARN - https://iwlearn.net/iw-projects/2759	Wastewater management in Manila ²⁶ Report "Toward a Comprehensive Watershed Management Strategy for Manila Bay" ²⁷ Report "Total Pollutant Loading Study in the Laguna de Bay-Pasig River-Manila Bay Watershed" ²⁸
11. 2972	Liaoning Medium Cities Infrastructure - under WB/GEF Partnership Investment Fund for Pollution Reduction in the LME of East Asia ²⁹	2006-2011	WB	Project - IW:LEARN - https://iwlearn.net/iw-projects/2972	Landfill remediation and reduction of pollution to Bohai Sea (China) ³⁰
12. 2979	Second Shandong Environment - under WB/GEF Partnership Investment Fund for Pollution Reduction in the LME of East Asia ³¹	2007-2013	WB	Project - http://www.pemsea.org IW:LEARN - https://iwlearn.net/iw-projects/2979	
13. 3025	World Bank/GEF Partnership Investment Fund for Pollution Reduction in the Large Marine Ecosystems of East Asia (Tranche 1, Installment 2)	2007 - present	WB	Project - http://www.pemsea.org IW:LEARN - https://iwlearn.net/iw-projects/3025	
14. 3187	Demonstration of Sustainable Management of Coral Reef Resources in the Coastal Waters of Ninh Hai	2010-2013	UNEP	Project - http://www.vnio.org.vn/duanninhhai IW:LEARN - https://iwlearn.net/iw-projects/3187	Biological monitoring in 9 coral reefs

²⁴ China (East China Sea)

²⁵ Sulu-Celebes Sea (LME) , South China Sea (LME)

²⁶ <http://www.pemsea.org/our-work/pollution-and-waste-management/pollution-hotspots/manila-bay>

²⁷ <http://www.pemsea.org/publications/reports/toward-comprehensive-watershed-management-strategy-manila-bay>

²⁸ <http://www.pemsea.org/publications/reports/total-pollutant-loading-study-laguna-de-bay-pasig-river-manila-bay-watershed>

²⁹ China, East China Sea

³⁰ <http://www.pemsea.org/our-work/pollution-and-waste-management/pollution-hotspots/bohai-sea>

³¹ China, East China Sea

GEF ID	Project title	Dates	IA	Project and other information websites	Databases, GIS and reports
	District, Ninh Thuan Province, Viet Nam ³²				
15. 3188	Demonstration of Community-based Mgt of Seagrass Habitats in Trikora Beach East Bintan, Riau Archipelago Province, Indonesia ³³	2007-2010	UNEP	Project - IW:LEARN - https://iwlearn.net/iw-projects/3188	Establish an integrated management system for a total of 1,500 ha of the coastal and marine environment including seagrass and associated habitats
16. 3223	Shanghai Agricultural and Non-Point Pollution Reduction project (SANPR) - under WB/GEF Strategic Partnership Investment Fund for Pollution Reduction in the LME of East Asia ³⁴	2010-2013	WB	Project - http://www.pemsea.org IW:LEARN - https://iwlearn.net/iw-projects/3223	Measurements of nutrient pollution (i.e. TN, TP, BOD, COD and NH3-N).
17. 3524	CTI Sulu-Celebes Sea Sustainable Fisheries Management Project (SCS) ³⁵	2009-2014	UNDP	Project - http://archive.iwlearn.net/scfishproject.iwlearn.org/ IW:LEARN - https://iwlearn.net/iw-projects/3524	Sulu-Celebes Sea Large Marine Ecosystem TDA (2014) and SAP (2013) Knowledge documents and Fisheries assessments (population, dynamics)
18. 4343	UNDP/GEF Yellow Sea LME Phase II Project ³⁶	2014 - present	UNDP	Project - https://yslmeproject.wixsite.com/phase2 IW:LEARN - https://iwlearn.net/iw-projects/4343	Regional Working Group on Monitoring and Assessment Group established (2017) ³⁷ including the establishment of a comprehensive regional monitoring system: develop regional monitoring strategies for N/P/Si changes, climate change, jellyfish blooms and HAB – NMEMC
19. 5401	Establishment and Operation of a Regional System of Fisheries Refugia in	2016- present	UNEP	Project - https://fisheries-refugia.org IW:LEARN - https://iwlearn.net/iw-projects/5401	The Fisheries Refugia Interactive Mapping Tool (http://refugia.unepscs.org/) and knowledge repository (https://fisheries-refugia.org)

³² Gulf of Thailand (LME) , South China Sea (LME)

³³ Gulf of Thailand (LME) , South China Sea (LME)

³⁴ China, East China Sea

³⁵ Sulu-Celebes Sea (LME)

³⁶ Yellow Sea

³⁷ https://docs.wixstatic.com/ugd/fdf002_328dd6a41ada4c99a314f437a30e4fce.pdf

GEF ID	Project title	Dates	IA	Project and other information websites	Databases, GIS and reports
	the South China Sea and Gulf of Thailand ³⁸				Distribution and Abundance of Fish Larvae in the Gulf of Thailand and South China Sea (with SEAFDEC) ³⁹ . SEAFDEC conducted a series of Marine Fisheries Resources Surveys from 1996-1999 in the Gulf of Thailand and South China Sea.
20. 5538	Implementing the Strategic Action Programme for the South China Sea ⁴⁰	2014-2019	UNEP	Project - IW:LEARN - https://iwlearn.net/iw-projects/5538	
21. 5768	Enabling Transboundary Cooperation for Sustainable Management of the Indonesian Seas	2016-2018	FAO	IW:LEARN - https://iwlearn.net/iw-projects/5768	

³⁸ Gulf of Thailand (LME) , South China Sea (LME)

³⁹ http://refugia.unepscs.org/Fisheries_Refugia_Information/About_Fisheries_Refugia/Fisheries_Refugia_Science_Programme.html

⁴⁰ Gulf of Thailand (LME) , South China Sea (LME)