E4347 V5 REV

China: Fujian Fishing Ports Project

Appendix of Environmental Impact Assessment

Fujian Provincial Department of Ocean and Fisheries

Xiapu State-owned Assets Investment & Operation Co., Ltd.

Fujian Provincial Academy of Environmental Science

OCTOBER 2013

Appendix A Terminology

Terminology

	Chinese	English	Notes
B	白龙宫神龛	Bailonggong Temple	
	半日潮	semidiurnal tide	
	包络图	envelop diagram	
	北霜二级渔港	Beishuang Class-2 Fishing Port	
	避风港	typhoon shelter	
	避风率	sheltering coverage	
	避风锚地	shelter anchorage	
	避风水域	sheltered waters	
	避风水域面积	sheltered area	
	避难所	shelter	
	边界条件	Boundary conditions	
	标高	Bottom elevation	
	泊位	Berth	
C	产卵场	spawning ground	
	潮差	tidal range	
	潮间带	inter-tidal zone	
	潮流场	tidal flow field	
	潮位	tidal level	
	潮汐/潮流/余流/波浪	tide/current/residual current/wave	
	潮汐周期	period of tide	
	沉积物	sediment	
	冲淤	erosion and sedimentation	
	初级生产力	primary productivity	
	船员	crew member(s)	
D	大船	vessel	
	大京二级渔港	Dajing Class-2 Fishing Port	
	低潮	low water	
	底栖生物	benthonic organism	
	地震	seismicity	
	基床开挖后抛石	dumping after the Excavation of Foundation Bed	
	多样性指数	diversity index	
E	二期工程	Phase-II	
F	法	law,regulation,statute	
	法定保护区	legally designated protected area	

	繁殖场	breeding ground	
	方案比选	alternative analysis	
	防波堤	breakwater	
	丰富度	abundance	
	烽火二级渔港	Fenghuo Class-2 Fishing Port	
	浮游动物	zooplankton	
	浮游植物	phytoplankton	
	福建省海洋与渔业厅	Fujian Provincial Oceanic and Fishery Department	
	福建省水产设计院	Fujian Aquatic Product Design Institute	
G	港内水域	port waters	
	高潮	spring tide	
	高潮	high water	
	工程分析	engineering analysis	
	规定	rule;stipulation	
H	海床演变及稳定性	seabed evolution and stability	
	海洋环境质量现状调查与评价	marine environmental baselines and assessment	
	海洋经济	marine economy	
	海洋生态环境	marine ecology	
	航道	navigation channel	
	护岸	seawall	
	环境管理计划	environmental management plan	
	环境影响	environmental impacts	
	环境影响评价	Environmental Impact Assessment	
	洄游通道	migratory channel	
	绞吸式挖泥船	cutter suctiondredgers	
J	均匀度	homogeneity	
	科	families	
K	累积环境影响评价	Cumulative impact assessment	
L	零方案	“Without project” scenario	
	流速	flow rate	
	流向	flow direction	
	落潮	ebb	
	吕峡一级渔港	Luxia Class-1 Fishing Port	
	码头	dock	

M	门	phylum	
	门(复数)	phyla	
	闽东渔区	East Fujian Fishing Ground	
	纳潮量	tidal prism	
N	泥沙运动	sediment transport	
	平潮	stand	
P	抛石挤淤	packing sediment by throwing stones	
	爆破挤淤	packing sediment by blasting	
	气候	meteorology	
Q	迁徙鸟类	migrating birds	
	区域自然环境和社会环境概况	regional environmental and social baselines	
	全日潮	diurnal tide	
	人工鱼礁	artificial reef	
R	三沙渔港方案一	Proposal I for Sansha Fishing Port	
S	三沙中心渔港	Sansha central fishing port	
	施工工艺	construction method	
	施工期/运营期影响分析	analysis of impacts during construction/operation period	
	施工期/运营期主要污染环境影响因素	key impacts during construction/operation period	
	施工设备及进度	construction equipment and schedule	
	施工组织	construction organization	
	实施机构	implementing agency	
	疏浚	dredging	
	疏浚物	dredged materials	
	疏浚物处置、吹填、回填	disposal	
	疏浚物处置方案	disposal of dredged materials	
	属	genera	
	属复数	genus	
	数值模拟	numerical modelling	
	水动力环境现状	hydrodynamics	
	水深	bathymetry	
	水文	hydrology	
	水文动力	hydrodynamics	

	水文动力环境及冲淤现状	hydrodynamics and sedimentation	
	水下钻孔爆破	underwater borehole explosion	
	索饵场	feeding ground	
	挑流	deflecting flow	
T	条例	regulation;rule	
	拖网	fish trawl	
	文澳二级渔港	Wenao Class-2 Fishing Port	
W	项目办（指海洋与渔业厅世行项目办）	Fujian Project Management Office	FPMO
X	小潮	neap tide	
	悬浮物	suspended sediment	
	悬浮物浓度	suspended sediment concentration	
	验证	validation	
Y	一期工程	Phase-I	
	移民安置行动计划	resettlement action plan	RAP
	溢油	oil spill	
	应急响应预案	Emergency Preparedness and Response Plan	
	应急指挥中心	emergency command center	
	优势度	dominance	
	淤积	siltation	
	渔船	fishing boat	
	渔村（镇、县亦同）	fishing village	
	渔民	fishermen	
	渔业	fishery sector	
	渔业经济	fishery economy	
	渔业生产总值	Gross value of fisheries output	
	预警系统	early warning system	
	越冬场	wintering ground	
	造地	land reclamation	指疏浚物回填造地
Z	栈桥	trestle	
	涨潮	flood	
	种	species	
	种类单纯度	species simplicity	
	自然环境	physical environment	

Appendix B Provisions of Domestic Laws and Regulations

(1) Environmental Protection Law of P.R.C.

Clause 21, the State Council and Coastal People's Government at various levels shall strengthen the marine environmental protection, the sea and waste dumping, coastal engineering construction and offshore oil exploitation shall avoid the pollution to marine environment pursuant to the laws.

(2) Marine Environmental Protection Law of P.R.C.

Clause 50, when the blasting is needed in marine constructive projects, the effective measures shall be taken to protect the marine resources;

Clause 55, no institution can dump any waste into the sea area within the jurisdiction of P.R.C. without the authorization of national marine administrative authorities;

Clause 57, before designating and approving the marine dumping area, the national marine administrative authorities shall ask the national authorities of maritime affairs and fishery for advice.

(3) Sea Utilization Administrative Regulation of P.R.C.

Clause 4, the system of marine functional zoning applies in China, the sea utilization shall conform to the marine functional zoning and the activities changing the natural property of sea area like reclamation are strictly under control.

(4) EIA Law of P.R.C.

Clause 21, in addition to the conditions to keep confidential pursuant to national regulations, as to constructive projects potentially having major impacts or necessarily preparing the EIA, the constructing agency shall hold demonstration meeting or hearing or take other activities to ask for the advice of relevant institutions, specialists or the public before submitting the EIA report for approval. The submitted EIA report shall attach the remarks on whether the advice is adopted or not.

(5) Fishery Law of P.R.C.

Clause 35, as to underwater blasting, exploitation and construction with serious influence on fishery resources, the operating agency shall negotiate with the fishery authority above the county level first then take measures to prevent or reduce the damage, the operations resulting in the fishery resources loss shall be ordered by the People's Government above the county level to compensate;

Clause 36, the People's Government at various levels shall take measures to protect, improve the ecological environment of fishery waters and prevent pollution.

Clause 32, for building sluice gates and dams in migratory channel of fishes, shrimps and crabs, if it has serious influence on fishery resources, the constructing agency shall establish facilities for fish passing or take other remedial measures.

(6) Soil and Water Conservation Law of P.R.C.

Clause 26, for the constructive projects requiring preparing the soil and water conservation plan, if the plan isn't prepared or their plan hasn't been approved by the water authorities, the construction won't be allowed to commence.

(7) Cultural Relics Law of P.R.C.

Clauses 2, in the territory of the P.R.C., the following cultural relics are protected by the State:

1. The ancient cultural relics, tombs, buildings, cave temples and stone carvings, murals with the historical, artistic and scientific value;

2. Modern important historical sites, physical objects, representative buildings related to important historical events, revolutionary movements or famous people with important commemorative and educational significance and historical value;

3. Precious artworks, arts and crafts in different historical periods;

4. Important documentations in different historical periods and manuscripts, books with historical, artistic and scientific value;

5. The representative physical objects reflecting the different historical periods, social system, social production and lives of different nations.

The standard and regulation for identifying cultural relics are formulated by the cultural relics authorities and approved by the State Council.

The ancient vertebrate fossils and ancient human fossils are protected by the State the same as the cultural relics.

Clause 17, the construction or blasting, drilling and mining can't be carried out within the protected scope of cultural relics, when these activities are specially needed, the safety of cultural relics shall be guaranteed first and approved by the People's Government approving and announcing before agreed by the corresponding authority at upper level, if these activities are carried out within the protected scope of nationwide key cultural relics, they shall secure the agreement of cultural relics authorities under the State Council before approved by the People's Government of Provinces, Autonomous regions and Municipalities directly under the Central Government.

Clause 20, the site selection shall try to avoid the non-removable cultural relics, which shall be protected in place as possible if can't be avoided.

For those protected in place, the protection measures shall be determined by the constructing agency in advance and submitted to corresponding cultural relics authorities for approval, incorporating the protection measures into the FSR or specification.

For those can't be protected in place and have to be relocated or removed, they shall be submitted to the People's Government of Provinces, Autonomous regions and Municipalities directly under the Central Government for approval, those requiring relocation or removal shall first secure the agreement of cultural relics authorities under the State Council, the national key cultural relics can't be removed, they shall be submitted to the State Council for approval by the People's Government of Provinces, Autonomous regions and Municipalities directly under the Central Government if the relocation is necessary.

The State-owned non-movable cultural relics include murals, carvings and building elements, which were collected by agency designated by the cultural relics authorities.

The expenditure of site protection, relocation and removal will be incorporated in the cost estimate.

(8) Marine Environmental Protection Law of P.R.C.

Clause 8, the facilities shall be equipped with the staffs mastering the expertise of Collision avoidance, signal, communication, fire protection, rescue etc.

Clause 20, the above and under water activities and designating safe operating area in coastal waters shall be approved and announced by the authorities, the irrelevant vessels aren't allowed to enter the safe operating area, where can't be expanded by the constructing agency at will.

(9) Navigation Safety Regulations for Above- and Under Water Activities of P.R.C.

Clause 7, the above and under water activities requiring designating the safe operating area shall be approved by maritime affairs authorities and applied by the constructing or host agency while applying to maritime affairs authorities for the license.

(10) Administrative Regulations for Marine Pollution Prevention from Marine Engineering of P.R.C.

Clause 21, the land reclamation is strictly under control, which can't be carried out in the natural spawning, breeding and feeding ground of economic creatures, the fill materials for reclamation shall meet the environmental protection standard.

Clause 22, the marine engineering construction shall not result in the erosion, sedimentation, damage on territorial sea base and surrounding environment, influencing the stability of territorial sea base.

Clause 28, when the marine blasting is required during construction, the constructing agency shall report to the marine authorities before blasting, the marine authorities shall timely inform the authorities of maritime affairs and fishery.

(11) Administrative Regulations for Marine Pollution Prevention from Ship Wastes of P.R.C.

Clause 15, discharging the vessel waste, domestic sewage, oil-contained sewage, sewage and exhaust containing toxic and harmful substances, ballast water into the sea area under the jurisdiction of China shall conform to the laws, administrative regulations, international treaties concluded or acceded to and relevant standards. The pollutants don't meet the above-mentioned requirements shall be discharged into the port receiving facilities or received by the relevant agency.

Clause 17, the agency receiving the vessel waste, residual oil, oil-contained sewage, sewage containing toxic and harmful substances shall be approved legally by the maritime affairs authorities.

(12) Interim Regulations for Management of Scenic Spots

Clause 8, the land within the scenic spot can't be occupied by any institution or individual. All the scenes and natural environment shall be strictly protected, which can't be destroyed or changed at will. The construction within scenic spot or peripheral protected area shall be harmonious with the scenes, those facilities may destroy scenes, pollute environment or hamper sightseeing aren't allowed to construct. The hotel, hostel and nursing home can't be built within crowded sightseeing area. In addition to necessary protective and supporting facilities, other facilities can't be built additionally around or at the rare, important scenes.

(13) Administrative Regulations for Marine Special Reserve

Clause 2, the marine special reserve in this regulation refers to the regions with the special geographical conditions, ecological system, bio and non-bio resources and special requirements of marine development, which requires the special management through taking effective protective measures and developing in a scientific way.

Clause 4, the principle of scientific planning, unified management, priority to protection and proper development applies to the marine special reserve, where shall take the scientific, proper and effective measures to protect and recover marine ecology, protect marine rights and interests and utilize marine resources.

Clause 10, in terms of the geographical location, current condition of resources and environment, marine developing & utilization and the requirements of socio-economic development, the marine special reserve can be divided into reserves of marine special geographical condition, marine ecological protection, marine resources protection as well as the ocean park etc. In order to promote the sustainable utilization of marine resources, to establish the marine resources reserve in the reserved developing zones for important marine bio-resources, mineral, oil and gas resources and ocean resources, marine ecological industrial zone and development & coordination zone for various marine resources.

Clause 24, those with the authorization to develop within the marine special reserve shall draw up the ecological recovery plan or compensation measures, the pollutants discharge and reclamation inside or outside the reserve damaging its ecological environment shall pay for the ecological compensation.

Clause 38, various constructive projects or developing activities are strictly under control within the marine special reserve, for those key constructive projects competent for the overall planning of reserve, the EIA for marine engineering and sea use demonstration shall be carried out pursuant to laws and regulations, which specially incorporate plan and detailed measures of the ecological environmental protection, ecological recovery and compensation.

(14) Administrative Regulations for Marine Natural Reserve

Clause 2, the marine natural reserve refers to regions separating the coast, estuary, wetland or sea area including the protected objects pursuant to law and carrying out special protection and management with the aim to protect the marine resource and natural environment.

Clause 13, the marine natural reserve can be divided into core, buffer and experimental zones based

on the conditions of natural environment and resource as well as the protection needs, alternatively, specify the absolute protection period and relative protection period according to different protected objects.

In the core zone, except the survey, observation and study activities approved by the costal marine authorities of Provinces, Autonomous regions and Municipalities directly under the Central Government, all the activities potentially damaging the reserve are forbidden.

In the buffer zone, the fishery production, tourism, studies, practice teaching can be properly carried out within the specified period and scope after approved by the reserve authorities under the premise of no artificial damage and pollution on protected objects.

In the experimental zone, the developing activities can be properly carried out under the planning and guidance of reserve administrations.

The absolute protection period refers to the period specified considering the living habits of protected objects, within this period, any activity potentially damaging the protected objects is forbidden in the reserve, while the studies and practice teaching can be properly carried out after approved by the reserve administrations.

The relative protection period refers to period excluding the absolute, when the activities without catching, damaging protected objects can be carried out in the reserve.

Clause 14, the institution, inhabitant in the marine natural reserve as well as the nonnative personnel and vessels entering the reserve shall obey the regulations and rules of the reserve and follow the administration of reserve authorities.

Clause 16, without the authorization of national, coastal Provinces, Autonomous regions and Municipalities directly under the Central Government., any institution or individual isn't allowed to build facilities within the marine natural reserve, the unauthorized buildings in the reserve can be ordered by national, coastal marine authorities of Provinces, Autonomous regions and Municipalities directly under the Central Government to remove or restore to original status

Clause 17, for the activities of studies, practice teaching and exploration within the marine natural reserve, the application and action plan shall be submitted to reserve authorities in advance, carrying out the activities after being approved.

(15) Fujian Provincial Marine Functional Zoning (2011-2020)

According to the *Fujian Provincial Marine Functional Zoning (2011-2020),* the sea area in Fujian Province is divided into 8 kinds of marine basic functional zones, that is, agriculture and fishery zone, port shipping zone, sea zone for industrial and urban use, mineral and resource zone, tourism and entertainment zone, marine protection zone, zone for special use and reserved zone. See the figure 1 for detail.

(1) Agriculture and fishery zone

The agriculture and fishery zone refers to the sea area used for expanding the agricultural development space and developing marine bio-resource and applicable to agricultural reclamation, construction of fishing ports and breeding grounds, marine aquaculture and fishing production as well as the important fishery species maintenance, which includes the agricultural reclamation zone, fishery infrastructure zone, aquaculture zone, reproduction zone, fishing zone and aquatic germplasm resources conservation zone.

The marine fishery resources shall be appropriately utilized during the development to protect the ecological environment in aquaculture area. To enhance the reproduction and release, develop modern fishery and ensure the clean, healthy marine products, gradually adjust the sea use activities don't meet the requirements of functional zone, as well to renovate the sea area in unqualified environmental quality, orderly recover the damaged ecological system in bay, estuary, island, coast and protect the important fishery waters in spawning ground, wintering ground, feeding ground and migratory channel. The sea area in this zone can be used for new fishing village construction, coastal tourism, recreational fishery, experiment, reserve and key transportation infrastructure construction but not for waste dumping. The Type-2 standard of sea water quality (no lower than), Type-1 standard of marine sediment quality and

Type-1 marine bio-quality standard apply to the fishery aquaculture and reproduction zone, the Type-1 standard of sea water quality, Type-1 standard of marine sediment quality and Type-1 marine bio-quality standard apply to the fishing zone and key fishery species conservation zone, the current marine environmental quality standard (no lower than) applies to the aquatic germplasm resources conservation zone, the standards no lower than the Type-2 standard of sea water quality, Type-2 standard of marine sediment quality and Type-2 marine bio-quality standard apply to the sea area for constructing fishing ports and fishery facilities.

(2) Reserved Zone

The reserved zone is the designated sea area restricted for development during the Zoning period in order to keep the backup space and resources. The reserved zone include the sea area which has been undeveloped temporarily due to socio-economic factors and not applicable to determining basic function, as well can't be used currently due to restricted technological means or shall be reserved from the long-term development perspective.

The reserved zones in Fujian Province totaled 21 with the area of 3,778.75km^2, 10 of which belong to coastal functional zone, that is, Yacheng Bay, Changbiao, Zhanggang, Haitan Strait, Ao'qian, Xigang, Dagang Bay, Changlingtou, Eastern sea area of Jinjiang City, Fotan Bay etc., 11 of which belong to offshore basic functional zone, that is, Shacheng Port, Sansha Bay, Luoyuan Bay, Mazu, Mouth of Ming River, Xinhua Bay, Meizhou Bay, Xiamen Bay, Dongshan Bay, Dacheng Bay etc.

The reserved zone shall strictly restrict the changes on the natural property of sea area, which shall keep the current development situation in principle, if the further development is necessary, the marine development activities without changes on the natural property of sea area can be carried out after scientific demonstration based on ensuring the public transportation. As to sea area reclaimed before designating reserved zone, the appropriate marine development activities can be arranged after scientific demonstration based on not expanding the influence on marine environment. The use of reserved zone mainly considers the transport projects, water, electricity, communication, seawater desalination, marine environmental protection, giving priority to the nonprofit needs of marine renewable energy and science studies. The reserved zone carries out the quality standard of seawater, marine sediments and marine creatures no lower than the current corresponding standards.

(3) Marine Reserve

The marine reserve is the sea area especially for marine resources, environmental and ecological protection, including marine natural reserve and marine special reserve.

The marine reserves total 30 with the area of 4493.06km^2, including 11 coastal basic functional zones, that is, Shacheng Port Mangrove Marine Reserve, Yantian Port Mangrove Marine Reserve, Wanwu Mangrove Marine Reserve, Estuary Wetland Marine Reserve in Ming River, Changle Sea Clams Marine Reserve, Shanqi'ao Chinese Limuloid Marine Reserve, Estuary Wetland Marine Reserve in Quanzhou Bay, Marine Reserve of Submarine Ancient Forest in Shenhu Bay, Mangrove Marine Reserve in Jiulong River Mouth, Mangrove Marine Reserve in Zhang River Mouth, Dongshan Coral Marine Reserve etc., 19 offshore basic functional zones, that is, Taishan Islands-Xinzai Islands Marine Reserve, Riyu-Qixing Islands Marine Reserve, Fuyao Islands Marine Reserve, Fuying Island Marine Reserve, Guanjingyang Large Yellow Croaker Marine Reserve, Sandu'ao Rim Waterfowl Mangrove Marine Reserve, Marine Reserve in Territorial sea base of Dongyin-Dongsha Island, Shanzhou Islands Marine Reserve, Haitan Bay Marine Reserve, Niushan Island Marine Reserve, Tangyu Islands Marine Reserve, Marine Reserve of Territorial sea base in Wuqiuyu, Meizhou Island Marine Reserve, Xia'men Marine Reserve for Rare Marine Species, Marine Reserve of Territorial sea base in Dongding Island, Nanding Island Marine Reserve, Caiyu Islands Marine Reserve, Xiongdiyu Marine Reserve, Longhu Lion & Elephant Islands Marine Reserve etc.

The national and local laws and regulations of marine natural and special reserve shall be strictly implemented to strengthen the monitoring on sea use activities and environment, preserve and recover the marine ecological environment and protect the diversity of bio-resources. The border and area of marine reserve are restrictive, those developing activities inconsistent with the protection aim are forbidden in the reserve. The marine tourism, fishery breeding and fishing are compatibles with the reserve functions while the port waste and sewage discharge are incompatible, the sea use activities damaging the protected objects, changing the natural property of sea and influencing the marine ecological environment are

forbidden. To strengthen the monitoring and control on the operation quality of functional zone under the marine reserve, renovate the unreasonable sea use activities and recover the damaged marine ecological system and landscape. The Type-1 standard of sea water quality, Type-1 standard of marine sediment quality and Type-1 marine bio-quality standard apply to the marine nature reserve, while the standards of sea water quality, marine sediment quality and marine bio-quality no lower than functional requirements apply to the marine special reserve.

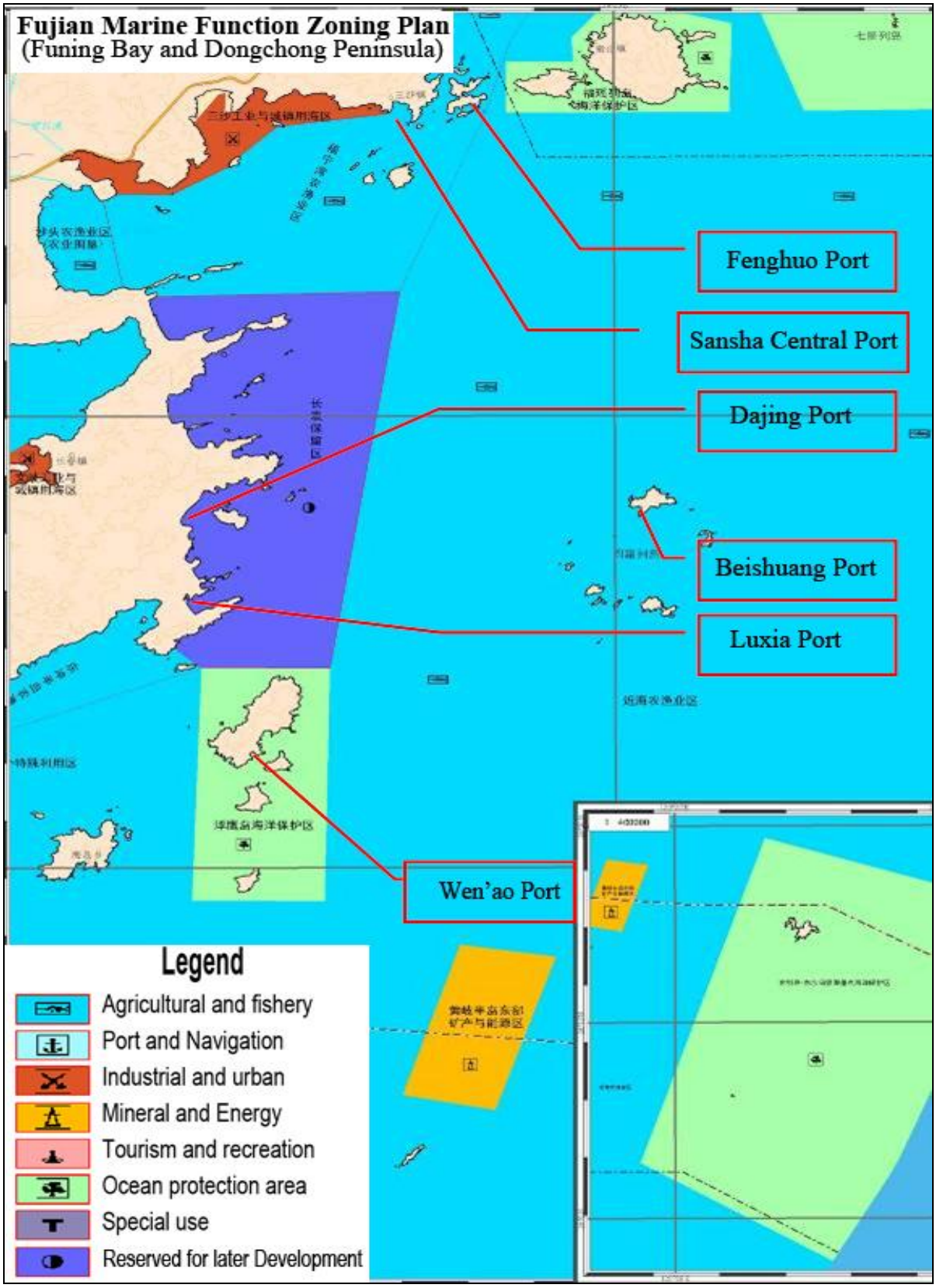


Figure 1 Fujian Provincial Marine Functional Zoning (including this Project)

(16) Fujian Provincial Marine Environmental Protection Planning (2011-2020)

The types and requirements of environment hierarchical control zones of *the Fujian Provincial Marine Environmental Protection Plan (2011-2020)* are shown in the Table1. Fujian marine environmental classification zoning is shown in Figure2.

Table1 Levels and Types of Marine Environment Zoning

Level	Types	Code	Environmental Monitoring & Management
Key Protection Area	Legally protected nature reserve such as marine reserve etc.	1.1	Core and buffer zones of nature reserve; forbid all developing activities irrelevant to protect the dominant ecological function
	Important habitat and ecological functional zone	1.2	Area for restricted development; developing activities with insignificant influence on ecological environment are allowed without influence on dominant ecological function.
Controlled Protection & Utilization	Fishery zone	2.1	Appropriately develop and use following the principle of not influencing the main service function of ecological system based on the planning of marine functional zoning.
	Tourism zone	2.2	
	Ecological Channel zone	2.3	
Development & monitoring area	Monitoring Zone in Cities, Towns, Industries and Ports	3.1	Area with intensive developing activities. Monitoring & management shall be attached with great importance to prevent the significant ecological damage and pollution.
	Ocean disposal zone	3.2	

Table2 Marine Environment Zoning for Project Areas

Port	Code	Name	Environmental Protection Requirements
Sansha Fenghuo	2.1-4	Protection & Use Zone of Fishery Environment in Funing Bay	Control the pollutants emission of surrounding land area, protect fishery environment and control reclamation scale
Luxia	2.1-8	Protection & Use Zone of Fishery Environment on sea area of east Dongchong Peninsula	Strengthen the protection of spawning ground, breeding ground and migratory channel of fishes and shrimps, control the pollutants emission of surrounding land area, protect fishery environment
Beishuang	2.1-9	Protection & Use Zone of Fishery Environment on sea area of east Ningde City	Strengthen the protection of spawning ground, breeding ground and migratory channel of fishes and shrimps and control the fishing
Dajing	2.2-2	Protection & Use Zone of Changmen-Luxia Tourism Environment	Protect island and reef ecological system, strictly control the coastline, sandy beach occupation and coastal protection forest
Wen'ao	1.2-10	Key Protection Area of Island Ecological System in Fuying Island	Protect island ecological system, pollicipes mitella species and ecological system

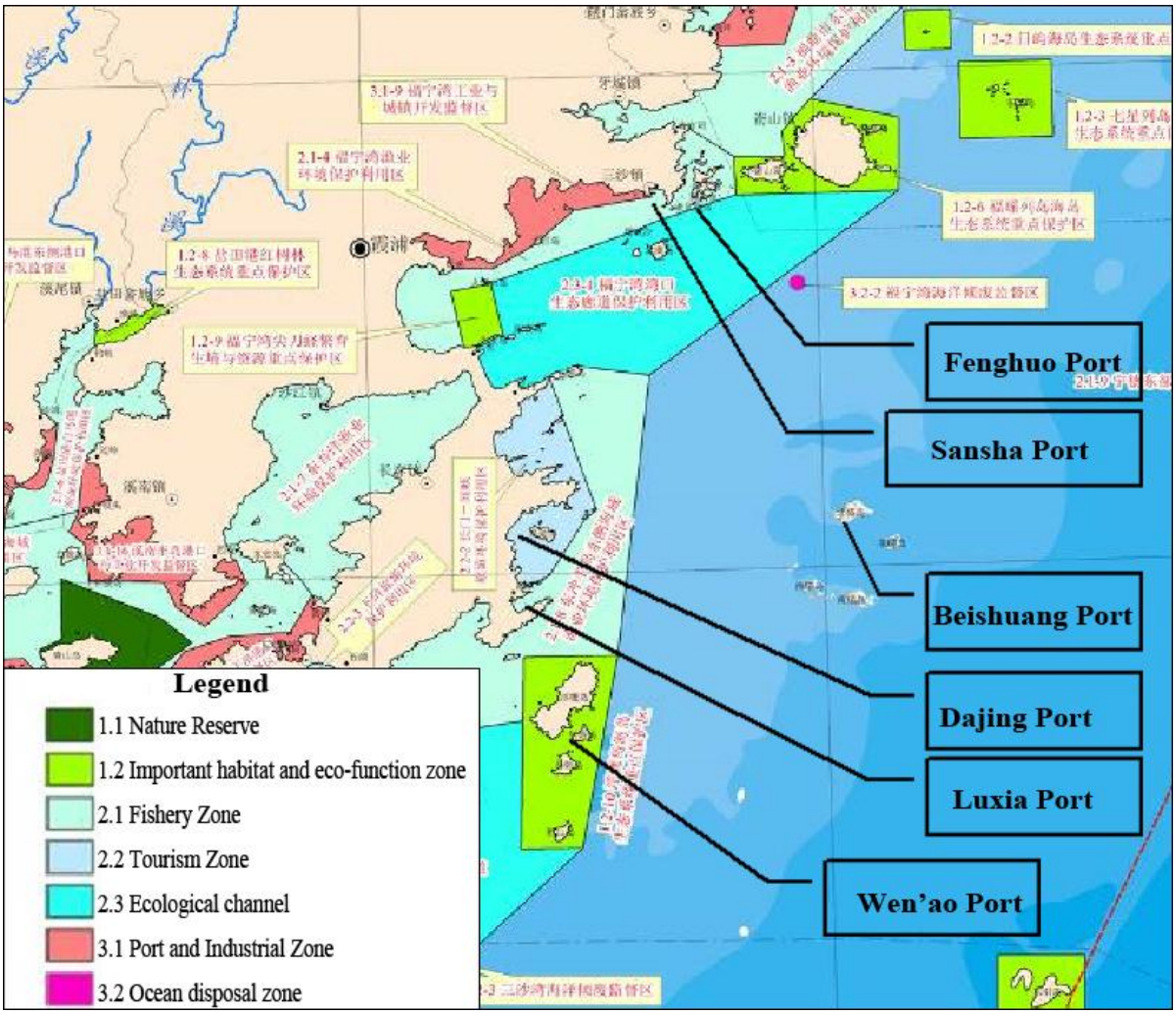


Figure 2 Marine Environmental Protection Classification of Fishing Port Area

(17) Fujian Provincial Offshore Area Environmental Functional Zoning (2011-2010)

The offshore area environmental functional zones are shown in the table3 and figure 3.

Table 3 Related Offshore Area Environmental Functional Zones

Name of Sea Area	ID No.	Name of Functional Zone	Scope	Offshore Area Environmental Functional Zoning		Target of Water Quality Protection	
				Main Function	Auxiliary Function	Short-term	Long-term
East of Ningde City	FJ027-B-Ⅰ	Type-2 Zone of Eastern Coastal Ningde City	Sea area of east Ningde City, which covers an area of 4,803.31km^2	Marine fishery, fresh seawater supply	Breeding and shipping	Type-1 Standard	Type-1 Standard
	FJ009-D-Ⅱ	Type-4 Zone in Sansha Port	Sea area from Qingguanlan	Port shipping	General industrial water use,	Type-2 Standard	Type-2 Standard

			in Sansha, Fenghuo Island, Qingyu, to Dong'ao		Tourism		
	FJ011-B-Ⅱ	Type-2 Zone in Surrounding Sea Area between the Fuying Island and Xiyang Island	Sea area between Fuying Island and Xiyang Island, Xiapu County	Ecological Protection and Tourism	Breeding	Type-2 Standard	Type-2 Standard

(18) Fujian Provincial Ecological Functional Zoning (2010)

The ecological functional zoning in the *Fujian Provincial Ecological Functional Zoning (2010)* is shown in the table 4 and figure 4.

Table4 Related Ecological Functional Zoning in Fujian Province

Ecological Functional Zoning			Location and Area	Main Ecological Problems	Eco-environmental sensitivity	Eco system function	Protective Measures and Development Trend
Ecological Zone	Ecological sub-zone	Ecological Functional Zone					
Ⅰ Ecological Zone in East, Middle, North, West Fujian	Ⅰ3 Coastal and offshore sea area ecological sub-zone in east Fujian	3105 Shacheng-Beijiao Ecological Functional Zone for Offshore Sea Fishery	Offshore area to the South of the Shacheng Port, Fuding City and to the north of Huangqi Peninsula, Luoyuan County, which cover an area of 3,649km^2	Some important marine economic species are significantly decreasing, the coastal wetland is decreasing by the reclamation, , the dense breeding worsens the water quality in partial waters, the alien species called Spartina occupy some mudflat and endanger the ecology, the port, urban and industrial discharge influences the water environment of coastal waters	Key halobios biotope medium-sensitive	Maintain the fishery ecological environment, biodiversity in islands, coastal and island tourism ecological environment, port shipping	Properly plan the aquaculture, control the marine fishing, carry out the fishing-off system, strengthen the protection of ecological environment and bio-resources of islands, establish the important ecological functional reserve for fishery waters, properly plan the marine and costal projects within the Shacheng Port, control the unnecessary reclamation, strengthen the prevention and treatment of port discharge and oil pollution accidents, control the port, urban and industrial discharge

(19) Site Selection and Construction Plan of Fishing Ports along Fujian Coast (2009-2018)

As stipulated in the *Site Selection and Construction Plan of Fishing Ports along Fujian Coast (2009-2018)*, the targets of the planning include "Considering the current situation of coastal economic development in Fujian Province as well as the requirements of fishery development and disaster prevention and mitigation, comprehensively consider the fishery resources, proportion of fishery economy, fishing vessels quantity, current situation of fishing ports and natural conditions in different places, then plan to construct 167 fishing ports (4 central fishing ports, 15 Class-1 fishing ports, 59 Class-2 fishing ports and 89 Class-3 fishing ports) and 16 shelter anchorages in the short term (2009-2013) on the basis of current fishing ports, to provide sheltered waters for 83% of fishing vessels. It's also planned to construct or reconstruct 72 fishing port in the long term (2014-2018), including 7 central fishing ports, 6 Class-1 fishing ports, 19 Class-2 fishing ports and 40 Class-3 fishing ports, to provide sheltered waters for 97% of fishing vessels, basically establish the standard system of fishing ports with proper layout, optimized structure, complementary function, complete facilities and services, good ecology and sustainable development, which will lay the foundations for comprehensively constructing the system of disaster prevention and mitigation.

The proposed 2nd Stage of Sansha Central Fishing Port, 2nd Stage of Fenghuo Class-2 Fishing Port, Beishuang Class-2 Fishing Port, Dajing Class-2 Fishing Port, Lv'xia Class-2 Fishing Port, Wen'ao Class-2 Fishing Port all belong to the construction projects in the Planning.

(20) Planning of Provincial-level Scenic Area of Dongchong Peninsula

The Provincial-level scenic spot in Funing Bay was included in the 7th batch of scenic spots issued by Fujian People's Government in 2007, which was renamed to Provincial-level scenic spot in Dongchong Peninsula in the No.17 document of Fujian People's Government issued in January 2010.

The planning covers an area of 187.8km^2, including marine area of 90.2km^2, island of 4km^2 and land area of 93.6km^2. Based on the current landscape and infrastructure, the landscape system will be expanded from the center to southern and northern edges centering on Gaoluo and Dajing, to form a coastal sightseeing zone from Beach of Funing Bay to Haidao Town with the core sightseeing zone locating in Gaoluo and Dajing scenic spots.

The proposed Lv'xia Fishing Port and Dajing Fishing Port are located within the Provincial-level scenic spot in Dongchong Peninsula, the Dajing scenic spot includes attractions of Dajing Castle, Dajing Beach, Xiaojing Beach, Danwan Beach, Dajing Tea Farm, Weiyu, Zhongyu, Jiabei Mountain, Qiyu, Chaoxie Reef, Yuzhai Island, Bijiashan Island. The Lv'xia scenic spot include attractions of Lv'xia Beach, Xiao'lv Beach, Lv'xia Castle, Aged Banyan Trees, Anlanhouguan, Yanduiwei Pennisula, Xiawei Island, Jinyu etc.

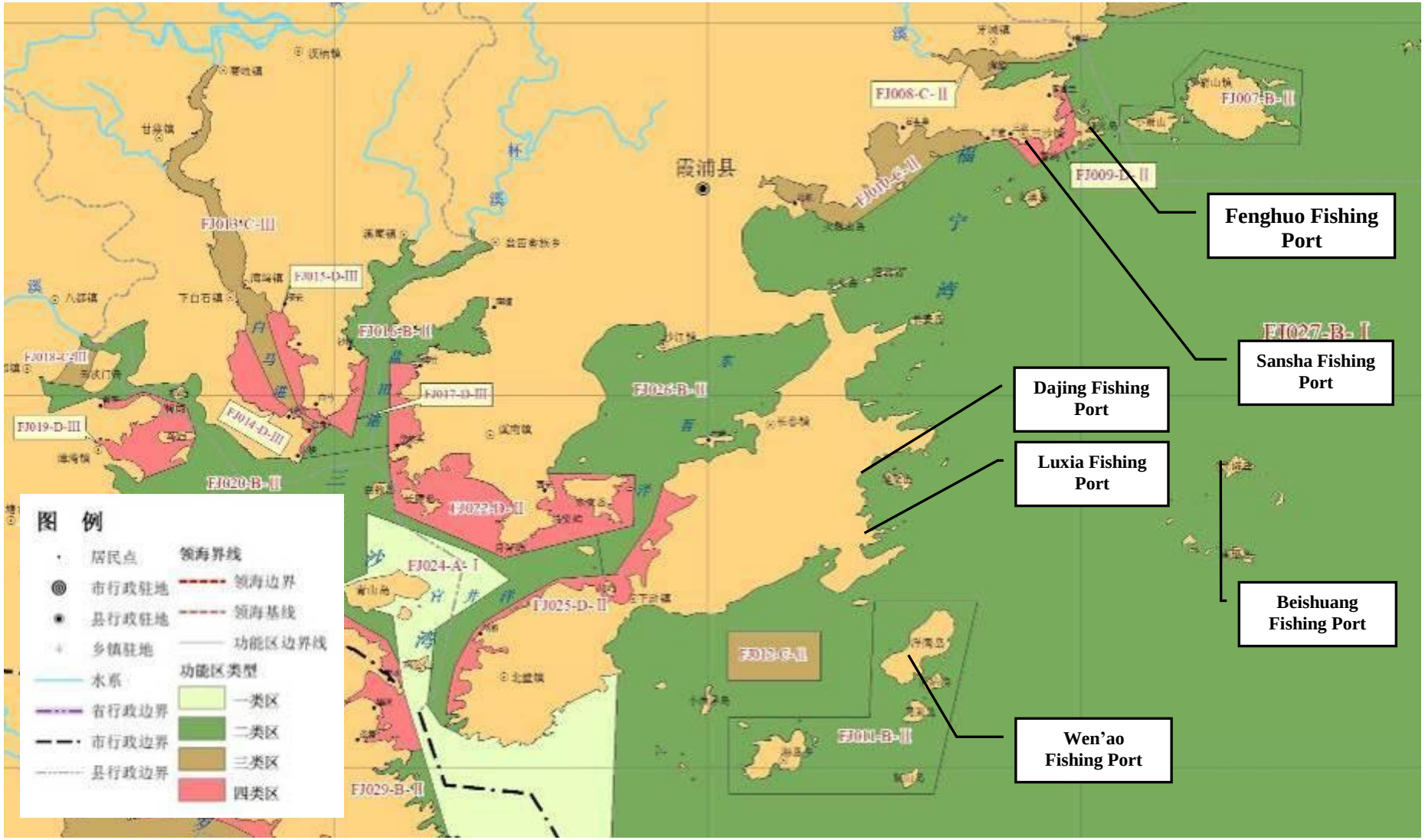


Figure 3 Fujian Provincial Offshore Area Environmental Functional Zoning

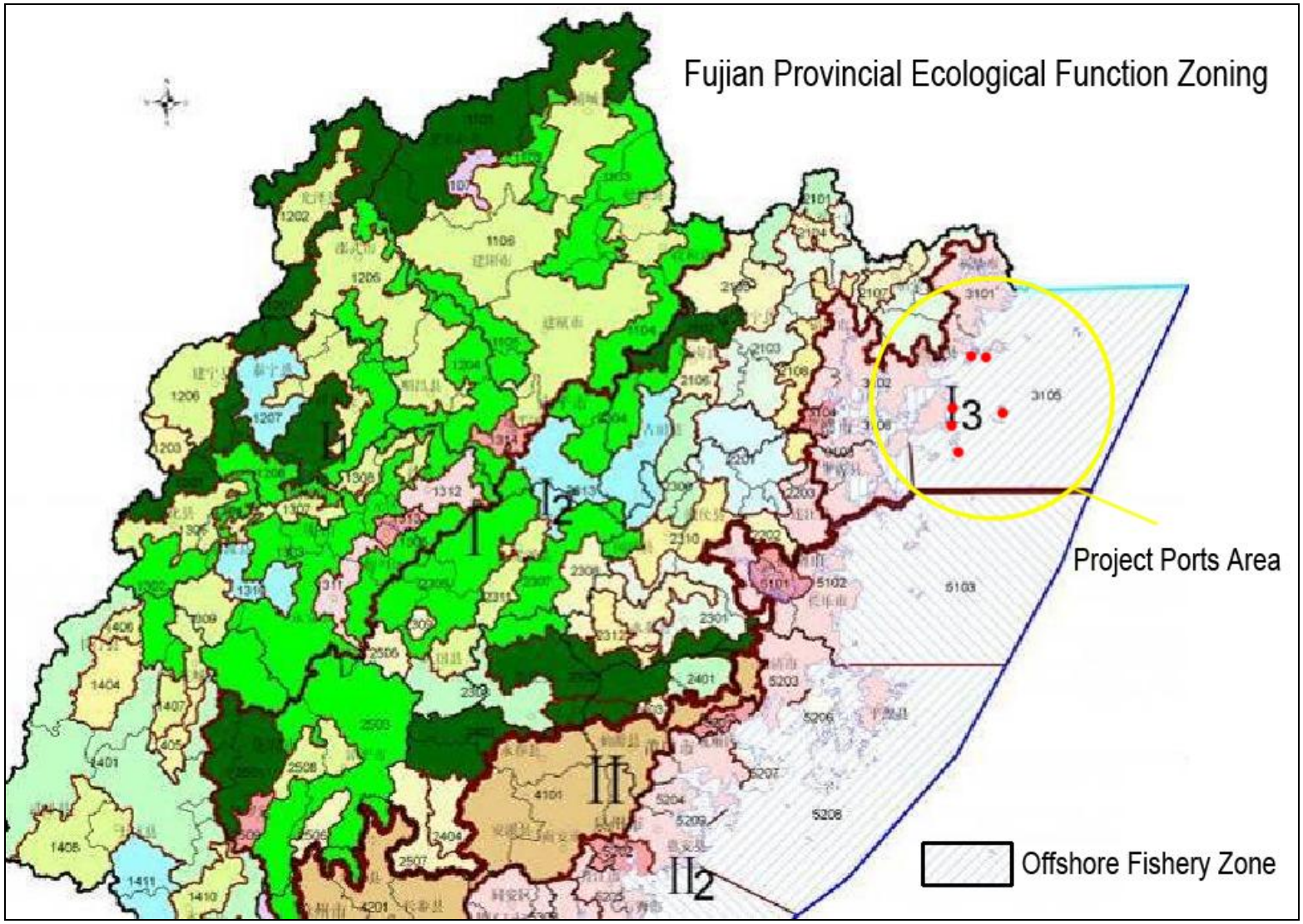


Figure 4 Fujian Provincial Ecological Functional Zoning

Figure 5 Planning o Provincial-level Scenic Spot in Dongchong Peninsula (Partial)

Appendix C Marine Ecological Survey Data

ⅠHydrology & Sediment Survey in Sea Area

1. Coordinates of Stations for Hydrology & Sediment Observation in Surveyed Sea Area

Table 1 Coordinates of Stations for Hydrology & Sediment Observation in Surveyed Sea Area

Station No.	Longitude	Latitude	Station No.	Longitude	Latitude
1#	120.275813	26.91306	9#	120.041955	26.57288
2#	120.206987	26.86499	10#	120.114774	26.51718
3#	120.182467	26.80421	HDT01	120.293889	27.044167
4#	120.244103	26.80433	HDT02	120.301389	27.041111
5#	120.214015	26.71805	HDT03	120.292500	27.027778
6#	120.319007	26.70645	HDT04	120.294444	27.023056
7#	120.142564	26.67215	HDT05	120.278889	27.036111
8#	120.1333	26.61331	HDT06	120.275278	27.031667

2. Tidal Characteristic Value

Table 2 Tidal Characteristic Value through Actual Observation in Surveyed Sea Area

Item		Sansha Tidal Observation Station	Lv'xia Temporary Tidal Observation Station
Tidal level	Highest tidal level	7.98m	6.21m
	Lowest tidal level	1.57m	0.22m
	Average high tidal level	7.28m	5.74m
	Average low tidal level	2.84m	0.91m
	Average sea level	5.13m	3.32m
Tidal range	Maximum tidal range	6.35m	5.78m
	Minimum tidal range	2.45m	3.36m
	Average tidal range	4.46m	4.86m
Time of flood, ebb	Average time of flood	6h08min	6h26min
	Average time of ebb	6h20min	6h21min
Datum level		Gauge zero	Gauge zero
Period of statistics		Apr.20-May.5, 2013	Apr.24-May.5, 2013

3. Tidal Harmonic Constants for Lv'xia Observation Station

Table 3 Tidal Harmonic Constants for Lv'xia Observation Station

Station / Tidal Component	Sansha		Lv'xia	
	Vibration h (cm)	Tidal Epoch g (°)	Vibration h (cm)	Tidal Epoch g (°)
M_2	215.3	202	219.0	287
S_2	113.1	102	112.1	177
N_2	39.3	139	35.4	228
K_2	79.1	251	66.1	331
K_1	171.1	355	126.8	127
O_1	68.2	346	30.9	86
P_1	164.9	173	143.9	318
Q_1	26.6	188	21.2	309
M_4	6.0	243	4.1	71
M_{S4}	3.5	194	0.9	49
M_6	1.3	124	2.7	265

Ⅱ Seawater Quality Survey

1. Methods of Seawater Quality Analysis

Table 4 Methods of Seawater Quality Analysis

No.	Item	Analysis Method	Method Source
1	Water	CTD	GB/T 12763-2007
2	pH	pH meter	GB17378.4-2007
3	Salinity	Salimeter	GB17378.4-2007
4	DO	Iodometry	GB17378.4-2007
5	COD	Alkalic Potassium Permanganate	GB17378.4-2007
6	Nitrate nitrogen	Cadmium column reduction	GB/T12763.4-2007
7	Nitrite nitrogen	Naphthyl ethylenediamine dihydrochloride	GB/T12763.4-2007
8	Ammonia	Indophenol blue spectrophotometry	GB/T12763.4-2007
9	Active	Phosphorus molybdenum blue	GB/T12763.4-2007
10	Suspended	Weight	GB17378.4-2007
11	Petroleum	Ultraviolet spectrophotometry	GB17378.4-2007
12	Cooper	Flameless atomic absorption spectrometry	GB17378.4-2007
13	Lead	Flameless atomic absorption spectrometry	GB17378.4-2007
14	Zinc	Flame atomic absorption spectrometry	GB17378.4-2007
15	Cadmium	Flameless atomic absorption spectrometry	GB17378.4-2007
16	Chromium	Flame atomic absorption spectrometry	GB17378.4-2007
17	Arsenic	Atomic Fluorescence Spectrometry	GB17378.4-2007
18	Mercury	Atomic Fluorescence Spectrometry	GB17378.4-2007

2. Assessment Method of Seawater Quality

The single factor indicator method applies to assessing the water quality, the pollution index (Si) higher than 1 means exceeding the specified water quality standard. The calculation formula of pollution indexes for each monitored project is shown as follows:

a. Standard index for other pollutants except pH and DO：

$$Si = Ci/Csi$$

Note: Si represents the pollution index with single factor; Ci represents the actual monitoring value; Csi represents the standard value for assessment.

b. Standard index for pH:

$$S_{pH} = \frac{\left| pH - pH_{sm} \right|}{DS}$$

among which, $pH_{sm} = \frac{pH_{su} + pH_{sd}}{2} DS = \frac{pH_{su} - pH_{sd}}{2}$

Where, S_{pH} represents pH pollution index; pH represents pH monitoring value; pH_{sd} represents lower limit value for water quality; pH_{su} represents upper limit value for water quality.

c. Standard index for DO:

$$S_{DO} = \frac{\left| DO_f - DO \right|}{DO_f - DO_s}, DO \geq DO_s, \quad S_{DO} = 10 - 9\frac{DO}{DO_s}, DO < DO_s,$$

$$DO_f = 468/(31.6 + T)$$

Where, DO represents the monitoring value, DOs represents standard value for assessment, DO_f represents DO value under the current water temperature.

3. Monitoring Result of Seawater Quality

The monitoring result of seawater quality in Apr 2013 is shown in the table 5 to 8 and the corresponding assessment result is shown in the table 9 to 12.

Table 5 Survey Result to Seawater Quality in Flood and Spring Tide on Apr. 27, 2013

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
1	Surface	18.62	8.14	30.42	99.3	7.97	0.50	0.521	0.0258	0.023	1.78	1.60	20.48	0.056	1.04	0.015	< 0.5
2	Surface	19.04	8.10	30.53	110.7	7.99	0.56	0.504	0.0203	0.019	1.49	1.48	18.81	0.052	2.81	0.017	1.30
3	Surface	18.82	8.06	29.85	112.0	7.96	0.66	0.451	0.0164	0.026	1.14	0.69	20.24	0.042	1.77	0.019	1.34
	Bottom	18.16	8.03	30.14	133.7	7.96	0.46	0.537	0.0173	/	1.85	0.45	18.33	0.039	0.70	0.018	1.37
4	Surface	18.89	8.08	29.86	118.7	8.00	0.59	0.538	0.0185	0.024	0.88	0.56	17.38	0.036	0.77	0.030	1.36
5	Surface	18.73	8.09	30.56	111.3	7.88	0.57	0.497	0.0130	0.029	1.00	0.86	17.38	0.037	0.79	0.034	1.34
6	Surface	19.02	8.11	30.72	159.0	7.88	0.73	0.475	0.0152	0.036	1.06	1.11	15.71	0.038	1.09	0.032	1.31
7	Surface	18.83	8.12	30.24	70.0	7.94	0.96	0.535	0.0136	0.028	1.32	0.73	19.29	0.047	0.88	0.029	1.37
8	Surface	18.91	8.12	30.82	112.3	7.82	0.54	0.554	0.0164	0.038	0.72	0.74	17.62	0.035	0.76	0.031	1.35
9	Surface	17.49	8.17	29.05	143.7	7.80	0.50	0.516	0.0194	0.038	0.69	0.63	15.71	0.108	1.23	0.032	1.33
	Surface	16.92	8.17	29.38	164.7	7.75	0.66	0.488	0.0209	/	1.05	0.84	19.29	0.071	0.61	0.031	1.37
10	Surface	18.69	8.10	30.11	100.0	7.84	0.64	0.439	0.0155	0.029	1.34	1.11	14.52	0.044	0.59	0.030	1.30
11	Surface	18.50	8.05	30.03	95.0	7.86	0.63	0.562	0.0209	0.031	2.09	1.52	18.81	0.052	0.43	0.036	1.29
	Bottom	17.92	8.03	30.08	130.7	7.82	0.72	0.266	0.0230	/	2.36	1.69	17.62	0.046	0.49	0.041	1.28
12	Surface	18.21	8.03	29.60	102.7	7.96	0.88	0.542	0.0130	0.035	2.36	1.04	20.24	0.094	1.20	0.033	1.25
	Bottom	17.57	8.02	30.01	142.3	7.90	0.61	0.482	0.0115	/	2.17	0.96	21.67	0.052	0.83	0.032	1.33
13	Surface	17.15	8.15	29.42	117.3	8.02	0.57	0.464	0.0291	0.042	0.70	0.46	8.10	0.041	0.42	0.030	1.38
	Bottom	16.76	8.17	29.41	127.7	7.85	0.60	0.590	0.0300	/	0.59	0.80	13.57	0.081	1.01	0.032	1.41
14	Surface	17.68	7.85	28.65	137.7	7.78	0.57	0.547	0.0161	0.04	2.1	1.62	18.33	0.075	2.82	0.036	1.35
15	Surface	17.42	7.89	28.69	149	7.65	0.54	0.432	0.0188	0.043	2.27	1.92	19.29	0.077	1.69	0.036	1.44
	Bottom	17.3	7.85	28.78	161	7.74	0.51	0.461	0.0379	/	2.14	1.69	17.14	0.082	1.89	0.036	1.42
16	Surface	17.56	8	29.4	105.7	8.1	0.54	0.555	0.0182	0.04	2.31	0.67	20.48	0.085	0.52	0.034	1.35
	Bottom	17.36	8.01	29.49	120.3	7.98	0.6	0.506	0.0379	/	1	0.68	20.95	0.112	2.26	0.038	1.34
17	Surface	17.47	8.07	29.46	102	8.04	0.72	0.606	0.0115	0.043	1.24	1.1	16.43	0.208	0.44	0.04	1.29
	Bottom	16.96	8.04	29.62	113	8.26	0.54	0.536	0.0233	/	1.44	1.34	15.24	0.18	0.52	0.039	1.34

Continued Table 5 Survey Result to Seawater Quality in Flood and Spring Tide on Apr. 27, 2013 (1)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
18	Surface	16.99	8.19	29.54	67	8.27	0.8	0.672	0.0185	0.033	0.89	1.63	19.29	0.115	0.51	0.039	1.31
	Bottom	16.75	8.18	29.56	96.3	7.94	0.62	0.603	0.0221	/	0.78	1.01	14.76	0.099	0.93	0.04	1.24
19	Surface	17.66	7.9	28.87	127	7.72	0.53	0.612	0.0164	0.043	1.9	1.71	21.43	0.061	0.79	0.043	1.4
20	Surface	17.35	7.81	28.81	119.7	7.84	0.43	0.423	0.0245	0.045	1.33	1.96	15	0.072	0.45	0.04	1.53
	Bottom	17.2	7.95	28.83	127	7.68	0.54	0.554	0.0209	/	1.21	1.79	13.33	0.049	0.47	0.042	1.29
21	Surface	17.82	8.08	29.03	108.3	8.03	0.72	0.581	0.0236	0.019	1.72	0.89	15.95	0.134	2.92	0.041	1.29
	Bottom	17.79	8.07	29.67	133.3	7.92	0.76	0.65	0.0118	/	0.66	0.68	13.1	0.08	0.42	0.045	1.27
22	Surface	17.55	8.13	29.53	100.3	8.02	0.78	0.498	0.0242	0.042	0.99	0.65	11.19	0.052	0.58	0.04	1.31
	Bottom	16.87	8.13	29.57	132.7	7.93	0.82	0.303	0.0252	/	0.79	0.8	12.86	0.055	0.44	0.047	1.32
23	Surface	17.17	8.19	29.7	100.7	8.32	0.54	0.444	0.0245	0.036	0.71	1.22	15.48	0.091	1.22	0.045	1.31
	Bottom	16.75	8.18	29.68	124.3	7.98	0.45	0.413	0.0267	/	0.49	0.82	15	0.054	1.22	0.045	1.31
24	Surface	17.78	7.91	28.97	143.3	8.01	0.62	0.278	0.0206	0.036	0.63	1.11	15	0.077	0.5	0.049	1.32
25	Surface	18.01	7.94	29.05	107.3	8.26	0.59	0.416	0.0197	0.029	0.6	1.2	20	0.044	2.06	0.046	1.25
26	Surface	17.87	8	28.79	152	8.2	0.53	0.295	0.0188	0.033	0.66	1.29	19.76	0.135	1.22	0.042	1.29
	Bottom	17.37	7.98	28.92	164.7	8.12	0.67	0.409	0.0273	/	0.46	1.13	15.71	0.04	0.67	0.043	1.35
27	Surface	17.35	8.1	29.62	115.3	8.32	0.64	0.533	0.0252	0.016	0.67	0.76	16.9	0.119	0.78	0.041	1.39
	Bottom	16.9	8.1	29.64	119	7.94	0.72	0.541	0.023	/	0.89	0.93	17.14	0.107	0.68	0.044	1.36
28	Surface	17.62	8.15	29.78	99.7	8.24	0.56	0.445	0.0297	0.038	0.61	1.59	13.1	0.051	1.05	0.042	1.37
	Bottom	17.18	8.14	29.75	125	8.14	0.5	0.514	0.0221	/	0.46	1.54	17.86	0.084	0.46	0.046	1.4
29	Surface	19.62	7.95	29.02	109.7	8.1	0.5	0.514	0.03	0.035	0.83	1.03	15.71	0.076	0.43	0.045	1.38
30	Surface	18.09	7.96	29.12	93	8.23	0.6	0.508	0.0245	0.035	0.61	1.66	12.62	0.127	0.48	0.046	1.39
	Bottom	17.09	7.99	29.16	111.7	8.11	0.62	0.469	0.0252	/	1.27	1.3	14.52	0.082	0.4	0.049	1.38
31	Surface	19.59	7.94	29.29	106	8.22	0.62	0.3823	0.023	0.0294	0.8	1.62	21.43	0.091	0.43	0.051	1.37
32	Surface	17.9	7.98	29.2	119.7	8.18	0.62	0.5182	0.0233	0.0329	0.63	1.11	16.9	0.112	0.41	0.049	1.34
	Bottom	16.64	7.99	29.32	132	8	0.42	0.455	0.0306	/	1.77	1.38	21.43	0.062	0.49	0.053	1.39

Continued Table 5 Survey Result to Seawater Quality in Flood and Spring Tide on Apr. 27, 2013 (2)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
33	Surface	17.64	8.11	29.92	106.3	8.15	0.66	0.615	0.0215	0.035	1.8	1.99	13.33	0.173	0.51	0.062	1.37
	Bottom	17.38	8.12	29.92	82.3	8.08	0.72	0.441	0.0167	/	0.77	1.87	14.76	0.09	0.46	0.058	1.39
34	Surface	18.0	8.11	29.36	11.2	7.96	0.88	0.326	0.0106	0.014	1.0	0.49	15.4	0.05	0.28	0.012	1.6
	Bottom	17.6	8.12	29.27	27.6	7.98	0.93	0.388	0.0149	/	1.3	0.41	17.4	0.08	0.18	0.016	1.4
35	Surface	18.2	8.13	29.17	17.4	8.08	0.64	0.331	0.0164	0.015	2.4	0.34	17.5	0.07	0.17	0.013	1.4
	Bottom	17.9	8.14	29.3	19.2	8.14	0.99	0.356	0.0143	/	1.2	0.66	15.8	0.08	0.32	0.011	1.8
36	Surface	17.6	8.35	29.15	19.4	6.95	0.83	0.336	0.0127	0.015	1.7	0.23	17.7	0.07	0.15	0.015	0.9
	Bottom	17.0	8.38	29.2	12.6	8.05	0.88	0.320	0.0118	/	2.2	0.64	17.7	0.06	0.17	0.009	1.2
37	Surface	16.5	8.10	29.62	47.2	7.79	0.79	0.469	0.0164	0.014	1.1	0.31	18.2	0.08	0.16	0.009	1.0
	Bottom	16.0	8.14	29.70	62.4	7.93	0.67	0.439	0.0099	/	1.2	0.43	18.7	0.08	0.17	0.011	1.7
38	Surface	17.0	8.12	29.11	20.6	7.94	0.67	0.493	0.0143	0.014	1.1	0.22	18.0	0.06	0.14	0.009	1.4
	Bottom	16.5	8.10	29.16	18.6	8.07	0.73	0.419	0.0158	/	1.3	0.74	18.5	0.08	0.15	0.011	1.3
39	Surface	18.0	8.13	29.29	21.0	7.49	0.86	0.388	0.0192	0.014	1.8	0.77	14.5	0.06	0.16	0.012	1.7
	Bottom	17.8	8.11	29.31	38.2	7.58	0.74	0.498	0.0217	/	2.0	0.45	20.0	0.10	0.16	0.011	1.3
40	Surface	18.0	8.31	29.03	11.2	6.97	1.04	0.397	0.0167	0.014	1.2	0.97	16.0	0.18	0.14	0.013	1.5
	Bottom	17.5	8.33	29.50	35.4	7.00	1.13	0.338	0.0115	/	1.7	0.30	19.7	0.06	0.15	0.010	1.5
41	Surface	18.0	8.11	29.06	16.2	8.03	0.96	0.337	0.0204	0.015	1.2	0.68	16.4	0.06	0.17	0.009	1.4
	Bottom	18.0	8.13	29.37	16	8.05	0.91	0.363	0.0176	/	2.1	0.57	17.4	0.10	0.16	0.015	1.4
42	Surface	18.3	8.09	29.07	17.4	7.79	0.98	0.324	0.017	0.015	1.6	0.43	16.6	0.07	0.16	0.010	1.5
	Bottom	18.0	8.12	29.26	11.8	8.18	0.81	0.385	0.0201	/	1.4	0.41	17.6	0.13	0.14	0.010	1.9
43	Surface	16.0	8.08	29.51	25.4	7.84	0.63	0.418	0.0062	0.013	0.9	1.10	16.6	0.08	0.13	0.014	1.3
44	Surface	16.0	8.09	29.81	33.0	7.89	0.70	0.489	0.0084	0.015	1.8	0.35	16.2	0.07	0.21	0.011	1.2
	Bottom	15.9	8.12	29.76	43.6	7.92	0.68	0.289	0.0065	/	1.5	0.80	14.7	0.08	0.16	0.014	1.2
45	Surface	16.2	8.10	29.23	36.6	7.78	0.85	0.371	0.0062	0.012	1.1	0.21	16.2	0.07	0.15	0.013	1.4
	Bottom	16.0	8.12	29.64	37.8	8.17	0.66	0.468	0.0124	/	1.6	0.56	16.7	0.09	0.19	0.012	1.0

Continued Table 5 Survey Result to Seawater Quality in Flood and Spring Tide on Apr. 27, 2013 (3)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
46	Surface	16.8	8.17	29.51	20.4	8.17	0.85	0.433	0.0232	0.015	2.5	0.50	14.0	0.07	0.15	0.010	1.4
	Bottom	16.2	8.13	29.89	27.0	8.11	1.14	0.403	0.0195	/	1.3	1.09	18.3	0.07	0.14	0.012	1.4
47	Surface	16.8	8.18	29.42	21.8	8.15	1.04	0.472	0.0244	0.015	2.6	1.43	14.0	0.19	0.24	0.014	1.8
	Bottom	16.0	8.13	29.76	25.2	8.14	0.80	0.483	0.0204	/	1.4	0.27	13.8	0.07	0.12	0.010	1.5
48	Surface	16.8	8.19	29.43	19.4	7.82	0.74	0.378	0.0217	0.013	1.0	0.63	15.6	0.07	0.16	0.015	1.5
	Bottom	15.9	8.13	29.81	27.2	7.83	0.95	0.403	0.0195	/	1.5	0.31	15.0	0.10	0.14	0.011	1.7
49	Surface	16.7	8.2	29.36	18.2	7.8	0.64	0.328	0.0229	0.014	0.9	0.51	17.4	0.15	0.14	0.013	1.4
	Bottom	15.8	8.12	29.77	20.6	7.83	0.71	0.428	0.0207	/	0.9	0.26	19.0	0.08	0.11	0.015	1.9
50	Surface	16.4	8.13	29.23	27.2	7.99	0.89	0.376	0.0081	0.014	0.9	0.75	15.1	0.10	0.11	0.013	1.2
	Bottom	16.2	8.12	29.70	28.6	8.01	0.67	0.427	0.0158	/	2.2	0.82	17.0	0.14	0.08	0.013	1.4
51	Surface	16.5	8.14	29.36	40.4	7.91	0.67	0.351	0.0124	0.012	1.1	0.27	17.8	0.08	0.31	0.012	1.4
	Bottom	16.0	8.12	29.62	49.8	7.95	0.82	0.339	0.0121	/	1.0	0.56	19.3	0.13	0.13	0.010	1.4
52	Surface	16.5	8.15	29.41	25.4	7.94	0.65	0.363	0.0096	0.014	1.3	0.54	14.2	0.13	0.16	0.013	1.8
	Bottom	16.0	8.12	29.71	47.4	7.99	0.70	0.511	0.0069	/	1.0	0.35	15.9	0.14	0.16	0.010	1.6
53	Surface	16.5	8.16	29.21	15.6	7.69	0.78	0.482	0.0173	0.014	1.5	1.18	15.6	0.09	0.11	0.013	1.5
	Bottom	16.0	8.12	29.62	23.4	7.91	0.72	0.404	0.0241	/	1.4	0.81	18.6	0.09	0.20	0.010	1.6
54	Surface	16.6	8.18	29.27	33.2	7.27	0.67	0.389	0.0250	0.012	2.1	0.43	18.1	0.08	0.16	0.012	1.8
	Bottom	16.0	8.13	29.71	39.2	7.61	0.72	0.366	0.0173	/	2.0	0.32	16.7	0.13	0.14	0.016	1.5
55	Surface	16.7	8.18	29.23	22	7.63	0.78	0.408	0.0235	0.015	1.2	0.23	16.6	0.09	0.16	0.012	1.8
	Bottom	16.0	8.13	29.52	35.4	7.67	1.07	0.381	0.0254	/	1.3	0.64	17.4	0.07	0.11	0.011	1.4
56	Surface	16.7	8.19	29.17	19.4	7.73	0.75	0.464	0.0229	0.013	1.8	0.24	14.5	0.08	0.19	0.010	1.5
	Bottom	15.9	8.13	29.62	33.4	7.74	0.67	0.413	0.0207	/	0.9	0.20	15.8	0.09	0.15	0.010	1.4
57	Surface	16.6	8.18	29.31	26.0	7.63	0.62	0.404	0.0291	0.014	2.6	0.46	15.9	0.13	0.11	0.011	1.7
	Bottom	15.9	8.12	29.67	21.6	7.68	0.66	0.413	0.0201	/	2.4	0.24	19.6	0.07	0.16	0.010	1.7

Continued Table 5 Survey Result to Seawater Quality in Flood and Spring Tide on Apr. 27, 2013 (4)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
58	Surface	18.0	8.13	29.30	26.2	7.80	0.78	0.432	0.0115	0.013	0.8	1.10	17.5	0.23	0.14	0.013	1.5
	Bottom	16.2	8.10	29.56	102.8	7.96	0.73	0.372	0.0146	/	0.8	1.09	18.6	0.24	0.10	0.011	1.3
59	Surface	18.2	8.11	29.40	37.4	7.84	0.86	0.410	0.0102	0.014	3.3	1.21	18.8	0.09	0.10	0.011	1.2
	Bottom	16.0	8.12	29.71	145.0	8.05	1.05	0.346	0.0127	/	1.3	0.33	18.3	0.09	0.13	0.009	1.1
60	Surface	18.1	8.12	29.20	58.4	7.91	0.71	0.370	0.0093	0.013	1.2	0.62	18.3	0.09	0.20	0.014	1.0
	Bottom	16.8	8.10	29.61	132.4	7.95	0.74	0.398	0.0090	/	1.2	0.79	14.6	0.09	0.16	0.011	1.2
61	Surface	18.2	8.12	29.50	21.6	8.03	1.14	0.432	0.0124	0.012	2.3	0.28	18.6	0.09	0.12	0.012	1.6
	Bottom	16.2	8.10	29.73	50.0	8.04	1.04	0.452	0.0109	/	1.8	0.74	19.0	0.11	0.10	0.009	1.4
62	Surface	18.0	8.13	29.41	30.6	7.66	0.87	0.368	0.0093	0.015	2.0	0.35	14.6	0.09	0.19	0.010	1.3
	Bottom	16.0	8.11	29.67	59.8	7.73	0.80	0.371	0.0115	/	1.2	0.74	19.1	0.10	0.09	0.012	1.0
63	Surface	18.8	8.09	29.62	35.8	8.11	0.74	0.425	0.0180	0.016	1.2	0.96	14.9	0.19	0.17	0.014	1.3
	Bottom	17.6	8.08	29.83	40.4	8.28	0.69	0.403	0.0118	/	1.2	1.15	17.8	0.21	0.16	0.012	1.1
64	Surface	18.6	8.12	29.61	35.4	7.97	0.67	0.373	0.0081	0.016	1.3	1.79	18.6	0.25	0.15	0.010	1.0
	Bottom	17.0	8.10	29.76	38.4	8.12	1.01	0.395	0.0072	/	1.9	1.66	17.4	0.21	0.17	0.009	1.3
65	Surface	18.2	8.13	29.56	31.2	8.09	0.67	0.355	0.0115	0.016	1.2	0.23	15.8	0.11	0.10	0.012	1.8
	Bottom	16.2	8.11	29.81	38.0	7.97	0.63	0.392	0.0102	/	1.3	0.51	18.4	0.12	0.12	0.013	1.1
66	Surface	18.0	8.12	29.40	45.4	8.05	0.73	0.415	0.0090	0.014	1.2	1.18	17.5	0.28	0.09	0.013	1.1
	Bottom	16.2	8.11	29.73	81.4	8.05	1.21	0.399	0.0115	/	1.1	0.28	15.5	0.09	0.13	0.011	1.2
67	Surface	18.0	8.09	29.50	25.2	7.97	1.05	0.360	0.0072	0.019	1.1	0.23	13.7	0.08	0.13	0.012	1.3
	Bottom	16.1	8.10	29.64	120.2	8.09	0.99	0.339	0.0106	/	1.1	0.77	18.5	0.11	0.12	0.010	1.6
68	Surface	17.8	8.11	29.72	52.4	8.03	0.58	0.321	0.0173	0.014	2.0	0.72	14.6	0.12	0.09	0.013	1.2
	Bottom	16.6	8.12	29.85	53.0	8.14	0.68	0.400	0.0201	/	1.4	0.70	17.2	0.11	0.12	0.017	1.3
69	Surface	16.2	8.11	28.71	35.4	7.91	0.64	0.359	0.0146	0.014	1.9	0.43	17.8	0.15	0.08	0.013	1.2
	Bottom	16.0	8.12	28.97	77.8	8.05	0.64	0.433	0.0093	/	2.0	0.54	13.7	0.16	0.07	0.010	1.1

Continued Table 5 Survey Result to Seawater Quality in Flood and Spring Tide on Apr. 27, 2013 (5)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
70	Surface	16.3	8.11	29.71	25.4	7.43	0.70	0.312	0.0133	0.015	1.8	0.47	14.0	0.15	0.15	0.011	1.1
	Bottom	16.1	8.12	29.88	60.2	7.47	0.67	0.348	0.0139	/	2.5	0.41	16.3	0.18	0.17	0.014	1.6
71	Surface	18.0	8.13	29.37	22.4	8.05	1.10	0.351	0.0096	0.013	1.3	1.52	18.8	0.12	0.13	0.014	1.1
	Bottom	16.2	8.12	29.71	60.8	8.12	0.94	0.388	0.0115	/	2.2	1.29	18.3	0.10	0.13	0.013	1.3
72	Surface	17.0	8.12	29.40	24.4	8.01	1.18	0.395	0.0106	0.015	0.9	1.01	16.2	0.29	0.10	0.015	1.3
	Bottom	16.0	8.10	29.63	55.0	8.05	0.88	0.367	0.0084	/	1.2	1.32	14.0	0.12	0.10	0.013	1.2
73	Surface	17.7	8.09	29.68	40.8	8.17	0.67	0.309	0.0090	0.012	1.4	0.75	17.8	0.16	0.13	0.012	1.2
	Bottom	16.5	8.10	29.87	69.2	8.17	0.66	0.271	0.0124	/	1.9	0.43	15.2	0.11	0.09	0.010	1.1
74	Surface	16.1	8.12	29.22	33.2	7.44	0.63	0.420	0.0090	0.014	1.8	0.79	16.1	0.16	0.07	0.009	1.0
	Bottom	16.0	8.12	29.42	94.8	7.77	0.77	0.307	0.0170	/	1.8	0.62	13.8	0.11	0.09	0.012	1.6
75	Surface	16.3	8.13	29.87	25.6	7.62	0.55	0.390	0.0352	0.014	1.6	0.83	14.4	0.16	0.15	0.010	1.2
	Bottom	16.3	8.14	29.87	65.0	7.89	0.61	0.322	0.0331	/	1.7	0.33	13.2	0.07	0.07	0.013	1.3
76	Surface	16.5	8.15	29.92	27.2	7.55	0.71	0.328	0.0210	0.013	2.3	0.56	17.2	0.16	0.09	0.010	1.5
	Bottom	16.2	8.16	29.90	60.0	7.95	0.66	0.266	0.0170	/	1.4	0.80	17.0	0.10	0.08	0.012	1.2
77	Surface	16.7	8.17	29.60	23.4	7.33	0.61	0.315	0.0102	0.012	1.3	0.63	16.6	0.14	0.07	0.016	1.4
	Bottom	16.3	8.18	29.88	34.4	7.56	0.80	0.296	0.0133	/	1.5	0.85	17.8	0.08	0.08	0.011	1.3
78	Surface	17.7	8.1	29.7	38.8	7.85	0.7	0.274	0.0124	0.016	1.2	0.28	15.8	0.1	0.14	0.013	1.5
	Bottom	16.6	8.1	29.96	70.4	8.19	0.59	0.28	0.0195	/	1.2	0.52	15.6	0.1	0.05	0.015	1.5
79	Surface	17.5	8.13	29.71	58.6	7.69	0.72	0.348	0.0198	0.014	1.8	0.7	19.1	0.1	0.16	0.013	1.4
	Bottom	16.5	8.14	29.92	80.6	7.89	0.64	0.243	0.013	/	1.3	0.66	16.3	0.08	0.09	0.016	1.9
80	Surface	17.1	8.13	29.74	28	7.76	0.59	0.348	0.0133	0.015	1.7	0.63	16.7	0.14	0.06	0.01	1.4
	Bottom	16.4	8.15	29.8	42	7.96	0.63	0.355	0.0136	/	2	0.29	16.2	0.07	0.16	0.013	1.3
81	Surface	17	8.15	29.81	22.2	7.65	0.67	0.33	0.0173	0.014	1.8	1	15.6	0.08	0.07	0.012	1.3
	Bottom	16.3	8.17	29.9	38.6	7.69	0.65	0.294	0.0186	/	1.3	0.35	16.5	0.07	0.16	0.016	1.9

Table 6 Survey Result to Seawater Quality in Ebb and Spring Tide on Apr. 27, 2013

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
1	Surface	19.10	8.20	30.48	103.3	8.07	1.06	0.472	0.0264	0.0312	1.51	1.40	16.90	0.047	0.58	0.061	1.39
2	Surface	18.73	8.13	29.64	106.0	8.33	0.80	0.570	0.0203	0.0225	1.86	1.27	13.10	0.044	0.46	0.063	1.38
3	Surface	18.69	8.09	30.16	130.7	7.98	0.90	0.454	0.0185	0.0346	1.66	0.97	15.00	0.042	1.12	0.062	1.35
4	Surface	19.05	8.17	29.74	112.7	7.84	0.78	0.475	0.0191	0.0294	1.31	0.38	11.90	0.042	1.02	0.059	1.35
5	Surface	18.69	8.11	30.42	88.7	7.84	0.75	0.523	0.0176	0.0416	2.03	1.59	21.43	0.055	0.78	0.057	1.40
6	Surface	19.04	8.15	30.27	165.7	7.78	0.79	0.460	0.0173	0.0364	1.16	0.46	10.48	0.038	0.76	0.057	1.41
7	Surface	18.59	8.14	29.93	133.0	7.86	0.82	0.539	0.0176	0.026	1.33	1.70	17.62	0.061	1.52	0.059	1.38
8	Surface	18.84	8.14	30.64	108.0	7.97	0.62	0.639	0.0188	0.0398	1.31	1.50	14.05	0.120	1.17	0.056	1.37
9	Surface	17.49	8.18	29.27	180.0	7.96	0.51	0.610	0.0206	0.0277	1.15	1.66	20.71	0.110	0.47	0.056	1.37
	Bottom	17.29	8.19	29.36	190.3	7.90	0.82	0.562	0.0176	/	1.31	1.60	16.67	0.148	1.12	0.055	1.40
10	Surface	18.62	8.23	30.27	118.3	7.85	0.61	0.551	0.0258	0.0277	1.80	1.86	19.29	0.123	0.54	0.056	1.36
11	Surface	18.47	8.17	30.04	112.0	7.88	0.75	0.453	0.0318	0.0329	1.62	1.06	15.71	0.084	1.15	0.057	1.40
12	Surface	18.38	8.12	29.85	139.3	7.74	0.67	0.532	0.0321	0.0346	1.65	1.92	19.52	0.174	0.79	0.056	1.45
	Bottom	18.12	8.11	29.63	170.0	7.66	0.82	0.520	0.0321	/	1.55	1.16	21.43	0.103	1.14	0.064	1.41
13	Surface	17.62	8.21	29.41	90.3	8.02	0.54	0.610	0.0306	0.026	0.97	0.89	22.38	0.090	1.01	0.055	1.42
	Bottom	17.49	8.21	29.37	162.7	8.27	0.74	0.519	0.0312	/	0.87	1.11	18.33	0.061	0.54	0.061	1.43
14	Surface	18.14	7.98	28.61	172	7.57	0.61	0.617	0.04	0.021	1.04	1.82	13.57	0.123	0.74	0.069	1.44
15	Surface	17.39	8.00	28.8	162.7	7.76	0.49	0.599	0.0385	0.019	1.07	0.85	14.76	0.124	0.6	0.063	1.36
16	Surface	17.34	8.31	28.82	122	8.12	0.75	0.481	0.0361	0.036	1.06	1.97	15.71	0.128	1.06	0.064	1.38
	Bottom	17.36	8.31	29.75	158	7.68	0.66	0.571	0.0394	/	1.41	2.14	17.86	0.089	0.78	0.066	1.37
17	Surface	17.18	8.31	29.51	97.3	8.1	0.78	0.567	0.027	0.021	1.24	1.38	17.38	0.128	0.46	0.068	1.39
	Bottom	17.51	8.28	29.45	157.3	7.94	0.88	0.517	0.0276	/	1.13	1.53	13.81	0.091	0.73	0.069	1.39

Continued Table 6 Survey Result to Seawater Quality in Ebb and Spring Tide on Apr. 27, 2013 (1)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
18	Surface	17.26	8.22	29.44	103.3	8.06	0.64	0.485	0.0258	0.019	0.9	1.13	11.19	0.094	0.44	0.064	1.37
	Bottom	17.54	8.22	29.47	118	7.82	0.72	0.579	0.0285	/	0.81	0.96	12.62	0.122	0.54	0.066	1.45
19	Surface	17.33	7.98	28.71	132	7.91	0.57	0.525	0.0267	0.028	0.96	1.26	12.62	0.087	0.61	0.068	1.4
20	Surface	17.77	8	28.97	119	7.92	0.46	0.487	0.0248	0.026	0.83	1.15	13.1	0.065	0.68	0.014	0.95
21	Surface	17.3	8.32	29.84	113	8.44	0.52	0.542	0.0282	0.029	0.85	0.99	13.81	0.195	0.96	0.029	1.15
	Bottom	18.18	8.29	30.01	135.7	8.14	0.52	0.634	0.0233	/	0.96	0.92	16.9	0.099	0.71	0.041	1.22
22	Surface	17.3	8.25	29.56	102.3	8.3	0.54	0.342	0.0236	0.016	1.2	0.95	17.62	0.118	0.95	0.038	1.34
	Bottom	17.78	8.24	29.72	130.7	8.52	0.61	0.443	0.0118	/	0.87	0.6	19.29	0.092	0.9	0.041	1.32
23	Surface	17.31	8.25	29.65	159	8.32	0.59	0.483	0.0197	0.021	0.8	0.64	11.43	0.084	0.77	0.041	1.2
	Bottom	17.55	8.25	29.69	171.7	8.24	0.5	0.267	0.0294	/	1.11	0.98	14.52	0.124	0.57	0.042	1.29
24	Surface	17.16	7.94	28.26	232.7	7.52	0.58	0.386	0.0245	0.029	0.97	0.93	14.05	0.084	0.87	0.049	1.14
25	Surface	18.76	7.98	28.73	118.3	7.71	0.7	0.406	0.0355	0.042	1.45	1.54	16.9	0.163	1.52	0.048	1.01
26	Surface	18.38	7.97	28.49	108.3	8.05	0.48	0.426	0.0224	0.035	1.83	0.39	15.48	0.074	1.64	0.048	1.3
27	Surface	19.57	8.29	30.08	136	8.28	0.54	0.342	0.0148	0.031	0.97	1.03	12.38	0.15	0.58	0.048	1.22
	Bottom	17.22	8.31	30.34	147.3	7.98	0.62	0.538	0.0379	/	0.94	0.55	16.67	0.117	0.52	0.049	1.28
28	Surface	16.94	8.28	29.56	92	8.54	0.64	0.554	0.0297	0.023	0.96	1.06	20	0.114	0.6	0.049	1.31
	Bottom	17.7	8.26	29.79	136.7	8.02	0.67	0.312	0.0221	/	0.89	0.42	16.43	0.081	0.57	0.049	1.33
29	Surface	17.29	7.96	28.97	106	8.02	0.66	0.507	0.0212	0.04	0.94	0.78	17.38	0.058	0.51	0.048	1.28
30	Surface	19.55	8.01	29.35	163	8.04	0.48	0.419	0.0221	0.021	0.88	0.85	14.52	0.247	1.42	0.048	1.37
31	Surface	17.01	7.97	29.27	101	8.06	0.54	0.3689	0.0233	0.0294	0.75	0.57	15.71	0.036	0.5	0.05	1.25
32	Surface	17.86	7.98	29.32	117	8.18	0.56	0.527	0.0306	0.0225	0.74	1.08	21.9	0.093	0.72	0.049	1.04
33	Surface	18.64	8.31	30.08	124.7	8.56	0.54	0.435	0.0233	0.028	1.12	0.96	11.67	0.107	1.31	0.048	1.02
	Bottom	17.86	8.28	30.35	132	8.33	0.61	0.345	0.0252	/	0.87	1.01	17.86	0.136	0.57	0.052	1.19

Continued Table 6 Survey Result to Seawater Quality in Ebb and Spring Tide on Apr. 27, 2013 (2)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
34	Surface	18.1	8.1	29.16	15.4	8.03	0.78	0.395	0.0152	0.014	1.5	1.14	15.8	0.16	0.14	0.011	1.3
	Bottom	17.8	8.12	29.42	27.2	8.11	0.67	0.404	0.0109	/	2.2	0.28	19.5	0.07	0.09	0.013	1.6
35	Surface	17.9	8.11	29.07	19.6	8.09	0.92	0.388	0.0069	0.013	1.1	0.57	17.7	0.06	0.26	0.013	1.3
	Bottom	17.4	8.13	29.32	40.4	8.13	0.87	0.448	0.0118	/	1.7	0.5	19.8	0.08	0.22	0.013	1.5
36	Surface	18.1	8.11	29.02	11.8	8.09	1.01	0.352	0.0065	0.013	2	0.39	18.2	0.07	0.2	0.01	1.1
	Bottom	17.8	8.12	29.24	25	8.06	0.89	0.372	0.0062	/	1.8	0.7	15.7	0.04	0.21	0.01	1.5
37	Surface	18.0	8.12	29.07	25.6	8.08	0.80	0.366	0.0204	0.014	1.9	0.85	19.2	0.04	0.12	0.009	1.5
	Bottom	17.8	8.14	29.11	60.6	8.12	0.67	0.482	0.0217	/	2.0	0.39	16.3	0.08	0.14	0.013	1.5
38	Surface	18.0	8.12	29.20	50.0	8.04	0.67	0.364	0.0207	0.015	1.0	0.30	18.2	0.05	0.11	0.009	1.5
	Bottom	17.7	8.13	29.23	37.8	8.12	0.88	0.359	0.0269	/	1.7	0.39	18.3	0.08	0.09	0.011	1.5
39	Surface	17.9	8.14	29.56	20.6	8.09	0.63	0.377	0.0269	0.013	2.2	0.28	15.0	0.05	0.16	0.010	1.7
	Bottom	17.5	8.16	29.27	47.0	8.09	0.70	0.395	0.0247	/	1.6	0.50	19.2	0.09	0.15	0.013	1.3
40	Surface	18.0	8.15	29.21	52.8	8.06	0.89	0.453	0.0109	0.014	1.4	0.92	15.9	0.13	0.11	0.011	1.4
	Bottom	17.5	8.17	29.41	19.6	8.07	0.82	0.346	0.0173	/	1.8	0.29	15.6	0.08	0.14	0.009	1.6
41	Surface	17.9	8.12	29.1	17	8.03	1.01	0.426	0.0081	0.013	1.6	0.39	15.7	0.04	0.27	0.014	1.5
	Bottom	17.5	8.13	29.36	63.2	8.11	0.86	0.466	0.0106	/	2.5	0.38	17.7	0.07	0.11	0.009	1.7
42	Surface	18	8.13	29.07	15.8	8.1	0.8	0.319	0.0176	0.014	1.3	0.5	15.1	0.07	0.16	0.012	1.5
	Bottom	17.7	8.15	29.26	23.2	8.1	0.83	0.442	0.0075	/	1.6	0.58	14.4	0.05	0.15	0.009	1.3
43	Surface	17.9	8.11	28.67	55.8	8.08	0.78	0.391	0.0244	0.015	2.1	0.27	16.7	0.06	0.12	0.010	1.9
	Bottom	17.4	8.12	29.15	91.4	8.11	0.68	0.461	0.0226	/	1.5	0.56	18.6	0.05	0.14	0.014	1.2
44	Surface	17.9	8.10	28.86	49.4	8.08	0.80	0.397	0.0254	0.014	2.1	0.46	15.6	0.08	0.12	0.014	1.4
	Bottom	17.7	8.12	29.03	83.6	8.13	0.82	0.404	0.0291	/	0.9	0.54	18.7	0.06	0.09	0.011	1.6
45	Surface	18.1	8.11	28.90	23.4	8.16	0.77	0.414	0.0244	0.017	1.4	0.33	18.8	0.13	0.17	0.010	1.3
	Bottom	17.8	8.12	29.07	69.8	8.21	0.75	0.430	0.0247	/	1.8	0.65	18.3	0.09	0.16	0.012	1.8

Continued Table 6 Survey Result to Seawater Quality in Ebb and Spring Tide on Apr. 27, 2013 (3)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
46	Surface	17.0	8.18	29.42	21.6	8.11	1.07	0.430	0.0241	0.015	1.6	0.56	18.5	0.07	0.09	0.013	1.5
	Bottom	16.4	8.14	29.73	23.4	8.15	0.86	0.411	0.0207	/	1.4	0.59	15.9	0.09	0.16	0.011	1.4
47	Surface	17	8.19	29.26	26.8	8.15	1.06	0.461	0.0217	0.014	1.1	0.31	14.6	0.09	0.11	0.014	1.5
	Bottom	16.5	8.13	29.47	25.2	8.19	0.98	0.473	0.0229		1	0.46	18.4	0.09	0.17	0.013	1.5
48	Surface	17.2	8.2	29.17	25	8.13	0.93	0.373	0.021	0.016	1.8	0.33	18.9	0.06	0.12	0.013	1.5
	Bottom	16.5	8.14	29.42	36.6	8.21	0.77	0.399	0.0247		1.8	0.35	14.6	0.09	0.16	0.012	1.5
49	Surface	17.2	8.2	29.21	20.2	8.1	0.78	0.396	0.0213	0.015	1.5	1.54	17.3	0.06	0.14	0.009	1.4
	Bottom	16.6	8.14	29.41	21.4	8.11	0.72	0.383	0.021		2.1	0.94	15.4	0.06	0.09	0.014	1.6
50	Surface	16.8	8.14	29.27	47.8	8.11	0.74	0.371	0.0161	0.012	2.4	0.46	18.5	0.07	0.12	0.014	2.3
	Bottom	16.5	8.10	29.41	31.8	8.16	0.75	0.419	0.0143	/	1.1	1.15	16.8	0.05	0.16	0.012	1.6
51	Surface	17.0	8.14	29.07	26.4	8.08	0.72	0.334	0.0127	0.014	1.1	0.56	18.1	0.06	0.11	0.012	1.3
	Bottom	16.4	8.11	29.26	27.4	8.12	0.75	0.367	0.0139	/	2.1	0.37	15.7	0.09	0.17	0.011	1.5
52	Surface	17.0	8.15	29.16	25.8	8.05	0.64	0.480	0.0106	0.013	1.6	0.41	18.8	0.06	0.10	0.011	1.5
	Bottom	16.4	8.12	29.36	21.4	8.07	0.67	0.473	0.0124	/	0.9	0.89	14.4	0.04	0.16	0.009	1.4
53	Surface	17.2	8.16	29.07	28.4	8.05	0.69	0.401	0.0146	0.013	2.4	0.51	13.6	0.08	0.09	0.012	1.9
	Bottom	16.4	8.13	29.27	34.4	8.05	0.64	0.390	0.0192	/	1.2	0.29	15.3	0.04	0.15	0.016	1.4
54	Surface	17.3	8.18	29.26	30.6	8.14	0.69	0.376	0.021	0.014	1.4	0.22	16	0.06	0.08	0.012	1.9
	Bottom	16.4	8.14	29.36	28.8	8.17	0.67	0.397	0.0155	/	1.8	0.81	18.1	0.05	0.14	0.011	1.3
55	Surface	17.4	8.22	29.02	21	8.01	0.88	0.384	0.0186	0.014	2.3	0.54	18.6	0.1	0.17	0.015	2
	Bottom	16.5	8.18	29.24	33.6	8.05	0.78	0.457	0.0161	/	1.1	0.66	17.3	0.09	0.12	0.013	2
56	Surface	17.4	8.21	29.11	23.6	8.03	1.09	0.36	0.0161	0.014	3.3	0.45	18.4	0.05	0.16	0.01	1.6
	Bottom	16.6	8.15	29.3	35.6	8.08	0.82	0.288	0.0217	/	1.2	0.24	18.6	0.09	0.11	0.011	1.8
57	Surface	17.3	8.19	29.11	32.6	8.15	0.75	0.418	0.0213	0.016	1.2	0.73	16.4	0.12	0.16	0.016	1.6
	Bottom	16.4	8.16	29.17	31.4	8.19	0.85	0.419	0.0189	/	1.2	0.97	13.1	0.06	0.13	0.011	1.6

Continued Table 6 Survey Result to Seawater Quality in Ebb and Spring Tide on Apr. 27, 2013 (4)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
58	Surface	18.0	8.13	29.17	35.4	8.23	1.12	0.369	0.0109	0.015	1.5	0.31	17.9	0.06	0.09	0.011	1.6
	Bottom	17.1	8.10	29.40	75.4	8.29	0.89	0.366	0.0130	/	2.0	0.63	13.7	0.17	0.10	0.012	1.4
59	Surface	18.0	8.13	29.14	24.4	8.14	0.81	0.338	0.0093	0.015	2.8	0.29	15.4	0.06	0.13	0.010	1.3
	Bottom	16.9	8.12	29.27	53.6	8.23	0.75	0.387	0.0127	/	3.5	0.50	18.4	0.12	0.11	0.009	1.4
60	Surface	18.1	8.13	29.27	27.2	8.16	0.79	0.371	0.0121	0.013	1.2	0.89	17.7	0.06	0.11	0.012	1.6
	Bottom	17.2	8.12	29.56	83.0	8.17	1.15	0.354	0.0155	/	1.7	0.61	14.6	0.09	0.12	0.009	1.2
61	Surface	18.4	8.13	29.27	30.8	8.12	0.74	0.361	0.0130	0.015	1.1	1.50	19.9	0.08	0.11	0.011	1.3
	Bottom	17.3	8.12	29.30	95.8	8.15	1.01	0.401	0.0112	/	1.2	1.62	19.8	0.09	0.09	0.010	1.5
62	Surface	18.6	8.13	29.46	18.6	8.07	0.67	0.341	0.0127	0.018	1.2	1.44	16.3	0.07	0.11	0.012	1.0
	Bottom	17.5	8.12	29.31	145.2	8.12	0.61	0.360	0.0109	/	1.8	1.75	14.0	0.10	0.18	0.012	1.1
63	Surface	19.0	8.10	29.53	72.2	8.13	0.77	0.380	0.0133	0.014	1.6	0.77	15.3	0.05	0.11	0.013	1.1
	Bottom	17.8	8.08	29.76	98.0	8.27	0.89	0.374	0.0093	/	2.3	0.31	18.6	0.07	0.17	0.013	1.0
64	Surface	19.0	8.13	29.24	51.8	8.03	0.91	0.385	0.0099	0.018	1.3	1.86	13.7	0.25	0.11	0.014	1.7
	Bottom	18.0	8.11	29.36	88.0	8.10	1.05	0.382	0.0084	/	2.0	1.33	18.4	0.06	0.08	0.011	1.0
65	Surface	18.8	8.13	29.26	51.4	8.11	0.75	0.359	0.0124	0.019	0.8	1.57	15.9	0.24	0.12	0.013	1.1
	Bottom	17.8	8.12	29.53	119.0	8.15	1.08	0.374	0.0112	/	1.5	0.74	17.2	0.07	0.12	0.009	1.3
66	Surface	18.6	8.12	29.12	20.6	8.15	0.72	0.390	0.0127	0.014	1.1	0.92	14.4	0.11	0.13	0.011	1.1
	Bottom	17.4	8.12	29.36	44.6	8.13	0.77	0.385	0.0102	/	1.2	0.29	18.4	0.07	0.17	0.012	1.2
67	Surface	18.5	8.11	29.11	21.2	8.04	0.91	0.367	0.0093	0.014	1.7	0.52	15.4	0.09	0.18	0.011	1.2
	Bottom	17.4	8.12	29.41	36.2	8.11	0.88	0.362	0.0118	/	1.2	1.02	18.1	0.18	0.17	0.013	1.4
68	Surface	18.2	8.10	29.62	48.6	8.09	0.73	0.402	0.0099	0.013	1.3	0.59	17.2	0.17	0.14	0.012	1.5
	Bottom	16.7	8.10	29.70	59.4	8.23	0.63	0.317	0.0158	/	1.6	0.30	14.0	0.17	0.14	0.014	1.3
69	Surface	17.7	8.12	29.32	67.6	8.07	0.82	0.325	0.0155	0.014	1.2	0.81	15.5	0.07	0.15	0.011	1.4

Continued Table 6 Survey Result to Seawater Quality in Ebb and Spring Tide on Apr. 27, 2013 (5)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
70	Surface	16.8	8.12	29.16	65.2	8.06	0.80	0.299	0.0198	0.014	1.4	0.20	17.7	0.07	0.09	0.012	1.3
	Bottom	17.8	8.13	29.66	102.4	8.09	0.73	0.298	0.0152	/	1.6	0.36	15.3	0.12	0.08	0.017	1.2
71	Surface	16.6	8.14	29.12	55.8	8.12	0.82	0.404	0.0118	0.018	2.1	1.76	16.2	0.23	0.09	0.014	1.0
	Bottom	18.4	8.12	29.41	110.0	8.12	0.98	0.420	0.0115	/	1.7	0.40	15.0	0.09	0.09	0.011	1.3
72	Surface	17.2	8.12	29.17	36.2	8.10	0.89	0.414	0.0130	0.014	1.8	0.38	16.4	0.09	0.12	0.013	1.2
	Bottom	18.5	8.11	29.40	75.8	8.10	0.74	0.352	0.0152	/	1.4	0.93	16.1	0.20	0.13	0.013	1.3
73	Surface	17.2	8.11	29.41	52.6	8.19	0.62	0.284	0.0146	0.015	1.9	1.01	17.8	0.22	0.07	0.009	1.5
	Bottom	18.3	8.10	29.67	119.6	8.25	0.56	0.371	0.0164	/	1.3	0.89	15.0	0.16	0.09	0.013	1.3
74	Surface	17.0	8.12	29.27	48.6	8.05	0.59	0.334	0.0109	0.012	2.1	0.27	18.7	0.09	0.09	0.012	1.3
	Bottom	17.8	8.12	29.71	114.0	8.06	0.72	0.345	0.0121	/	1.3	0.63	18.7	0.16	0.13	0.016	1.5
75	Surface	16.7	8.14	29.56	98.4	8.09	0.63	0.264	0.0102	0.016	1.7	0.97	18.9	0.21	0.07	0.010	1.5
	Bottom	18.0	8.15	29.82	107.0	8.11	0.74	0.273	0.0124	/	2.3	1.78	18.4	0.08	0.09	0.011	2.0
76	Surface	16.7	8.16	29.42	45.4	8.12	1.09	0.300	0.0152	0.015	1.5	1.45	17.0	0.19	0.14	0.013	1.1
	Bottom	18.0	8.16	29.76	34.0	8.13	0.75	0.252	0.0115	/	1.7	1.26	19.5	0.24	0.14	0.015	1.2
77	Surface	16.7	8.15	29.54	32.6	8.13	0.78	0.288	0.0124	0.014	1.4	0.41	18.8	0.13	0.09	0.012	1.2
	Bottom	18.1	8.17	29.81	44.0	8.23	0.87	0.290	0.0130	/	1.3	0.85	17.8	0.17	0.13	0.011	1.8
78	Surface	17	8.11	29.58	39.8	8.09	0.58	0.301	0.0183	0.012	1.9	0.45	14	0.12	0.07	0.013	1.9
	Bottom	18.3	8.12	29.62	53.4	8.03	0.6	0.299	0.0146		2	0.6	18.4	0.13	0.09	0.015	1.9
79	Surface	16.9	8.12	29.4	33.6	8.17	0.64	0.294	0.0139	0.015	1.6	0.86	18.3	0.17	0.12	0.013	1.4
	Bottom	18.4	8.13	29.67	53.4	8.22	0.82	0.287	0.0158		1.9	0.41	17.2	0.14	0.14	0.011	1.3
80	Surface	17.1	8.12	29.38	45.2	8.08	1.28	0.308	0.0183	0.013	1.6	0.38	18	0.15	0.14	0.013	1.4
	Bottom	18.4	8.14	29.64	61	8.15	1.12	0.361	0.0155		1.4	0.85	17.3	0.16	0.07	0.016	1.3
81	Surface	17.2	8.15	29.6	24.6	8.17	0.54	0.321	0.0164	0.012	1.8	0.71	13.2	0.13	0.09	0.011	1.3
	Bottom	18.2	8.16	29.87	50.8	8.23	0.94	0.263	0.0115		1.3	0.28	17	0.12	0.08	0.016	1.1

Table 7 Survey Result to Seawater Quality in Flood and Neap Tide on May 4, 2013

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
1	Surface	19.15	8.08	29.55	39.7	8.35	1.43	0.8635	0.0066	0.022	1.23	0.69	20.23	0.043	0.64	0.048	1.54
2	Surface	18.71	8.08	29.61	20.3	8.34	1.52	0.7935	0.0049	0.021	2.32	0.93	22.33	0.040	0.78	0.049	1.27
3	Surface	19.07	8.69	29.75	76.3	10.91	7.12	0.528	0.0127	0.031	1.47	1.37	12.79	0.080	1.87	0.048	1.38
4	Surface	18.81	8.07	29.35	61.3	8.29	1.50	0.7748	0.0173	0.028	0.91	0.82	19.30	0.057	0.89	0.047	1.52
5	Surface	18.77	8.09	29.98	48.7	8.38	1.58	0.8555	0.0081	0.033	2.40	1.10	22.09	0.044	0.73	0.045	1.40
6	Surface	18.43	8.31	30.03	58.0	11.62	4.24	0.5522	0.0026	0.029	1.54	1.40	16.28	0.015	0.73	0.046	1.54
7	Surface	18.69	8.07	27.46	40.7	8.08	2.56	1.1289	0.0219	0.017	0.71	0.47	14.88	0.034	0.62	0.049	1.61
8	Surface	18.74	8.11	29.70	13.7	8.66	2.31	0.8688	0.0127	0.028	1.21	0.64	19.77	0.027	0.52	0.051	1.40
9	Surface	18.07	8.49	29.63	19.7	8.62	1.42	0.9075	0.0052	0.029	0.67	0.70	12.56	0.036	0.67	0.054	1.20
	Bottom	17.95	8.47	29.68	23.7	8.52	1.07	1.0202	0.0061	/	1.40	0.72	14.88	0.044	1.18	0.053	1.36
10	Surface	19.02	8.10	29.58	52.7	8.44	1.32	0.8865	0.0135	0.019	1.96	0.78	16.74	0.034	0.43	0.051	1.19
11	Surface	18.64	8.13	30.05	52.0	8.80	2.06	1.0676	0.0035	0.031	2.46	0.65	18.84	0.035	0.69	0.048	1.16
12	Surface	18.48	8.14	30.14	51.0	8.92	2.19	0.996	0.0081	0.028	2.09	0.96	13.02	0.035	0.92	0.051	1.93
	Bottom	18.38	8.12	30.14	48.7	8.84	2.08	1.1518	0.0075	/	1.46	0.90	19.30	0.034	0.79	0.051	1.26
13	Surface	18.43	8.47	29.66	18.0	8.51	1.10	0.8916	0.0046	0.017	1.85	1.12	16.74	0.050	1.34	0.052	0.99
	Bottom	18.16	8.44	29.69	14.0	8.36	1.47	0.9077	0.0049	/	1.12	0.93	14.65	0.043	0.91	0.052	1.11
14	Surface	18.03	8.15	28.99	13	7.98	0.68	0.847	0.0193	0.012	1.56	1.28	16.98	0.043	0.98	0.052	1.1
15	Surface	18.35	8.19	29.04	20.7	7.9	1.44	0.753	0.0213	0.016	1.01	1.1	14.88	0.041	1.04	0.051	1.16
	Bottom	18.56	8.18	29.08	22.7	8.06	1.38	0.922	0.0164	/	0.68	0.99	13.26	0.03	0.46	0.052	0.83
16	Surface	18.46	8.78	29.71	34.3	12.5	4.94	0.667	0.0026	0.029	0.78	1.33	13.49	0.033	1.26	0.05	1.16
	Bottom	18.07	8.68	29.79	29	10.48	2.29	0.615	0.0055	/	0.97	0.99	15.58	0.038	0.76	0.049	1.65
17	Surface	18.03	8.61	29.62	23.7	9.74	1.42	0.552	0.0063	0.017	1.3	1.01	10.7	0.035	0.97	0.046	1.34
	Bottom	18.31	8.58	29.65	25	8.71	1.26	0.574	0.0098	/	1.33	1.32	18.37	0.042	0.91	0.05	1.43

Continued Table 7 Survey Result to Seawater Quality in Flood and Neap Tide on May 4, 2013 (1)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
18	Surface	18.27	8.47	29.63	18	8.7	1.12	1.011	0.0058	0.016	0.8	1.52	13.26	0.035	1.08	0.053	1.34
	Bottom	17.97	8.45	29.73	23.3	8.42	1.48	0.54	0.0055	/	0.97	1.07	16.98	0.036	0.75	0.054	1.7
19	Surface	17.78	8.17	29.1	19	7.55	1.02	0.845	0.0184	0.021	1.05	1.05	15.35	0.034	1.32	0.052	1.28
20	Surface	18.74	8.27	29.16	14.3	9.06	1.33	0.661	0.0075	0.024	0.85	0.83	9.77	0.022	0.67	0.054	1.34
	Bottom	18.33	8.25	29.14	15	8.02	1.01	0.666	0.0124	/	0.65	1	13.49	0.035	0.56	0.052	0.74
21	Surface	17.72	8.92	29.89	36.3	15.96	5.97	0.552	0.0058	0.026	0.89	1.25	13.49	0.027	1.11	0.051	0.8
	Bottom	17.81	8.73	29.86	33.7	10.6	4.51	0.341	0.0069	/	0.97	0.85	13.02	0.041	1.19	0.05	0.9
22	Surface	17.11	8.64	30.02	17.7	14.01	3.92	0.615	0.0014	0.014	0.64	1.02	8.6	0.025	0.77	0.056	1.15
	Bottom	16.99	8.67	30.12	18.3	9.06	2.74	0.452	0.0058	/	0.85	1.12	11.63	0.048	0.92	0.051	1.04
23	Surface	17.42	8.71	29.95	32.3	13.06	3.42	0.64	0.0029	0.012	1.71	0.92	9.07	0.039	0.92	0.051	1.13
	Bottom	17.26	8.67	30.16	31.7	9.81	4.56	0.68	0.0058	/	0.82	0.89	10.7	0.036	1.24	0.056	1.65
24	Surface	19.54	8.1	28.08	36	7.9	0.85	0.716	0.0196	0.026	1.09	1.4	13.95	0.037	0.62	0.055	1.51
25	Surface	19.11	8.16	28.31	12.7	8.38	2.79	0.543	0.0141	0.038	1.14	1.21	15.35	0.084	1.4	0.051	1.51
26	Surface	18.68	8.41	28.35	20.7	10.93	4.12	0.562	0.0066	0.026	0.46	1.38	7.91	0.042	0.48	0.054	0.98
27	Surface	17.84	8.83	29.69	22.7	13.84	4.94	0.837	0.0061	0.022	1.25	1.44	17.21	0.048	1.23	0.052	1.24
	Bottom	17.71	8.55	30.07	7.3	8.7	3.99	0.365	0.0135	/	0.72	1.43	17.67	0.071	0.8	0.054	1.05
28	Surface	17.79	8.73	30.08	16.7	11.42	5.12	0.386	0.0072	0.021	0.57	0.92	10	0.03	1.53	0.05	1.22
	Bottom	17.77	8.64	30.13	28.3	9.68	1.7	0.55	0.0061	/	0.78	0.93	12.33	0.026	1.18	0.072	1.46
29	Surface	18.24	8.29	28.51	16.3	9.04	2.75	1.485	0.0121	0.038	1.04	1.3	17.91	0.032	1.11	0.05	1.19
30	Surface	18.52	8.42	29.2	10.7	10.52	2.37	0.515	0.0052	0.012	0.76	1.2	11.4	0.033	1.55	0.051	1.34
31	Surface	17.87	8.21	28.94	14.3	8	1.28	0.503	0.0135	0.022	0.74	1.08	11.86	0.073	1.08	0.055	1.39
32	Surface	17.94	8.41	29.27	6.3	9.04	1.78	1.135	0.0107	0.021	0.88	1.35	10.23	0.036	1.35	0.052	1.17
33	Surface	17.78	8.63	30.22	27	10.4	2.95	0.35	0.0017	0.019	1.54	1.33	14.19	0.044	1.03	0.055	1.31
	Bottom	17.68	8.63	30.26	27.7	9.14	2.53	0.523	0.0069	/	1.59	1.22	14.42	0.045	1.04	0.042	1.34

Continued Table 7 Survey Result to Seawater Quality in Flood and Neap Tide on May 4, 2013 (2)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
34	Surface	17.8	8.08	30.2	28.4	8.05	0.75	0.313	0.0078	0.012	2.2	0.58	15.2	0.07	0.09	0.012	1.6
	Bottom	17.5	8.12	30.22	44.2	8.09	1.07	0.333	0.0096	/	1.6	1.2	17	0.07	0.12	0.015	1.5
35	Surface	18	8.09	30.23	23.6	8.07	0.71	0.415	0.0115	0.013	1.6	0.77	16.7	0.12	0.08	0.01	1.3
	Bottom	17.6	8.12	30.21	49.8	8.12	1.09	0.298	0.0102	/	2	0.65	15.1	0.07	0.07	0.013	1.6
36	Surface	18	8.1	29.95	21	8	0.87	0.405	0.0118	0.014	1.4	0.82	17.7	0.07	0.14	0.012	1.7
	Bottom	17.5	8.13	30.14	51.4	8.05	1.05	0.414	0.0099	/	1.5	0.35	15.8	0.08	0.06	0.011	1.4
37	Surface	16.8	8.10	30.10	21.0	8.04	0.85	0.389	0.0084	0.014	1.7	0.93	16.8	0.21	0.05	0.010	1.3
	Bottom	16.5	8.11	30.12	41.6	8.06	1.29	0.401	0.0059	/	2.1	1.57	15.0	0.23	0.08	0.011	1.2
38	Surface	17.5	8.09	29.98	16.0	8.01	0.85	0.353	0.0065	0.012	2.9	1.40	14.6	0.24	0.10	0.017	1.6
	Bottom	17.3	8.10	30.27	48.0	8.05	1.27	0.412	0.0084	/	1.6	1.12	16.9	0.20	0.09	0.010	1.7
39	Surface	17.5	8.11	29.48	22.2	8.05	0.85	0.416	0.0102	0.012	1.6	1.03	15.6	0.20	0.08	0.013	1.5
	Bottom	17.1	8.12	30.20	63.8	8.07	1.11	0.265	0.0065	/	1.8	0.68	15.2	0.17	0.09	0.009	1.4
40	Surface	17.5	8.09	29.48	37.4	8.02	0.83	0.414	0.0072	0.012	2.6	0.98	16.5	0.18	0.07	0.010	1.4
	Bottom	17.0	8.12	30.18	48.2	8.09	1.10	0.295	0.0096	/	1.7	0.80	18.7	0.18	0.05	0.009	1.3
41	Surface	17.7	8.07	29.88	34.2	8.06	0.85	0.412	0.0121	0.014	2.5	1.15	15.8	0.21	0.06	0.013	1.3
	Bottom	17.5	8.1	30.24	51.6	8.07	1.05	0.298	0.0106	/	1.9	0.55	17.9	0.07	0.15	0.01	1.4
42	Surface	18	8.11	29.94	19	8.01	0.8	0.277	0.0093	0.015	1.9	0.77	18.2	0.18	0.06	0.009	1.9
	Bottom	17.6	8.13	30.11	110	8.03	1.03	0.411	0.0099	/	1.5	0.98	18.6	0.06	0.1	0.012	1.7
43	Surface	17.0	8.05	29.67	16.2	8.08	0.79	0.366	0.0047	0.015	1.6	0.79	17.7	0.18	0.07	0.010	1.3
	Bottom	16.6	8.07	30.10	34.2	8.07	0.97	0.434	0.0053	/	1.6	0.74	16.9	0.20	0.11	0.014	1.1
44	Surface	16.9	8.05	29.27	18.6	8.05	0.85	0.418	0.0062	0.014	1.5	1.04	13.4	0.15	0.06	0.009	1.8
	Bottom	16.7	8.03	30.12	48.8	8.05	0.92	0.416	0.0056	/	1.7	0.89	12.9	0.22	0.10	0.010	1.7
45	Surface	17.1	8.06	30.20	14.8	8.05	0.79	0.409	0.0084	0.013	1.9	1.37	18.8	0.17	0.06	0.010	1.6
	Bottom	16.9	8.08	30.26	57.8	8.05	1.17	0.412	0.0078	/	3.3	1.26	17.1	0.23	0.08	0.013	1.4

Continued Table 7 Survey Result to Seawater Quality in Flood and Neap Tide on May 4, 2013 (3)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
46	Surface	17.1	8.12	30.33	14.6	8.02	1.07	0.295	0.0130	0.013	1.6	0.22	18.7	0.11	0.09	0.012	1.8
	Bottom	16.2	8.10	30.48	24.2	8.07	0.77	0.277	0.0143	/	1.8	0.75	15.9	0.18	0.07	0.009	1.2
47	Surface	17.1	8.12	30.11	13.8	8.02	0.8	0.309	0.0087	0.015	1.5	0.54	17.7	0.12	0.11	0.009	1.2
	Bottom	16.1	8.1	30.52	26.8	8.04	0.67	0.286	0.0099	/	1.3	0.52	14.3	0.12	0.1	0.013	1
48	Surface	17.1	8.14	29.73	18.8	8.05	0.73	0.342	0.013	0.014	1.8	0.76	14.5	0.12	0.14	0.016	1.3
	Bottom	16.2	8.09	29.9	33.4	8.13	0.95	0.356	0.0093	/	1.5	0.81	13.2	0.09	0.15	0.014	1
49	Surface	17.1	8.14	29.9	35	8.03	0.8	0.384	0.0102	0.021	1.8	0.97	18	0.11	0.17	0.01	1.3
	Bottom	16.1	8.11	29.97	35.8	8.12	0.84	0.374	0.0093	/	2	0.64	17.8	0.13	0.14	0.011	1.1
50	Surface	17.0	8.08	29.35	49.4	7.99	0.66	0.407	0.0078	0.015	1.6	0.74	16.2	0.10	0.11	0.011	1.1
	Bottom	16.6	8.07	29.67	49.2	8.05	0.82	0.462	0.0118	/	1.7	0.70	16.8	0.08	0.06	0.011	1.0
51	Surface	17.0	8.11	29.16	20.0	8.01	1.05	0.408	0.0065	0.018	1.6	1.14	15.8	0.07	0.14	0.014	1.1
	Bottom	16.4	8.07	30.06	32.2	8.08	0.87	0.407	0.0127	/	1.6	0.62	15.4	0.11	0.15	0.013	1.5
52	Surface	17.0	8.11	29.53	30.4	7.96	0.85	0.396	0.0149	0.017	1.6	0.90	17.2	0.07	0.14	0.011	1.1
	Bottom	16.3	8.09	29.72	31.0	8.03	1.04	0.383	0.0102	/	1.3	1.09	18.1	0.05	0.14	0.012	1.0
53	Surface	17.0	8.12	29.87	24.0	8.05	0.72	0.344	0.0096	0.015	1.8	1.26	18.7	0.11	0.09	0.015	1.2
	Bottom	16.3	8.08	29.90	20.4	8.10	0.85	0.370	0.0112	/	1.9	0.75	16.9	0.16	0.09	0.011	1.2
54	Surface	17	8.12	29.83	15.4	7.95	1.03	0.382	0.0109	0.015	2.5	0.82	19	0.21	0.09	0.014	1.1
	Bottom	16.2	8.1	29.91	19.6	8.09	1.17	0.377	0.0136	/	2.1	0.7	15.1	0.13	0.14	0.01	1.7
55	Surface	17	8.13	29.74	14.6	8	0.75	0.367	0.0198	0.013	1.5	0.9	17.8	0.11	0.1	0.012	1.2
	Bottom	16.2	8.11	29.88	26.2	8.09	0.93	0.392	0.0136	/	1.9	1.04	15.1	0.14	0.1	0.011	1.4
56	Surface	17	8.13	29.82	19.8	7.98	0.73	0.393	0.013	0.015	1.8	0.98	15	0.08	0.12	0.015	1.4
	Bottom	16.1	8.1	29.91	26.2	8.06	0.91	0.402	0.0136	/	1.4	0.68	18.3	0.09	0.14	0.011	1.2
57	Surface	17.0	8.13	29.70	28.4	8.05	0.81	0.467	0.0084	0.014	2.2	0.87	15.3	0.17	0.14	0.016	1.1
	Bottom	16.2	8.10	29.72	34.2	8.11	0.91	0.365	0.0161	/	2.2	0.66	18.9	0.15	0.09	0.011	1.3

Continued Table 7 Survey Result to Seawater Quality in Flood and Neap Tide on May 4, 2013 (4)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
58	Surface	17.6	8.14	29.82	33.8	7.99	0.76	0.324	0.0173	0.016	1.3	0.66	18.4	0.09	0.17	0.010	1.4
	Bottom	17.3	8.12	29.87	31.2	8.04	0.91	0.347	0.0146	/	1.5	1.06	17.7	0.09	0.16	0.013	1.3
59	Surface	17.5	8.13	30.15	24.0	7.99	0.83	0.347	0.0127	0.013	3.3	0.42	13.2	0.07	0.12	0.011	1.1
	Bottom	17.2	8.10	30.32	49.2	8.05	0.97	0.433	0.0152	/	3.4	0.68	18.0	0.09	0.12	0.018	1.5
60	Surface	17.6	8.14	29.76	26.0	8.02	0.69	0.336	0.0204	0.016	2.2	1.75	16.4	0.08	0.11	0.011	1.3
	Bottom	17.3	8.13	29.85	48.0	8.11	1.07	0.325	0.0186	/	2.8	0.89	15.2	0.16	0.10	0.012	1.2
61	Surface	17.2	8.11	29.93	22.8	8.03	0.87	0.333	0.0146	0.014	2.1	0.42	19.3	0.06	0.09	0.014	1.1
	Bottom	17.0	8.12	30.06	46.0	8.06	0.76	0.390	0.0143	/	2.0	0.66	15.1	0.08	0.11	0.017	1.6
62	Surface	17.3	8.12	30.20	18.0	8.04	1.16	0.423	0.0173	0.019	3.4	0.52	14.5	0.07	0.11	0.018	1.3
	Bottom	17.0	8.14	30.31	45.0	8.11	0.71	0.438	0.0127	/	3.5	0.50	17.8	0.07	0.10	0.014	1.2
63	Surface	17.0	8.14	29.28	39.2	8.03	0.65	0.342	0.0099	0.014	1.9	1.33	13.9	0.10	0.10	0.014	1.1
	Bottom	17.3	8.13	29.75	56.0	8.07	0.73	0.400	0.0136	/	1.8	1.51	15.1	0.10	0.10	0.009	1.2
64	Surface	17.1	8.14	29.90	34.2	7.73	0.90	0.350	0.0093	0.015	1.5	1.45	18.3	0.09	0.22	0.012	1.0
	Bottom	17.3	8.12	29.97	32.0	7.90	1.11	0.379	0.0127	/	1.4	1.35	15.4	0.10	0.24	0.012	0.9
65	Surface	17.0	8.13	30.02	22.0	8.03	0.67	0.355	0.0133	0.015	1.8	1.62	17.2	0.07	0.13	0.011	1.4
	Bottom	17.2	8.12	30.04	69.8	8.08	0.72	0.348	0.0133	/	1.5	0.39	18.1	0.09	0.12	0.014	1.1
66	Surface	16.8	8.10	30.01	26.0	8.00	1.06	0.391	0.0121	0.015	1.4	0.83	18.7	0.10	0.10	0.013	1.0
	Bottom	17.0	8.11	30.25	100.8	8.05	0.67	0.383	0.0118	/	1.7	0.43	16.8	0.10	0.12	0.009	1.5
67	Surface	17.2	8.13	29.97	29.2	8.03	0.75	0.390	0.0130	0.015	3.1	1.49	14.6	0.08	0.14	0.012	1.3
	Bottom	16.8	8.12	30.13	37.2	8.15	0.89	0.388	0.0180	/	2.6	1.57	17.8	0.09	0.12	0.011	1.2
68	Surface	17.8	8.07	30.07	26.0	8.03	0.71	0.365	0.0109	0.018	1.4	1.08	18.2	0.12	0.13	0.010	1.1
	Bottom	17.6	8.07	30.43	26.8	8.06	0.66	0.401	0.0186	/	2.6	0.82	15.0	0.09	0.13	0.009	1.5
69	Surface	17.9	8.12	30.01	28.6	8.13	0.73	0.411	0.0158	0.017	2.5	0.86	14.7	0.10	0.11	0.013	1.4
	Bottom	17.5	8.14	30.28	95.0	8.10	0.67	0.420	0.0149	/	1.6	0.94	18.2	0.12	0.12	0.015	1.5

Continued Table 7 Survey Result to Seawater Quality in Flood and Neap Tide on May 4, 2013 (5)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
70	Surface	18.0	8.11	30.01	27.8	8.06	0.81	0.413	0.0124	0.017	3.2	0.89	18.5	0.10	0.10	0.014	1.1
	Bottom	17.7	8.12	30.09	33.8	8.09	0.89	0.428	0.0127	/	2.7	0.95	14.5	0.11	0.12	0.012	1.0
71	Surface	17.4	8.13	29.87	17.8	8.02	0.79	0.321	0.0152	0.013	2.3	0.44	15.8	0.08	0.12	0.017	1.3
	Bottom	17.0	8.12	30.17	125.4	8.09	0.73	0.395	0.0121	/	2.9	0.87	16.9	0.13	0.12	0.013	1.4
72	Surface	17.4	8.14	30.25	26.0	8.05	0.69	0.394	0.0158	0.015	1.8	0.55	15.3	0.10	0.10	0.013	1.1
	Bottom	17.0	8.13	30.37	53.0	8.07	0.69	0.392	0.0133	/	1.5	1.57	18.4	0.06	0.09	0.010	1.4
73	Surface	17.6	8.10	30.12	29.2	8.04	0.85	0.376	0.0127	0.017	3.1	0.84	18.7	0.07	0.12	0.016	1.1
	Bottom	17.4	8.11	30.31	40.8	8.05	0.99	0.433	0.0152	/	1.5	0.91	17.4	0.12	0.08	0.009	1.5
74	Surface	17.9	8.12	30.08	30.2	8.06	0.78	0.413	0.0170	0.016	1.3	1.11	13.7	0.12	0.08	0.017	1.1
	Bottom	17.5	8.13	30.10	26.4	8.03	0.69	0.405	0.0152	/	2.1	0.80	14.1	0.09	0.11	0.011	1.2
75	Surface	18.1	8.14	30.05	27.0	8.05	1.08	0.416	0.0112	0.018	1.3	1.10	16.5	0.13	0.22	0.017	1.1
	Bottom	17.7	8.16	30.43	33.8	8.03	0.75	0.401	0.0149	/	2.5	0.44	16.1	0.06	0.12	0.012	1.3
76	Surface	18.2	8.15	30.00	19.4	8.03	0.85	0.410	0.0133	0.016	1.3	0.37	14.1	0.09	0.08	0.009	1.4
	Bottom	17.9	8.16	30.28	34.4	8.02	1.23	0.409	0.0155	/	1.6	0.53	18.7	0.11	0.12	0.013	1.2
77	Surface	18.0	8.16	30.01	25.2	8.07	0.93	0.409	0.0136	0.020	2.2	0.28	18.2	0.07	0.14	0.009	1.3
	Bottom	17.7	8.18	30.27	36.0	8.07	0.75	0.406	0.0170	/	3.3	0.41	18.6	0.09	0.12	0.012	1.4
78	Surface	17.6	8.12	30.26	19.6	8.03	0.85	0.38	0.0124	0.016	2.3	0.33	16.9	0.07	0.12	0.012	1.3
	Bottom	17.3	8.12	30.37	44	8.02	0.95	0.368	0.0109	/	2	0.84	13.9	0.07	0.22	0.01	1.3
79	Surface	17.4	8.12	30.21	26.2	8.04	0.69	0.405	0.013	0.017	2.9	0.65	15.5	0.08	0.12	0.014	1.2
	Bottom	17.1	8.13	30.28	30.8	8.06	0.93	0.406	0.0121	/	2.4	1.18	15.4	0.05	0.1	0.014	1.1
80	Surface	17.5	8.13	30.16	35	8.09	0.97	0.401	0.0173	0.02	2	0.34	17.4	0.08	0.2	0.009	1.1
	Bottom	18	8.14	30.38	38	8.06	0.79	0.415	0.0136	/	1.2	0.49	18.9	0.11	0.21	0.011	1.8
81	Surface	18	8.15	29.88	22.8	8.09	0.63	0.413	0.0186	0.017	2.8	0.43	14.1	0.07	0.13	0.012	1.4
	Bottom	17.6	8.16	30.18	40.2	8.11	0.72	0.419	0.0189	/	1.2	0.32	19.1	0.07	0.08	0.014	1.3

Table 8 Survey Result to Seawater Quality in Ebb and Neap Tide on May 4, 2013

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
1	Surface	18.96	8.04	29.58	44.7	7.84	1.59	1.108	0.0156	0.014	1.44	0.51	18.37	0.050	1.52	0.071	0.94
2	Surface	18.50	8.15	29.67	23.3	9.76	3.09	0.641	0.0020	0.010	1.94	0.72	14.19	0.043	1.14	0.052	1.09
3	Surface	18.00	8.30	29.35	40.7	10.72	1.50	0.904	0.0032	0.019	2.00	0.75	10.93	0.052	1.62	0.052	1.01
4	Surface	18.84	8.06	29.66	61.0	8.02	1.29	0.820	0.0115	0.016	1.12	1.10	17.67	0.028	1.37	0.055	1.09
5	Surface	18.48	8.17	29.59	55.3	8.51	4.71	0.522	0.0063	0.026	1.50	1.20	8.60	0.097	1.69	0.055	1.11
6	Surface	18.22	8.29	30.03	38.3	10.76	2.32	0.901	0.0009	0.028	2.83	1.35	14.19	0.047	0.82	0.054	0.98
7	Surface	18.54	8.07	29.74	53.3	8.07	0.98	0.918	0.0159	0.026	1.65	1.26	12.79	0.046	0.68	0.055	1.12
8	Surface	18.60	8.11	29.75	41.7	8.52	1.34	1.262	0.0156	0.036	1.80	1.23	11.63	0.030	0.79	0.071	1.02
9	Surface	17.78	8.52	29.52	23.7	9.14	1.49	0.937	0.0095	0.035	1.99	1.22	10.23	0.130	2.01	0.057	1.06
	Bottom	17.78	8.52	29.61	25.3	8.84	2.22	0.816	0.0078	/	0.96	0.61	11.16	0.061	1.22	0.055	0.90
10	Surface	18.30	8.08	30.00	64.7	8.25	0.96	0.957	0.0138	0.021	1.61	0.98	8.84	0.061	0.62	0.057	1.08
11	Surface	18.12	8.11	30.22	65.3	8.48	1.02	0.926	0.0023	0.021	2.90	0.80	18.84	0.050	0.93	0.061	1.17
	Bottom	17.50	8.10	30.28	75.0	8.50	1.43	0.915	0.0029	/	2.73	0.77	22.79	0.183	1.06	0.062	1.02
12	Surface	18.04	7.99	30.18	57.3	7.98	1.26	0.938	0.0124	0.033	1.40	0.99	13.72	0.082	0.64	0.058	1.07
	Bottom	17.70	8.03	30.31	130.3	7.92	1.73	0.936	0.0121	/	1.52	1.04	18.84	0.058	0.69	0.063	1.24
13	Surface	17.75	8.60	29.63	12.7	10.04	2.32	0.522	0.0081	0.035	1.42	0.88	8.84	0.030	1.28	0.055	1.33
	Bottom	17.60	8.54	29.75	10.3	9.14	3.63	0.896	0.0112	/	1.12	1.26	11.86	0.069	1.69	0.061	1.47
14	Surface	18.3	8.17	29.09	57.3	7.72	2.78	0.751	0.0193	0.031	1.29	1	12.79	0.046	0.71	0.058	1.44
15	Surface	18.28	8.17	28.92	53.7	7.91	1.01	0.841	0.0121	0.033	1	0.69	14.88	0.055	1.04	0.057	1.35
	Bottom	18.07	8.18	28.87	57.7	7.57	1.58	1.001	0.0161	/	0.98	0.48	13.49	0.09	0.57	0.059	1.41
16	Surface	18.25	8.51	29.65	33.7	8.75	1.22	0.782	0.0012	0.036	2.72	0.87	11.86	0.223	0.49	0.055	1.53
	Bottom	17.96	8.47	29.73	23	8.34	1.5	0.827	0.0009	/	1.67	1.06	15.58	0.062	0.93	0.057	1.42
17	Surface	17.98	8.47	29.61	85	8.14	2.29	0.733	0.0032	0.04	1.93	0.97	10	0.095	1.41	0.055	1.4
	Bottom	16.86	8.45	30.01	14.7	8.08	2.22	0.848	0.0052	/	1.82	1.01	17.44	0.119	1.74	0.054	1.41

Continued Table 8 Survey Result to Seawater Quality in Ebb and Neap Tide on May 4, 2013 (1)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
18	Surface	17.59	8.59	29.72	14	9.92	1.66	0.609	0.0104	0.024	1.75	0.95	11.4	0.127	1.69	0.058	1.33
	Bottom	17.53	8.61	29.83	9.7	9.82	2.52	0.53	0.0084	/	2.42	1.02	14.19	0.068	1.27	0.057	1.4
19	Surface	17.06	8.2	28.9	52.3	7.52	0.63	0.705	0.0167	0.036	0.68	0.54	7.44	0.039	0.58	0.057	1.58
20	Surface	18.23	8.26	29.16	48	8.12	1.24	0.824	0.011	0.033	0.89	1.18	11.63	0.045	0.57	0.053	1.54
	Bottom	18.21	8.21	29.18	51.7	8.08	3.26	0.677	0.0135	/	0.78	1.1	10.23	0.044	0.5	0.052	1.52
21	Surface	17.82	8.46	29.66	91.3	8	0.83	0.88	0.0055	0.016	1.35	1.44	13.26	0.116	0.79	0.051	1.48
	Bottom	17.55	8.46	29.89	12.3	8.38	1.54	0.72	0.0075	/	1.52	0.94	13.95	0.065	0.72	0.052	1.46
22	Surface	17.76	8.48	29.69	21	8.46	1.74	0.597	0.0009	0.038	1.96	0.82	9.77	0.061	1.81	0.054	1.36
	Bottom	17.68	8.48	29.76	23.7	7.85	2.24	0.643	0.0055	/	0.98	0.61	8.6	0.078	0.62	0.052	1.42
23	Surface	17.57	8.62	29.87	26	9.2	0.98	0.888	0.0029	0.026	1.01	1.05	8.37	0.061	1.26	0.054	1.26
	Bottom	17	8.58	30.27	13	8.14	1.07	0.523	0.0012	/	1.46	1.29	10	0.039	0.82	0.054	1.32
24	Surface	18.62	8.18	28.86	53.7	7.72	0.93	0.862	0.0193	0.028	0.69	0.93	16.51	0.064	0.57	0.052	1.47
25	Surface	18.25	8.27	28.91	27.0	8.24	1.15	0.530	0.0147	0.026	1.66	0.96	16.74	0.084	0.67	0.049	1.55
26	Surface	18.17	8.41	29.10	18.3	10.26	4.95	0.491	0.0055	0.026	1.05	1.03	18.37	0.029	0.67	0.047	1.37
	Bottom	18.11	8.31	29.22	15.7	9.00	2.78	0.651	0.0115	/	2.66	0.83	15.58	0.038	0.84	0.047	1.16
27	Surface	17.61	8.63	29.80	98.3	10.02	3.02	1.064	0.0138	0.014	1.04	1.17	13.49	0.065	0.90	0.051	1.13
	Bottom	17.36	8.61	30.19	8.0	9.16	2.46	0.460	0.0095	/	1.44	0.98	17.21	0.066	1.40	0.049	1.22
28	Surface	17.67	8.62	29.82	16.0	9.80	3.26	0.378	0.0069	0.029	0.99	0.94	11.16	0.029	1.39	0.050	1.25
	Bottom	17.60	8.60	29.95	16.0	9.28	2.28	0.435	0.0107	/	0.99	0.97	8.60	0.044	1.54	0.048	1.36
29	Surface	18.00	8.31	28.88	13.3	8.73	2.22	0.621	0.0072	0.033	0.62	0.91	13.02	0.039	0.71	0.048	1.35
30	Surface	17.91	8.46	29.14	34.0	11.28	5.10	0.348	0.0066	0.031	0.72	1.20	12.33	0.040	0.96	0.049	1.45
	Bottom	17.88	8.34	29.28	18.0	9.55	2.23	0.588	0.0133	/	0.50	0.75	10.23	0.032	1.05	0.051	1.56
31	Surface	18.24	8.21	29.55	8.7	7.68	1.52	0.684	0.0216	0.028	0.62	0.94	16.05	0.056	1	0.05	1.65
32	Surface	17.8	8.38	29.19	8.3	10.21	2.86	0.432	0.0029	0.024	1.87	0.88	20.93	0.057	1.04	0.048	1.36

Continued Table 8 Survey Result to Seawater Quality in Ebb and Neap Tide on May. 4, 2013 (2)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
33	Surface	17.75	8.53	30.04	25.7	8.98	1.54	0.449	0.0101	0.035	1.11	0.78	13.26	0.143	1.90	0.047	1.43
	Bottom	17.62	8.51	30.17	43.0	8.82	1.52	0.591	0.0101	/	1.22	0.87	12.09	0.078	1.58	0.049	1.42
34	Surface	18	8.14	30.25	22.8	8.08	0.93	0.373	0.0084	0.013	0.9	1.07	15.7	0.11	0.08	0.01	1.4
	Bottom	17.7	8.12	30.3	41	8.17	1.12	0.425	0.0087	/	1.8	0.74	14.7	0.13	0.11	0.011	1.3
35	Surface	18	8.11	30.22	29.4	8.09	0.75	0.372	0.0102	0.014	2.3	1.2	17.4	0.16	0.11	0.018	1.9
	Bottom	17.5	8.1	30.23	51.8	8.15	1.11	0.445	0.0121	/	1.5	1.14	15.1	0.1	0.13	0.011	1.2
36	Surface	17.8	8.12	30.18	21.8	8.05	1.03	0.416	0.0164	0.015	2.2	0.58	17.9	0.08	0.14	0.009	1.1
	Bottom	17.5	8.14	30.23	31.2	8.13	1.01	0.457	0.0124	/	2.2	0.64	18.3	0.09	0.09	0.013	1.1
37	Surface	17.7	8.11	30.23	44.2	8.05	0.77	0.329	0.0139	0.012	2.2	1.19	17.7	0.18	0.12	0.009	1.5
	Bottom	17.5	8.13	30.27	44.0	8.08	0.93	0.340	0.0106	/	2.4	0.43	15.9	0.08	0.12	0.013	1.4
38	Surface	17.8	8.10	30.12	16.2	8.02	0.91	0.359	0.0133	0.013	1.8	0.76	14.7	0.12	0.10	0.011	1.2
	Bottom	17.5	8.11	30.21	44.6	8.03	1.04	0.381	0.0109	/	2.5	1.43	17.2	0.21	0.11	0.011	1.4
39	Surface	17.6	8.12	30.15	27.2	7.99	0.95	0.334	0.0152	0.014	1.7	0.90	14.7	0.10	0.09	0.011	1.6
	Bottom	17.4	8.13	30.24	39.4	8.04	1.09	0.387	0.0099	/	1.6	1.00	17.7	0.13	0.07	0.012	1.5
40	Surface	18.0	8.11	30.17	27.4	8.03	0.68	0.404	0.0152	0.014	2.1	0.48	17.7	0.08	0.12	0.011	1.3
	Bottom	17.5	8.13	30.23	49.6	8.04	1.10	0.397	0.0133	/	1.5	1.03	17.2	0.08	0.12	0.010	1.2
41	Surface	18	8.09	30.15	15.6	8.03	1.11	0.417	0.0096	0.015	1.8	0.74	14.6	0.11	0.08	0.014	1.4
	Bottom	17.6	8.1	30.25	45.6	8.11	1.2	0.397	0.0143		1.7	1.07	17.9	0.09	0.11	0.012	1.4
42	Surface	17.9	8.12	30.2	19	8.03	0.95	0.394	0.0115	0.014	1.9	1.1	14.8	0.13	0.08	0.013	1.3
	Bottom	17.7	8.13	30.24	54.6	8.05	1.13	0.418	0.0139		1.9	0.61	17.8	0.1	0.06	0.013	1.5
43	Surface	17.5	8.09	30.27	19.0	8.08	0.93	0.372	0.0121	0.014	1.1	0.88	15.5	0.07	0.12	0.012	1.1
	Bottom	17.0	8.11	30.12	49.4	8.12	0.97	0.405	0.0090	/	2.1	0.38	15.4	0.08	0.12	0.010	1.2
44	Surface	17.5	8.07	30.20	25.6	8.04	0.87	0.361	0.0099	0.014	2.3	0.56	16.5	0.08	0.08	0.009	1.4
	Bottom	17.3	8.09	30.28	46.0	8.09	0.93	0.271	0.0112	/	1.5	0.40	17.1	0.14	0.11	0.015	1.4

Continued Table 8 Survey Result to Seawater Quality in Ebb and Neap Tide on May 4, 2013 (3)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
45	Surface	17.9	8.08	30.20	28.8	8.05	0.98	0.335	0.0164	0.013	1.7	1.53	17.5	0.07	0.09	0.018	1.3
	Bottom	17.4	8.10	30.23	44.8	8.06	0.95	0.358	0.0136	/	1.5	0.37	16.6	0.10	0.07	0.014	1.6
46	Surface	17.2	8.12	30.11	22.6	8.02	0.68	0.339	0.0106	0.014	1.5	0.92	15.7	0.21	0.08	0.011	1.3
	Bottom	16.2	8.09	30.33	16.4	8.05	0.73	0.307	0.0139	/	1.2	0.63	18.5	0.16	0.12	0.010	1.0
47	Surface	17.2	8.13	30.18	23	8.05	0.77	0.373	0.0173	0.013	2.5	0.6	17.4	0.16	0.14	0.01	1.2
	Bottom	16.3	8.1	30.22	22.6	8.11	1.03	0.233	0.0155	/	2.1	0.95	17.1	0.12	0.13	0.015	1
48	Surface	17.2	8.13	30.13	24.2	8.05	0.94	0.322	0.0136	0.013	2.3	1.03	18.4	0.16	0.08	0.009	1.3
	Bottom	16.4	8.1	30.25	33.8	8.1	1.12	0.33	0.0161	/	2	1.24	18.7	0.14	0.09	0.012	1.3
49	Surface	17.2	8.13	30.12	27.8	8.03	0.76	0.387	0.0109	0.016	1.4	0.38	17.4	0.19	0.07	0.012	1.1
	Bottom	16.4	8.1	30.2	23.4	8.07	0.69	0.353	0.0096	/	1.7	0.5	14.2	0.17	0.1	0.009	1.2
50	Surface	17.0	8.09	29.76	22.0	8.02	0.89	0.329	0.0130	0.017	1.2	0.44	17.6	0.04	0.10	0.010	1.1
	Bottom	16.5	8.06	29.90	30.4	8.15	1.11	0.406	0.0139	/	1.3	0.46	18.5	0.07	0.08	0.009	1.3
51	Surface	17.1	8.10	29.90	18.8	8.07	0.65	0.289	0.0143	0.017	1.1	0.41	16.6	0.06	0.16	0.010	1.4
	Bottom	16.4	8.07	29.96	27.4	8.11	1.15	0.351	0.0124	/	1.9	1.00	16.7	0.09	0.09	0.015	1.8
52	Surface	17.1	8.12	30.15	20.6	8.02	0.74	0.306	0.0127	0.017	1.4	0.32	17.0	0.09	0.09	0.012	1.4
	Bottom	16.3	8.08	30.26	26.0	8.10	1.08	0.313	0.0155	/	1.7	0.60	18.4	0.10	0.08	0.014	1.5
53	Surface	17.1	8.12	30.08	25.6	8.02	0.63	0.342	0.0115	0.017	1.8	0.99	16.8	0.09	0.10	0.016	1.3
	Bottom	16.4	8.09	30.12	30.0	8.11	0.83	0.288	0.0109	/	1.7	0.48	16.9	0.10	0.10	0.013	1.3
54	Surface	17.1	8.13	29.96	21	8.03	0.68	0.346	0.0133	0.015	2.2	1.17	18.5	0.11	0.09	0.015	1.1
	Bottom	16.4	8.1	30.46	18.6	8.11	1.13	0.36	0.009	/	1.8	0.47	18.2	0.12	0.11	0.011	1.2
55	Surface	17.2	8.13	30.03	31.8	8.01	0.94	0.309	0.0139	0.012	1.6	1.27	18.1	0.09	0.08	0.011	1.2
	Bottom	16.3	8.1	30.17	26.8	8.06	0.85	0.381	0.0133	/	1.7	0.36	17.2	0.1	0.11	0.013	1.2
56	Surface	17.2	8.14	30.04	33	8.03	1.22	0.319	0.0118	0.014	1.6	0.5	17.5	0.18	0.09	0.011	1.4
	Bottom	16.3	8.11	30.13	46.4	8.07	1.01	0.397	0.0136	/	1.6	0.58	17.5	0.09	0.16	0.013	1.3

Continued Table 8 Survey Result to Seawater Quality in Ebb and Neap Tide on May 4, 2013 (4)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
57	Surface	17.1	8.14	30.15	36.2	8.04	0.89	0.348	0.0109	0.013	2.4	1.03	17.6	0.19	0.09	0.012	1.4
	Bottom	16.3	8.12	30.36	21.0	8.10	1.08	0.344	0.0143	/	2.2	0.93	17.4	0.14	0.21	0.010	1.4
58	Surface	18.4	8.14	29.86	25.4	8.06	0.69	0.408	0.0133	0.014	3.0	1.14	17.6	0.08	0.10	0.015	1.0
	Bottom	17.5	8.11	30.02	48.2	8.13	0.87	0.366	0.0112	/	2.0	0.94	17.2	0.09	0.09	0.012	1.6
59	Surface	18.4	8.14	29.88	23.0	8.09	0.83	0.371	0.0133	0.014	2.2	0.90	18.2	0.06	0.10	0.012	1.2
	Bottom	17.5	8.11	29.96	44.8	8.12	0.88	0.373	0.0121	/	1.8	0.39	14.7	0.06	0.21	0.011	1.3
60	Surface	18.4	8.13	29.85	39.8	8.03	0.87	0.347	0.0121	0.014	2.2	0.83	18.2	0.09	0.12	0.012	1.3
	Bottom	17.6	8.12	30.03	35.2	8.11	0.70	0.359	0.0139	/	2.8	0.53	17.7	0.07	0.11	0.008	1.5
61	Surface	18.4	8.13	29.97	27.8	8.04	0.67	0.408	0.0118	0.013	2.7	0.94	17.5	0.05	0.17	0.015	1.2
	Bottom	17.5	8.12	30.25	28.0	8.09	0.62	0.432	0.0155	/	2.9	0.65	15.9	0.05	0.14	0.011	1.3
62	Surface	18.5	8.15	29.79	21.6	8.00	0.73	0.344	0.0118	0.014	2.7	0.98	16.2	0.06	0.11	0.009	1.2
	Bottom	17.6	8.18	29.97	39.4	8.06	0.71	0.352	0.0109	/	2.9	0.51	18.8	0.07	0.11	0.011	1.4
63	Surface	17.4	8.13	29.38	49.2	8.01	0.70	0.373	0.0127	0.015	2.2	0.47	18.4	0.07	0.09	0.011	1.4
	Bottom	17.1	8.10	29.85	33.4	8.03	0.58	0.367	0.0149	/	1.4	0.93	15.7	0.09	0.09	0.017	1.3
64	Surface	17.6	8.14	29.53	38.8	8.03	0.77	0.340	0.0152	0.016	2.3	0.65	17.5	0.09	0.11	0.017	1.4
	Bottom	17.2	8.12	29.90	38.4	8.06	0.71	0.375	0.0161	/	2.6	0.55	15.1	0.08	0.09	0.013	1.7
65	Surface	17.6	8.13	29.54	46.8	8.04	0.74	0.310	0.0164	0.016	1.3	0.65	17.2	0.07	0.21	0.010	1.5
	Bottom	17.2	8.13	29.76	34.4	8.11	0.94	0.344	0.0139	/	2.1	1.27	15.6	0.08	0.09	0.014	1.1
66	Surface	18.1	8.09	29.78	25.6	7.99	0.92	0.354	0.0139	0.014	2.8	0.51	15.2	0.05	0.09	0.009	1.2
	Bottom	17.2	8.12	29.92	33.8	8.03	1.05	0.376	0.0164	/	2.2	0.46	16.2	0.07	0.14	0.013	1.3
67	Surface	18.4	8.13	29.94	23.8	8.03	0.70	0.353	0.0127	0.013	2.2	1.00	19.6	0.08	0.11	0.015	1.4
	Bottom	17.6	8.12	30.01	34.4	8.06	0.86	0.379	0.0084	/	1.6	0.70	15.9	0.08	0.11	0.017	1.2
68	Surface	17.7	8.07	30.07	26.0	8.03	0.71	0.365	0.0109	0.018	1.4	1.08	18.2	0.12	0.13	0.010	1.1
	Bottom	17.4	8.07	30.43	26.8	8.06	0.66	0.401	0.0186	/	2.6	0.82	15.0	0.09	0.13	0.009	1.5
69	Surface	17.7	8.12	30.01	28.6	8.13	0.73	0.411	0.0158	0.017	2.5	0.86	14.7	0.10	0.11	0.013	1.4

Continued Table 8 Survey Result to Seawater Quality in Ebb and Neap Tide on May 4, 2013 (5)

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
69	Bottom	17.5	8.14	30.28	95.0	8.10	0.67	0.420	0.0149	/	1.6	0.94	18.2	0.12	0.12	0.015	1.5
70	Surface	17.6	8.11	30.01	27.8	8.06	0.81	0.413	0.0124	0.017	3.2	0.89	18.5	0.10	0.10	0.014	1.1
	Bottom	17.3	8.12	30.09	33.8	8.09	0.89	0.428	0.0127	/	2.7	0.95	14.5	0.11	0.12	0.012	1.0
71	Surface	18.4	8.13	29.91	33.6	8.04	0.67	0.380	0.0152	0.014	2.3	0.48	18.3	0.09	0.15	0.009	1.3
	Bottom	17.6	8.12	30.02	26.8	8.07	0.64	0.384	0.0136	/	2.7	0.69	14.7	0.07	0.15	0.012	1.4
72	Surface	18.4	8.09	29.92	26.6	8.01	0.67	0.369	0.0161	0.014	2.8	0.77	15.6	0.05	0.09	0.009	1.7
	Bottom	17.6	8.12	29.96	27.2	8.15	0.75	0.362	0.0109	/	1.9	0.55	17.7	0.06	0.10	0.016	1.2
73	Surface	17.8	8.10	30.12	29.2	8.04	0.85	0.376	0.0127	0.017	3.1	0.84	18.7	0.07	0.12	0.016	1.1
	Bottom	17.6	8.11	30.31	40.8	8.05	0.99	0.433	0.0152	/	1.5	0.91	17.4	0.12	0.08	0.009	1.5
74	Surface	17.6	8.12	30.08	30.2	8.06	0.78	0.413	0.0170	0.016	1.3	1.11	13.7	0.12	0.08	0.017	1.1
	Bottom	17.4	8.13	30.10	26.4	8.03	0.69	0.405	0.0152	/	2.1	0.80	14.1	0.09	0.11	0.011	1.2
75	Surface	17.4	8.14	30.05	27.0	8.05	1.08	0.416	0.0112	0.018	1.3	1.10	16.5	0.13	0.22	0.017	1.1
	Bottom	17.1	8.16	30.43	33.8	8.03	0.75	0.401	0.0149	/	2.5	0.44	16.1	0.06	0.12	0.012	1.3
76	Surface	17.2	8.15	30.00	19.4	8.03	0.85	0.410	0.0133	0.016	1.3	0.37	14.1	0.09	0.08	0.009	1.4
	Bottom	16.9	8.16	30.28	34.4	8.02	1.23	0.409	0.0155	/	1.6	0.53	18.7	0.11	0.12	0.013	1.2
77	Surface	17.2	8.16	30.01	25.2	8.07	0.93	0.409	0.0136	0.020	2.2	0.28	18.2	0.07	0.14	0.009	1.3
	Bottom	16.8	8.18	30.27	36.0	8.07	0.75	0.406	0.0170	/	3.3	0.41	18.6	0.09	0.12	0.012	1.4
78	Surface	17.8	8.12	30.26	19.6	8.03	0.85	0.38	0.0124	0.016	2.3	0.33	16.9	0.07	0.12	0.012	1.3
	Bottom	17.5	8.12	30.37	44	8.02	0.95	0.368	0.0109		2	0.84	13.9	0.07	0.22	0.01	1.3
79	Surface	17.9	8.12	30.21	26.2	8.04	0.69	0.405	0.013	0.017	2.9	0.65	15.5	0.08	0.12	0.014	1.2
	Bottom	17.6	8.13	30.28	30.8	8.06	0.93	0.406	0.0121		2.4	1.18	15.4	0.05	0.1	0.014	1.1
80	Surface	18	8.13	30.16	35	8.09	0.97	0.401	0.0173	0.02	2	0.34	17.4	0.08	0.2	0.009	1.1
	Bottom	17.7	8.14	30.38	38	8.06	0.79	0.415	0.0136		1.2	0.49	18.9	0.11	0.21	0.011	1.8
81	Surface	17	8.15	29.88	22.8	8.09	0.63	0.413	0.0186	0.017	2.8	0.43	14.1	0.07	0.13	0.012	1.4
	Bottom	16.7	8.16	30.18	40.2	8.11	0.72	0.419	0.0189		1.2	0.32	19.1	0.07	0.08	0.014	1.3

Table 9 Survey Result to Seawater Quality in Flood and Neap Tide on Aug.26, 2013

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
37	Surface	28.12	8.09	32.36	28.7	5.28	0.78	0.2604	0.0248	0.0325	1.11	1.76	17.18	0.032	0.52	＜0.007	1.52
38	Surface	27.98	8.08	32.34	29.7	5.54	1.47	0.0522	0.0123	0.026	1.66	1.25	17.18	0.033	0.61	＜0.007	1.49
	Bottom	27.72	8.09	32.37	60.7	4.96	1.36	0.2754	0.0134	/	1.00	1.03	14.36	0.036	0.52	＜0.007	1.68
43	Surface	28.61	8.07	32.34	36.3	5.28	0.74	0.2887	0.0079	0.0416	1.98	1.21	21.79	0.041	0.82	0.007	1.56
44	Surface	27.96	8.07	32.32	13.7	5.56	1.13	0.0806	0.0215	0.036	2.03	0.83	20.00	0.046	0.60	0.009	1.57
	Bottom	27.82	8.06	32.32	49.3	5.20	1.02	0.2822	0.0144	/	2.18	0.86	21.54	0.083	0.39	0.010	1.58
45	Surface	28.63	8.11	32.34	11.3	5.76	1.05	0.2656	0.0213	0.0372	2.11	0.98	21.03	0.050	0.38	0.013	2.19
	Bottom	27.64	8.11	32.40	27.0	5.40	1.17	0.3213	0.0259	/	1.55	1.10	16.67	0.055	0.66	0.010	1.48
46	Surface	28.13	8.08	32.36	23.0	5.64	1.85	0.1792	0.0117	0.0343	1.78	0.83	13.33	0.046	1.02	0.014	1.58
	Bottom	27.86	8.11	32.37	30.7	5.74	1.62	0.3116	0.0232	/	1.30	0.90	12.31	0.036	0.56	0.010	1.66
50	Surface	29.22	8.19	32.37	10.0	5.78	1.20	0.2362	0.0166	0.0321	1.60	0.87	13.85	0.043	0.56	0.008	1.65
51	Surface	27.52	8.09	32.24	16.0	5.65	0.99	0.1803	0.0104	0.0319	1.51	0.78	14.36	0.036	0.56	0.010	1.59
	Bottom	27.14	8.09	32.32	55.7	5.42	0.90	0.408	0.0229	/	1.47	0.71	13.59	0.033	0.52	0.013	1.67
52	Surface	27.21	8.10	32.34	21.3	5.12	0.67	0.2934	0.0204	0.0393	1.65	1.03	15.90	0.036	0.51	0.012	1.57
	Bottom	27.06	8.13	32.30	50.7	5.50	0.75	0.2801	0.0281	/	0.97	0.77	10.26	0.042	0.62	0.014	1.52
53	Surface	28.10	8.15	32.32	13.0	5.60	1.64	0.1944	0.0104	0.0434	1.38	0.86	11.03	0.066	0.53	0.013	1.51
	Bottom	27.55	8.15	32.39	31.0	5.56	1.62	0.1976	0.0166	/	2.84	1.39	19.74	0.085	0.34	0.015	1.48
54	Surface	28.04	8.12	32.47	19.3	5.91	0.58	0.364	0.0207	0.0391	1.34	1.01	10.51	0.052	0.29	0.011	1.50
	Bottom	27.25	8.15	32.49	24.0	5.30	0.58	0.4304	0.0213	/	2.06	1.01	18.21	0.077	0.41	0.013	1.46
58	Surface	27.83	8.08	32.25	19.3	5.98	1.73	0.3519	0.0213	0.0295	0.93	0.95	21.79	0.078	0.94	0.011	1.55
	Bottom	26.97	8.09	32.21	49.0	5.29	1.59	0.3815	0.0169	/	0.86	1.13	19.74	0.118	0.44	0.017	1.53

Continued Table 9 Survey Result to Seawater Quality in Flood and Neap Tide on Aug.26, 2013

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
60	Surface	27.54	8.03	31.85	34.3	5.48	1.72	0.3322	0.0174	0.0351	0.88	1.05	19.23	0.075	0.97	0.012	1.54
	Bottom	27.35	8.03	32.25	36.0	5.32	1.52	0.1364	0.0172	/	0.75	0.96	22.82	0.081	0.80	0.018	1.52
61	Surface	27.20	8.04	32.29	20.3	6.26	1.12	0.2196	0.0120	0.0271	0.50	1.09	17.95	0.098	0.35	0.014	1.50
	Bottom	27.04	8.05	32.32	45.3	5.34	1.07	0.195	0.0248	/	0.86	1.00	21.03	0.076	0.61	0.014	1.64
62	Surface	28.65	8.11	32.31	27.7	5.92	1.61	0.195	0.0188	0.0292	0.55	0.92	11.03	0.057	0.60	0.013	1.45
	Bottom	26.99	8.12	32.35	27.0	5.41	1.47	0.1964	0.0243	/	0.85	0.95	18.72	0.072	0.48	0.014	1.39
65	Surface	27.58	8.03	31.88	83.7	5.36	1.01	0.2209	0.0188	0.0206	0.95	1.00	13.08	0.092	0.44	0.013	1.58
	Bottom	27.11	8.02	32.26	91.0	5.52	0.82	0.32	0.0332	/	0.72	0.96	13.33	0.080	0.40	0.014	1.54
66	Surface	27.68	8.08	32.21	31.7	5.90	1.86	0.2122	0.0283	0.0372	0.44	1.30	11.28	0.040	0.27	0.014	1.43
	Bottom	27.24	8.09	32.26	44.0	5.58	1.72	0.2168	0.0272	/	0.53	0.93	17.18	0.069	0.72	0.017	1.52
67	Surface	28.42	8.15	32.05	15.0	6.38	0.93	0.0874	0.0253	0.0231	0.72	0.98	12.56	0.088	0.70	0.013	1.50
	Bottom	28.31	8.12	32.16	47.0	5.96	0.98	0.1251	0.0210	/	0.47	1.11	7.69	0.045	0.47	0.017	1.43
69	Surface	28.70	8.01	32.11	42.3	5.95	1.73	0.0769	0.0188	0.0351	1.05	0.91	11.28	0.084	0.96	0.016	1.58
	Bottom	28.27	8.02	32.06	92.0	5.34	1.45	0.1737	0.0185	/	0.64	0.95	10.77	0.056	1.04	0.013	1.46
70	Surface	27.63	8.02	32.37	51.3	5.87	1.62	0.193	0.0335	0.034	0.65	0.96	22.05	0.076	0.86	0.014	1.52
	Bottom	27.22	8.03	32.29	51.0	5.67	1.50	0.2167	0.0308	/	0.74	1.14	20.00	0.057	0.90	0.019	1.55
71	Surface	27.22	8.08	32.22	34.7	5.98	1.81	0.128	0.0302	0.028	0.69	0.98	13.85	0.079	0.80	0.016	1.49
	Bottom	27.33	8.09	32.21	40.7	5.69	1.69	0.1661	0.0185	/	0.57	0.93	20.26	0.074	0.76	0.016	1.48
72	Surface	28.59	8.09	32.05	32.7	6.14	0.59	0.1409	0.0256	0.0203	0.49	0.96	23.59	0.056	0.62	0.015	1.45
	Bottom	28.17	8.03	32.05	32.7	5.72	0.72	0.1224	0.0308	/	0.80	0.97	22.05	0.069	0.69	0.015	1.48

Table 10 Survey Result to Seawater Quality in Ebb and Neap Tide on Aug.26, 2013

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
37	Surface	27.89	8.04	32.31	32.7	6.56	0.91	0.1	0.0117	0.0372	1.76	1.51	23.33	0.092	0.31	< 0.007	1.55
38	Surface	28.58	8.08	32.41	8	6.86	1.66	0.212	0.0188	0.034	1.43	1.67	18.46	0.081	1.04	< 0.007	1.56
	Bottom	27.15	8.05	32.27	49.3	6.27	1.39	0.2095	0.021	/	1.98	1.92	21.28	0.114	0.51	< 0.007	1.51
43	Surface	28.67	8.08	32.33	37	5.21	0.82	0.2979	0.0093	0.028	1.78	0.88	21.79	0.141	0.6	< 0.007	1.59
44	Surface	28.01	8.07	32.36	25.7	5.32	1.1	0.2811	0.0221	0.033	1.47	0.95	19.49	0.051	0.52	< 0.007	1.56
	Bottom	27.64	8.08	32.34	43	5.58	0.97	0.334	0.0207	/	1.4	1.31	16.92	0.048	0.2	< 0.007	1.56
45	Surface	28.82	8.1	32.27	38	6.1	1.13	0.3201	0.0232	0.0289	1.69	1.67	23.59	0.058	0.48	0.009	1.58
	Bottom	27.35	8.08	32.33	98.3	5.56	1.21	0.3088	0.0207	/	1.56	1.38	21.54	0.061	0.64	< 0.007	1.53
46	Surface	29.71	8.1	32.39	11.3	5.58	1.94	0.2187	0.0063	0.0399	1.05	1	16.92	0.087	0.79	< 0.007	1.49
	Bottom	27.42	8.13	32.42	16.3	5.26	0.74	0.3142	0.0153	/	1.4	0.85	19.74	0.07	0.8	＜0.007	1.51
50	Surface	27.63	8.08	32.37	33	5.45	1.28	0.1202	0.0128	0.0305	1.38	1.15	17.18	0.042	0.58	0.012	1.59
51	Surface	29.04	8.12	32.34	15.7	6.46	1.09	0.3031	0.0207	0.0327	1.25	1.02	17.69	0.052	0.94	< 0.007	1.54
	Bottom	27.61	8.09	32.38	35.3	5.62	1.04	0.3656	0.0185	/	1.41	1	19.74	0.051	0.81	< 0.007	1.52
52	Surface	29.15	8.15	32.39	10.7	6.3	0.86	0.0963	0.0112	0.034	1.02	1.06	19.49	0.042	0.84	< 0.007	1.39
	Bottom	27.44	8.14	32.43	48.3	5.88	0.77	0.1747	0.0098	/	1.18	1.16	14.87	0.045	0.41	< 0.007	1.48
53	Surface	28.94	8.15	32.32	19.7	6.62	1.55	0.1744	0.0144	0.0396	1.15	1.51	19.23	0.044	0.42	< 0.007	1.47
	Bottom	27.73	8.14	32.44	22.3	5.75	1.73	0.2109	0.0131	/	1.64	1.03	20.26	0.048	0.22	0.009	1.54
54	Surface	27.67	8.14	32.5	6	6	0.67	0.3033	0.015	0.0446	1.7	1	17.95	0.054	0.26	< 0.007	1.56
	Bottom	27.4	8.14	32.64	37.3	5.84	0.74	0.3394	0.0166	/	1.45	1	21.79	0.097	0.39	0.007	1.41
58	Surface	27.51	8.08	32.26	50	6.6	1.78	0.1723	0.0142	0.0307	0.98	0.96	23.59	0.091	0.49	< 0.007	1.5
	Bottom	26.93	8.08	31.44	73	6.32	1.68	0.2411	0.0144	/	1.3	0.98	25.13	0.073	0.82	< 0.007	1.54

Continued Table 10 Survey Result to Seawater Quality in Ebb and Neap Tide on Aug.26, 2013

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
60	Surface	27.2	8.02	32.24	24.7	6.24	1.85	0.0485	0.012	0.0324	1.22	1.05	21.03	0.068	0.91	＜0.007	1.6
	Bottom	26.9	8.02	32.26	70	6.22	1.69	0.1781	0.0188	/	1.38	0.99	23.85	0.068	0.63	0.007	1.56
61	Surface	27.32	8.08	32.27	30.7	6.38	0.67	0.1157	0.0297	0.0358	1.07	0.99	20	0.073	0.83	0.007	1.51
	Bottom	27.03	8.08	32.27	49	6.08	1.13	0.1821	0.012	/	1.4	1.12	21.03	0.064	0.91	< 0.007	1.54
62	Surface	27.64	8.11	31.67	28	6.7	1.7	0.1045	0.0218	0.0251	0.9	0.78	14.1	0.045	0.42	＜0.007	1.55
	Bottom	26.94	8.11	32.34	53.3	6.18	1.6	0.178	0.0223	/	0.8	1.16	17.18	0.04	0.81	< 0.007	1.46
65	Surface	28.37	8.02	32.18	33.7	5.88	1.15	0.0712	0.0343	0.0304	0.61	1.07	10.26	0.043	0.8	＜0.007	1.68
	Bottom	27.5	8.02	32.14	37.3	5.64	0.91	0.2052	0.0188	/	0.74	0.99	20.26	0.063	0.88	< 0.007	1.59
66	Surface	28.19	8.07	32.19	31.3	6.42	1.92	0.258	0.0253	0.0286	0.71	0.97	17.95	0.07	0.96	0.007	1.5
	Bottom	27.87	8.06	32.04	36.3	6.17	1.81	0.2098	0.0324	/	0.62	0.98	14.62	0.055	0.56	< 0.007	1.44
67	Surface	27.63	8.12	31.3	14	6.28	0.75	0.2312	0.0188	0.0208	0.76	0.97	15.38	0.072	0.55	＜0.007	1.5
	Bottom	27.31	8.11	32.1	41	6.22	1.16	0.1487	0.027	/	0.79	0.97	18.21	0.073	0.79	＜0.007	1.61
69	Surface	27.23	8.02	32.26	47	5.92	1.81	0.169	0.0289	0.0362	0.63	0.99	14.36	0.058	0.44	＜0.007	1.59
	Bottom	27.76	8.02	32.02	64.3	5.8	1.59	0.1697	0.0343	/	0.61	1.23	10.77	0.042	0.48	0.009	1.64
70	Surface	27.69	8.05	32.07	40	6.14	1.68	0.1933	0.0289	0.0384	0.58	1.09	16.15	0.05	0.51	0.009	1.59
	Bottom	27.09	8.05	32.29	56.7	5.74	1.49	0.1522	0.0297	/	0.64	1	16.41	0.063	0.52	0.007	1.58
71	Surface	27.24	8.09	32.08	21.7	6.32	1.94	0.2228	0.0136	0.0271	0.54	1.01	18.72	0.055	0.33	＜0.007	1.55
	Bottom	27.42	8.06	30.42	60	6.18	1.77	0.1714	0.0316	/	0.74	0.99	20	0.063	0.69	0.007	1.48
72	Surface	27.84	8.11	32.05	11	6.44	0.54	0.1966	0.0199	0.0314	0.59	1.02	11.79	0.071	0.67	0.016	1.47
	Bottom	27.2	8.1	32.08	46.3	6.24	0.69	0.1332	0.0278	/	0.9	1	19.74	0.078	0.52	0.008	1.46

Table 11 Survey Result to Seawater Quality in Flood and Spring Tide on Sept.6, 2013

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
37	Surface	28.41	7.98	32.55	17.3	6.26	0.98	0.1212	0.0103	0.0295	1.89	1.63	17.14	0.047	0.67	0.01	1.26
38	Surface	28.26	7.97	32.13	13.7	6.24	0.75	0.2264	0.0221	0.0354	1.95	1.46	7.62	0.048	0.72	0.011	1.45
	Bottom	27.63	7.96	32.21	12.3	6.1	0.6	0.205	0.0158	/	1.82	0.51	18.57	0.042	0.65	0.011	1.09
43	Surface	27.83	7.97	32.52	7.7	6.39	0.82	0.0553	0.0089	0.032	1.48	0.82	8.33	0.037	0.54	0.011	1.43
44	Surface	27.81	7.98	32.49	20.3	6.21	0.94	0.0775	0.0063	0.0295	1.86	2.31	9.76	0.06	0.7	0.012	1.32
	Bottom	28.03	8.01	32.36	47.3	6.18	0.82	0.1915	0.0121	/	1.77	1.68	15.95	0.097	0.66	0.01	0.95
45	Surface	27.96	7.96	32.05	13.3	6.2	0.93	0.2526	0.0184	0.0407	2.65	1.47	10.95	0.064	0.53	0.012	1.35
	Bottom	27.57	7.95	32.08	17	6.08	0.81	0.3094	0.0158	/	1.88	1.57	9.76	0.057	0.77	0.012	1.06
46	Surface	27.57	7.99	32.1	9	6.64	1.01	0.1937	0.0184	0.0178	1.51	0.98	11.9	0.052	0.51	0.011	1.43
	Bottom	27.54	7.87	32.14	18.7	6.38	0.9	0.2509	0.0201	/	1.33	0.45	5.95	0.037	0.81	0.012	1.08
50	Surface	28.14	7.98	32.6	14.7	6.36	0.74	0.2903	0.0172	0.0312	2.08	0.8	11.43	0.049	0.71	0.014	0.98
51	Surface	28.17	7.99	32.37	18.7	6.07	1.55	0.1828	0.0204	0.0436	1.94	0.75	10	0.1	0.86	0.013	1.24
	Bottom	27.44	7.98	32.84	29.3	6.31	1.37	0.1728	0.0201	/	1.88	1.47	11.67	0.065	0.75	0.017	1.02
52	Surface	27.85	7.99	32.16	15	6.36	1.2	0.2519	0.0195	0.0262	1.88	0.39	12.14	0.062	1.07	0.012	1.27
	Bottom	27.64	7.98	32.15	20.3	6.06	1.09	0.2166	0.0218	/	1.82	0.94	9.29	0.064	0.87	0.012	1.05
53	Surface	27.86	7.98	32.14	11.7	6.5	0.81	0.2341	0.0057	0.0231	2.3	0.78	11.9	0.053	0.59	0.015	1.1
	Bottom	26.44	7.98	32.84	15.7	6.1	0.98	0.276	0.0126	/	2.08	1.34	13.81	0.133	0.58	0.013	1.04
54	Surface	26.89	8.01	32.83	17	6.16	1.05	0.1085	0.0164	0.0286	1.53	1.31	16.19	0.046	0.74	0.014	1.11
	Bottom	26.96	8	32.73	21.7	6.11	0.92	0.126	0.0175	/	1.63	1.19	9.76	0.045	0.84	0.014	0.98
58	Surface	27.54	8.15	32.12	21.3	6.12	0.57	0.2421	0.0216	0.026	1.01	1.9	12.86	0.075	0.75	0.012	1.09
	Bottom	27.08	8.15	32.36	31.3	5.86	0.81	0.1754	0.0089	/	0.96	2.16	12.86	0.065	0.79	0.011	1.06

Continued Table 11 Survey Result to Seawater Quality in Flood and Spring Tide on Sept.6, 2013

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
60	Surface	27.24	8.14	32.57	30.3	6.27	0.59	0.196	0.0118	0.0248	1.24	0.81	12.38	0.097	0.89	0.014	1.03
	Bottom	22.65	8.13	32.5	32.7	6	0.67	0.2011	0.0181	/	1.01	1.84	11.9	0.075	0.54	0.014	1.06
61	Surface	27.33	8.14	32.11	33.3	6.02	0.55	0.2654	0.0086	0.0202	1.11	1.48	12.38	0.101	0.7	0.012	1.12
	Bottom	27.29	8.13	32.03	68.7	5.87	0.65	0.2921	0.0178	/	1.19	1.94	13.81	0.113	0.55	0.012	1.08
62	Surface	27.23	8.17	32.54	35.7	6.06	0.61	0.2732	0.0121	0.0193	0.81	0.41	10.48	0.069	0.66	0.013	1.04
	Bottom	26.83	8.17	32.76	41	5.94	0.73	0.1846	0.0172	/	0.92	1.23	9.76	0.044	0.58	0.014	1.06
65	Surface	27.05	8.13	32.65	15.7	6	0.63	0.0907	0.0115	0.0369	0.98	0.69	10.24	0.087	0.77	0.013	1.23
	Bottom	27.11	8.12	32.54	33	5.48	0.7	0.1732	0.0132	/	0.92	1.18	12.62	0.058	0.79	0.013	1.03
66	Surface	27.25	8.16	32.17	22	6.48	0.67	0.1995	0.0103	0.0216	1.06	1.12	10	0.098	0.85	0.013	1.05
	Bottom	26.56	8.15	32.73	50	6.22	0.82	0.3237	0.0118	/	1.1	1.08	10.95	0.064	0.85	0.014	1.04
67	Surface	22.47	8.16	32.58	37	6.25	0.75	0.215	0.0158	0.0291	0.9	1.7	11.19	0.048	0.7	0.013	1.07
	Bottom	26.37	8.16	32.59	49.7	5.88	0.86	0.2279	0.0175	/	1.33	1.18	13.81	0.108	0.65	0.012	1.04
69	Surface	27.65	8.12	32.44	43.7	6.03	0.48	0.1898	0.0135	0.0333	1.1	1.39	12.14	0.072	0.78	0.012	1.08
	Bottom	26.95	8.13	32.7	66.7	5.97	0.58	0.1996	0.0138	/	1.44	1.93	19.76	0.088	0.82	0.013	1.05
70	Surface	27.28	8.11	32.64	12.7	6.49	0.57	0.1084	0.0152	0.023	1.07	1.98	13.1	0.083	0.73	0.012	1.13
	Bottom	27.23	8.1	32.62	35.3	6.05	0.71	0.1843	0.019	/	1.17	2.32	18.81	0.088	0.66	0.013	1.05
71	Surface	27.39	8.14	32.25	56	6.26	0.55	0.3117	0.0144	0.0269	1.29	0.67	15.48	0.078	0.84	0.012	1.13
	Bottom	27.22	8.14	32.45	71.7	5.85	0.68	0.1926	0.0138	/	1.17	1.24	13.1	0.041	0.71	0.013	1.13
72	Surface	27.19	8.15	32.36	52	6.12	0.52	0.2167	0.019	0.032	1.13	0.73	11.19	0.05	0.55	0.012	0.99
	Bottom	26.85	8.14	32.4	65	5.92	0.86	0.1943	0.0187	/	0.9	1.61	12.86	0.046	0.7	0.015	1.06

Table 12 Survey Result to Seawater Quality in Ebb and Spring Tide on Sept.6, 2013

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
37	Surface	27.02	7.96	32.46	15.7	6.04	0.87	0.0182	0.0057	0.0312	2.08	1.28	22.86	0.067	0.71	0.066	1.29
38	Surface	27.06	7.99	32.34	7	6.48	0.62	0.0648	0.0121	0.039	1.97	2.31	16.19	0.096	0.92	＜0.007	0.78
	Bottom	27.09	7.97	32.21	13.7	5.96	0.79	0.1668	0.0138	/	1.61	1.04	22.14	0.094	0.9	< 0.007	0.96
43	Surface	27.69	7.97	32.51	22	6.48	0.87	0.0847	0.0115	0.0252	2.1	0.97	10.95	0.056	0.67	＜0.007	1.33
44	Surface	27.61	7.99	32.31	12.3	6.12	0.78	0.1032	0.0103	0.0336	2.11	2.42	16.67	0.086	0.82	＜0.007	0.87
	Bottom	27.32	7.98	32.42	20	6.1	0.97	0.2193	0.0141	/	1.94	1.07	12.14	0.066	0.8	< 0.007	0.84
45	Surface	26.97	7.97	32.26	35.7	6.6	0.89	0.0865	0.0086	0.0286	1.67	2.06	15.24	0.06	0.67	0.009	1.51
	Bottom	27.04	7.95	32.27	41.3	6.24	0.95	0.2584	0.0152	/	1.37	1.24	17.62	0.062	0.95	0.015	0.84
46	Surface	26.93	7.96	32.07	6	6.1	0.94	0.0741	0.0075	0.0369	1.54	2.18	14.29	0.062	0.69	0.009	1.4
	Bottom	26.91	7.96	32.04	22.7	6.04	0.89	0.3259	0.0092	/	1.31	2.35	10.71	0.055	0.97	0.008	0.85
50	Surface	27.47	7.99	32.54	17.3	6.58	0.87	0.1297	0.0083	0.0403	2.3	0.75	10.48	0.062	0.85	0.01	1.25
51	Surface	27.27	7.99	32.46	8.3	6.46	1.31	0.3379	0.017	0.0368	2.02	1.95	15.71	0.099	0.98	0.012	1.18
	Bottom	27.2	7.98	32.53	32.7	6.08	1.09	0.1813	0.0216	/	1.9	1.1	11.67	0.049	0.94	0.009	0.89
52	Surface	27.3	7.99	32.3	19	6	1.07	0.2006	0.0121	0.0283	2.26	2.01	13.81	0.051	0.99	0.008	1.3
	Bottom	26.95	7.98	32.27	20.7	5.84	1.21	0.3163	0.0132	/	1.83	1.22	15.95	0.067	1.05	0.009	1.4
53	Surface	26.94	7.98	32.02	8	6.56	0.76	0.2285	0.021	0.0347	1.9	1.22	16.19	0.053	0.71	0.009	1.25
	Bottom	26.91	7.98	32.1	10.3	6.16	0.98	0.2962	0.0201	/	1.96	1.82	15.24	0.103	0.79	0.009	0.85
54	Surface	26.55	8.01	32.68	25.3	6.5	1	0.0693	0.0095	0.0329	2.07	1.5	13.33	0.053	0.9	0.009	0.77
	Bottom	26.71	8	32.48	37.7	6.02	1.09	0.2114	0.0152	/	2.01	1.45	19.52	0.079	0.92	0.013	0.87
58	Surface	26.59	8.13	32.24	34.3	6.06	0.49	0.2369	0.0172	0.026	1.83	1.3	19.76	0.095	0.9	0.01	0.98
	Bottom	26.85	8.13	32.25	35	5.96	0.77	0.1969	0.023	/	1.47	1.2	18.81	0.089	0.93	0.01	0.91

Continued Table 12 Survey Result to Seawater Quality in Ebb and Spring Tide on Sept.6, 2013

Monitoring Station	Layer	Water Temperature (℃)	pH	Salinity	Suspended Solids	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
					mg/L						μg/L						
60	Surface	26.65	8.12	32.35	59.3	6.12	0.48	0.2383	0.0138	0.0278	2.56	1.57	17.38	0.099	1.02	0.009	0.91
	Bottom	26.66	8.13	32.43	68.3	6.09	0.58	0.2472	0.0201	/	1.56	1.2	18.1	0.104	0.71	0.013	0.89
61	Surface	26.79	8.13	32.24	13.7	6.12	0.42	0.2213	0.0115	0.024	1	0.94	17.86	0.13	0.9	0.01	0.98
	Bottom	26.59	8.13	32.46	41.3	6.02	0.57	0.1822	0.0144	/	1.28	0.93	20.71	0.095	0.65	0.01	0.88
62	Surface	26.77	8.14	32.33	58	5.93	0.51	0.0964	0.0126	0.0275	1.22	1.5	14.52	0.109	0.82	0.011	1.03
	Bottom	26.76	8.14	32.48	52	5.84	0.67	0.1289	0.0141	/	1.4	1.84	16.43	0.069	0.72	0.009	0.87
65	Surface	27.63	8.14	33.55	77	6.02	0.41	0.1144	0.0178	0.0385	1.08	1.58	15.24	0.104	0.98	0.011	0.9
	Bottom	27.01	8.13	32.56	79.7	5.74	0.54	0.2113	0.0201	/	1.21	0.55	19.05	0.068	0.93	0.01	0.87
66	Surface	27.04	8.14	32.29	29	5.99	0.65	0.2115	0.0121	0.0307	1.55	1.94	13.81	0.11	0.94	0.019	0.9
	Bottom	26.83	8.17	32.57	47	5.89	0.55	0.2403	0.0152	/	1.42	2.24	15.24	0.089	0.94	0.011	0.94
67	Surface	25.88	8.14	32.44	40.3	5.92	0.71	0.1645	0.0193	0.034	1.2	1.58	17.62	0.097	0.87	0.01	0.86
	Bottom	26.02	8.14	32.47	49	5.84	0.81	0.1772	0.0198	/	1.1	1.68	17.86	0.067	0.76	0.009	0.97
69	Surface	27.48	8.13	33.52	27.7	6.14	0.51	0.134	0.0164	0.029	1.21	2.36	16.9	0.093	0.99	0.01	0.99
	Bottom	27.49	8.13	32.65	36.7	6	0.68	0.2252	0.023	/	1.07	1.33	15.48	0.055	1.04	0.01	1.09
70	Surface	27.07	8.13	32.47	49.3	6.06	0.56	0.0702	0.017	0.0354	1	1.23	11.67	0.056	0.9	0.01	0.91
	Bottom	26.9	8.13	32.87	89	5.33	0.63	0.1689	0.0184	/	0.87	1.8	12.14	0.052	0.77	0.009	1.51
71	Surface	26.71	8.14	32.65	50.7	5.82	0.54	0.1865	0.0086	0.0221	1.27	2.12	15	0.117	0.98	0.01	0.95
	Bottom	26.66	8.14	32.69	58	5.82	0.74	0.0966	0.0101	/	1.63	2.16	16.19	0.087	0.83	0.01	0.95
72	Surface	26.18	8.15	34	36.3	6.02	0.48	0.1295	0.0244	0.0194	0.99	1.61	16.19	0.097	0.71	0.012	1.57
	Bottom	26.68	8.15	32.74	58.7	5.87	0.65	0.0809	0.025	/	1.37	1.93	17.62	0.077	0.8	0.011	1.1

Table 13 Standard Indexes for Assessment Factors of Seawater Quality in Flood and Spring Tide on Apr.27, 2013

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
1	Surface	0.029	0.312	0.167	**1.736**	0.860	0.450	0.178	0.320	0.410	0.011	0.010	0.075	0.0008
2	Surface	0.143	0.295	0.187	**1.679**	0.677	0.380	0.149	0.296	0.376	0.010	0.028	0.085	0.043
3	Surface	0.257	0.403	0.330	**2.257**	**1.093**	0.520	0.228	0.690	**1.012**	0.042	0.035	0.380	0.067
	Bottom	0.343	0.424	0.230	**2.685**	**1.153**	/	0.370	0.450	0.917	0.039	0.014	0.360	0.069
4	Surface	0.200	0.297	0.197	**1.794**	0.617	0.484	0.088	0.112	0.348	0.007	0.008	0.150	0.045
5	Surface	0.171	0.330	0.190	**1.657**	0.433	0.588	0.100	0.172	0.348	0.007	0.008	0.170	0.045
6	Surface	0.114	0.322	0.243	**1.584**	0.507	0.728	0.106	0.222	0.314	0.008	0.011	0.160	0.044
7	Surface	0.086	0.313	0.320	**1.785**	0.453	0.554	0.132	0.146	0.386	0.009	0.009	0.145	0.046
8	Surface	0.086	0.339	0.180	**1.845**	0.547	0.762	0.072	0.148	0.352	0.007	0.008	0.155	0.045
9	Surface	0.057	0.382	0.167	**1.721**	0.647	0.762	0.069	0.126	0.314	0.022	0.012	0.160	0.044
	Bottom	0.057	0.408	0.220	**1.626**	0.697	/	0.105	0.168	0.386	0.014	0.006	0.155	0.046
10	Surface	0.143	0.340	0.213	**1.463**	0.517	0.580	0.134	0.222	0.290	0.009	0.006	0.150	0.043
11	Surface	0.286	0.341	0.210	**1.873**	0.697	0.620	0.209	0.304	0.376	0.010	0.004	0.180	0.043
	Bottom	0.343	0.366	0.240	0.887	0.767	/	0.236	0.338	0.352	0.009	0.005	0.205	0.043
12	Surface	0.343	0.327	0.293	**1.807**	0.433	0.700	0.236	0.208	0.405	0.019	0.012	0.165	0.042
	Bottom	0.371	0.358	0.203	**1.607**	0.383	/	0.217	0.192	0.433	0.010	0.008	0.160	0.044
13	Surface	0.000	0.439	0.285	**2.320**	**1.940**	0.840	0.140	0.460	0.405	0.041	0.008	0.600	0.069
	Bottom	0.057	0.497	0.300	**2.950**	**2.000**	/	0.118	0.800	0.679	0.081	0.020	0.640	0.071
14	Surface	0.857	0.382	0.190	**1.823**	0.537	0.800	0.210	0.324	0.367	0.015	0.028	0.180	0.045
15	Surface	0.743	0.417	0.180	**1.440**	0.627	0.860	0.227	0.384	0.386	0.015	0.017	0.180	0.048
	Bottom	0.857	0.401	0.170	**1.537**	**1.263**	/	0.214	0.338	0.343	0.016	0.019	0.180	0.047
16	Surface	0.429	0.314	0.180	**1.850**	0.607	0.800	0.231	0.134	0.410	0.017	0.005	0.170	0.045
	Bottom	0.400	0.346	0.200	**1.687**	**1.263**	/	0.100	0.136	0.419	0.022	0.023	0.190	0.045
17	Surface	0.229	0.330	0.240	**2.020**	0.383	0.860	0.124	0.220	0.329	0.042	0.004	0.200	0.043
	Bottom	0.314	0.297	0.180	**1.787**	0.777	/	0.144	0.268	0.305	0.036	0.005	0.195	0.045

Continued Table 13 Standard Indexes for Assessment Factors of Seawater Quality in Flood and Spring Tide on Apr.27, 2013 (1)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
18	Surface	0.114	0.375	0.400	**3.360**	**1.233**	0.660	0.178	**1.630**	0.965	0.115	0.010	0.780	0.066
	Bottom	0.086	0.473	0.310	**3.015**	**1.473**	/	0.156	**1.010**	0.738	0.099	0.019	0.800	0.062
19	Surface	0.714	0.396	0.177	**2.040**	0.547	0.860	0.190	0.342	0.429	0.012	0.008	0.215	0.047
20	Surface	0.971	0.377	0.143	**1.410**	0.817	0.900	0.133	0.392	0.300	0.014	0.005	0.200	0.051
	Bottom	0.571	0.416	0.180	**1.847**	0.697	/	0.121	0.358	0.267	0.010	0.005	0.210	0.043
21	Surface	0.200	0.322	0.240	**1.937**	0.787	0.380	0.172	0.178	0.319	0.027	0.029	0.205	0.043
	Bottom	0.229	0.348	0.253	**2.167**	0.393	/	0.066	0.136	0.262	0.016	0.004	0.225	0.042
22	Surface	0.057	0.426	0.390	**2.490**	**1.613**	0.840	0.198	0.650	0.560	0.052	0.012	0.800	0.066
	Bottom	0.057	0.472	0.410	**1.515**	**1.680**	/	0.158	0.800	0.643	0.055	0.009	0.940	0.066
23	Surface	0.114	0.355	0.270	**2.220**	**1.633**	0.720	0.142	**1.220**	0.774	0.091	0.024	0.900	0.066
	Bottom	0.086	0.462	0.225	**2.065**	**1.780**	/	0.098	0.820	0.750	0.054	0.024	0.900	0.066
24	Surface	0.686	0.328	0.207	0.927	0.687	0.720	0.063	0.222	0.300	0.015	0.005	0.245	0.044
25	Surface	0.600	0.265	0.197	**1.387**	0.657	0.580	0.060	0.240	0.400	0.009	0.021	0.230	0.042
26	Surface	0.429	0.283	0.177	0.983	0.627	0.660	0.066	0.258	0.395	0.027	0.012	0.210	0.043
	Bottom	0.486	0.315	0.223	**1.363**	0.910	/	0.046	0.226	0.314	0.008	0.007	0.215	0.045
27	Surface	0.143	0.272	0.213	**1.777**	0.840	0.320	0.067	0.152	0.338	0.024	0.008	0.205	0.046
	Bottom	0.143	0.368	0.240	**1.803**	0.767	/	0.089	0.186	0.343	0.021	0.007	0.220	0.045
28	Surface	0.000	0.362	0.280	**2.225**	**1.980**	0.760	0.122	**1.590**	0.655	0.051	0.021	0.840	0.069
	Bottom	0.029	0.405	0.250	**2.570**	**1.473**	/	0.092	**1.540**	0.893	0.084	0.009	0.920	0.070
29	Surface	0.571	0.251	0.167	**1.713**	1.000	0.700	0.083	0.206	0.314	0.015	0.004	0.225	0.046
30	Surface	0.543	0.269	0.200	**1.693**	0.817	0.700	0.061	0.332	0.252	0.025	0.005	0.230	0.046
	Bottom	0.457	0.326	0.207	**1.563**	0.840	/	0.127	0.260	0.290	0.016	0.004	0.245	0.046
31	Surface	0.600	0.223	0.207	**1.274**	0.767	0.588	0.080	0.324	0.429	0.018	0.004	0.255	0.046
32	Surface	0.486	0.286	0.207	**1.727**	0.777	0.658	0.063	0.222	0.338	0.022	0.004	0.245	0.045
	Bottom	0.457	0.362	0.140	**1.517**	**1.020**	/	0.177	0.276	0.429	0.012	0.005	0.265	0.046

Continued Table 13 Standard Indexes for Assessment Factors of Seawater Quality in Flood and Spring Tide on Apr.27, 2013 (2)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
33	Surface	0.114	0.386	0.330	**3.075**	**1.433**	0.700	0.360	**1.990**	0.667	0.173	0.010	**1.240**	0.069
	Bottom	0.086	0.415	0.360	**2.205**	**1.113**	/	0.154	**1.870**	0.738	0.090	0.009	**1.160**	0.070
34	Surface	0.114	0.429	0.440	**1.630**	0.707	0.280	0.200	0.490	0.770	0.050	0.006	0.240	0.080
	Bottom	0.086	0.436	0.465	**1.940**	0.993	/	0.260	0.410	0.870	0.080	0.004	0.320	0.070
35	Surface	0.057	0.388	0.320	**1.655**	**1.093**	0.300	0.480	0.340	0.875	0.070	0.003	0.260	0.070
	Bottom	0.029	0.381	0.495	**1.780**	0.953	/	0.240	0.660	0.790	0.080	0.006	0.220	0.090
36	Surface	0.571	0.730	0.415	**1.680**	0.847	0.300	0.340	0.230	0.885	0.070	0.003	0.300	0.045
	Bottom	0.657	0.435	0.440	**1.600**	0.787	/	0.440	0.640	0.885	0.060	0.003	0.180	0.060
37	Surface	0.143	0.410	0.263	**1.563**	0.547	0.280	0.110	0.062	0.364	0.016	0.002	0.045	0.033
	Bottom	0.029	0.394	0.223	**1.463**	0.330	/	0.120	0.086	0.374	0.016	0.002	0.055	0.057
38	Surface	0.086	0.466	0.335	**2.465**	0.953	0.280	0.220	0.220	0.900	0.060	0.003	0.180	0.070
	Bottom	0.143	0.445	0.365	**2.095**	**1.053**	/	0.260	0.740	0.925	0.080	0.003	0.220	0.065
39	Surface	0.057	0.566	0.430	**1.940**	**1.280**	0.280	0.360	0.770	0.725	0.060	0.003	0.240	0.085
	Bottom	0.114	0.545	0.370	**2.490**	**1.447**	/	0.400	0.450	1.000	0.100	0.003	0.220	0.065
40	Surface	0.457	0.718	0.520	**1.985**	**1.113**	0.280	0.240	0.970	0.800	0.180	0.003	0.260	0.075
	Bottom	0.514	0.717	0.565	**1.690**	0.767	/	0.340	0.300	0.985	0.060	0.003	0.200	0.075
41	Surface	0.114	0.409	0.480	**1.685**	**1.360**	0.300	0.240	0.680	0.820	0.060	0.003	0.180	0.070
	Bottom	0.057	0.403	0.455	**1.815**	**1.173**	/	0.420	0.570	0.870	0.100	0.003	0.300	0.070
42	Surface	0.171	0.470	0.490	**1.620**	**1.133**	0.300	0.320	0.430	0.830	0.070	0.003	0.200	0.075
	Bottom	0.086	0.365	0.405	**1.925**	**1.340**	/	0.280	0.410	0.880	0.130	0.003	0.200	0.095
43	Surface	0.200	0.412	0.210	**1.393**	0.207	0.260	0.090	0.220	0.332	0.016	0.001	0.070	0.043
44	Surface	0.171	0.402	0.233	**1.630**	0.280	0.300	0.180	0.070	0.324	0.014	0.002	0.055	0.040
	Bottom	0.086	0.398	0.227	0.963	0.217	/	0.150	0.160	0.294	0.016	0.002	0.070	0.040

Continued Table 13 Standard Indexes for Assessment Factors of Seawater Quality in Flood and Spring Tide on Apr.27, 2013 (3)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
45	Surface	0.143	0.530	0.425	**1.855**	0.413	0.240	0.220	0.210	0.810	0.070	0.003	0.260	0.070
	Bottom	0.086	0.434	0.330	**2.340**	0.827	/	0.320	0.560	0.835	0.090	0.004	0.240	0.050
46	Surface	0.057	0.409	0.425	**2.165**	**1.547**	0.300	0.500	0.500	0.700	0.070	0.003	0.200	0.070
	Bottom	0.057	0.443	0.570	**2.015**	**1.300**	/	0.260	**1.090**	0.915	0.070	0.003	0.240	0.070
47	Surface	0.086	0.414	0.520	**2.360**	**1.627**	0.300	0.520	**1.430**	0.700	0.190	0.005	0.280	0.090
	Bottom	0.057	0.442	0.400	**2.415**	**1.360**	/	0.280	0.270	0.690	0.070	0.002	0.200	0.075
48	Surface	0.114	0.504	0.370	**1.890**	**1.447**	0.260	0.200	0.630	0.780	0.070	0.003	0.300	0.075
	Bottom	0.057	0.525	0.475	**2.015**	**1.300**	/	0.300	0.310	0.750	0.100	0.003	0.220	0.085
49	Surface	0.143	0.512	0.320	**1.640**	**1.527**	0.280	0.180	0.510	0.870	0.150	0.003	0.260	0.070
	Bottom	0.086	0.528	0.355	**2.140**	**1.380**	/	0.180	0.260	0.950	0.080	0.002	0.300	0.095
50	Surface	0.057	0.371	0.297	**1.253**	0.270	0.280	0.090	0.150	0.302	0.020	0.001	0.065	0.040
	Bottom	0.086	0.372	0.223	**1.423**	0.527	/	0.220	0.164	0.340	0.028	0.001	0.065	0.047
51	Surface	0.029	0.385	0.223	**1.170**	0.413	0.240	0.110	0.054	0.356	0.016	0.003	0.060	0.047
	Bottom	0.086	0.389	0.273	**1.130**	0.403	/	0.100	0.112	0.386	0.026	0.001	0.050	0.047
52	Surface	0.000	0.480	0.325	**1.815**	0.640	0.280	0.260	0.540	0.710	0.130	0.003	0.260	0.090
	Bottom	0.086	0.481	0.350	**2.555**	0.460	/	0.200	0.350	0.795	0.140	0.003	0.200	0.080
53	Surface	0.029	0.547	0.390	**2.410**	**1.153**	0.280	0.300	**1.180**	0.780	0.090	0.002	0.260	0.075
	Bottom	0.086	0.502	0.360	**2.020**	**1.607**	/	0.280	0.810	0.930	0.090	0.004	0.200	0.080
54	Surface	0.086	0.658	0.335	**1.945**	**1.667**	0.240	0.420	0.430	0.905	0.080	0.003	0.240	0.090
	Bottom	0.057	0.580	0.360	**1.830**	**1.153**	/	0.400	0.320	0.835	0.130	0.003	0.320	0.075
55	Surface	0.086	0.558	0.390	**2.040**	**1.567**	0.300	0.240	0.230	0.830	0.090	0.003	0.240	0.090
	Bottom	0.057	0.564	0.535	**1.905**	**1.693**	/	0.260	0.640	0.870	0.070	0.002	0.220	0.070
56	Surface	0.114	0.531	0.375	**2.320**	**1.527**	0.260	0.360	0.240	0.725	0.080	0.004	0.200	0.075
	Bottom	0.057	0.548	0.335	**2.065**	**1.380**	/	0.180	0.200	0.790	0.090	0.003	0.200	0.070

Continued Table 13 Standard Indexes for Assessment Factors of Seawater Quality in Flood and Spring Tide on Apr.27, 2013 (4)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
57	Surface	0.086	0.561	0.310	**2.020**	**1.940**	0.280	0.520	0.460	0.795	0.130	0.002	0.220	0.085
	Bottom	0.086	0.564	0.330	**2.065**	**1.340**	/	0.480	0.240	0.980	0.070	0.003	0.200	0.085
58	Surface	0.057	0.476	0.390	**2.160**	0.767	0.260	0.160	**1.100**	0.875	0.230	0.003	0.260	0.075
	Bottom	0.143	0.483	0.365	**1.860**	0.973	/	0.160	**1.090**	0.930	0.240	0.002	0.220	0.065
59	Surface	0.114	0.458	0.430	**2.050**	0.680	0.280	0.660	**1.210**	0.940	0.090	0.002	0.220	0.060
	Bottom	0.086	0.465	0.525	**1.730**	0.847	/	0.260	0.330	0.915	0.090	0.003	0.180	0.055
60	Surface	0.086	0.441	0.355	**1.850**	0.620	0.260	0.240	0.620	0.915	0.090	0.004	0.280	0.050
	Bottom	0.143	0.469	0.370	**1.990**	0.600	/	0.240	0.790	0.730	0.090	0.003	0.220	0.060
61	Surface	0.086	0.403	0.570	**2.160**	0.827	0.240	0.460	0.280	0.930	0.090	0.002	0.240	0.080
	Bottom	0.143	0.462	0.520	**2.260**	0.727	/	0.360	0.740	0.950	0.110	0.002	0.180	0.070
62	Surface	0.057	0.517	0.435	**1.840**	0.620	0.300	0.400	0.350	0.730	0.090	0.004	0.200	0.065
	Bottom	0.114	0.549	0.400	**1.855**	0.767	/	0.240	0.740	0.955	0.100	0.002	0.240	0.050
63	Surface	0.171	0.274	0.247	**1.417**	0.600	0.320	0.120	0.192	0.298	0.038	0.002	0.070	0.043
	Bottom	0.200	0.273	0.230	**1.343**	0.393	/	0.120	0.230	0.356	0.042	0.002	0.060	0.037
64	Surface	0.086	0.313	0.223	**1.243**	0.270	0.320	0.130	0.358	0.372	0.050	0.002	0.050	0.033
	Bottom	0.143	0.326	0.337	**1.317**	0.240	/	0.190	0.332	0.348	0.042	0.002	0.045	0.043
65	Surface	0.057	0.297	0.223	**1.183**	0.383	0.320	0.120	0.046	0.316	0.022	0.001	0.060	0.060
	Bottom	0.114	0.380	0.210	**1.307**	0.340	/	0.130	0.102	0.368	0.024	0.001	0.065	0.037
66	Surface	0.086	0.403	0.365	**2.075**	0.600	0.280	0.240	**1.180**	0.875	0.280	0.002	0.260	0.055
	Bottom	0.114	0.459	0.605	**1.995**	0.767	/	0.220	0.280	0.775	0.090	0.003	0.220	0.060
67	Surface	0.171	0.427	0.525	**1.800**	0.480	0.380	0.220	0.230	0.685	0.080	0.003	0.240	0.065
	Bottom	0.143	0.452	0.495	**1.695**	0.707	/	0.220	0.770	0.925	0.110	0.002	0.200	0.080
68	Surface	0.114	0.323	0.193	**1.070**	0.577	0.280	0.200	0.144	0.292	0.024	0.001	0.065	0.040
	Bottom	0.086	0.333	0.227	**1.333**	0.670	/	0.140	0.140	0.344	0.022	0.001	0.085	0.043

Continued Table 13 Standard Indexes for Assessment Factors of Seawater Quality in Flood and Spring Tide on Apr.27, 2013 (5)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
69	Surface	0.114	0.393	0.213	**1.197**	0.487	0.280	0.190	0.086	0.356	0.030	0.001	0.065	0.040
	Bottom	0.086	0.369	0.213	**1.443**	0.310	/	0.200	0.108	0.274	0.032	0.001	0.050	0.037
70	Surface	0.114	0.621	0.350	**1.560**	0.887	0.300	0.360	0.470	0.700	0.150	0.003	0.220	0.055
	Bottom	0.086	0.614	0.335	**1.740**	0.927	/	0.500	0.410	0.815	0.180	0.003	0.280	0.080
71	Surface	0.057	0.403	0.550	**1.755**	0.640	0.260	0.260	**1.520**	0.940	0.120	0.003	0.280	0.055
	Bottom	0.086	0.441	0.470	**1.940**	0.767	/	0.440	**1.290**	0.915	0.100	0.003	0.260	0.065
72	Surface	0.086	0.446	0.590	**1.975**	0.707	0.300	0.180	**1.010**	0.810	0.290	0.002	0.300	0.065
	Bottom	0.143	0.465	0.440	**1.835**	0.560	/	0.240	**1.320**	0.700	0.120	0.002	0.260	0.060
73	Surface	0.171	0.294	0.223	**1.030**	0.300	0.240	0.140	0.150	0.356	0.032	0.001	0.060	0.040
	Bottom	0.143	0.330	0.220	0.903	0.413	/	0.190	0.086	0.304	0.022	0.001	0.050	0.037
74	Surface	0.086	0.622	0.315	**2.100**	0.600	0.280	0.360	0.790	0.805	0.160	0.001	0.180	0.050
	Bottom	0.086	0.538	0.385	**1.535**	**1.133**	/	0.360	0.620	0.690	0.110	0.002	0.240	0.080
75	Surface	0.057	0.570	0.275	**1.950**	**2.347**	0.280	0.320	0.830	0.720	0.160	0.003	0.200	0.060
	Bottom	0.029	0.499	0.305	**1.610**	**2.207**	/	0.340	0.330	0.660	0.070	0.001	0.260	0.065
76	Surface	0.000	0.584	0.355	**1.640**	**1.400**	0.260	0.460	0.560	0.860	0.160	0.002	0.200	0.075
	Bottom	0.029	0.486	0.330	**1.330**	**1.133**	/	0.280	0.800	0.850	0.100	0.002	0.240	0.060
77	Surface	0.057	0.640	0.305	**1.575**	0.680	0.240	0.260	0.630	0.830	0.140	0.001	0.320	0.070
	Bottom	0.086	0.586	0.400	**1.480**	0.887	/	0.300	0.850	0.890	0.080	0.002	0.220	0.065
78	Surface	0.143	0.366	0.233	0.913	0.413	0.320	0.120	0.056	0.316	0.020	0.001	0.065	0.050
	Bottom	0.143	0.323	0.197	0.933	0.650	/	0.120	0.104	0.312	0.020	0.001	0.075	0.050
79	Surface	0.057	0.406	0.240	**1.160**	0.660	0.280	0.180	0.140	0.382	0.020	0.002	0.065	0.047
	Bottom	0.029	0.389	0.213	0.810	0.433	/	0.130	0.132	0.326	0.016	0.001	0.080	0.063
80	Surface	0.057	0.401	0.197	**1.160**	0.443	0.300	0.170	0.126	0.334	0.028	0.001	0.050	0.047
	Bottom	0.000	0.377	0.210	**1.183**	0.453	/	0.200	0.058	0.324	0.014	0.002	0.065	0.043
81	Surface	0.000	0.428	0.223	**1.100**	0.577	0.280	0.180	0.200	0.312	0.016	0.001	0.060	0.043
	Bottom	0.057	0.436	0.217	0.980	0.620	/	0.130	0.070	0.330	0.014	0.002	0.080	0.063

Table 14 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Spring Tide on Apr.27, 2013

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
1	Surface	0.143	0.274	0.353	**1.573**	0.880	0.624	0.151	0.280	0.338	0.009	0.006	0.305	0.046
2	Surface	0.057	0.225	0.267	**1.899**	0.677	0.450	0.186	0.254	0.262	0.009	0.005	0.315	0.046
3	Surface	0.171	0.401	0.450	**2.271**	**1.233**	0.692	0.332	0.970	0.750	0.042	0.022	**1.240**	0.068
4	Surface	0.057	0.330	0.260	**1.582**	0.637	0.588	0.131	0.076	0.238	0.008	0.010	0.295	0.045
5	Surface	0.114	0.340	0.250	**1.742**	0.587	0.832	0.203	0.318	0.429	0.011	0.008	0.285	0.047
6	Surface	0.000	0.345	0.263	**1.533**	0.577	0.728	0.116	0.092	0.210	0.008	0.008	0.285	0.047
7	Surface	0.029	0.339	0.273	**1.798**	0.587	0.520	0.133	0.340	0.352	0.012	0.015	0.295	0.046
8	Surface	0.029	0.306	0.207	**2.131**	0.627	0.796	0.131	0.300	0.281	0.024	0.012	0.280	0.046
9	Surface	0.086	0.347	0.170	**2.033**	0.687	0.554	0.115	0.332	0.414	0.022	0.005	0.280	0.046
	Bottom	0.114	0.366	0.273	**1.873**	0.587	/	0.131	0.320	0.333	0.030	0.011	0.275	0.047
10	Surface	0.229	0.340	0.203	**1.837**	0.860	0.560	0.180	0.372	0.386	0.025	0.005	0.280	0.045
11	Surface	0.057	0.337	0.250	**1.510**	**1.060**	0.660	0.162	0.212	0.314	0.017	0.012	0.285	0.047
12	Surface	0.086	0.372	0.223	**1.773**	**1.070**	0.700	0.165	0.384	0.390	0.035	0.008	0.280	0.048
	Bottom	0.114	0.397	0.273	**1.733**	**1.070**	/	0.155	0.232	0.429	0.021	0.011	0.320	0.047
13	Surface	0.171	0.424	0.270	**3.050**	**2.040**	0.520	0.194	0.890	**1.119**	0.090	0.020	**1.100**	0.071
	Bottom	0.171	0.358	0.370	**2.595**	**2.080**	/	0.174	**1.110**	0.917	0.061	0.011	**1.220**	0.072
14	Surface	0.486	0.417	0.203	**2.057**	**1.333**	0.420	0.104	0.364	0.271	0.025	0.007	0.345	0.048
15	Surface	0.429	0.394	0.163	**1.997**	**1.283**	0.380	0.107	0.170	0.295	0.025	0.006	0.315	0.045
16	Surface	0.457	0.316	0.250	**1.603**	**1.203**	0.720	0.106	0.394	0.314	0.026	0.011	0.320	0.046
	Bottom	0.457	0.412	0.220	**1.903**	**1.313**	/	0.141	0.428	0.357	0.018	0.008	0.330	0.046
17	Surface	0.457	0.325	0.260	**1.890**	0.900	0.420	0.124	0.276	0.348	0.026	0.005	0.340	0.046
	Bottom	0.371	0.351	0.293	**1.723**	0.920	/	0.113	0.306	0.276	0.018	0.007	0.345	0.046
18	Surface	0.200	0.424	0.320	**2.425**	**1.720**	0.380	0.180	**1.130**	0.560	0.094	0.009	**1.280**	0.069
	Bottom	0.200	0.484	0.360	**2.895**	**1.900**	/	0.162	0.960	0.631	0.122	0.011	**1.320**	0.073
19	Surface	0.486	0.362	0.190	**1.750**	0.890	0.560	0.096	0.252	0.252	0.017	0.006	0.340	0.047

Continued Table 14 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Spring Tide on Apr.27, 2013 (1)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
20	Surface	0.429	0.348	0.153	**1.623**	0.827	0.520	0.083	0.230	0.262	0.013	0.007	0.070	0.032
21	Surface	0.486	0.247	0.173	**1.807**	0.940	0.580	0.085	0.198	0.276	0.039	0.010	0.145	0.038
	Bottom	0.400	0.287	0.173	**2.113**	0.777	/	0.096	0.184	0.338	0.020	0.007	0.205	0.041
22	Surface	0.286	0.356	0.270	**1.710**	**1.573**	0.320	0.240	0.950	0.881	0.118	0.019	0.760	0.067
	Bottom	0.257	0.275	0.305	**2.215**	0.787	/	0.174	0.600	0.965	0.092	0.018	0.820	0.066
23	Surface	0.286	0.350	0.295	**2.415**	**1.313**	0.420	0.160	0.640	0.572	0.084	0.015	0.820	0.060
	Bottom	0.286	0.364	0.250	**1.335**	**1.960**	/	0.222	0.980	0.726	0.124	0.011	0.840	0.065
24	Surface	0.600	0.452	0.193	**1.287**	0.817	0.580	0.097	0.186	0.281	0.017	0.009	0.245	0.038
25	Surface	0.486	0.369	0.233	**1.353**	**1.183**	0.840	0.145	0.308	0.338	0.033	0.015	0.240	0.034
26	Surface	0.514	0.301	0.160	**1.420**	0.747	0.700	0.183	0.078	0.310	0.015	0.016	0.240	0.043
27	Surface	0.400	0.209	0.180	**1.140**	0.493	0.620	0.097	0.206	0.248	0.030	0.006	0.240	0.041
	Bottom	0.457	0.350	0.207	**1.793**	**1.263**	/	0.094	0.110	0.333	0.023	0.005	0.245	0.043
28	Surface	0.371	0.302	0.320	**2.770**	**1.980**	0.460	0.192	**1.060**	1.000	0.114	0.012	0.980	0.066
	Bottom	0.314	0.422	0.335	**1.560**	**1.473**	/	0.178	0.420	0.822	0.081	0.011	0.980	0.067
29	Surface	0.543	0.340	0.220	**1.690**	0.707	0.800	0.094	0.156	0.348	0.012	0.005	0.240	0.043
30	Surface	0.400	0.267	0.160	**1.397**	0.737	0.420	0.088	0.170	0.290	0.049	0.014	0.240	0.046
31	Surface	0.514	0.339	0.180	**1.230**	0.777	0.588	0.075	0.114	0.314	0.007	0.005	0.250	0.042
32	Surface	0.486	0.287	0.187	**1.757**	1.020	0.450	0.074	0.216	0.438	0.019	0.007	0.245	0.035
33	Surface	0.457	0.228	0.270	**2.175**	**1.553**	0.560	0.224	0.960	0.584	0.107	0.026	0.960	0.051
	Bottom	0.371	0.327	0.305	**1.725**	**1.680**	/	0.174	**1.010**	0.893	0.136	0.011	**1.040**	0.060
34	Surface	0.143	0.406	0.390	**1.975**	**1.013**	0.280	0.300	**1.140**	0.790	0.160	0.003	0.220	0.065
	Bottom	0.086	0.393	0.335	**2.020**	0.727	/	0.440	0.280	0.975	0.070	0.002	0.260	0.080
35	Surface	0.114	0.395	0.460	**1.940**	0.460	0.260	0.220	0.570	0.885	0.060	0.005	0.260	0.065
	Bottom	0.057	0.400	0.435	**2.240**	0.787	/	0.340	0.500	0.990	0.080	0.004	0.260	0.075

Continued Table 14 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Spring Tide on Apr.27, 2013 (2)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
36	Surface	0.114	0.388	0.505	**1.760**	0.433	0.260	0.400	0.390	0.910	0.070	0.004	0.200	0.055
	Bottom	0.086	0.407	0.445	**1.860**	0.413	/	0.360	0.700	0.785	0.040	0.004	0.200	0.075
37	Surface	0.086	0.306	0.267	**1.220**	0.680	0.280	0.190	0.170	0.384	0.008	0.001	0.045	0.050
	Bottom	0.029	0.303	0.223	**1.607**	0.723	/	0.200	0.078	0.326	0.016	0.001	0.065	0.050
38	Surface	0.086	0.406	0.335	**1.820**	**1.380**	0.300	0.200	0.300	0.910	0.050	0.002	0.180	0.075
	Bottom	0.057	0.393	0.440	**1.795**	**1.793**	/	0.340	0.390	0.915	0.080	0.002	0.220	0.075
39	Surface	0.029	0.395	0.315	**1.885**	**1.793**	0.260	0.440	0.280	0.750	0.050	0.003	0.200	0.085
	Bottom	0.029	0.408	0.350	**1.975**	**1.647**	/	0.320	0.500	0.960	0.090	0.003	0.260	0.065
40	Surface	0.000	0.400	0.445	**2.265**	0.727	0.280	0.280	0.920	0.795	0.130	0.002	0.220	0.070
	Bottom	0.057	0.414	0.410	**1.730**	**1.153**	/	0.360	0.290	0.780	0.080	0.003	0.180	0.080
41	Surface	0.086	0.412	0.505	**2.130**	0.540	0.260	0.320	0.390	0.785	0.040	0.005	0.280	0.075
	Bottom	0.057	0.403	0.430	**2.330**	0.707	/	0.500	0.380	0.885	0.070	0.002	0.180	0.085
42	Surface	0.057	0.389	0.400	**1.595**	**1.173**	0.280	0.260	0.500	0.755	0.070	0.003	0.240	0.075
	Bottom	0.000	0.399	0.415	**2.210**	0.500	/	0.320	0.580	0.720	0.050	0.003	0.180	0.065
43	Surface	0.114	0.309	0.260	**1.303**	0.813	0.300	0.210	0.054	0.334	0.012	0.001	0.050	0.063
	Bottom	0.086	0.317	0.227	**1.537**	0.753	/	0.150	0.112	0.372	0.010	0.001	0.070	0.040
44	Surface	0.143	0.309	0.267	**1.323**	0.847	0.280	0.210	0.092	0.312	0.016	0.001	0.070	0.047
	Bottom	0.086	0.303	0.273	**1.347**	0.970	/	0.090	0.108	0.374	0.012	0.001	0.055	0.053
45	Surface	0.114	0.368	0.385	**2.070**	**1.627**	0.340	0.280	0.330	0.940	0.130	0.003	0.200	0.065
	Bottom	0.086	0.364	0.375	**2.150**	**1.647**	/	0.360	0.650	0.915	0.090	0.003	0.240	0.090
46	Surface	0.086	0.419	0.535	**2.150**	**1.607**	0.300	0.320	0.560	0.925	0.070	0.002	0.260	0.075
	Bottom	0.029	0.427	0.430	**2.055**	**1.380**	/	0.280	0.590	0.795	0.090	0.003	0.220	0.070
47	Surface	0.114	0.408	0.530	**2.305**	**1.447**	0.280	0.220	0.310	0.730	0.090	0.002	0.280	0.075
	Bottom	0.057	0.413	0.490	**2.365**	**1.527**	/	0.200	0.460	0.920	0.090	0.003	0.260	0.075

Continued Table 14 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Spring Tide on Apr.27, 2013 (3)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
48	Surface	0.143	0.407	0.465	**1.865**	**1.400**	0.320	0.360	0.330	0.945	0.060	0.002	0.260	0.075
	Bottom	0.029	0.407	0.385	**1.995**	**1.647**	/	0.360	0.350	0.730	0.090	0.003	0.240	0.075
49	Surface	0.143	0.415	0.390	**1.980**	**1.420**	0.300	0.300	**1.540**	0.865	0.060	0.003	0.180	0.070
	Bottom	0.029	0.431	0.360	**1.915**	**1.400**	/	0.420	0.940	0.770	0.060	0.002	0.280	0.080
50	Surface	0.029	0.334	0.247	**1.237**	0.537	0.240	0.240	0.092	0.370	0.014	0.001	0.070	0.077
	Bottom	0.143	0.332	0.250	**1.397**	0.477	/	0.110	0.230	0.336	0.010	0.002	0.060	0.053
51	Surface	0.029	0.335	0.240	**1.113**	0.423	0.280	0.110	0.112	0.362	0.012	0.001	0.060	0.043
	Bottom	0.114	0.343	0.250	**1.223**	0.463	/	0.210	0.074	0.314	0.018	0.002	0.055	0.050
52	Surface	0.000	0.435	0.320	**2.400**	0.707	0.260	0.320	0.410	0.940	0.060	0.002	0.220	0.075
	Bottom	0.086	0.448	0.335	**2.365**	0.827	/	0.180	0.890	0.720	0.040	0.003	0.180	0.070
53	Surface	0.029	0.429	0.345	**2.005**	0.973	0.260	0.480	0.510	0.680	0.080	0.002	0.240	0.095
	Bottom	0.057	0.453	0.320	**1.950**	**1.280**	/	0.240	0.290	0.765	0.040	0.003	0.320	0.070
54	Surface	0.086	0.401	0.345	**1.880**	**1.400**	0.280	0.280	0.220	0.800	0.060	0.002	0.240	0.095
	Bottom	0.029	0.421	0.335	**1.985**	**1.033**	/	0.360	0.810	0.905	0.050	0.003	0.220	0.065
55	Surface	0.200	0.434	0.440	**1.920**	**1.240**	0.280	0.460	0.540	0.930	0.100	0.003	0.300	0.100
	Bottom	0.086	0.450	0.390	**2.285**	**1.073**	/	0.220	0.660	0.865	0.090	0.002	0.260	0.100
56	Surface	0.171	0.428	0.545	**1.800**	**1.073**	0.280	0.660	0.450	0.920	0.050	0.003	0.200	0.080
	Bottom	0.000	0.439	0.410	**1.440**	**1.447**	/	0.240	0.240	0.930	0.090	0.002	0.220	0.090
57	Surface	0.114	0.398	0.375	**2.090**	**1.420**	0.320	0.240	0.730	0.820	0.120	0.003	0.320	0.080
	Bottom	0.029	0.416	0.425	**2.095**	**1.260**	/	0.240	0.970	0.655	0.060	0.003	0.220	0.080
58	Surface	0.057	0.351	0.560	**1.845**	0.727	0.300	0.300	0.310	0.895	0.060	0.002	0.220	0.080
	Bottom	0.143	0.366	0.445	**1.830**	0.867	/	0.400	0.630	0.685	0.170	0.002	0.240	0.070
59	Surface	0.057	0.377	0.405	**1.690**	0.620	0.300	0.560	0.290	0.770	0.060	0.003	0.200	0.065
	Bottom	0.086	0.389	0.375	**1.935**	0.847	/	0.700	0.500	0.920	0.120	0.002	0.180	0.070

Continued Table 14 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Spring Tide on Apr.27, 2013 (4)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
60	Surface	0.057	0.368	0.395	**1.855**	0.807	0.260	0.240	0.890	0.885	0.060	0.002	0.240	0.080
	Bottom	0.086	0.396	0.575	**1.770**	**1.033**	/	0.340	0.610	0.730	0.090	0.002	0.180	0.060
61	Surface	0.057	0.369	0.370	**1.805**	0.867	0.300	0.220	**1.500**	0.995	0.080	0.002	0.220	0.065
	Bottom	0.086	0.398	0.505	**2.005**	0.747	/	0.240	**1.620**	0.990	0.090	0.002	0.200	0.075
62	Surface	0.057	0.377	0.335	**1.705**	0.847	0.360	0.240	**1.440**	0.815	0.070	0.002	0.240	0.050
	Bottom	0.086	0.400	0.305	**1.800**	0.727	/	0.360	**1.750**	0.700	0.100	0.004	0.240	0.055
63	Surface	0.143	0.263	0.257	**1.267**	0.443	0.280	0.160	0.154	0.306	0.010	0.001	0.065	0.037
	Bottom	0.200	0.269	0.297	**1.247**	0.310	/	0.230	0.062	0.372	0.014	0.002	0.065	0.033
64	Surface	0.057	0.287	0.303	**1.283**	0.330	0.360	0.130	0.372	0.274	0.050	0.001	0.070	0.057
	Bottom	0.114	0.301	0.350	**1.273**	0.280	/	0.200	0.266	0.368	0.012	0.001	0.055	0.033
65	Surface	0.057	0.274	0.250	**1.197**	0.413	0.380	0.080	0.314	0.318	0.048	0.001	0.065	0.037
	Bottom	0.086	0.296	0.360	**1.247**	0.373	/	0.150	0.148	0.344	0.014	0.001	0.045	0.043
66	Surface	0.086	0.353	0.360	**1.950**	0.847	0.280	0.220	0.920	0.720	0.110	0.003	0.220	0.055
	Bottom	0.086	0.400	0.385	**1.925**	0.680	/	0.240	0.290	0.920	0.070	0.003	0.240	0.060
67	Surface	0.114	0.389	0.455	**1.835**	0.620	0.280	0.340	0.520	0.770	0.090	0.004	0.220	0.060
	Bottom	0.086	0.406	0.440	**1.810**	0.787	/	0.240	**1.020**	0.905	0.180	0.003	0.260	0.070
68	Surface	0.143	0.297	0.243	**1.340**	0.330	0.260	0.130	0.118	0.344	0.034	0.001	0.060	0.050
	Bottom	0.143	0.311	0.210	**1.057**	0.527	/	0.160	0.060	0.280	0.034	0.001	0.070	0.043
69	Surface	0.086	0.317	0.273	**1.083**	0.517	0.280	0.120	0.162	0.310	0.014	0.002	0.055	0.047
70	Surface	0.086	0.439	0.400	**1.495**	**1.320**	0.280	0.280	0.200	0.885	0.070	0.002	0.240	0.065
	Bottom	0.057	0.398	0.365	**1.490**	**1.013**	/	0.320	0.360	0.765	0.120	0.002	0.340	0.060
71	Surface	0.029	0.429	0.410	**2.020**	0.787	0.360	0.420	**1.760**	0.810	0.230	0.002	0.280	0.050
	Bottom	0.086	0.369	0.490	**2.100**	0.767	/	0.340	0.400	0.750	0.090	0.002	0.220	0.065
72	Surface	0.086	0.415	0.445	**2.070**	0.867	0.280	0.360	0.380	0.820	0.090	0.002	0.260	0.060
	Bottom	0.114	0.372	0.370	**1.760**	**1.013**	/	0.280	0.930	0.805	0.200	0.003	0.260	0.065

Continued Table 14 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Spring Tide on Apr.27, 2013 (5)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
73	Surface	0.114	0.305	0.207	0.947	0.487	0.300	0.190	0.202	0.356	0.044	0.001	0.045	0.050
	Bottom	0.143	0.258	0.187	**1.237**	0.547	/	0.130	0.178	0.300	0.032	0.001	0.065	0.043
74	Surface	0.086	0.435	0.295	**1.670**	0.727	0.240	0.420	0.270	0.935	0.090	0.002	0.240	0.065
	Bottom	0.086	0.407	0.360	**1.725**	0.807	/	0.260	0.630	0.935	0.160	0.003	0.320	0.075
75	Surface	0.029	0.434	0.315	**1.320**	0.680	0.320	0.340	0.970	0.945	0.210	0.001	0.200	0.075
	Bottom	0.000	0.386	0.370	**1.365**	0.827	/	0.460	**1.780**	0.920	0.080	0.002	0.220	0.100
76	Surface	0.029	0.425	0.545	**1.500**	**1.013**	0.300	0.300	**1.450**	0.850	0.190	0.003	0.260	0.055
	Bottom	0.029	0.380	0.375	**1.260**	0.767	/	0.340	**1.260**	0.975	0.240	0.003	0.300	0.060
77	Surface	0.000	0.423	0.390	**1.440**	0.827	0.280	0.280	0.410	0.940	0.130	0.002	0.240	0.060
	Bottom	0.057	0.347	0.435	**1.450**	0.867	/	0.260	0.850	0.890	0.170	0.003	0.220	0.090
78	Surface	0.114	0.308	0.200	0.997	0.487	/	0.200	0.120	0.368	0.026	0.001	0.075	0.063
	Bottom	0.086	0.318	0.213	0.980	0.463	0.300	0.160	0.172	0.366	0.034	0.001	0.065	0.047
79	Surface	0.086	0.261	0.273	0.957	0.527	/	0.190	0.082	0.344	0.028	0.001	0.055	0.043
	Bottom	0.057	0.332	0.427	**1.027**	0.610	0.260	0.160	0.076	0.360	0.030	0.001	0.065	0.047
80	Surface	0.086	0.278	0.373	**1.203**	0.517	/	0.140	0.170	0.346	0.032	0.001	0.080	0.043
	Bottom	0.029	0.309	0.180	**1.070**	0.547	0.240	0.180	0.142	0.264	0.026	0.001	0.055	0.043
81	Surface	0.000	0.266	0.313	0.877	0.383	/	0.130	0.056	0.340	0.024	0.001	0.080	0.037
	Bottom	0.029	0.308	0.200	0.997	0.487	/	0.200	0.120	0.368	0.026	0.001	0.075	0.063

Table 15 Standard Indexes for Assessment Factors of Seawater Quality in Flood and NeapTide on May 4, 2013

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
1	Surface	0.200	0.206	0.477	**2.878**	0.220	0.448	0.123	0.138	0.405	0.009	0.006	0.240	0.051
2	Surface	0.200	0.224	0.507	**2.645**	0.163	0.414	0.232	0.186	0.447	0.008	0.008	0.245	0.042
3	Surface	**1.543**	0.517	**3.560**	**2.640**	0.847	0.620	0.294	**1.370**	0.640	0.080	0.037	0.960	0.069
4	Surface	0.229	0.232	0.500	**2.583**	0.577	0.552	0.091	0.164	0.386	0.011	0.009	0.235	0.051
5	Surface	0.171	0.212	0.527	**2.852**	0.270	0.656	0.240	0.220	0.442	0.009	0.007	0.225	0.047
6	Surface	0.457	0.520	**1.413**	**1.841**	0.087	0.586	0.154	0.280	0.326	0.003	0.007	0.230	0.051
7	Surface	0.229	0.285	0.853	**3.763**	0.730	0.344	0.071	0.094	0.298	0.007	0.006	0.245	0.054
8	Surface	0.114	0.148	0.770	**2.896**	0.423	0.552	0.121	0.128	0.395	0.005	0.005	0.255	0.047
9	Surface	0.971	0.181	0.473	**3.025**	0.173	0.586	0.067	0.140	0.251	0.007	0.007	0.270	0.040
	Bottom	0.914	0.208	0.357	**3.401**	0.203	/	0.140	0.144	0.298	0.009	0.012	0.265	0.045
10	Surface	0.143	0.190	0.440	**2.957**	0.450	0.380	0.196	0.156	0.335	0.007	0.004	0.255	0.040
11	Surface	0.057	0.119	0.687	**3.560**	0.117	0.620	0.246	0.130	0.377	0.007	0.007	0.240	0.039
12	Surface	0.029	0.098	0.730	**3.320**	0.270	0.560	0.209	0.192	0.260	0.007	0.009	0.255	0.064
	Bottom	0.086	0.120	0.693	**3.840**	0.250	/	0.146	0.180	0.386	0.007	0.008	0.255	0.042
13	Surface	0.914	0.252	0.550	**4.460**	0.307	0.340	0.370	**1.120**	0.837	0.050	0.027	**1.040**	0.050
	Bottom	0.829	0.307	0.735	**4.540**	0.327	/	0.224	0.930	0.733	0.043	0.018	**1.040**	0.056
14	Surface	0.000	0.327	0.227	**2.823**	0.643	0.240	0.156	0.256	0.340	0.009	0.010	0.260	0.037
15	Surface	0.114	0.336	0.480	**2.510**	0.710	0.320	0.101	0.220	0.298	0.008	0.010	0.255	0.039
	Bottom	0.086	0.293	0.460	**3.073**	0.547	/	0.068	0.198	0.265	0.006	0.005	0.260	0.028
16	Surface	**1.800**	0.725	**1.647**	**2.223**	0.087	0.580	0.078	0.266	0.270	0.007	0.013	0.250	0.039
	Bottom	**1.514**	0.239	0.763	**2.050**	0.183	/	0.097	0.198	0.312	0.008	0.008	0.245	0.055
17	Surface	**1.314**	0.070	0.473	**1.840**	0.210	0.340	0.130	0.202	0.214	0.007	0.010	0.230	0.045
	Bottom	**1.229**	0.152	0.420	**1.913**	0.327	/	0.133	0.264	0.367	0.008	0.009	0.250	0.048
18	Surface	0.914	0.202	0.560	**5.055**	0.387	0.320	0.160	**1.520**	0.663	0.035	0.022	**1.060**	0.067
	Bottom	0.857	0.297	0.740	**2.700**	0.367	/	0.194	**1.070**	0.849	0.036	0.015	**1.080**	0.085

Continued Table 15 Standard Indexes for Assessment Factors of Seawater Quality in Flood and NeapTide on May 4, 2013 (1)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
19	Surface	0.057	0.430	0.340	**2.817**	0.613	0.420	0.105	0.210	0.307	0.007	0.013	0.260	0.043
20	Surface	0.343	0.055	0.443	**2.203**	0.250	0.480	0.085	0.166	0.195	0.004	0.007	0.270	0.045
	Bottom	0.286	0.309	0.337	**2.220**	0.413	/	0.065	0.200	0.270	0.007	0.006	0.260	0.025
21	Surface	**2.200**	**1.441**	**1.990**	**1.840**	0.193	0.520	0.089	0.250	0.270	0.005	0.011	0.255	0.027
	Bottom	**1.657**	0.252	**1.503**	**1.137**	0.230	/	0.097	0.170	0.260	0.008	0.012	0.250	0.030
22	Surface	**1.400**	**1.220**	**1.960**	**3.075**	0.093	0.280	0.128	**1.020**	0.430	0.025	0.015	**1.120**	0.058
	Bottom	**1.486**	0.157	**1.370**	**2.260**	0.387	/	0.170	**1.120**	0.582	0.048	0.018	**1.020**	0.052
23	Surface	**1.600**	0.990	**1.710**	**3.200**	0.193	0.240	0.342	0.920	0.454	0.039	0.018	**1.020**	0.057
	Bottom	**1.486**	0.065	**2.280**	**3.400**	0.387	/	0.164	0.890	0.535	0.036	0.025	**1.120**	0.083
24	Surface	0.143	0.301	0.283	**2.387**	0.653	0.520	0.109	0.280	0.279	0.007	0.006	0.275	0.050
25	Surface	0.029	0.201	0.930	**1.810**	0.470	0.760	0.114	0.242	0.307	0.017	0.014	0.255	0.050
26	Surface	0.743	0.377	**1.373**	**1.873**	0.220	0.520	0.046	0.276	0.158	0.008	0.005	0.270	0.033
27	Surface	**1.943**	0.979	**1.647**	**2.790**	0.203	0.440	0.125	0.288	0.344	0.010	0.012	0.260	0.041
	Bottom	**1.143**	0.176	**1.330**	**1.217**	0.450	/	0.072	0.286	0.353	0.014	0.008	0.270	0.035
28	Surface	**1.657**	0.559	**2.560**	**1.930**	0.480	0.420	0.114	0.920	0.500	0.030	0.031	1.000	0.061
	Bottom	**1.400**	0.058	0.850	**2.750**	0.407	/	0.156	0.930	0.617	0.026	0.024	**1.440**	0.073
29	Surface	0.400	0.080	0.917	**4.950**	0.403	0.760	0.104	0.260	0.358	0.006	0.011	0.250	0.040
30	Surface	0.771	0.273	0.790	**1.717**	0.173	0.240	0.076	0.240	0.228	0.007	0.016	0.255	0.045
31	Surface	0.171	0.327	0.427	**1.677**	0.450	0.440	0.074	0.216	0.237	0.015	0.011	0.275	0.046
32	Surface	0.743	0.092	0.593	**3.783**	0.357	0.420	0.088	0.270	0.205	0.007	0.014	0.260	0.039
33	Surface	**1.371**	0.265	**1.475**	**1.750**	0.113	0.380	0.308	**1.330**	0.710	0.044	0.021	**1.100**	0.066
	Bottom	**1.371**	0.102	**1.265**	**2.615**	0.460	/	0.318	**1.220**	0.721	0.045	0.021	0.840	0.067
34	Surface	0.200	0.410	0.375	**1.565**	0.520	0.240	0.440	0.580	0.760	0.070	0.002	0.240	0.080
	Bottom	0.086	0.408	0.535	**1.665**	0.640	/	0.320	**1.200**	0.850	0.070	0.002	0.300	0.075

Continued Table 15 Standard Indexes for Assessment Factors of Seawater Quality in Flood and NeapTide on May 4, 2013 (2)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
35	Surface	0.171	0.397	0.355	**2.075**	0.767	0.260	0.320	0.770	0.835	0.120	0.002	0.200	0.065
	Bottom	0.086	0.396	0.545	**1.490**	0.680	/	0.400	0.650	0.755	0.070	0.001	0.260	0.080
36	Surface	0.143	0.418	0.435	**2.025**	0.787	0.280	0.280	0.820	0.885	0.070	0.003	0.240	0.085
	Bottom	0.057	0.420	0.525	**2.070**	0.660	/	0.300	0.350	0.790	0.080	0.001	0.220	0.070
37	Surface	0.143	0.349	0.283	**1.297**	0.280	0.280	0.170	0.186	0.336	0.042	0.001	0.050	0.043
	Bottom	0.114	0.353	0.430	**1.337**	0.197	/	0.210	0.314	0.300	0.046	0.001	0.055	0.040
38	Surface	0.171	0.431	0.425	**1.765**	0.433	0.240	0.580	**1.400**	0.730	0.240	0.002	0.340	0.080
	Bottom	0.143	0.426	0.635	**2.060**	0.560	/	0.320	**1.120**	0.845	0.200	0.002	0.200	0.085
39	Surface	0.114	0.420	0.425	**2.080**	0.680	0.240	0.320	**1.030**	0.780	0.200	0.002	0.260	0.075
	Bottom	0.086	0.427	0.555	**1.325**	0.433	/	0.360	0.680	0.760	0.170	0.002	0.180	0.070
40	Surface	0.171	0.428	0.415	**2.070**	0.480	0.240	0.520	0.980	0.825	0.180	0.001	0.200	0.070
	Bottom	0.086	0.424	0.550	**1.475**	0.640	/	0.340	0.800	0.935	0.180	0.001	0.180	0.065
41	Surface	0.229	0.410	0.425	**2.060**	0.807	0.280	0.500	**1.150**	0.790	0.210	0.001	0.260	0.065
	Bottom	0.143	0.414	0.525	**1.490**	0.707	/	0.380	0.550	0.895	0.070	0.003	0.200	0.070
42	Surface	0.114	0.415	0.400	**1.385**	0.620	0.300	0.380	0.770	0.910	0.180	0.001	0.180	0.095
	Bottom	0.057	0.422	0.515	**2.055**	0.660	/	0.300	0.980	0.930	0.060	0.002	0.240	0.085
43	Surface	0.286	0.335	0.263	**1.220**	0.157	0.300	0.160	0.158	0.354	0.036	0.001	0.050	0.043
	Bottom	0.229	0.348	0.323	**1.447**	0.177	/	0.160	0.148	0.338	0.040	0.001	0.070	0.037
44	Surface	0.286	0.344	0.283	**1.393**	0.207	0.280	0.150	0.208	0.268	0.030	0.001	0.045	0.060
	Bottom	0.343	0.350	0.307	**1.387**	0.187	/	0.170	0.178	0.258	0.044	0.001	0.050	0.057
45	Surface	0.257	0.432	0.395	**2.045**	0.560	0.260	0.380	**1.370**	0.940	0.170	0.001	0.200	0.080
	Bottom	0.200	0.438	0.585	**2.060**	0.520	/	0.660	**1.260**	0.855	0.230	0.002	0.260	0.070
46	Surface	0.086	0.440	0.535	**1.475**	0.867	0.260	0.320	0.220	0.935	0.110	0.002	0.240	0.090
	Bottom	0.143	0.454	0.385	**1.385**	0.953	/	0.360	0.750	0.795	0.180	0.001	0.180	0.060

Continued Table 15 Standard Indexes for Assessment Factors of Seawater Quality in Flood and NeapTide on May 4, 2013 (3)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
47	Surface	0.086	0.440	0.400	**1.545**	0.580	0.300	0.300	0.540	0.885	0.120	0.002	0.180	0.060
	Bottom	0.143	0.465	0.335	**1.430**	0.660	/	0.260	0.520	0.715	0.120	0.002	0.260	0.050
48	Surface	0.029	0.432	0.365	**1.710**	0.867	0.280	0.360	0.760	0.725	0.120	0.003	0.320	0.065
	Bottom	0.171	0.438	0.475	**1.780**	0.620	/	0.300	0.810	0.660	0.090	0.003	0.280	0.050
49	Surface	0.029	0.438	0.400	**1.920**	0.680	0.420	0.360	0.970	0.900	0.110	0.003	0.200	0.065
	Bottom	0.114	0.444	0.420	**1.870**	0.620	/	0.400	0.640	0.890	0.130	0.003	0.220	0.055
50	Surface	0.200	0.354	0.220	**1.357**	0.260	0.300	0.160	0.148	0.324	0.020	0.001	0.055	0.037
	Bottom	0.229	0.352	0.273	**1.540**	0.393	/	0.170	0.140	0.336	0.016	0.001	0.055	0.033
51	Surface	0.114	0.350	0.350	**1.360**	0.217	0.360	0.160	0.228	0.316	0.014	0.001	0.070	0.037
	Bottom	0.229	0.352	0.290	**1.357**	0.423	/	0.160	0.124	0.308	0.022	0.002	0.065	0.050
52	Surface	0.114	0.460	0.425	**1.980**	0.993	0.340	0.320	0.900	0.860	0.070	0.003	0.220	0.055
	Bottom	0.171	0.462	0.520	**1.915**	0.680	/	0.260	**1.090**	0.905	0.050	0.003	0.240	0.050
53	Surface	0.086	0.435	0.360	**1.720**	0.640	0.300	0.360	**1.260**	0.935	0.110	0.002	0.300	0.060
	Bottom	0.200	0.443	0.425	**1.850**	0.747	/	0.380	0.750	0.845	0.160	0.002	0.220	0.060
54	Surface	0.086	0.463	0.515	**1.910**	0.727	0.300	0.500	0.820	0.950	0.210	0.002	0.280	0.055
	Bottom	0.143	0.449	0.585	**1.885**	0.907	/	0.420	0.700	0.755	0.130	0.003	0.200	0.085
55	Surface	0.057	0.449	0.375	**1.835**	**1.320**	0.260	0.300	0.900	0.890	0.110	0.002	0.240	0.060
	Bottom	0.114	0.449	0.465	**1.960**	0.907	/	0.380	**1.040**	0.755	0.140	0.002	0.220	0.070
56	Surface	0.057	0.454	0.365	**1.965**	0.867	0.300	0.360	0.980	0.750	0.080	0.002	0.300	0.070
	Bottom	0.143	0.460	0.455	**2.010**	0.907	/	0.280	0.680	0.915	0.090	0.003	0.220	0.060
57	Surface	0.057	0.435	0.405	**2.335**	0.560	0.280	0.440	0.870	0.765	0.170	0.003	0.320	0.055
	Bottom	0.143	0.443	0.455	**1.825**	**1.073**	/	0.440	0.660	0.945	0.150	0.002	0.220	0.065

Continued Table 15 Standard Indexes for Assessment Factors of Seawater Quality in Flood and NeapTide on May 4, 2013 (4)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
58	Surface	0.029	0.433	0.380	**1.620**	**1.153**	0.320	0.260	0.660	0.920	0.090	0.003	0.200	0.070
	Bottom	0.086	0.429	0.455	**1.735**	0.973	/	0.300	**1.060**	0.885	0.090	0.003	0.260	0.065
59	Surface	0.057	0.437	0.415	**1.735**	0.847	0.260	0.660	0.420	0.660	0.070	0.002	0.220	0.055
	Bottom	0.143	0.429	0.485	**2.165**	**1.013**	/	0.680	0.680	0.900	0.090	0.002	0.360	0.075
60	Surface	0.029	0.425	0.345	**1.680**	**1.360**	0.320	0.440	**1.750**	0.820	0.080	0.002	0.220	0.065
	Bottom	0.057	0.409	0.535	**1.625**	**1.240**	/	0.560	0.890	0.760	0.160	0.002	0.240	0.060
61	Surface	0.114	0.435	0.435	**1.665**	0.973	0.280	0.420	0.420	0.965	0.060	0.002	0.280	0.055
	Bottom	0.086	0.432	0.380	**1.950**	0.953	/	0.400	0.660	0.755	0.080	0.002	0.340	0.080
62	Surface	0.086	0.429	0.580	**2.115**	**1.153**	0.380	0.680	0.520	0.725	0.070	0.002	0.360	0.065
	Bottom	0.029	0.419	0.355	**2.190**	0.847	/	0.700	0.500	0.890	0.070	0.002	0.280	0.060
63	Surface	0.029	0.346	0.217	**1.140**	0.330	0.280	0.190	0.266	0.278	0.020	0.001	0.070	0.037
	Bottom	0.057	0.328	0.243	**1.333**	0.453	/	0.180	0.302	0.302	0.020	0.001	0.045	0.040
64	Surface	0.029	0.408	0.300	**1.167**	0.310	0.300	0.150	0.290	0.366	0.018	0.002	0.060	0.033
	Bottom	0.086	0.366	0.370	**1.263**	0.423	/	0.140	0.270	0.308	0.020	0.002	0.060	0.030
65	Surface	0.057	0.346	0.223	**1.183**	0.443	0.300	0.180	0.324	0.344	0.014	0.001	0.055	0.047
	Bottom	0.086	0.329	0.240	**1.160**	0.443	/	0.150	0.078	0.362	0.018	0.001	0.070	0.037
66	Surface	0.143	0.455	0.530	**1.955**	0.807	0.300	0.280	0.830	0.935	0.100	0.002	0.260	0.050
	Bottom	0.114	0.435	0.335	**1.915**	0.787	/	0.340	0.430	0.840	0.100	0.002	0.180	0.075
67	Surface	0.057	0.435	0.375	**1.950**	0.867	0.300	0.620	**1.490**	0.730	0.080	0.003	0.240	0.065
	Bottom	0.086	0.414	0.445	**1.940**	**1.200**	/	0.520	**1.570**	0.890	0.090	0.002	0.220	0.060
68	Surface	0.229	0.323	0.237	**1.217**	0.363	0.360	0.140	0.216	0.364	0.024	0.001	0.050	0.037
	Bottom	0.229	0.322	0.220	**1.337**	0.620	/	0.260	0.164	0.300	0.018	0.001	0.045	0.050
69	Surface	0.086	0.297	0.243	**1.370**	0.527	0.340	0.250	0.172	0.294	0.020	0.001	0.065	0.047
	Bottom	0.029	0.316	0.223	**1.400**	0.497	/	0.160	0.188	0.364	0.024	0.001	0.075	0.050

Continued Table 15 Standard Indexes for Assessment Factors of Seawater Quality in Flood and Neap Tide on May 4, 2013 (5)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
70	Surface	0.114	0.400	0.405	**2.065**	0.827	0.340	0.640	0.890	0.925	0.100	0.002	0.280	0.055
	Bottom	0.086	0.402	0.445	**2.140**	0.847	/	0.540	0.950	0.725	0.110	0.002	0.240	0.050
71	Surface	0.057	0.431	0.395	**1.605**	**1.013**	0.260	0.460	0.440	0.790	0.080	0.002	0.340	0.065
	Bottom	0.086	0.424	0.365	**1.975**	0.807	/	0.580	0.870	0.845	0.130	0.002	0.260	0.070
72	Surface	0.029	0.423	0.345	**1.970**	**1.053**	0.300	0.360	0.550	0.765	0.100	0.002	0.260	0.055
	Bottom	0.057	0.430	0.345	**1.960**	0.887	/	0.300	**1.570**	0.920	0.060	0.002	0.200	0.070
73	Surface	0.143	0.326	0.283	**1.253**	0.423	0.340	0.310	0.168	0.374	0.014	0.001	0.080	0.037
	Bottom	0.114	0.330	0.330	**1.443**	0.507	/	0.150	0.182	0.348	0.024	0.001	0.045	0.050
74	Surface	0.086	0.404	0.390	**2.065**	**1.133**	0.320	0.260	**1.110**	0.685	0.120	0.002	0.340	0.055
	Bottom	0.057	0.425	0.345	**2.025**	**1.013**	/	0.420	0.800	0.705	0.090	0.002	0.220	0.060
75	Surface	0.029	0.400	0.540	**2.080**	0.747	0.360	0.260	**1.100**	0.825	0.130	0.004	0.340	0.055
	Bottom	0.029	0.419	0.375	**2.005**	0.993	/	0.500	0.440	0.805	0.060	0.002	0.240	0.065
76	Surface	0.000	0.403	0.425	**2.050**	0.887	0.320	0.260	0.370	0.705	0.090	0.002	0.180	0.070
	Bottom	0.029	0.415	0.615	**2.045**	**1.033**	/	0.320	0.530	0.935	0.110	0.002	0.260	0.060
77	Surface	0.029	0.397	0.465	**2.045**	0.907	0.400	0.440	0.280	0.910	0.070	0.003	0.180	0.065
	Bottom	0.086	0.407	0.375	**2.030**	**1.133**	/	0.660	0.410	0.930	0.090	0.002	0.240	0.070
78	Surface	0.086	0.328	0.283	**1.267**	0.413	0.320	0.230	0.066	0.338	0.014	0.001	0.060	0.043
	Bottom	0.086	0.339	0.317	**1.227**	0.363	/	0.200	0.168	0.278	0.014	0.002	0.050	0.043
79	Surface	0.086	0.332	0.230	**1.350**	0.433	0.340	0.290	0.130	0.310	0.016	0.001	0.070	0.040
	Bottom	0.057	0.336	0.310	**1.353**	0.403	/	0.240	0.236	0.308	0.010	0.001	0.070	0.037
80	Surface	0.057	0.318	0.323	**1.337**	0.577	0.400	0.200	0.068	0.348	0.016	0.002	0.045	0.037
	Bottom	0.029	0.310	0.263	**1.383**	0.453	/	0.120	0.098	0.378	0.022	0.002	0.055	0.060
81	Surface	0.000	0.303	0.210	**1.377**	0.620	0.340	0.280	0.086	0.282	0.014	0.001	0.060	0.047
	Bottom	0.029	0.311	0.240	**1.397**	0.630	/	0.120	0.064	0.382	0.014	0.001	0.070	0.043

Table 16 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Neap Tide on May 4, 2013

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
1	Surface	0.314	0.333	0.530	**3.692**	0.520	0.276	0.144	0.102	0.367	0.010	0.015	0.355	0.031
2	Surface	0.000	0.096	**1.030**	**2.135**	0.067	0.206	0.194	0.144	0.284	0.009	0.011	0.260	0.036
3	Surface	0.429	0.374	0.750	**4.520**	0.213	0.380	0.400	0.750	0.547	0.052	0.032	**1.040**	0.051
4	Surface	0.257	0.294	0.430	**2.733**	0.383	0.310	0.112	0.220	0.353	0.006	0.014	0.275	0.036
5	Surface	0.057	0.192	**1.570**	**1.741**	0.210	0.518	0.150	0.240	0.172	0.019	0.017	0.275	0.037
6	Surface	0.400	0.311	0.773	**3.004**	0.030	0.552	0.283	0.270	0.284	0.009	0.008	0.270	0.033
7	Surface	0.229	0.292	0.327	**3.061**	0.530	0.518	0.165	0.252	0.256	0.009	0.007	0.275	0.037
8	Surface	0.114	0.186	0.447	**4.208**	0.520	0.724	0.180	0.246	0.233	0.006	0.008	0.355	0.034
9	Surface	**1.057**	0.075	0.497	**3.123**	0.317	0.690	0.199	0.244	0.205	0.026	0.020	0.285	0.035
	Bottom	**1.057**	0.142	0.740	**2.719**	0.260	/	0.096	0.122	0.223	0.012	0.012	0.275	0.030
10	Surface	0.200	0.258	0.320	**3.190**	0.460	0.420	0.161	0.196	0.177	0.012	0.006	0.285	0.036
11	Surface	0.114	0.211	0.340	**3.087**	0.077	0.420	0.290	0.160	0.377	0.010	0.009	0.305	0.039
	Bottom	0.143	0.228	0.477	**3.050**	0.097	/	0.273	0.154	0.456	0.037	0.011	0.310	0.034
12	Surface	0.457	0.327	0.420	**3.127**	0.413	0.660	0.140	0.198	0.274	0.016	0.006	0.290	0.036
	Bottom	0.343	0.350	0.577	**3.120**	0.403	/	0.152	0.208	0.377	0.012	0.007	0.315	0.041
13	Surface	**1.286**	0.160	**1.160**	**2.610**	0.540	0.700	0.284	0.880	0.442	0.030	0.026	**1.100**	0.067
	Bottom	**1.114**	0.106	**1.815**	**4.480**	0.747	/	0.224	**1.260**	0.593	0.069	0.034	**1.220**	0.074
14	Surface	0.057	0.379	0.927	**2.503**	0.643	0.620	0.129	0.200	0.256	0.009	0.007	0.290	0.048
15	Surface	0.057	0.336	0.337	**2.803**	0.403	0.660	0.100	0.138	0.298	0.011	0.010	0.285	0.045
	Bottom	0.086	0.419	0.527	**3.337**	0.537	/	0.098	0.096	0.270	0.018	0.006	0.295	0.047
16	Surface	**1.029**	0.145	0.407	**2.607**	0.040	0.720	0.272	0.174	0.237	0.045	0.005	0.275	0.051
	Bottom	0.914	0.248	0.500	**2.757**	0.030	/	0.167	0.212	0.312	0.012	0.009	0.285	0.047
17	Surface	0.914	0.293	0.763	**2.443**	0.107	0.800	0.193	0.194	0.200	0.019	0.014	0.275	0.047
	Bottom	0.857	0.339	0.740	**2.827**	0.173	/	0.182	0.202	0.349	0.024	0.017	0.270	0.047

Continued Table 16 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Neap Tide on May 4, 2013 (1)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
18	Surface	**1.257**	0.115	0.830	**3.045**	0.693	0.480	0.350	0.950	0.570	0.127	0.034	**1.160**	0.067
	Bottom	**1.314**	0.083	**1.260**	**2.650**	0.560	/	0.484	**1.020**	0.710	0.068	0.025	**1.140**	0.070
19	Surface	0.143	0.454	0.210	**2.350**	0.557	0.720	0.068	0.108	0.149	0.008	0.006	0.285	0.053
20	Surface	0.314	0.290	0.413	**2.747**	0.367	0.660	0.089	0.236	0.233	0.009	0.006	0.265	0.051
	Bottom	0.171	0.299	**1.087**	**2.257**	0.450	/	0.078	0.220	0.205	0.009	0.005	0.260	0.051
21	Surface	0.886	0.329	0.277	**2.933**	0.183	0.320	0.135	0.288	0.265	0.023	0.008	0.255	0.049
	Bottom	0.886	0.253	0.513	**2.400**	0.250	/	0.152	0.188	0.279	0.013	0.007	0.260	0.049
22	Surface	0.943	0.293	0.870	**2.985**	0.060	0.760	0.392	0.820	0.489	0.061	0.036	**1.080**	0.068
	Bottom	0.943	0.471	**1.120**	**3.215**	0.367	/	0.196	0.610	0.430	0.078	0.012	**1.040**	0.071
23	Surface	**1.343**	0.090	0.490	**4.440**	0.193	0.520	0.202	**1.050**	0.419	0.061	0.025	**1.080**	0.063
	Bottom	**1.229**	0.410	0.535	**2.615**	0.080	/	0.292	**1.290**	0.500	0.039	0.016	**1.080**	0.066
24	Surface	0.086	0.370	0.310	**2.873**	0.643	0.560	0.069	0.186	0.330	0.013	0.006	0.260	0.049
25	Surface	0.343	0.262	0.383	**1.767**	0.490	0.520	0.166	0.192	0.335	0.017	0.007	0.245	0.052
26	Surface	0.743	0.195	**1.650**	**1.637**	0.183	0.520	0.105	0.206	0.367	0.006	0.007	0.235	0.046
	Bottom	0.457	0.094	0.927	**2.170**	0.383	/	0.266	0.166	0.312	0.008	0.008	0.235	0.039
27	Surface	**1.371**	0.113	**1.007**	**3.547**	0.460	0.280	0.104	0.234	0.270	0.013	0.009	0.255	0.038
	Bottom	**1.314**	0.087	0.820	**1.533**	0.317	/	0.144	0.196	0.344	0.013	0.014	0.245	0.041
28	Surface	**1.343**	0.086	**1.630**	**1.890**	0.460	0.580	0.198	0.940	0.558	0.029	0.028	1.000	0.063
	Bottom	**1.286**	0.066	**1.140**	**2.175**	0.713	/	0.198	0.970	0.430	0.044	0.031	0.960	0.068
29	Surface	0.457	0.159	0.740	**2.070**	0.240	0.660	0.062	0.182	0.260	0.008	0.007	0.240	0.045
30	Surface	0.886	0.410	**1.700**	**1.160**	0.220	0.620	0.072	0.240	0.247	0.008	0.010	0.245	0.048
	Bottom	0.543	0.021	0.743	**1.960**	0.443	/	0.050	0.150	0.205	0.006	0.011	0.255	0.052
31	Surface	0.171	0.390	0.507	**2.280**	0.720	0.560	0.062	0.188	0.321	0.011	0.010	0.250	0.055
32	Surface	0.657	0.165	0.953	**1.440**	0.097	0.480	0.187	0.176	0.419	0.011	0.010	0.240	0.045

Continued Table 16 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Neap Tide on May 4, 2013 (2)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
33	Surface	**1.086**	0.144	0.770	**2.245**	0.673	0.700	0.222	0.780	0.663	0.143	0.038	0.940	0.072
	Bottom	**1.029**	0.196	0.760	**2.955**	0.673	/	0.244	0.870	0.605	0.078	0.032	0.980	0.071
34	Surface	0.029	0.395	0.465	**1.865**	0.560	0.260	0.180	**1.070**	0.785	0.110	0.002	0.200	0.070
	Bottom	0.086	0.379	0.560	**2.125**	0.580	/	0.360	0.740	0.735	0.130	0.002	0.220	0.065
35	Surface	0.114	0.392	0.375	**1.860**	0.680	0.280	0.460	**1.200**	0.870	0.160	0.002	0.360	0.095
	Bottom	0.143	0.391	0.555	**2.225**	0.807	/	0.300	**1.140**	0.755	0.100	0.003	0.220	0.060
36	Surface	0.086	0.410	0.515	**2.080**	**1.093**	0.300	0.440	0.580	0.895	0.080	0.003	0.180	0.055
	Bottom	0.029	0.397	0.505	**2.285**	0.827	/	0.440	0.640	0.915	0.090	0.002	0.260	0.055
37	Surface	0.114	0.321	0.257	**1.097**	0.463	0.240	0.220	0.238	0.354	0.036	0.001	0.045	0.050
	Bottom	0.057	0.320	0.310	**1.133**	0.353	/	0.240	0.086	0.318	0.016	0.001	0.065	0.047
38	Surface	0.143	0.418	0.455	**1.795**	0.887	0.260	0.360	0.760	0.735	0.120	0.002	0.220	0.060
	Bottom	0.114	0.425	0.520	**1.905**	0.727	/	0.500	**1.430**	0.860	0.210	0.002	0.220	0.070
39	Surface	0.086	0.433	0.475	**1.670**	**1.013**	0.280	0.340	0.900	0.735	0.100	0.002	0.220	0.080
	Bottom	0.057	0.426	0.545	**1.935**	0.660	/	0.320	1.000	0.885	0.130	0.001	0.240	0.075
40	Surface	0.114	0.409	0.340	**2.020**	**1.013**	0.280	0.420	0.480	0.885	0.080	0.002	0.220	0.065
	Bottom	0.057	0.422	0.550	**1.985**	0.887	/	0.300	**1.030**	0.860	0.080	0.002	0.200	0.060
41	Surface	0.171	0.409	0.555	**2.085**	0.640	0.300	0.360	0.740	0.730	0.110	0.002	0.280	0.070
	Bottom	0.143	0.399	0.600	**1.985**	0.953	/	0.340	**1.070**	0.895	0.090	0.002	0.240	0.070
42	Surface	0.086	0.412	0.475	**1.970**	0.767	0.280	0.380	**1.100**	0.740	0.130	0.002	0.260	0.065
	Bottom	0.057	0.413	0.565	**2.090**	0.927	/	0.380	0.610	0.890	0.100	0.001	0.260	0.075
43	Surface	0.171	0.320	0.310	**1.240**	0.403	0.280	0.110	0.176	0.310	0.014	0.001	0.060	0.037
	Bottom	0.114	0.326	0.323	**1.350**	0.300	/	0.210	0.076	0.308	0.016	0.001	0.050	0.040
44	Surface	0.229	0.329	0.290	**1.203**	0.330	0.280	0.230	0.112	0.330	0.016	0.001	0.045	0.047
	Bottom	0.171	0.324	0.310	0.903	0.373	/	0.150	0.080	0.342	0.028	0.001	0.075	0.047
45	Surface	0.200	0.407	0.490	**1.675**	**1.093**	0.260	0.340	**1.530**	0.875	0.070	0.002	0.360	0.065
	Bottom	0.143	0.420	0.475	**1.790**	0.907	/	0.300	0.370	0.830	0.100	0.001	0.280	0.080

Continued Table 16 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Neap Tide on May 4, 2013 (3)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
46	Surface	0.086	0.437	0.340	**1.695**	0.707	0.280	0.300	0.920	0.785	0.210	0.002	0.220	0.065
	Bottom	0.171	0.459	0.365	**1.535**	0.927	/	0.240	0.630	0.925	0.160	0.002	0.200	0.050
47	Surface	0.057	0.429	0.385	**1.865**	**1.153**	0.260	0.500	0.600	0.870	0.160	0.003	0.200	0.060
	Bottom	0.143	0.440	0.515	**1.165**	**1.033**	/	0.420	0.950	0.855	0.120	0.003	0.300	0.050
48	Surface	0.057	0.429	0.470	**1.610**	0.907	0.260	0.460	**1.030**	0.920	0.160	0.002	0.180	0.065
	Bottom	0.143	0.440	0.560	**1.650**	**1.073**	/	0.400	**1.240**	0.935	0.140	0.002	0.240	0.065
49	Surface	0.057	0.435	0.380	**1.935**	0.727	0.320	0.280	0.380	0.870	0.190	0.001	0.240	0.055
	Bottom	0.143	0.448	0.345	**1.765**	0.640	/	0.340	0.500	0.710	0.170	0.002	0.180	0.060
50	Surface	0.171	0.348	0.297	**1.097**	0.433	0.340	0.120	0.088	0.352	0.008	0.001	0.050	0.037
	Bottom	0.257	0.334	0.370	**1.353**	0.463	/	0.130	0.092	0.370	0.014	0.001	0.045	0.043
51	Surface	0.143	0.334	0.217	**0.963**	0.477	0.340	0.110	0.082	0.332	0.012	0.002	0.050	0.047
	Bottom	0.229	0.345	0.383	**1.170**	0.413	/	0.190	0.200	0.334	0.018	0.001	0.075	0.060
52	Surface	0.086	0.440	0.370	**1.530**	0.847	0.340	0.280	0.320	0.850	0.090	0.002	0.240	0.070
	Bottom	0.200	0.443	0.540	**1.565**	**1.033**	/	0.340	0.600	0.920	0.100	0.002	0.280	0.075
53	Surface	0.086	0.440	0.315	**1.710**	0.767	0.340	0.360	0.990	0.840	0.090	0.002	0.320	0.065
	Bottom	0.171	0.437	0.415	**1.440**	0.727	/	0.340	0.480	0.845	0.100	0.002	0.260	0.065
54	Surface	0.057	0.438	0.340	**1.730**	0.887	0.300	0.440	**1.170**	0.925	0.110	0.002	0.300	0.055
	Bottom	0.143	0.437	0.565	**1.800**	0.600	/	0.360	0.470	0.910	0.120	0.002	0.220	0.060
55	Surface	0.057	0.440	0.470	**1.545**	0.927	0.240	0.320	**1.270**	0.905	0.090	0.002	0.220	0.060
	Bottom	0.143	0.454	0.425	**1.905**	0.887	/	0.340	0.360	0.860	0.100	0.002	0.260	0.060
56	Surface	0.029	0.435	0.610	**1.595**	0.787	0.280	0.320	0.500	0.875	0.180	0.002	0.220	0.070
	Bottom	0.114	0.451	0.505	**1.985**	0.907	/	0.320	0.580	0.875	0.090	0.003	0.260	0.065
57	Surface	0.029	0.435	0.445	**1.740**	0.727	0.260	0.480	**1.030**	0.880	0.190	0.002	0.240	0.070
	Bottom	0.086	0.443	0.540	**1.720**	0.953	/	0.440	0.930	0.870	0.140	0.004	0.200	0.070

Continued Table 16 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Neap Tide on May 4, 2013 (4)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
58	Surface	0.029	0.387	0.345	**2.040**	0.887	0.280	0.600	**1.140**	0.880	0.080	0.002	0.300	0.050
	Bottom	0.114	0.397	0.435	**1.830**	0.747	/	0.400	0.940	0.860	0.090	0.002	0.240	0.080
59	Surface	0.029	0.378	0.415	**1.855**	0.887	0.280	0.440	0.900	0.910	0.060	0.002	0.240	0.060
	Bottom	0.114	0.400	0.440	**1.865**	0.807	/	0.360	0.390	0.735	0.060	0.004	0.220	0.065
60	Surface	0.057	0.396	0.435	**1.735**	0.807	0.280	0.440	0.830	0.910	0.090	0.002	0.240	0.065
	Bottom	0.086	0.399	0.350	**1.795**	0.927	/	0.560	0.530	0.885	0.070	0.002	0.160	0.075
61	Surface	0.057	0.393	0.335	**2.040**	0.787	0.260	0.540	0.940	0.875	0.050	0.003	0.300	0.060
	Bottom	0.086	0.408	0.310	**2.160**	**1.033**	/	0.580	0.650	0.795	0.050	0.003	0.220	0.065
62	Surface	0.000	0.401	0.365	**1.720**	0.787	0.280	0.540	0.980	0.810	0.060	0.002	0.180	0.060
	Bottom	0.086	0.413	0.355	**1.760**	0.727	/	0.580	0.510	0.940	0.070	0.002	0.220	0.070
63	Surface	0.057	0.339	0.233	**1.243**	0.423	0.300	0.220	0.094	0.368	0.014	0.001	0.055	0.047
	Bottom	0.143	0.343	0.193	**1.223**	0.497	/	0.140	0.186	0.314	0.018	0.001	0.085	0.043
64	Surface	0.029	0.328	0.257	**1.133**	0.507	0.320	0.230	0.130	0.350	0.018	0.001	0.085	0.047
	Bottom	0.086	0.333	0.237	**1.250**	0.537	/	0.260	0.110	0.302	0.016	0.001	0.065	0.057
65	Surface	0.057	0.326	0.247	**1.033**	0.547	0.320	0.130	0.130	0.344	0.014	0.002	0.050	0.050
	Bottom	0.057	0.322	0.313	**1.147**	0.463	/	0.210	0.254	0.312	0.016	0.001	0.070	0.037
66	Surface	0.171	0.418	0.460	**1.770**	0.927	0.280	0.560	0.510	0.760	0.050	0.002	0.180	0.060
	Bottom	0.086	0.435	0.525	**1.880**	**1.093**	/	0.440	0.460	0.810	0.070	0.003	0.260	0.065
67	Surface	0.057	0.396	0.350	**1.765**	0.847	0.260	0.440	1.000	0.980	0.080	0.002	0.300	0.070
	Bottom	0.086	0.413	0.430	**1.895**	0.560	/	0.320	0.700	0.795	0.080	0.002	0.340	0.060
68	Surface	0.229	0.326	0.237	**1.217**	0.363	0.360	0.140	0.216	0.364	0.024	0.001	0.050	0.037
	Bottom	0.229	0.328	0.220	**1.337**	0.620	/	0.260	0.164	0.300	0.018	0.001	0.045	0.050
69	Surface	0.086	0.303	0.243	**1.370**	0.527	0.340	0.250	0.172	0.294	0.020	0.001	0.065	0.047
	Bottom	0.029	0.316	0.223	**1.400**	0.497	/	0.160	0.188	0.364	0.024	0.001	0.075	0.050

Continued Table 16 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Neap Tide on May 4, 2013 (5)

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
70	Surface	0.114	0.413	0.405	**2.065**	0.827	0.340	0.640	0.890	0.925	0.100	0.002	0.280	0.055
	Bottom	0.086	0.415	0.445	**2.140**	0.847	/	0.540	0.950	0.725	0.110	0.002	0.240	0.050
71	Surface	0.057	0.393	0.335	**1.900**	**1.013**	0.280	0.460	0.480	0.915	0.090	0.003	0.180	0.065
	Bottom	0.086	0.411	0.320	**1.920**	0.907	/	0.540	0.690	0.735	0.070	0.003	0.240	0.070
72	Surface	0.171	0.402	0.335	**1.845**	**1.073**	0.280	0.560	0.770	0.780	0.050	0.002	0.180	0.085
	Bottom	0.086	0.388	0.375	**1.810**	0.727	/	0.380	0.550	0.885	0.060	0.002	0.320	0.060
73	Surface	0.143	0.320	0.283	**1.253**	0.423	0.340	0.310	0.168	0.374	0.014	0.001	0.080	0.037
	Bottom	0.114	0.324	0.330	**1.443**	0.507	/	0.150	0.182	0.348	0.024	0.001	0.045	0.050
74	Surface	0.086	0.413	0.390	**2.065**	**1.133**	0.320	0.260	**1.110**	0.685	0.120	0.002	0.340	0.055
	Bottom	0.057	0.428	0.345	**2.025**	**1.013**	/	0.420	0.800	0.705	0.090	0.002	0.220	0.060
75	Surface	0.029	0.423	0.540	**2.080**	0.747	0.360	0.260	**1.100**	0.825	0.130	0.004	0.340	0.055
	Bottom	0.029	0.438	0.375	**2.005**	0.993	/	0.500	0.440	0.805	0.060	0.002	0.240	0.065
76	Surface	0.000	0.435	0.425	**2.050**	0.887	0.320	0.260	0.370	0.705	0.090	0.002	0.180	0.070
	Bottom	0.029	0.446	0.615	**2.045**	**1.033**	/	0.320	0.530	0.935	0.110	0.002	0.260	0.060
77	Surface	0.029	0.423	0.465	**2.045**	0.907	0.400	0.440	0.280	0.910	0.070	0.003	0.180	0.065
	Bottom	0.086	0.436	0.375	**2.030**	**1.133**	/	0.660	0.410	0.930	0.090	0.002	0.240	0.070
78	Surface	0.086	0.323	0.283	**1.267**	0.413	0.320	0.230	0.066	0.338	0.014	0.001	0.060	0.043
	Bottom	0.086	0.334	0.317	**1.227**	0.363	/	0.200	0.168	0.278	0.014	0.002	0.050	0.043
79	Surface	0.086	0.318	0.230	**1.350**	0.433	0.340	0.290	0.130	0.310	0.016	0.001	0.070	0.040
	Bottom	0.057	0.322	0.310	**1.353**	0.403	/	0.240	0.236	0.308	0.010	0.001	0.070	0.037
80	Surface	0.057	0.303	0.323	**1.337**	0.577	0.400	0.200	0.068	0.348	0.016	0.002	0.045	0.037
	Bottom	0.029	0.319	0.263	**1.383**	0.453	/	0.120	0.098	0.378	0.022	0.002	0.055	0.060
81	Surface	0.000	0.333	0.210	**1.377**	0.620	0.340	0.280	0.086	0.282	0.014	0.001	0.060	0.047
	Bottom	0.029	0.337	0.240	**1.397**	0.630	/	0.120	0.064	0.382	0.014	0.001	0.070	0.043

Table 17 Standard Indexes for Assessment Factors of Seawater Quality in Flood and Neap Tide on Aug.26, 2013

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
37	Surface	0.171	0.901	0.260	0.868	0.827	0.650	0.111	0.352	0.344	0.006	0.005	0.018	0.051
38	Surface	0.200	**1.248**	0.735	0.261	0.820	0.520	0.332	**1.250**	0.859	0.033	0.012	0.070	0.075
	Bottom	0.171	**1.550**	0.680	**1.377**	0.893	/	0.200	**1.030**	0.718	0.036	0.010	0.070	0.084
43	Surface	0.229	0.899	0.247	0.962	0.263	0.832	0.198	0.242	0.436	0.008	0.008	0.035	0.052
44	Surface	0.229	0.804	0.377	0.269	0.717	0.720	0.203	0.166	0.400	0.009	0.006	0.045	0.052
	Bottom	0.257	0.930	0.340	0.941	0.480	/	0.218	0.172	0.431	0.017	0.004	0.050	0.053
45	Surface	0.114	**1.136**	0.525	**1.328**	**1.420**	0.744	0.422	0.980	1.052	0.050	0.008	0.260	0.110
	Bottom	0.114	**1.316**	0.585	**1.607**	**1.727**	/	0.310	**1.100**	0.834	0.055	0.013	0.200	0.074
46	Surface	0.200	**1.196**	0.925	0.896	0.780	0.686	0.356	0.830	0.667	0.046	0.020	0.280	0.079
	Bottom	0.114	**1.139**	0.810	**1.558**	**1.547**	/	0.260	0.900	0.616	0.036	0.011	0.200	0.083
50	Surface	0.114	0.711	0.400	0.787	0.553	0.642	0.160	0.174	0.277	0.009	0.006	0.040	0.055
51	Surface	0.171	0.777	0.330	0.601	0.347	0.638	0.151	0.156	0.287	0.007	0.006	0.050	0.053
	Bottom	0.171	0.858	0.300	**1.360**	0.763	/	0.147	0.142	0.272	0.007	0.005	0.065	0.056
52	Surface	0.143	**1.449**	0.335	**1.467**	**1.360**	0.786	0.330	1.030	0.795	0.036	0.010	0.240	0.079
	Bottom	0.057	**1.253**	0.375	**1.401**	**1.873**	/	0.194	0.770	0.513	0.042	0.012	0.280	0.076
53	Surface	0.000	**1.217**	0.820	0.972	0.693	0.868	0.276	0.860	0.552	0.066	0.011	0.260	0.076
	Bottom	0.000	**1.230**	0.810	0.988	**1.107**	/	0.568	**1.390**	0.987	0.085	0.007	0.300	0.074
54	Surface	0.086	**1.049**	0.290	**1.820**	**1.380**	0.782	0.268	**1.010**	0.526	0.052	0.006	0.220	0.075
	Bottom	0.000	**1.359**	0.290	**2.152**	**1.420**	/	0.412	**1.010**	0.911	0.077	0.008	0.260	0.073
58	Surface	0.200	**1.011**	0.865	**1.760**	**1.420**	0.590	0.186	0.950	1.090	0.078	0.019	0.220	0.078
	Bottom	0.171	**1.357**	0.795	**1.908**	**1.127**	/	0.172	**1.130**	0.987	0.118	0.009	0.340	0.077

Continued Table 17 Standard Indexes for Assessment Factors of Seawater Quality in Flood and Neap Tide on Aug.26, 2013

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
60	Surface	0.343	**1.272**	0.860	**1.661**	**1.160**	0.702	0.176	**1.050**	0.962	0.075	0.019	0.240	0.077
	Bottom	0.343	**1.351**	0.760	0.682	**1.147**	/	0.150	0.960	**1.141**	0.081	0.016	0.360	0.076
61	Surface	0.314	0.867	0.560	**1.098**	0.800	0.542	0.100	**1.090**	0.898	0.098	0.007	0.280	0.075
	Bottom	0.286	**1.333**	0.535	0.975	**1.653**	/	0.172	1.000	**1.052**	0.076	0.012	0.280	0.082
62	Surface	0.114	**1.045**	0.805	0.975	**1.253**	0.584	0.110	0.920	0.552	0.057	0.012	0.260	0.073
	Bottom	0.086	**1.297**	0.735	0.982	**1.620**	/	0.170	0.950	0.936	0.072	0.010	0.280	0.070
65	Surface	0.343	0.876	0.337	0.736	0.627	0.412	0.095	0.200	0.262	0.018	0.004	0.065	0.053
	Bottom	0.371	0.825	0.273	**1.067**	**1.107**	/	0.072	0.192	0.267	0.016	0.004	0.070	0.051
66	Surface	0.200	**1.053**	0.930	**1.061**	**1.887**	0.744	0.088	**1.300**	0.564	0.040	0.005	0.280	0.072
	Bottom	0.171	**1.215**	0.860	**1.084**	**1.813**	/	0.106	0.930	0.859	0.069	0.014	0.340	0.076
67	Surface	0.000	0.789	0.465	0.437	**1.687**	0.462	0.144	0.980	0.628	0.088	0.014	0.260	0.075
	Bottom	0.086	**1.022**	0.490	0.626	**1.400**	/	0.094	**1.110**	0.385	0.045	0.009	0.340	0.072
69	Surface	0.400	0.656	0.577	0.256	0.627	0.702	0.105	0.182	0.226	0.017	0.010	0.080	0.053
	Bottom	0.371	0.879	0.483	0.579	0.617	/	0.064	0.190	0.215	0.011	0.010	0.065	0.049
70	Surface	0.371	0.700	0.540	0.643	**1.117**	0.680	0.065	0.192	0.441	0.015	0.009	0.070	0.051
	Bottom	0.343	0.773	0.500	0.722	**1.027**	/	0.074	0.228	0.400	0.011	0.009	0.095	0.052
71	Surface	0.200	0.669	0.603	0.427	**1.007**	0.560	0.069	0.196	0.277	0.016	0.008	0.080	0.050
	Bottom	0.171	0.765	0.563	0.554	0.617	/	0.057	0.186	0.405	0.015	0.008	0.080	0.049
72	Surface	0.171	0.921	0.295	0.705	**1.707**	0.406	0.098	0.960	**1.180**	0.056	0.012	0.300	0.073
	Bottom	0.343	**1.153**	0.360	0.612	**2.053**	/	0.160	0.970	**1.103**	0.069	0.014	0.300	0.074

Table 18 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Neap Tide on Aug.26, 2013

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
37	Surface	0.314	0.456	0.303	0.333	0.390	0.744	0.176	0.302	0.467	0.018	0.003	0.018	0.052
38	Surface	0.200	0.516	0.830	**1.060**	**1.253**	0.680	0.286	**1.670**	0.923	0.081	0.021	0.070	0.078
	Bottom	0.286	0.863	0.695	**1.048**	**1.400**	/	0.396	**1.920**	**1.064**	0.114	0.010	0.070	0.076
43	Surface	0.200	0.924	0.273	0.993	0.310	0.560	0.178	0.176	0.436	0.028	0.006	0.018	0.053
44	Surface	0.229	0.888	0.367	0.937	0.737	0.660	0.147	0.190	0.390	0.010	0.005	0.018	0.052
	Bottom	0.200	0.800	0.323	**1.113**	0.690	/	0.140	0.262	0.338	0.010	0.002	0.018	0.052
45	Surface	0.143	0.943	0.565	**1.601**	**1.547**	0.578	0.338	**1.670**	**1.180**	0.058	0.010	0.180	0.079
	Bottom	0.200	**1.227**	0.605	**1.544**	**1.380**	/	0.312	**1.380**	**1.077**	0.061	0.013	0.070	0.077
46	Surface	0.143	**1.257**	0.970	**1.094**	0.420	0.798	0.210	1.000	0.846	0.087	0.016	0.070	0.075
	Bottom	0.057	**1.384**	0.370	**1.571**	**1.020**	/	0.280	0.850	0.987	0.070	0.016	0.070	0.076
50	Surface	0.200	0.845	0.427	0.401	0.427	0.610	0.138	0.230	0.344	0.008	0.006	0.060	0.053
51	Surface	0.086	0.463	0.363	**1.010**	0.690	0.654	0.125	0.204	0.354	0.010	0.009	0.018	0.051
	Bottom	0.171	0.787	0.347	**1.219**	0.617	/	0.141	0.200	0.395	0.010	0.008	0.018	0.051
52	Surface	0.000	0.824	0.430	0.482	0.747	0.680	0.204	**1.060**	0.975	0.042	0.017	0.070	0.070
	Bottom	0.029	**1.062**	0.385	0.874	0.653	/	0.236	**1.160**	0.744	0.045	0.008	0.070	0.074
53	Surface	0.000	0.642	0.775	0.872	0.960	0.792	0.230	**1.510**	0.962	0.044	0.008	0.070	0.074
	Bottom	0.029	**1.132**	0.865	**1.055**	0.873	/	0.328	**1.030**	**1.013**	0.048	0.004	0.180	0.077
54	Surface	0.029	1.000	0.335	**1.517**	1.000	0.892	0.340	1.000	0.898	0.054	0.005	0.070	0.078
	Bottom	0.029	**1.083**	0.370	**1.697**	**1.107**	/	0.290	1.000	**1.090**	0.097	0.008	0.140	0.071
58	Surface	0.200	0.687	0.890	0.862	0.947	0.614	0.196	0.960	**1.180**	0.091	0.010	0.070	0.075
	Bottom	0.200	0.840	0.840	**1.206**	0.960	/	0.260	0.980	**1.257**	0.073	0.016	0.070	0.077

Continued Table 18 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Neap Tide on Aug.26, 2013

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
60	Surface	0.371	0.878	0.925	0.243	0.800	0.648	0.244	**1.050**	**1.052**	0.068	0.018	0.070	0.080
	Bottom	0.371	0.890	0.845	0.891	**1.253**	/	0.276	0.990	**1.193**	0.068	0.013	0.140	0.078
61	Surface	0.200	0.804	0.335	0.579	**1.980**	0.716	0.214	0.990	1.000	0.073	0.017	0.140	0.076
	Bottom	0.200	0.960	0.565	0.911	0.800	/	0.280	**1.120**	**1.052**	0.064	0.018	0.070	0.077
62	Surface	0.114	0.632	0.850	0.523	**1.453**	0.502	0.180	0.780	0.705	0.045	0.008	0.070	0.078
	Bottom	0.114	0.910	0.800	0.890	**1.487**	/	0.160	**1.160**	0.859	0.040	0.016	0.070	0.073
65	Surface	0.371	0.686	0.383	0.237	**1.143**	0.608	0.061	0.214	0.205	0.009	0.008	0.018	0.056
	Bottom	0.371	0.781	0.303	0.684	0.627	/	0.074	0.198	0.405	0.013	0.009	0.018	0.053
66	Surface	0.229	0.770	0.960	**1.290**	**1.687**	0.572	0.142	0.970	0.898	0.070	0.019	0.140	0.075
	Bottom	0.257	0.909	0.905	**1.049**	**2.160**	/	0.124	0.980	0.731	0.055	0.011	0.070	0.072
67	Surface	0.086	0.853	0.375	**1.156**	**1.253**	0.416	0.152	0.970	0.769	0.072	0.011	0.070	0.075
	Bottom	0.114	0.887	0.580	0.744	**1.800**	/	0.158	0.970	0.911	0.073	0.016	0.070	0.081
69	Surface	0.371	0.689	0.603	0.563	0.963	0.724	0.063	0.198	0.287	0.012	0.004	0.018	0.053
	Bottom	0.371	0.723	0.530	0.566	**1.143**	/	0.061	0.246	0.215	0.008	0.005	0.045	0.055
70	Surface	0.286	0.606	0.560	0.644	0.963	0.768	0.058	0.218	0.323	0.010	0.005	0.045	0.053
	Bottom	0.286	0.751	0.497	0.507	0.990	/	0.064	0.200	0.328	0.013	0.005	0.035	0.053
71	Surface	0.171	0.553	0.647	0.743	0.453	0.542	0.054	0.202	0.374	0.011	0.003	0.018	0.052
	Bottom	0.257	0.597	0.590	0.571	**1.053**	/	0.074	0.198	0.400	0.013	0.007	0.035	0.049
72	Surface	0.114	0.765	0.270	0.983	**1.327**	0.628	0.118	**1.020**	0.590	0.071	0.013	0.070	0.074
	Bottom	0.143	0.878	0.345	0.666	**1.853**	/	0.180	1.000	0.987	0.078	0.010	0.070	0.073

Table 19 Standard Indexes for Assessment Factors of Seawater Quality in Flood and Spring Tide on Sept.6, 2013

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
37	Surface	0.486	0.550	0.327	0.404	0.343	0.590	0.189	0.326	0.343	0.009	0.007	0.050	0.042
38	Surface	0.514	0.868	0.375	**1.132**	**1.473**	0.708	0.390	**1.460**	0.381	0.048	0.014	0.220	0.073
	Bottom	0.543	0.947	0.300	**1.025**	**1.053**	/	0.364	0.510	0.929	0.042	0.013	0.220	0.055
43	Surface	0.514	0.516	0.273	0.184	0.297	0.640	0.148	0.164	0.167	0.007	0.005	0.055	0.048
44	Surface	0.486	0.579	0.313	0.258	0.210	0.590	0.186	0.462	0.195	0.012	0.007	0.060	0.044
	Bottom	0.400	0.586	0.273	0.638	0.403	/	0.177	0.336	0.319	0.019	0.007	0.050	0.032
45	Surface	0.543	0.892	0.465	**1.263**	**1.227**	0.814	0.530	**1.470**	0.548	0.064	0.011	0.240	0.068
	Bottom	0.571	0.958	0.405	**1.547**	**1.053**	/	0.376	**1.570**	0.488	0.057	0.015	0.240	0.053
46	Surface	0.457	0.665	0.505	0.969	**1.227**	0.356	0.302	0.980	0.595	0.052	0.010	0.220	0.072
	Bottom	0.800	0.801	0.450	**1.255**	**1.340**	/	0.266	0.450	0.298	0.037	0.016	0.240	0.054
50	Surface	0.486	0.520	0.247	0.968	0.573	0.624	0.208	0.160	0.229	0.010	0.007	0.070	0.033
51	Surface	0.457	0.622	0.517	0.609	0.680	0.872	0.194	0.150	0.200	0.020	0.009	0.065	0.041
	Bottom	0.486	0.552	0.457	0.576	0.670	/	0.188	0.294	0.233	0.013	0.008	0.085	0.034
52	Surface	0.457	0.808	0.600	**1.260**	**1.300**	0.524	0.376	0.390	0.607	0.062	0.021	0.240	0.064
	Bottom	0.486	0.968	0.545	**1.083**	**1.453**	/	0.364	0.940	0.465	0.064	0.017	0.240	0.053
53	Surface	0.486	0.733	0.405	**1.171**	0.380	0.462	0.460	0.780	0.595	0.053	0.012	0.300	0.055
	Bottom	0.486	0.952	0.490	**1.380**	0.840	/	0.416	**1.340**	0.691	0.133	0.012	0.260	0.052
54	Surface	0.400	0.920	0.525	0.543	**1.093**	0.572	0.306	**1.310**	0.810	0.046	0.015	0.280	0.056
	Bottom	0.429	0.945	0.460	0.630	**1.167**	/	0.326	**1.190**	0.488	0.045	0.017	0.280	0.049
58	Surface	0.000	0.937	0.285	**1.211**	**1.440**	0.520	0.202	**1.900**	0.643	0.075	0.015	0.240	0.055
	Bottom	0.000	**1.071**	0.405	0.877	0.593	/	0.192	**2.160**	0.643	0.065	0.016	0.220	0.053

Continued Table 19 Standard Indexes for Assessment Factors of Seawater Quality in Flood and Spring Tide on Sept.6, 2013

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
60	Surface	0.029	0.862	0.295	0.980	0.787	0.496	0.248	0.810	0.619	0.097	0.018	0.280	0.052
	Bottom	0.057	1.000	0.335	**1.006**	**1.207**	/	0.202	**1.840**	0.595	0.075	0.011	0.280	0.053
61	Surface	0.029	0.990	0.275	**1.327**	0.573	0.404	0.222	**1.480**	0.619	0.101	0.014	0.240	0.056
	Bottom	0.057	**1.067**	0.325	**1.461**	**1.187**	/	0.238	**1.940**	0.691	0.113	0.011	0.240	0.054
62	Surface	0.057	0.969	0.305	**1.366**	0.807	0.386	0.162	0.410	0.524	0.069	0.013	0.260	0.052
	Bottom	0.057	**1.030**	0.365	0.923	**1.147**	/	0.184	**1.230**	0.488	0.044	0.012	0.280	0.053
65	Surface	0.057	0.664	0.210	0.302	0.383	0.738	0.098	0.138	0.205	0.017	0.008	0.065	0.041
	Bottom	0.086	0.838	0.233	0.577	0.440	/	0.092	0.236	0.252	0.012	0.008	0.065	0.034
66	Surface	0.029	0.754	0.335	0.998	0.687	0.432	0.212	**1.120**	0.500	0.098	0.017	0.260	0.053
	Bottom	0.000	0.893	0.410	**1.619**	0.787	/	0.220	**1.080**	0.548	0.064	0.017	0.280	0.052
67	Surface	0.029	0.906	0.375	**1.075**	**1.053**	0.582	0.180	**1.700**	0.560	0.048	0.014	0.260	0.054
	Bottom	0.029	**1.058**	0.430	**1.140**	**1.167**	/	0.266	**1.180**	0.691	0.108	0.013	0.240	0.052
69	Surface	0.086	0.645	0.160	0.633	0.450	0.666	0.110	0.278	0.243	0.014	0.008	0.060	0.036
	Bottom	0.057	0.676	0.193	0.665	0.460	/	0.144	0.386	0.395	0.018	0.008	0.065	0.035
70	Surface	0.114	0.495	0.190	0.361	0.507	0.460	0.107	0.396	0.262	0.017	0.007	0.060	0.038
	Bottom	0.143	0.645	0.237	0.614	0.633	/	0.117	0.464	0.376	0.018	0.007	0.065	0.035
71	Surface	0.029	0.570	0.183	**1.039**	0.480	0.538	0.129	0.134	0.310	0.016	0.008	0.060	0.038
	Bottom	0.029	0.712	0.227	0.642	0.460	/	0.117	0.248	0.262	0.008	0.007	0.065	0.038
72	Surface	0.000	0.939	0.260	**1.084**	**1.267**	0.640	0.226	0.730	0.560	0.050	0.011	0.240	0.050
	Bottom	0.029	**1.040**	0.430	0.972	**1.247**	/	0.180	**1.610**	0.643	0.046	0.014	0.300	0.053

Table 20 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Spring Tide on Sept.6, 2013

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
37	Surface	0.543	0.651	0.290	0.061	0.190	0.624	0.208	0.256	0.457	0.013	0.007	0.330	0.043
38	Surface	0.457	0.757	0.310	0.324	0.807	0.780	0.394	**2.310**	0.810	0.096	0.018	0.070	0.039
	Bottom	0.514	1.020	0.395	0.834	0.920	/	0.322	**1.040**	1.107	0.094	0.018	0.070	0.048
43	Surface	0.514	0.488	0.290	0.282	0.383	0.504	0.210	0.194	0.219	0.011	0.007	0.018	0.044
44	Surface	0.457	0.614	0.260	0.344	0.343	0.672	0.211	0.484	0.333	0.017	0.008	0.018	0.029
	Bottom	0.486	0.626	0.323	0.731	0.470	/	0.194	0.214	0.243	0.013	0.008	0.018	0.028
45	Surface	0.514	0.699	0.445	0.433	0.573	0.572	0.334	**2.060**	0.762	0.060	0.013	0.180	0.076
	Bottom	0.571	0.879	0.475	**1.292**	**1.013**	/	0.274	**1.240**	0.881	0.062	0.019	0.300	0.042
46	Surface	0.543	0.950	0.470	0.371	0.500	0.738	0.308	**2.180**	0.715	0.062	0.014	0.180	0.070
	Bottom	0.543	0.980	0.445	**1.630**	0.613	/	0.262	**2.350**	0.536	0.055	0.019	0.160	0.043
50	Surface	0.457	0.459	0.290	0.432	0.277	0.806	0.230	0.150	0.210	0.012	0.009	0.050	0.042
51	Surface	0.457	0.505	0.437	**1.126**	0.567	0.736	0.202	0.390	0.314	0.020	0.010	0.060	0.039
	Bottom	0.486	0.635	0.363	0.604	0.720	/	0.190	0.220	0.233	0.010	0.009	0.045	0.030
52	Surface	0.457	1.000	0.535	**1.003**	0.807	0.566	0.452	**2.010**	0.691	0.051	0.020	0.160	0.065
	Bottom	0.486	1.080	0.605	**1.582**	0.880	/	0.366	**1.220**	0.798	0.067	0.021	0.180	0.070
53	Surface	0.486	0.719	0.380	**1.143**	**1.400**	0.694	0.380	**1.220**	0.810	0.053	0.014	0.180	0.063
	Bottom	0.486	0.920	0.490	**1.481**	**1.340**	/	0.392	**1.820**	0.762	0.103	0.016	0.180	0.043
54	Surface	0.400	0.756	0.500	0.347	0.633	0.658	0.414	**1.500**	0.667	0.053	0.018	0.180	0.039
	Bottom	0.429	0.990	0.545	**1.057**	**1.013**	/	0.402	**1.450**	0.976	0.079	0.018	0.260	0.044
58	Surface	0.057	0.971	0.245	**1.185**	**1.147**	0.520	0.366	**1.300**	0.988	0.095	0.018	0.200	0.049
	Bottom	0.057	1.020	0.385	0.985	**1.533**	/	0.294	**1.200**	0.941	0.089	0.019	0.200	0.046

Continued Table 20 Standard Indexes for Assessment Factors of Seawater Quality in Ebb and Spring Tide on Sept.6, 2013

Station Location	Layer	pH	DO	COD	Inorganic nitrogen	Phosphate	Petroleum	Cooper	Lead	Zinc	Cadmium	Chromium	Mercury	Arsenic
60	Surface	0.086	0.941	0.240	**1.192**	0.920	0.556	0.512	**1.570**	0.869	0.099	0.020	0.180	0.046
	Bottom	0.057	0.956	0.290	**1.236**	**1.340**	/	0.312	**1.200**	0.905	0.104	0.014	0.260	0.045
61	Surface	0.057	0.940	0.210	**1.107**	0.767	0.480	0.200	0.940	0.893	0.130	0.018	0.200	0.049
	Bottom	0.057	0.990	0.285	0.911	0.960	/	0.256	0.930	**1.036**	0.095	0.013	0.200	0.044
62	Surface	0.029	**1.035**	0.255	0.482	0.840	0.550	0.244	**1.500**	0.726	0.109	0.016	0.220	0.052
	Bottom	0.029	**1.079**	0.335	0.645	0.940	/	0.280	**1.840**	0.822	0.069	0.014	0.180	0.044
65	Surface	0.029	0.648	0.137	0.381	0.593	0.770	0.108	0.316	0.305	0.021	0.010	0.055	0.030
	Bottom	0.057	0.752	0.180	0.704	0.670	/	0.121	0.110	0.381	0.014	0.009	0.050	0.029
66	Surface	0.029	**1.005**	0.325	**1.058**	0.807	0.614	0.310	**1.940**	0.691	0.110	0.019	0.380	0.045
	Bottom	0.057	**1.055**	0.275	**1.202**	**1.013**	/	0.284	**2.240**	0.762	0.089	0.019	0.220	0.047
67	Surface	0.029	**1.037**	0.355	0.823	**1.287**	0.680	0.240	**1.580**	0.881	0.097	0.017	0.200	0.043
	Bottom	0.029	**1.075**	0.405	0.886	**1.320**	/	0.220	**1.680**	0.893	0.067	0.015	0.180	0.049
69	Surface	0.057	0.610	0.170	0.447	0.547	0.580	0.121	0.472	0.338	0.019	0.010	0.050	0.033
	Bottom	0.057	0.658	0.227	0.751	0.767	/	0.107	0.266	0.310	0.011	0.010	0.050	0.036
70	Surface	0.057	0.644	0.187	0.234	0.567	0.708	0.100	0.246	0.233	0.011	0.009	0.050	0.030
	Bottom	0.057	0.890	0.210	0.563	0.613	/	0.087	0.360	0.243	0.010	0.008	0.045	0.050
71	Surface	0.029	0.729	0.180	0.622	0.287	0.442	0.127	0.424	0.300	0.023	0.010	0.050	0.032
	Bottom	0.029	0.730	0.247	0.322	0.337	/	0.163	0.432	0.324	0.017	0.008	0.050	0.032
72	Surface	0.000	0.990	0.240	0.648	**1.627**	0.388	0.198	**1.610**	0.810	0.097	0.014	0.240	0.079
	Bottom	0.000	**1.064**	0.325	0.405	**1.667**	/	0.274	**1.930**	0.881	0.077	0.016	0.220	0.055

Ⅲ Marine Sediment Survey

1. Method of Marine Sediment Analysis

Table 21 Monitored Items and Analysis Methods for Marine Sediment

No.	Item	Analysis Method	Method Source	Detection Limit
1	Cooper	Atomic absorption spectrophotometry	GB 17378.5-2007	2.0×10^{-6}
2	Lead		GB 17378.5-2007	3.0×10^{-6}
3	Zinc		GB 17378.5-2007	6.0×10^{-6}
4	Cadmium		GB 17378.5-2007	0.05×10^{-6}
5	Mercury	Atomic Fluorescence Spectrometry	GB 17378.5-2007	0.002 × 10-6
6	Arsenic		GB 17378.5-2007	0.06 × 10-6
7	Chromium	Atomic absorption	GB 17378.5-2007	2.0 × 10-6
8	Sulfide	Methylene blue spectrophotometry	GB 17378.5-2007	0.3 × 10-6
9	Petroleum	Ultraviolet spectrophotometry	GB 17378.5-2007	1.0× 10-6

2. Survey and Assessment Result of Marine Sediment

Table 22 Survey Result of Marine Sediment in Surveyed Area in Spring

Station No.	Mercury	Arsenic	Cooper	Lead	Cadmium	Chromium	Zinc	Petroleum	Sulfide
	× 10^{-6}								
1	0.062	9.81	21.83	25.54	0.092	82.65	108.44	31.6	79.2
3	0.058	11.21	28.47	36.88	0.140	91.13	142.24	70.6	72.4
4	0.063	8.08	28.80	34.11	0.119	96.48	143.98	79.4	78.8
6	0.065	10.04	26.55	30.36	0.106	85.15	144.82	42.6	68.0
7	0.057	8.97	26.03	31.15	0.143	89.49	136.29	168.9	126.1
8	0.066	6.83	28.04	35.69	0.105	88.16	147.15	59.8	74.8
10	0.063	10.77	31.68	32.15	0.101	89.39	172.75	44.8	51.0
11	0.069	7.27	28.67	34.04	0.103	90.11	144.39	33.4	44.5
14	0.071	10.03	29.54	39.67	0.116	85.03	138.62	257.1	51.6
15	0.062	8.84	31.41	35.69	0.107	90.91	155.59	77.8	86.3
17	0.058	10.52	27.72	39.55	0.120	90.19	140.90	58.5	56.8
18	0.049	9.86	28.50	31.91	0.114	82.46	133.85	54.1	38.0
20	0.057	9.60	29.16	30.00	0.113	86.06	130.01	127.8	65.1
22	0.057	8.22	25.68	34.00	0.106	88.88	139.73	83.4	41.1
23	0.044	9.57	25.78	35.04	0.091	77.41	133.93	75.9	45.3
25	0.058	8.72	19.62	24.83	0.096	83.55	119.14	66.4	70.1
27	0.064	8.53	22.68	21.23	0.138	51.78	142.72	33.8	71.5
29	0.068	10.64	22.71	23.53	0.149	57.56	147.43	29.0	42.0
31	0.053	8.54	23.70	22.49	0.136	53.89	126.96	42.6	149.5
33	0.065	10.28	21.05	21.44	0.090	52.25	144.00	28.5	30.5
34	0.049	11.52	29.01	38.43	0.142	91.77	121.81	80.9	23.6
36	0.053	10.24	31.08	28.68	0.133	90.48	173.09	55.3	23.6
38	0.046	8.98	29.38	30.39	0.143	97.58	130.94	24.1	41.0
40	0.057	10.74	28.18	32.02	0.177	98.56	157.65	30.3	19.4
42	0.057	11.29	26.95	32.52	0.116	94.44	155.21	46.6	49.9
44	0.058	9.43	19.70	43.20	0.081	48.64	96.80	26.4	38.0
45	0.054	10.82	17.98	36.20	0.076	55.98	106.69	29.4	13.8

Station No.	Mercury	Arsenic	Cooper	Lead	Cadmium	Chromium	Zinc	Petroleum	Sulfide
	× 10^{-6}								
47	0.046	8.66	28.88	31.90	0.134	93.33	127.07	29.9	42.2
48	0.051	10.20	24.22	21.00	0.124	75.65	108.67	15.8	92.5
51	0.057	11.23	29.66	29.12	0.091	70.94	107.99	16.2	34.6
53	0.057	10.52	29.06	29.70	0.121	92.20	149.44	29.0	63.9
54	0.057	9.96	24.64	20.70	0.098	80.72	104.94	19.8	98.0
55	0.064	9.95	26.96	33.08	0.102	84.79	111.64	28.6	323.8
57	0.06	10.27	27.41	20.22	0.147	106.64	127.98	33.3	75.7
59	0.057	10.43	27.49	22.31	0.055	78.03	102.50	167.6	185.2
61	0.057	11.43	27.85	17.18	0.074	87.66	103.34	141.9	74.6
64	0.054	9.19	25.53	15.61	0.061	70.61	100.34	20.2	14.6
65	0.052	10.51	24.02	15.77	0.088	94.66	127.29	63.3	154.7
66	0.042	13.20	30.30	26.78	0.124	104.92	158.30	196.2	83.5
68	0.057	9.07	29.76	28.81	0.129	94.53	139.52	23.7	74.4
69	0.050	8.94	23.32	21.27	0.084	94.14	114.15	21.9	12.4
71	0.066	11.09	19.34	21.28	0.062	55.45	89.88	22.8	45.1
72	0.055	9.16	24.88	39.97	0.109	79.57	102.12	25.1	51.8
74	0.053	9.87	20.74	24.42	0.041	59.17	86.70	24.6	32.0
76	0.063	9.34	24.07	30.57	0.098	89.17	114.65	28.6	54.0
77	0.056	7.98	25.17	31.36	0.106	83.23	106.57	29.0	14.9
79	0.055	9.67	26.32	30.78	0.093	87.70	110.49	18.0	41.1
81	0.054	10.29	26.21	26.87	0.121	87.31	129.67	25.9	42.8

Table 23 Assessment Result of Marine Sediment in Surveyed Sea Area in Spring of 2013

Station No.	Mercury	Arsenic	Cooper	Lead	Cadmium	Chromium	Zinc	Petroleum	Sulfide
1	0.310	0.491	0.624	0.426	0.184	**1.033**	0.723	0.063	0.264
3	0.290	0.561	0.813	0.615	0.280	**1.139**	0.948	0.141	0.241
4	0.315	0.404	0.823	0.569	0.238	**1.206**	0.960	0.159	0.263
6	0.325	0.502	0.759	0.506	0.212	**1.064**	0.965	0.085	0.227
7	0.285	0.449	0.744	0.519	0.286	**1.119**	0.909	0.338	0.420
8	0.330	0.342	0.801	0.595	0.210	**1.102**	0.981	0.120	0.249
10	0.315	0.539	0.905	0.536	0.202	**1.117**	**1.152**	0.090	0.170
11	0.345	0.364	0.819	0.567	0.206	**1.126**	0.963	0.067	0.148
14	0.355	0.502	0.844	0.661	0.232	**1.063**	0.924	0.514	0.172
15	0.310	0.442	0.897	0.595	0.214	**1.136**	**1.037**	0.156	0.288
17	0.290	0.526	0.792	0.659	0.240	**1.127**	0.939	0.117	0.189
18	0.245	0.493	0.814	0.532	0.228	**1.031**	0.892	0.108	0.127
20	0.285	0.480	0.833	0.500	0.226	**1.076**	0.867	0.256	0.217
22	0.285	0.411	0.734	0.567	0.212	**1.111**	0.932	0.167	0.137
23	0.220	0.479	0.737	0.584	0.182	0.968	0.893	0.152	0.151
25	0.290	0.436	0.561	0.414	0.192	**1.044**	0.794	0.133	0.234
27	0.320	0.427	0.648	0.354	0.276	0.647	0.951	0.068	0.238
29	0.340	0.532	0.649	0.392	0.298	0.720	0.983	0.058	0.140
31	0.265	0.427	0.677	0.375	0.272	0.674	0.846	0.085	0.498

33	0.325	0.514	0.601	0.357	0.180	0.653	0.960	0.057	0.102
34	0.245	0.576	0.829	0.641	0.284	**1.147**	0.812	0.162	0.079
36	0.265	0.512	0.888	0.478	0.266	**1.131**	**1.154**	**0.111**	0.079
38	0.230	0.449	0.839	0.507	0.286	**1.220**	0.873	0.048	0.137
40	0.285	0.537	0.805	0.534	0.354	**1.232**	**1.051**	0.061	0.065
42	0.285	0.565	0.770	0.542	0.232	**1.181**	**1.035**	0.093	0.166
44	0.290	0.472	0.563	0.720	0.162	0.608	0.645	0.053	0.127
45	0.270	0.541	0.514	0.603	0.152	0.700	0.711	0.059	0.046
47	0.230	0.433	0.825	0.532	0.268	**1.167**	0.847	0.060	0.141
48	0.255	0.510	0.692	0.350	0.248	0.946	0.724	0.032	0.308
51	0.285	0.562	0.847	0.485	0.182	0.887	0.720	0.032	0.115
53	0.285	0.526	0.830	0.495	0.242	**1.153**	0.996	0.058	0.213
54	0.285	0.498	0.704	0.345	0.196	**1.009**	0.700	0.040	0.327
55	0.320	0.498	0.770	0.551	0.204	**1.060**	0.744	0.057	**1.079**
57	0.300	0.514	0.783	0.337	0.294	**1.333**	0.853	0.067	0.252
59	0.285	0.522	0.785	0.372	0.110	0.975	0.683	0.335	0.617
61	0.285	0.572	0.796	0.286	0.148	**1.096**	0.689	0.284	0.249
64	0.270	0.460	0.729	0.260	0.122	0.883	0.669	0.040	0.049
65	0.260	0.526	0.686	0.263	0.176	**1.183**	0.849	0.127	0.516
66	0.210	0.660	0.866	0.446	0.248	**1.312**	**1.055**	0.392	0.278
68	0.285	0.454	0.850	0.480	0.258	**1.182**	0.930	0.047	0.248
69	0.250	0.447	0.666	0.355	0.168	**1.177**	0.761	0.044	0.041
71	0.330	0.555	0.553	0.355	0.124	0.693	0.599	0.046	0.150
72	0.275	0.458	0.711	0.666	0.218	0.995	0.681	0.050	0.173
74	0.265	0.494	0.593	0.407	0.082	0.740	0.578	0.049	0.107
76	0.315	0.467	0.688	0.510	0.196	**1.115**	0.764	0.057	0.180
77	0.280	0.399	0.719	0.523	0.212	**1.040**	0.710	0.058	0.050
79	0.275	0.484	0.752	0.513	0.186	**1.096**	0.737	0.036	0.137
81	0.270	0.515	0.749	0.448	0.242	**1.091**	0.864	0.052	0.143

Table 24 Survey Result of Marine Sediment in Surveyed Sea Area in Autumn of 2013

Station No.	Mercury	Arsenic	Cooper	Lead	Cadmium	Chromium	Zinc	Petroleum	Sulfide
	× 10^{-6}								
38	0.057	9.81	24.05	34.58	0.098	99.41	141.26	26.4	76.6
44	0.052	9.33	23.12	41.51	0.093	89.84	109.29	26.0	41.6
45	0.062	11.28	19.42	31.61	0.076	66.09	95.27	36.0	47.8
51	0.059	12.53	28.42	26.68	0.086	84.73	97.94	21.7	28.7
53	0.054	11.32	30.11	33.70	0.094	94.87	125.45	30.3	96.3
54	0.054	9.89	22.22	24.32	0.105	94.60	113.90	29.4	73.5
61	0.057	10.99	24.88	21.91	0.081	87.62	104.25	128.0	137.3
65	0.046	10.80	24.56	21.14	0.072	98.34	112.46	71.5	162.7
66	0.046	10.46	27.33	29.22	0.093	97.70	146.58	163.1	141.5
69	0.048	10.95	20.22	26.57	0.103	103.58	131.56	29.8	81.7
71	0.059	9.58	16.26	24.04	0.067	71.19	102.63	25.1	100.4
72	0.056	11.32	18.99	32.79	0.101	85.53	115.23	35.1	102.5

Table 25 Assessment Result of Marine Sediment in Surveyed Sea Area in Autumn of 2013

Station No.	Mercury	Arsenic	Cooper	Lead	Cadmium	Chromium	Zinc	Petroleum	Sulfide
38	0.285	0.491	0.687	0.576	0.196	**1.243**	0.942	0.053	0.255
44	0.260	0.467	0.661	0.692	0.186	**1.123**	0.729	0.052	0.139
45	0.310	0.564	0.555	0.527	0.152	0.826	0.635	0.072	0.159
51	0.295	0.627	0.812	0.445	0.172	**1.059**	0.653	0.043	0.096
53	0.270	0.566	0.860	0.562	0.188	**1.186**	0.836	0.061	0.321
54	0.270	0.495	0.635	0.405	0.210	**1.183**	0.759	0.059	0.245
61	0.285	0.550	0.711	0.365	0.162	**1.095**	0.695	0.256	0.458
65	0.230	0.540	0.702	0.352	0.144	**1.229**	0.750	0.143	0.542
66	0.230	0.523	0.781	0.487	0.186	**1.221**	0.977	0.326	0.472
69	0.240	0.548	0.578	0.443	0.206	**1.295**	0.877	0.060	0.272
71	0.295	0.479	0.465	0.401	0.134	0.890	0.684	0.050	0.335
72	0.280	0.566	0.543	0.547	0.202	**1.069**	0.768	0.070	0.342

Ⅳ Marine Bio-quality Survey

Table 26 Monitored Items and Analysis Methods for Marine Bio-quality

No.	Item	Analysis Method	Detection Limit	Method Source
1	Cooper	Flameless atomic absorption	0.4×10^{-6}	GB 17378.6-2007
2	Mercury	Atomic Fluorescence Spectrometry	0.002×10^{-6}	GB 17378.6-2007
3	Lead	Flameless atomic absorption	0.04×10^{-6}	GB 17378.6-2007
4	Zinc	Flame atomic absorption spectrometry	0.4×10^{-6}	GB 17378.6-2007
5	Cadmium		0.08×10^{-6}	GB 17378.6-2007
6	Chromium	Two - two carbon acyl hydrazine	0.40×10^{-6}	GB 17378.6-2007
7	Arsenic	Atomic Fluorescence Spectrometry	0.2×10^{-6}	GB 17378.6-2007
8	Petroleum	Fluorescence spectrometry	0.2×10^{-6}	GB 17378.6-2007

Ⅴ Marine Ecological Survey

Method of marine ecological survey

Phytoplankton survey: the samples are collected by trawling vertically from bottom layer to surface layer with a Type-Ⅲ shallow water net (length 140cm, opening diameter 37cm, opening area 0.1m^2, screen aperture 0.077mm); Water samples for Phytoplankton: the samples from the surface layer and bottom layer (500ml for each layer) are collected with an organic glass sampler (when the water depth is higher than 10m, the samples are collected from both layers, when the depth is no lower than 10m, only the samples from the bottom layer is collected), and fixed with 5% formalin solution on the spot, brought to the lab to identify the species and calculate, count, make statistical analysis following the individual count method to determine the species and cell density of phytoplankton. The unit of phytoplankton abundance is: net sample in cell/ m^3 and water sample in cell/L.

Zooplankton survey: the samples are collected by trawling vertically from bottom layer to surface layer with a Type-Ⅰ shallow water net (length 145cm, opening diameter 50cm, opening area 0.2m^2, screen aperture 0.505mm); The samples collected and fixed with 5% formalin solution on the spot, brought to the lab to weigh the biomass, classify, identify and count. The biomass of zooplankton is indicated in wet

weight, whose unit is mg/m^3 and the abundance unit is ind/m^3.

Benthic organisms survey: the samples for quantitative analysis were collected with a ONCI-Ⅰ Type bottom sampler (0.05 m^2), sampling four times at each station and merging, then cleaning through the three-layer screen with different apertures (screen apertures of upper, middle and lower layer are 2.0-5.0mm, 1.0mm and 0.5mm respectively) to pick out the specimen, which was fixed with 5% formalin solution on the vessel and brought to the lab to weigh the biomass, identify (species identified at possible) and count, coverted into the biomass (g/m^2) and inhabiting density (ind/m^2) in unit are; The Agassiz trawl applies to the qualitative analysis at the speed of 1-2kn with trawling for 10min at each station, the collected samples are classified and fixed on the spot, then brought to the lab to weigh the biomass, identify (species identified at possible) and count.

Survey of macrobenthos in intertidal zone: surveyed during the spring tide, as for the quantitative analysis, samples of macrobenthos in intertidal zone are taken from the high-upper, high-lower, middle-upper, middle-lower, low-upper, low-lower tidal zones. Four to eight samples are taken at the same level with equal spacing are collected by the frame (25×25×30cm^3), totally covering 0.25m^2-0.5m^2 , then cleaned in the net mesh. While collecting the quantitative samples, respectively collect the qualitative samples in the high, middle and low tidal zones, which are fixed with 5% formalin solution and brought to lab to idenfify and count.

Fishery resource survey: the specifications of otter trawl used in the survey: opening 5m*2.5m, net length 30m, mesh size of cod-end 20mm×20mm, size of mesh-bottom 10mm×10mm, trawling speed 2-3.0kn, trawling period at each station 0.5h, the specifications of stow net used: opering 5m×5m, net length 10m, mesh size of cod-end 20mm×20mm, size of mesh-bottom 10mm×10mm.

Directory of Phytoplankton Species

Table 27 Directory of Phytoplankton Species in Spring

No.	Species	Latin
一	**硅藻门**	**Bacillariophyta**
1	尤氏直链藻	*Melosira* juergensi
2	拟货币直链藻	*Melosira nummuloides*
3	具槽直链藻	*Melosira sulcata*
4	念珠直链藻	*Melosira moniliformis*
5	蛇目圆筛藻	*Coscinodiscus argus*
6	孔圆筛藻	*Coscinodiscus perforatus*
7	具边圆筛藻	*Coscinodiscus marginatus*
8	格氏圆筛藻	*Coscinodiscus granii*
9	虹彩圆筛藻	*Coscinodiscus oculus-iridis*
10	苏氏圆筛藻	*Coscinodiscus thorii*
11	辐射圆筛藻	*Coscinodiscus radiatus*
12	偏心圆筛藻	*Coscinodiscus excentricus*
13	琼氏圆筛藻	*Coscinodiscus jonesianus*
14	强氏圆筛藻	*Coscinodiscus Janischii*

15	威氏圆筛藻	*Coscinodiscus wailesii*
16	细弱圆筛藻	*Coscinodiscus subtilis*
17	线形圆筛藻	*Coscinodiscus lineatus*
18	小眼圆筛藻	*Coscinodiscus ocuiatus*
19	星脐圆筛藻	*Coscinodiscus asteromphalus*
20	有棘圆筛藻	*Coscinodiscus spinosus*
21	有翼圆筛藻	*Coscinodiscus bipartitus*
22	中心圆筛藻	*Coscinodiscus centralis*
23	整齐圆筛藻	*Coscinodiscus concinnus*
24	中肋骨条藻	*Skeletonema costatus*
25	条纹小环藻	*Cyclotella* striata
26	小环藻属	*Cyclotella* sp.
27	爱氏辐环藻	*Actinocyclus ehrenbergii*
28	波状辐环藻	*Actinocyclus undulatus*
29	厚辐环藻	*Actinocyslus crassus*
30	海链藻属	*Thalassiosira sp.*
31	丹麦细柱藻	*Leptocylindrus danicus*
32	小细柱藻	*Leptocylindrus minimus*
33	佰戈根管藻	*Rhizosolenia bergonii*
34	笔尖形根管藻	*Rhizosolenia styliformis*
35	粗根管藻	*Rhizosolenia styliformis*
36	脆根管藻	*Rhizosolenia fragilissima*
37	刚毛根管藻	*Rhizosolenia setigera*
38	柔弱根管藻	*Rhizosolenia delicatula*
39	旋链角毛藻	*Chaetoceros curvisetus*
40	细齿角毛藻	*Chaetoceros denticulatus*
41	绕孢角毛藻	*Chaetoceros didymus*
42	旋链角毛藻	*Chaetoceros curvisetus*
43	扁面角毛藻	*Chaetoceros compressus*
44	并基角毛藻	*Chaetoceros decipiens*
45	垂缘角毛藻	*Chaetoceros laciniosus*
46	发状角毛藻	*Chaetoceros crinitus*
47	聚生角毛藻	*Chaetoceros socialis*
48	洛氏角毛藻	*Chaetoceros lorezianus*
49	密联角毛藻	*Chaetoceros densus*
50	冕孢角毛藻	*Chaetoceros diadema*
51	扭链角毛藻	*Chaetoceros convolutus*
52	双突角毛藻	*Chaetoceros didymus*
53	印度角毛藻	*Chaetoceros indicus*
54	佛氏海毛藻	*Thalassiothrix frauenfeldii*
55	钝头盒形藻	*Biddulphia obtusa*
56	活动盒形藻	*Biddulphia mobiliensis*
57	中华盒形藻	*Biddulphia sinensis*
58	蜂窝三角藻	*Triceratium favus*
59	柔弱拟菱形藻	*Pseudo-nitzschia delicatissma*
60	长菱形藻	*Nitzschia longissima*
61	尖刺菱形藻	*Nitzschia pungens*

62	尖刺拟菱形藻	*Pseudo-nitzschia pungens*
63	洛氏菱形藻	*Nitzschia Lorenziana*
64	奇异菱形藻	*Nitzschia paradoxa*
65	弯菱形藻	*Nitzschia sigma*
66	新月菱形藻	*Nitzschia closterium*
67	曲舟藻属	*Pleurosigma* sp.
68	美丽曲舟藻	*Pleurosigma formosum*
69	端尖曲舟藻	*Pleurosigma* acutum
70	海洋曲舟藻	*Pleurosigma* pelagicum
71	相似曲舟藻	*Pleurosigma aestuarii*
72	太阳双尾藻	*Ditylum sol*
73	布氏双尾藻	*Ditylum brightwelli*
74	太平洋海链藻	*Ditylum pacific*
75	诺氏海链藻	*Thalassiosira nordenskioldi*
76	细弱海链藻	*Thalassiosira subtilis*
77	圆海链藻	*Thalassiosira rotula*
78	线状双眉藻	*Amhhora lineolata*
79	杆线藻	*Rhabdonema arcuatum*
80	棘冠藻属	*Corethron* sp.
81	豪猪棘冠藻	*Corethron hystrix*
82	波罗的海布纹藻	*Gyrosigma balticum*
83	短柄曲壳藻	*Achanthes brevipes*
84	华壮双菱藻	*Surirella fastuos*
85	膜状舟形藻	*Navicula membranacea*
86	楔形藻属	*Licmophora* sp.
87	舟形藻属	*Navicula* sp.
88	浮动弯角藻	*Eucampia* sp.
89	短楔形藻	*Licmophora abbreviada*
90	布纹藻属	*Gyrosigma* sp.
91	优美旭氏藻	*Schroederella delicatula*
92	三舌辐裥藻	*Actinoptychus trilingulatus*
93	地中海指管藻	*Dactyliosolen mediterraneus*
94	菱形海线藻	*Thalssionema nitzschiodes*
95	哈氏半盘藻	*Hemidiscus hardmannianus*
96	蜂腰双壁藻	*Diploneis bombus*
97	蛛网藻	*Arachnoidiscus ehrenbergii*
二	**甲藻门**	**Pyrrophyta**
98	卡氏角藻	*Ceratium karstenii*
99	大角角藻	*Ceratium macroceros*
100	三叉角藻	*Ceratium tripos*
101	梭角藻	*Ceratium fusus*
102	马西里亚角藻	*Ceratium massiliense*
103	叉状角藻	*Ceratium furca*
104	驼背角藻	*Ceratium gibberum*
105	血红裸甲藻	*Akashiwo sanguinea*
106	微小原甲藻	*Prorocentrum minimum*
107	五角多甲藻	*Peridinium quinquecorne*

108	锥形多甲藻	*Alexandrium tamarense*
109	斯氏扁甲藻	*Pyrophacus steinia*
110	东海原甲藻	*Prorocentrum donghaiense*
111	扁平原多甲藻	*Protoperidinium depressum*
112	扁形多甲藻	*Peridinium depressum*
113	具刺膝沟藻	*Gonyaulax spinifera*
114	塔玛亚历山大藻	*Alexandrium tamarense*
115	轮状斯克藻	*Scrippsiella trichoidea*
116	米氏凯伦藻	*Karenia mikimotoi*
117	夜光藻	*Noctiluca scintillans*
118	具尾鳍藻	*Dinophysis caudata*
119	渐尖鳍藻	*Dinophysis acuminata*
120	倒卵形鳍藻	*Dinophysis fortii*
121	螺旋环沟藻	*Gyrodinium spirale*
122	亚历山大藻	*Alexandrium* sp.
123	锥状斯克里普藻	*Scrippsiella trichoidea*
三	**金藻门**	**Chrysophyta**
124	小等刺硅鞭藻	*D*ictyocha fibula
四	**纤毛门**	**Ciliophora**
125	红色中缢虫	*Mesodinium rubrum*
五	**蓝细菌（藻）门**	**Cyanophyta**
126	铁氏束毛藻	*Trichodesmium thiebautii*
六	**绿藻门**	**Chlorophyta**
127	针状蓝纤维藻*	*D*actyloccopsis acicularis

Table 28 Directory of Phytoplankton Species in Autumn

No.	Species	Latin
一	**硅藻**	**Bacillariophyta**
1	辐环藻属	*Actinocyclus* sp.
2	波状辐裥藻	*Actinocyclus undulatus*
3	日本星杆藻	*Asterionella japonica*
4	透明辐杆藻	*Bacteriastrum hyalinum*
5	活动盒形藻	*Biddulphia mobiliensis*
6	美丽盒形藻	*Biddulphia pulchella*
7	高盒形藻	*Biddulphia regia*
8	中华盒形藻	*Biddulphia sinensis*
9	盒形藻属	*Biddulphia* sp.
10	中沙角管藻	*Ceratopleura zhongshaesis*
11	垂缘角毛藻	*Chaetocereos laciniosus*
12	窄隙角毛藻	*Chaetoceros affinis*
13	并基角毛藻	*Chaetoceros becipiens*
14	并基角毛藻	*Chaetoceros becipiens*
15	卡氏角毛藻	*Chaetoceros casttracanei*
16	旋链角毛藻	*Chaetoceros curvisetus*
17	罗氏角毛藻	*Chaetoceros Lauderi*
18	洛氏角毛藻	*Chaetoceros lorezianus*

19	聚生角毛藻	*Chaetoceros socialis*
20	角毛藻属	*Chaetoceros* sp.
21	冕孢角毛藻	*Chaetoceros subsecundus*
22	双凹梯形藻	*Climacodium biconcavum*
23	蛇目圆筛藻	*Coscinodiscus argus*
24	星脐圆筛藻	*Coscinodiscus asteromphalus*
25	有翼圆筛藻	*Coscinodiscus bipartitus*
26	中心圆筛藻	*Coscinodiscus centralis*
27	琼氏圆筛藻	*Coscinodiscus jonesianus*
28	具边线形园筛藻	*Coscinodiscus marginato-lineatus*
29	具边圆筛藻	*Coscinodiscus marginatus*
30	稀氏圆筛藻	*Coscinodiscus nitidus*
31	小眼圆筛藻	*Coscinodiscus oculatus*
32	虹彩圆筛藻	*Coscinodiscus oculs-iridis*
33	辐射圆筛藻	*Coscinodiscus radiatus*
34	有棘圆筛藻	*Coscinodiscus spinosus*
35	圆筛藻属	*Coscinodiscus* spp.
36	苏氏圆筛藻	*Coscinodiscus thorii*
37	条纹小环藻	*Cyclotella striata*
38	布氏双尾藻	*Ditylum brightwellii*
39	太阳双尾藻	*Ditylum sol*
40	萎软几内亚藻	*Guinardia flaccida*
41	波罗的海布纹藻	*Gyrosigma balticum*
42	膜质半管藻	*Hemiaulus membranaceus*
43	丹麦细柱藻	*Leptocylindrus danicus*
44	小细柱藻	*Leptocylindrus minimus*
45	具槽直链藻	*Melosira sulcata*
46	舟形藻属	*Navicula* sp.
47	柔弱菱形藻	*Nitzschia delicatissima*
48	长菱形藻	*Nitzschia lanceola*
49	洛氏菱形藻	*Nitzschia lorenziana*
50	奇异菱形藻	*Nitzschia paradoxa*
51	尖刺菱形藻	*Nitzschia pungens*
52	弯菱形藻	*Nitzschia sigma*
53	菱形藻属	*Nitzschia* sp.
54	太阳漂流藻	*Planktoniella sol*
55	相似曲舟藻	*Pleurosigma affine*
56	美丽曲舟藻	*Pleurosigma formosum*
57	海洋曲舟藻	*Pleurosigma Pelagicum*
58	细长翼根管藻	*Rhizosolenia alata f.gracillima*
59	印度翼根管藻	*Rhizosolenia alata f.Indica*
60	刚毛根管藻	*Rhizosolenia setigera*
61	根管藻属	*Rhizosolenia* sp.
62	笔尖形根管藻	*Rhizosolenia styliformis*
63	优美旭氏藻	*Schroederella delicatula*
64	中肋骨条藻	*Skeletonema costatum*
65	掌状冠盖藻	*Stephanopyxis palmeriana*

66	扭鞘藻	*Streptotheca thamesis*
67	双菱藻属	Surirella sp.
68	针杆藻属	*Synedra* sp.
69	菱形海线藻	*Thalassionema nitzschiodes*
70	诺氏海链藻	*Thalassiosira nordenskioldi*
71	海链藻属	Thalassiosira sp.
72	佛氏海毛藻	*Thalassiothrix frauenfeldii*
73	泰晤士扭鞘藻	*Streptotheca thamesis*
二	**甲藻**	**Pyrrophyta**
74	塔玛亚历山大藻	*Alexandrium tamarense*
75	短角藻	*Ceratium breve*
76	叉状角藻	*Ceratium furca*
77	叉状角藻矮胖变种	*Ceratium furca*
78	梭角藻	*Ceratium fusus*
79	梭角藻针状变种	*Ceratium fusus*
80	驼背角藻	*Ceratium gibberum*
81	马西里亚角藻	*Ceratium massilense*
82	角藻属	*Ceratium* sp.
83	三叉角藻	*Ceratium trichoceros*
84	三角角藻	*Ceratium tripos*
85	具尾鳍藻	*Dinophysis caudata*
86	鳍藻属	*Dinophysis* sp.
87	具刺膝沟藻	*Gonyaulax spinifera*
88	夜光藻	*Noctiluca scintillans*
89	厚甲多甲藻	*Peridinium crassipes*
90	海洋原甲藻	*Prorocentrum micans*
91	尖叶原甲藻	*Prorocentrum triestinum*
92	厚甲原多甲藻	*Protoperidinium crassipes*
93	扁形原多甲藻	Protoperidinium depressum
94	斯氏扁甲藻	*Pyrophacus steinii*
95	轮状斯克藻	*Scrippsiella trochoidea*
96	长咀角藻	*longir ostrum*
三	**蓝藻**	**Cyanophyta**
97	铁氏束毛藻	*Trichodesmium thiebauti*
98	红海束毛藻	*Trichod esmium erythraeum*

Directory of Zooplankton Species

Table 29 Directory of Zooplankton Species in Spring

No.	Species	Latin
一	**腔肠动物门**	**Coelenterata**
	水螅水母亚纲	**Hydrozoa**
1	鳞茎高手水母	**Boaugainvillia muscus**
2	半口壮丽水母	*Aglaura hemistoma*
3	黑球真唇水母	*Eucheilota menoni*
4	杜氏外肋水母	*Ectopleura dumortieri*
5	短柄和平水母	*Eirene brevistylus*
6	短腺和平水母	*Eirene brevigona*
7	对称两手水母	*Solmundella bitentaculata*
8	疣真囊水母	*Euphysora verrucosa*
9	贝氏真囊水母	*Euphysora bigelowi*
10	米勒水母	*Moerisia inkermanica*
11	嵊山秀氏水母	*Phialidium chengshanense*
12	双叉薮枝螅水母	*Obelia dichotoma*
13	四叶小舌水母	*Liriope tetraphylla*
14	真瘤水母 sp	*Eutima* sp.
15	鲜艳真瘤水母	*Eutima orientalis*
16	酒杯水母 sp	*Phialueium* sp.
17	真拟酒杯水母	*Phialueium mbenga*
18	带拟酒杯水母	*Phialueium taeniogonis*
19	隔膜水母 sp	*Leuckartiara*
20	锥形面具水母	*Pandea conica*
21	八囊摇蓝水母	*Cunina octonaria*
	管水母亚纲	**Siphonophorae**
22	五角水母	*Muggiaea atlantica*
23	拟细浅室水母	*Lensia subtiloides*
二	**栉水母门**	**Ctenophora**
24	球型侧腕水母	*Pleurobrachia globosa*
25	瓜水母	*Beroë cucumis*
三	**节肢动物门**	**Acthropoda**
	甲壳纲	**Crustacea**
	介型亚纲	**Ostracoda**
26	针刺真浮萤	*Euconchoecia aculeata*
	桡足亚纲	**Copepoda**
27	中华哲水蚤	*Calanus sinicus*
28	真刺唇角水蚤	*Labidocera euchaeta*
29	圆唇角水蚤	*Labidocera rotunda*
30	瘦尾胸刺水蚤	*Centropages tenuiremis*
31	墨氏胸刺水蚤	*Centropages mcmurrichi*
32	背针胸刺水蚤	*Centropages dorsispinatus*
33	克氏纺锤水蚤	*Acartia clausi*
34	刺尾纺锤水蚤	*Acartia spinicanda*
35	钝简角水蚤	*Pontellopsis yamadae*
36	小拟哲水蚤	*Paracalanus parvus*
37	针刺拟哲水蚤	*Paracalanus derjugini*

38	黄角光水蚤	*Lucicutia flavicornis*
39	精致真刺水蚤	*Euchaeta concinna*
40	平滑真刺水蚤	*Euchaeta plana*
41	太平洋真宽水蚤	*Eurytemora pacificSato*
42	近缘大眼剑水蚤	*Corycaeus affinis*
43	柱形宽水蚤	*Temora stylifera*
44	锥形宽水蚤	*Temora turbinata*
45	拟长腹剑水蚤	*Oithona simills*
46	平大眼剑水蚤	*Corycaeus dahli*
47	微胖大眼剑水蚤	*Corycaeus crassiusculus*
48	硬鳞盔头猛水蚤	*Clytemnestra scutellata*
	软甲亚纲	**Malacostraca**
	糠虾目	**Mysidacea**
49	长额超刺糠虾	*Hyperacanthomysis longirostris*
50	短额超刺糠虾	*Hyperacanthomysis brevirostris*
	涟虫目	**Cumacea**
51	三叶针尾涟虫	*Diasylis tricincta*
	端足目	**Amphipoda**
52	**钩虾亚目**	GAMMARIDEA
53	克氏尖头虫戎	*Oxycephalus clausi*
54	虫戎亚目	*Suborder Hyperiidea*
	磷虾目	**Euphausiacea**
55	中华假磷虾	*Pseudeuphausia sinica*
	十足目	**Decapoda**
56	日本毛虾	*Acetes japanicus*
57	细螯虾	*Leptochela gracilis*
58	正型萤虾	*Lucifer typus*
59	中型萤虾	*Lucifer intermdeius*
四	**毛颚动物门**	**Chaetongnaths**
60	肥胖箭虫	*Flaccisagitta enflata*
61	百陶箭虫	*Zonosagitta bedoti*
62	中华箭虫	*Zonosagitta sinica*
五	**尾索动物门**	**Urochordata**
	有尾纲	**Appendiculata**
63	长尾住囊虫	*Oikopleura longicauda*
64	异体住囊虫	*Oikopleura dioica*
	海樽纲	**Thallacea**
65	软拟海樽	*Dolioletta gegenbauri*
六	**幼虫（体）**	**Larva**
66	阿利玛幼虫	Alima larva
67	长尾类幼体	Macruran larva
68	短尾类大眼幼虫	Megalopa larva
69	短尾类溞状幼虫	Brachyura zoea larva
70	多毛类幼体	Polychata larva
71	腹足类幼虫	Gastropod larva
72	棘皮动物长腕幼虫	Echinoplutrus larva
73	棘皮动物耳状幼虫	Auricularia larva

74	箭虫幼体	Sagitta larvae
75	蔓足类六肢幼虫	Balanus larva(Balanus)
76	蔓足类无节幼虫	Balanus larva(Balanus)
77	纽形动物帽状幼虫	Pilidium larva
78	桡足类幼虫	Nauplius larva
79	羽腕幼虫	Astropecten
80	真刺水蚤幼体	Euchaeta larva
81	节胸幼虫	Nauplius larva
82	帚毛虫轮辐幼虫	actinotrocha larva
83	仔鱼	Fish larva
84	鱼卵	Fish eggs
85	幼螺	Gastropod post larva

Table 30 Directory of Zooplankton Species in Autumn

No.	Species	Latin
一	**水螅水母**	**Hydrozoa**
1	双叉薮枝螅水母	*Obelia dichotoma*
2	锥形面具水母	*Pandea conica*
3	短柄灯塔水母	*Turritopsis lata*
二	**管水母亚纲**	**Siphonophorae**
4	大西洋五角水母	*Muggiaea atlantica*
5	性轭小型水母	*Nanomia bijuga*
三	**栉水母**	**Ctenophora**
6	瓜水母	*Beroë cucumis*
7	球形侧腕水母	*Pleurobrachia globosa*
四	**多毛类**	**Polychaeta**
8	瘤蚕属	
五	**软体动物**	**Mollusca**
9	明螺	*Atlanta* sp.
10	尖笔帽螺	*Creseis acicula*
六	**毛颚动物门**	**Chaetongnaths**
11	肥胖箭虫	*Flaccisagitta enflata*
12	强壮箭虫	*Sagitta crassa*
13	凶形箭虫	*Sagitta ferox*
14	中华箭虫	*Zonosagitta sinica*
七	**介型亚纲**	**Ostracoda**
15	齿形海萤	*Cypridina dentata*
16	小型海萤	*Cypridina nana*
17	针刺真浮萤	*Euconchoecia aculeata*
18	细长真浮萤	*Euconchoecia aculeata vat. elongata*
八	**桡足亚纲**	**Copepoda**
19	太平洋纺锤水蚤	*Acartia pacifica*
20	驼背隆哲水蚤	*Acrocalanus gibber*
21	中华哲水蚤	*Calanns sinicus*
22	伯氏平头水蚤	*Candacia bradyi*
23	微刺哲水蚤	*Canthocalanus pauper*

24	哲胸刺水蚤	*Centropages calaninus*
25	背针胸刺水蚤	*Centropages dorsispinatus*
26	叉胸刺水蚤	*Centropages furcatus*
27	奥氏胸刺水蚤	*Centropages orsinii*
28	瘦尾胸刺水蚤	*Centropages tenuiremis*
29	小盘盔头猛水蚤	*Clytemnestra scutellata*
30	近缘大眼剑水蚤	*Corycaeus affinis*
31	灵巧大眼剑水蚤	*Corycaeus catus*
32	亚强真哲水蚤	*Eucalanus subcrassus*
33	精致真刺水蚤	*Euchaeta concinna*
34	平滑真刺水蚤	*Euchaeta plana*
35	尖刺唇角水蚤	*Labidocera acuta*
36	真刺唇角水蚤	*Labidocera euchaeta*
37	科氏唇角水蚤	*Labidocera kroyeri*
38	圆唇角水蚤	*Labidocera rotunda*
39	红小毛猛水蚤	*Microsetella norvegica*
40	小毛猛水蚤	*Microseteua norvegica*
41	拟长腹剑水蚤	*Oithona simills*
42	丽隆剑水蚤	*Oncaea venusta*
43	针刺拟哲水蚤	*Paracalanus derjugini*
44	强额拟哲水蚤	*Paracalanus crassirostris*
45	小拟哲水蚤	*Paracalanus parvus*
46	刺尾角水蚤	*Pontella spinicauda*
47	钝简角水蚤	*Pontellopsis villosa*
48	缘齿厚壳水蚤	*Scolecithrix nicobarica*
49	强真哲水蚤	*Subeucalanus crassus*
50	异尾宽水蚤	*Temora discaudata*
51	锥形宽水蚤	*Temora turbinata*
52	钳形歪水蚤	*Tortanus forcipatus*
53	普通波水蚤	*Undinula vulgaris*
54	红叶剑水蚤	
55	角锚哲水蚤	
九	**糠虾目**	**Mysidacea**
56	短额刺糠虾	*Hyperacanthomysis brevirostris*
57	漂浮小井伊糠虾	*Liella pelagicus*
58	节糠虾属	*Siriella* sp.
十	**端足目**	**Amphipoda**
59	钩虾	*Gammarus* sp.
60	细尖小涂氏虫戎	*Tullbergella cuspidata*
61	小泉虫戎属	*Hyperietta* sp.
十一	**磷虾目**	**Euphausiacea**
62	中华假磷虾	*Pseudeuphausia sinica*
63	日本毛虾	*Acetes japanicus*
64	细螯虾	*Leptochela gracilis*
65	亨生萤虾	*Lucifer hanseni*
66	中型萤虾	*Lucifer intermdeius*

十二	**尾索动物门**	**Urochordata**
67	海樽纲	Thaliacea
十三	**浮游幼体**	**Pelagic Larva**
68	阿利马幼虫	Alima larva
69	短尾类蚤状幼虫	Brachyura zoea larva
70	鱼卵	Fish egg
71	幼螺	Gastropod post larva
72	真刺水蚤幼体	Labidocera larva
73	长尾类幼体	Macruran larva
74	大眼幼虫	Megalopa larva
75	桡足类无节幼虫	Nauplius larva(Copepoda)
76	多毛类幼体	Polychaeta larva
77	磁蟹蚤状幼虫	Procellana zoea larva
78	箭虫幼体	Sagitta larva

Directory of Benthonic Organism Species

Table 31 Directory of Benthonic Organism Species in Spring

No.	Species	Latin	Quantitative	Qualitative
一	**腔肠动物门**	**Coelenterata**		
1	海笔	*Stachutilum* sp	+	
2	海仙人掌	*Cavernularia obesa*	+	
3	星虫状海葵	*Edwatdsia sipunculoides*	+	+
二	**环节动物门**	**Annelida**		
4	埃刺梳鳞虫	*Ehlersileanira incisa*	+	
5	西方似蛰虫	*Amaeana occidentalis*	+	
6	拟节虫	*Praxillella praetermissa*	+	
7	双形拟单指虫	*Cossurella dimorpha*	+	
8	背蚓虫	*Notomastus latericeus*	+	
9	扁蛰虫	*Loimia medusa*	+	
10	不倒翁虫	*Sternaspis sculata*	+	
11	长吻沙蚕	*Clycera chiror*	+	
12	持真节虫	*Euclymene annandalei*	+	
13	双鳃内卷齿蚕	*Aglaophamus dihrancdis*	+	
14	海结虫	*Leocrates chinensis*	+	
15	海稚虫科	*Spionidae* spp.	+	
16	寡节甘吻沙蚕	*Glycinde gurjanovae*	+	
17	奇异稚齿虫	*Paraprionospis pinnata*	+	
18	丝鳃虫	*Cirratulus cirratus*	+	
19	角海蛹	*Ophelina acuminata*	+	
20	蛰龙介	*Terebella ehrenbergi*	+	
21	稚齿虫	*Paraprionospis* sp.	+	
22	丝异须虫	*Heteromastus filiforms*	+	
23	须鳃虫	*Cirriformia* sp.	+	
24	圆锯齿吻沙蚕	*Dentinephtys glabra*	+	
25	异足索沙蚕	*Lumbrineris heteropoda*	+	+
三	**软体动物门**	**Mollusca**		

26	白带笋螺	*Terebra dussumieri*	+	
27	小荚蛏	*Siliqua minima*	+	
28	半褶织纹螺	*Nassarius semiplicatus*	+	
29	棒锥螺	*Turritella bacillum*	+	
30	薄云母蛤	*Yoldia similis*	+	
31	毛蚶	*Scapharca subcrenata*	+	
32	经氏壳蛞蝓	*Philine kinqlipini*	+	+
33	豆形胡桃蛤	*Nixula kawamurai*	+	
34	泥蚶	*Tegillarca gransa*	+	+
35	纵肋织纹螺	*Nassarius variciferus*	+	+
36	红带织纹螺	*Nassarius* succinctus	+	
37	圆筒原盒螺	*Eocylichna braunsi*	+	
38	马氏光螺	*Melanella martinii*	+	
39	金星蝶铰蛤	*Trigonothracia jinxingae*		+
40	亮螺	*Phos senticosus*		+
41	小刀蛏	*Cultellus attenuatus*		+
42	浅缝骨螺	*Murex trapa*		+
43	假奈拟塔螺	*Turricula nelliae spurius*		+
44	爪哇拟塔螺	*Turricula javana*		+
45	幼蛤	Bivalve larvae	+	
四	**节肢动物门**	**Arthropoda**		
46	无尾涟虫	*Leueon* sp.	+	
47	毛盲蟹	*Typhlocarcinus villosus*	+	
48	东方长眼虾	*Ogyrides orientalis*	+	
49	豆形短眼蟹	*Xenophthalmus pinnotheroides*	+	
50	钩虾	*Ampeliscidae* sp.	+	
51	蜾蠃蜚属	*Corophium* sp.	+	
52	日本鼓虾	*Alpheusjaponicus Miers*	+	
53	日本英雄蟹	*Achaeus japonicus*	+	
54	脊尾白虾	*Exopalaemon carinicauda*		+
55	细螯虾	*Leptochela gracilis*		+
56	细巧仿对虾	*Parapenaeopsis tenella*		+
57	中国毛虾	*Acetes chinensis*		+
58	绒毛细足蟹	*Raphidopus ciliatus*	+	
五	**棘皮动物门**	**Echinodermata**		
59	薄倍棘蛇尾	*Amphioplus praestans*	+	
60	金氏真蛇尾	*Ophiura kinbergi*	+	
61	马氏刺蛇尾	*Ophiothrix marenzelleri*	+	
62	棘刺锚参	*Protankyra bidentata*	+	+
六	**纽形动物门**	**Nemertea**		
63	纽虫	*Lineus* spp.	+	
64	纵沟纽虫	*Lineus* sp.	+	+
七	**脊索动物门**	**Chordata**		
65	中华栉孔虾虎鱼	*Trypauchen vagina*	+	+
66	红狼牙虾虎鱼	*Odontamblyopus rubicundus*	+	+
67	矛尾虾虎鱼	*Chaeturichthys stigmatias*		+
68	仔鱼	Fish larvae	+	

69	小带鱼	*Trichiurus muticus*		+
70	窄体舌鳎	*Cynoglossus gracilis*		+
Number of Species			57	22

+ means the emergence of this species, the same below.

Table 32 Directory of Benthonic Organism Species in Autumn

No.	Species	Latin
一	**多毛类**	**Polychaeta**
1	中华内卷齿蚕	*Aglaophamus sinensis*
2	双形拟单指虫	*Cossurella dimorpha*
3	埃刺梳鳞虫	*Ehlersileanira incisa*
4	持真节虫	*Euclymene annanolalei*
5	长吻沙蚕	*Glycera chirori*
6	异足索沙蚕	*Lumbrineris heteropoda*
7	不倒翁虫	*Sternaspis sculsts*
二	**软体动物**	**Mollusca**
8	小刀蛏	*Cultellus attenuatus*
9	日本镜蛤	*Dosinia (Phacosoma) japonica*
10	浅缝骨螺	*Murex trapa*
11	红带织纹螺	*Nassarius succinctus*
12	纵肋织纹螺	*Nassarius varicifeus*
13	扁玉螺	*Neverida didyma*
14	经氏壳蛞蝓	*Philine ringlipini*
15	亮螺	*Phosinella senticosus*
16	毛蚶	*Scapharca subcrnsta*
17	小荚蛏	*Siliqua minima*
18	白带笋螺	*Tere ra bussumieri*
19	假奈拟塔螺	*Turricula nelliae spurius*
20	爪哇拟塔螺	*Tutricula javana*
21	棒锥螺	*Tutritella bacillum*
22	薄云母蛤	*Yoldia similis*
三	**甲壳动物**	**Crustacea**
23	日本蟳	*Charybdis japonica*
24	隆线强蟹	*Eucrata crenata*
25	口虾蛄	*Oratosquilla oratoria*
26	葛氏长臂虾	*Palaemon gravieri*
27	绒毛细足蟹	*Paphidopus ciliatus*
28	哈氏仿对虾	*Parapenaeopsis hardwickii*
29	细巧仿对虾	*Parapenaeopsis tenella*
30	中华管鞭虾	*Solenocera crassicomis*
31	豆形短眼蟹	*Xenophthalmus pinnotheroides*
四	**棘皮动物**	**Echinodermata**
32	海地瓜	*Acaudina molpadioides*
33	金氏真蛇尾	*Ophiura kinbergi*
34	正环沙鸡子	*Phyllophorus ordinatus*
35	棘刺锚参	*Protankyra bidentata*
五	**鱼类**	**Pisces**
36	矛尾虾虎鱼	*Chaeturichthys stvqmatias*

37	中华栉孔虾虎鱼	*Crenotrypauchen chinensis*
38	窄体舌鳎	*Ctnoglossus gracilis*
39	焦氏舌鳎	*Ctnoglossus joyneri*
40	红狼牙虾虎鱼	*Odonlamblyopus rubicundus*
六	**腔肠动物**	**Coelenterata**
41	海仙人掌	*Cavernularia* sp.

Directory of Species in Intertidal Zone

Table 33 Directory of Species in Intertidal Zone in Spring

No.	Species	Latin
一	**软体动物门**	**Moullusca**
1	粗糙似滨螺	*Littoraria scabra*
2	粒结节滨螺	*Nodilittorina exigus*
3	塔结节滨螺	*Nodilittorina pyramidalis*
4	短滨螺	*Littorina brevicula*
5	齿纹蜒螺	*Neritina yoldi*
6	泷岩两栖螺(幼)	*Salinator takii*
7	蛛形菊花螺	*Siphonria sirisu*
8	日本菊花螺	*Siphonria japonica*
9	丽核螺	*Tritonoharpa leali*
10	绯拟沼螺	*Asssiminea latericera*
11	覆瓦小陀螺	*Serpulorbis imbricata*
12	粒花冠小月螺	*Lunella coronata*
13	脉红螺	*Rapana venosa*
14	单齿螺	*Monodonta labio*
15	纹斑棱蛤	*Trapezium liratum*
16	半褶织纹螺	*Nassarius semiplicatus*
17	厚壳贻贝	*Mytilus coruscus*
18	条纹隔贻贝	*Septifer virgatus*
19	甲虫螺	*Cantharus cecillei*
20	棘刺牡蛎	*Crassostrea kegaki*
21	近江牡蛎	*Crassostrea rivularia*
22	僧帽牡蛎	*Crassostrea cucullata*
23	嫁（虫戚）	*Cellana grata*
24	泥螺	*Bullacta exarata*
25	拟蜒单齿螺	*Monodonta neritoides*
26	琵琶拟沼螺	*Asssiminea lutea*
27	锈凹螺	*Chlorostoma rustica*
28	疣荔枝螺	*Thais clavigera*
29	珠带拟蟹守螺	*Cerithidea cingulata*
30	珠母爱尔螺	*Ergalatax margariticola*
31	扭曲猿头蛤 (太平洋）	*Chama pacifica*
32	猿头蛤科	*Chama* spp.
33	习见蛙螺	*Bursa rana*
34	青蛤	*Cyclina sinensis*
35	厚壳海菊蛤	*Spondylus squamosus*

36	黑荞麦蛤	*Vignadula atrata*
37	光滑河篮蛤	*Potamocorbula laevis*
38	中国不等蛤	*Anomia chinensis*
39	短偏顶蛤	*Modiolus flavidus*
40	带偏顶蛤	*Modiolus flavidus*
41	中国绿螂	*Glaucomya chinensis*
42	锉石蛏	*Lithophaga lima*
43	短石蛏	*Lithophaga curta*
44	缢蛏	*Sinonovacula constricta*
45	青蚶	*Barbatia virescens*
46	史氏背尖贝	*Notoacmea schrenckii*
47	红条毛肤石鳖	*Acanthochiton rubrolineratus*
48	日本花棘石鳖	Acanthopleura japonica
二	**甲壳动物门**	**Crustacea**
49	蜾蠃蜚属	*Corophium* sp.
50	海蟑螂	*Ligia exotica*
51	长足长方蟹	*Metaplax longipes*
52	粗腿厚纹蟹	*Pachygrapsus crassipes*
53	弧边招潮	*Uca arcuata*
54	字纹弓蟹	*Varuna litterata*
55	中华近方蟹	*Hemigrapsus sinensis*
56	双扇股窗蟹	*Scopimera bitympana*
57	光辉圆扇蟹	*Sphaerozius nitidus*
58	绒螯近方蟹	*Hemigrapsus peniciillatus*
59	日本大眼蟹	*Macrophthalmus japonicus*
60	豆形短眼蟹	*Xenophthalmus pinnotheroides*
61	锯眼泥蟹	*Ilyoplax serrata*
62	日本蟳	*Charybdis japonica*
63	谭氏泥蟹	*Ilyoplax deschampsi*
64	毛盲蟹	*Typhlocarcinus villosus*
65	火红皱蟹	*Leptodius exaratus*
66	四齿大额蟹	*Metopograpsus quadridentatus*
67	台湾泥蟹	*Ilyoplax formosensis*
68	伍氏厚蟹	*Helicana wuana*
69	异常猴面蟹	*Camptandrium anomalum*
70	褶痕相手蟹	*Sesarma plicata*
71	直螯活额寄居蟹	*Diogenes rectimanus*
72	平背蜞	Gaetice depressus
73	龟足	*Capitulum mitella*
74	白脊藤壶	*Fistulobalanus albicostatus*
75	鳞笠藤壶	*Tetraclita squamosa*
76	日本笠藤壶	*Tetraclita japonica*
77	中华管鞭虾	*Solenocera crassicornis*
78	哈氏仿对虾	*Parapenaeopsis hardwickii*
79	东方长眼虾	*Ogyrides orientalis*
80	中国毛虾	*Acetes chinensis*
81	鲜明鼓虾	*Alpheus distinguendus*

82	日本鼓虾	*Alpheus japonicus*
83	黑斑口虾蛄	*Oratosquilla kempi*
84	蝼蛄虾	*Upogebia sp.*
85	微小圆柱水虱	*Cirolana minuta*
86	浪漂水虱	*Cirolana harfordi*
87	**环节动物门**	**Annelida**
88	不倒翁虫	*Sternaspis scutata*
89	长吻沙蚕	*Glycera chiror*
90	多齿围沙蚕	*Perinereis aibuhitensis*
91	双齿围沙蚕	*Perinereis aibuhitensis*
92	双鳃内卷齿蚕	*Aglaophamus dibranchis*
93	丝异须虫	*Heteromastus filiforms*
94	须鳃虫	*Cirriformia* sp.
95	异足索沙蚕	*Lumbrineris heteropoda*
96	智利巢沙蚕	*Diopatra chilienis*
97	稚齿虫	*Paraprionospio* sp.
三	**脊索动物门**	**Chordata**
98	弹涂鱼	*Periophthalmus cantonensis*
99	大弹涂鱼	*Boleophthalmus pectinirostris*
100	日本鳗鲡	*Angnilla japonica*
101	中华栉孔虾虎鱼	*Trypauchen vagina*
四	**绿藻门**	**Chlorophyta**
102	石莼	*Ulva lactuca*
五	**红藻门**	**Phodophyta**
103	叉枝藻	Gymnogongrus fiabeiliformis
104	小石花菜	Gelidium divaricatum
105	小杉藻	Gigartina intermedia
106	珊瑚藻	Corallina officinalis
六	**褐藻门**	**Phaeophyta**
107	鼠尾藻	Sargassum thunbergii
108	囊藻	Colpomenia sinuosa
七	**蓝藻**	
109	半丰满鞘丝藻	Lyngbya confervodies
八	**刺胞动物门**	**Cnidaria**
110	绿侧花海葵	Anthopleura midori
111	星虫状海葵	*Eswardsia sipunculoides*
112	纵条肌海葵	Haliplanella luciae
113	桂山厚丛柳珊瑚	Hicksonella guishanesis
九	**棘皮动物门**	**Echinodermata**
114	棘刺锚参	*Protankyra bidentata*
十	**纽形动物门**	**Nemertea**
115	纽虫	*Nemertinea* sp.
十一	**星虫动物门**	**Echiura**
116	可口革囊星虫	*Phascolosoma esculenta*
117	裸体方格星虫	*Sipunculus nudus*
十二	**幼体**	**Larva**
118	日本菊花螺卵子群	Siphonria japonica larva

119	幼螺	Gastropod larva
120	幼蟹	Brachyura larvae

Table 34 Directory of Species in Intertidal Zone in Autumn

No.	Species	Latin
一	**褐藻门**	**Phaeophyta**
1	鼠尾藻	*Sargassum thunbergii*
二	**环节动物门**	**Annelida**
2	长吻沙蚕	*Glycera chirori*
三	**软体动物**	**Moullusca**
3	红条毛肤石鳖	*Acanthchitoa ubrolineatus*
4	青蚶	*Barbatia virescens*
5	甲虫螺	*Cantharus cecillei*
6	嫁虫戚	*Cellana toreuma*
7	锈凹螺	*Chlorostoma rusticum*
8	褐蚶	*Didimacar tenebrica*
9	日本镜蛤	*Dosinia japonica*
10	等边浅蛤	*Gomphina veneriformis*
11	日本花棘石鳖	*Liolophua japonica*
12	粗糙滨螺	*Littorina scabra*
13	粒花冠小月螺	*Lunella coronata*
14	单齿螺	*Monodonta labio*
15	拟蜒单齿螺	*Monodonta neritoides*
16	厚壳贻贝	*Mytilu coruscus*
17	齿纹蜒螺	*Nerita yoldi*
18	粒结节滨螺	*Nodilittorina exigua*
19	塔结节滨螺	*Nodilittorina pyramidalls*
20	史氏背尖贝	*Notoacmea schrenckii*
21	棘刺牡蛎	*Ostrea echinata*
22	近江牡蛎	*Ostrea rivularis*
23	条纹隔贻贝	*Septifer virgatus*
24	覆瓦小陀螺	*Serpuorbis imbricata*
25	蛛形菊花螺	*Siphonria sirisu*
26	长竹蛏	*Solen qouldii*
27	疣荔枝螺	*Thais clavigera*
28	黄口荔枝螺	*Thais luteostoma*
29	粒神螺	*Apollon olivator rubustus*
四	**甲壳动物门**	**Crustacea**
30	粗腿厚纹蟹	*Pachygrapsus crassipes*
31	龟足	*Popllicipes mitella*
32	日本笠藤壶	*Tetraclita japonica*
33	鳞笠藤壶	*Tetraclita sqamosa*
34	寄居蟹	*Diogenes* sp.
五	**腔肠动物**	**Cnidaria**
35	绿侧花海葵	*Anthopleura midori*

Directory of Fishery Resources

Table 35 Directory of Fishery Resources

No.	Species	Latin	Otter Trawl	Stow Net
一	**软骨鱼纲**	**CHONDRICHTHYES**		
	魟科	DASYATIDAE		
1	赤魟	*Dasyatis akajei*	+	
	犁头鳐科	RHINOBATEDAE		
2	斑纹犁头鳐	*Rhinobatos hynnicephalus*	+	
二	**硬骨鱼纲**	**OSTEICHTHYES**		
	海鳗科	MURAENESOCIDAE		
3	海鳗	*Muraenesox cinereus*	+	+
	蠕鳗科	ECHELIDAE		
4	裸鳍虫鳗	*Muraenichthys gymnupterus*		+
	鳀科	ENGRAULIDAE		
5	康氏小公鱼	*Anchoviella commersonii*		+
6	小公鱼	*Anchoviella* sp	+	
7	凤鲚	*Coilia mystus*	+	
8	日本鳀	*Engraulis japonicus*		+
9	黄鲫	*Setipinna taty*	+	+
	海鲶科	ARIIDAE		
10	大海鲶	*Arius thalassinus*	+	
	龙头鱼科	HARPODONTIDAE		
11	龙头鱼	*Harpodon nehereus*	+	+
	海龙科	SYNGNATHIDAE		
12	舒氏海龙	*Syngnathus schlegeli*		+
	鲉科	SCORPAENIDAE		
13	褐蓑鲉	*Sebastiscus marmoratus*	+	
	鲆科	PLATYCEPHALIDAE		
14	鲆鱼	*Platycephalus indicus*	+	
	狼鲈科	MORONIDAE		
15	鲈鱼	*Lateolabrax japonicus*		+
	石首鱼科	SCIAENIDAE		
16	白姑鱼	*Argyrosomus argentaus*	+	+
17	棘头梅童鱼	*Collichthys lucidus*	+	+
18	黄姑鱼	*Nibra albiflora*	+	
19	小黄鱼	*Pseudosciaena polyactis*	+	
	鲷科	SPARIDAE		
20	金头鲷	*Sparus auratus*		+
	虾虎鱼科	GOBIIDAE		
21	矛尾虾虎鱼	*Chaeturichthys stigmatias*	+	
22	中华栉孔虾虎鱼	*Ctenotrypauchen chinensis*	+	+
23	红狼牙虾虎鱼	*Odontamblyopus rubicundus*	+	+
24	钟馗虾虎鱼	*Triaenopogon barbatus*	+	
	带鱼科	TRICHIURIDAE		
25	小带鱼	*Trichiurus muticus*		+
	长娼科	CENTROLOPHIDAE		
26	刺鲳	*Psenopsis anomala*		+

	鲳科	STOMATEIDAE		
27	银鲳	*Stromateoides argenteus*	+	+
	舌鳎科	CYNOGLOSSIDAE		
28	窄体舌鳎	*Cynoglossus gracilis*	+	
29	焦氏舌鳎	*Cynoglossus joyneri*	+	
30	舌鳎 SP(幼)	*Cynoglossus sp*		+
	单角鲀科	MONACANTHIDAE		
31	绿鳍马面鲀	*Thamnaconus septentrionalis*		+
	鱼类未定种类			
32	鱼类未定种 1			+
三	**甲壳纲**	**CRUSTACEA**		
	管鞭虾科	SOLENOCERIDAE		
33	中华管鞭虾	*Solonocern sinensis*	+	+
	对虾科	PENAEIDAE		
34	中国对虾	*Fenneropenaeus chinensis*		+
35	周氏新对虾	*Metapeaeus joyneri*	+	
36	哈氏仿对虾	*Paeapenaeopsis handwickii*	+	
37	细巧仿对虾	*Paeapenaeopsis tenellus*	+	+
38	鹰爪虾	*Trachypenaeus curvirostris*		+
	樱虾科	SERGESTIDAE		
39	中国毛虾	*Acetes chinensis*		+
	玻璃虾科	PASIPHAEIDAE		
40	细螯虾	*Leptochela gracilis*	+	+
	长臂虾科	PALAEMONIDAE		
41	脊尾白虾	*Exopalaemon carinicauda*	+	
42	葛氏长臂虾	*Palaemon gravieri*	+	
	鼓虾科	ALPHEIDAE		
43	鲜明鼓虾	*Alpheus distinguendus*	+	
44	日本鼓虾	*Alpheus japonicus*	+	+
	藻虾科	HIPPOLYTIDAE		
45	鞭腕虾	*Lysmata vittata*	+	
	关公蟹科	DORIPPIDAE		
46	日本关公蟹	*Dorippe japonica*	+	
	玉蟹科	LEUCOSIIDAE		
47	七刺栗壳蟹	*Arcania heptacantha*	+	
	梭子蟹科	PORTUNIDAE		
48	日本蟳	*Charybdis japonica*	+	+
49	三疣梭子蟹	*Portunus trituberculatus*	+	
	长脚蟹科	GONEPLACIDAE		
50	隆线强蟹	*Eucrate crenata*	+	
	豆蟹科	PINNOTHERIDAE		
51	豆形短眼蟹	*Xenophthalmus pinnotheroides*		+
	方蟹科	GRAPSIDAE		
52	狭颚绒毛蟹	*Eriocheir leptognathus*	+	
	虾蛄科	SQUILLIDAE		
53	口虾蛄	*Oratosquilla oratotria*	+	

四	**头足纲**	**CEPHALOPODA**		
	枪乌贼科	LOLIGINIDAE		
54	日本枪乌贼	*Loligo japonica*		+
	章鱼科	OCTOPODIDAE		
55	长蛸	*Octopus minor*	+	
56	真蛸	*Octopus vulgaris*	+	
57	短蛸	*Amphioctopus fangsiao*	+	+
五	**双壳钢**	**BIVALVIA**		
	蚶科	ARCIDAE		
58	泥蚶	*Tegillarca granosa*	+	
六	**腹足纲**	**GASTROPODA**		
	锥螺科	TURRITELLIDAE		
59	棒锥螺	*Tutritella bacillum*	+	
	玉螺科	NATICIDAE		
60	扁玉螺	*Neverita didyma*	+	
	蛙螺科	BURSIDAE		
61	习见赤蛙螺	*Bufonaria rana*	+	
	蛾螺科	BUCCINIDAE		
62	亮螺	*Phosinella senticosus*	+	
	盔螺科	GALEODIDAE		
63	管角螺	*Hemifusus tuba*	+	
	织纹螺科	NASSIDAE		
64	红带织纹螺	*Nassarius succinctus*	+	
	榧螺科	OLIVIDAE		
65	伶鼬榧螺	*Oliva mustelina*	+	
	塔螺科	TURRIDAE		
66	爪哇拟塔螺	*Tutricula javana*	+	
67	假奈拟塔螺	*Turricula nelliae*	+	
	裸鳃目	NUDIBNANCHIA		
68	海牛 SP	Doridiidae und.	+	
七	**其它**			
69	海仙人掌	*Cavernularia* sp	+	
70	不倒翁虫	*Sternaspis sculsts*	+	
71	海笔	Virgulaia	+	

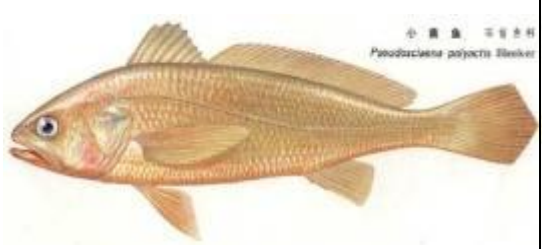
Table 36 Directory of Fishery Resources

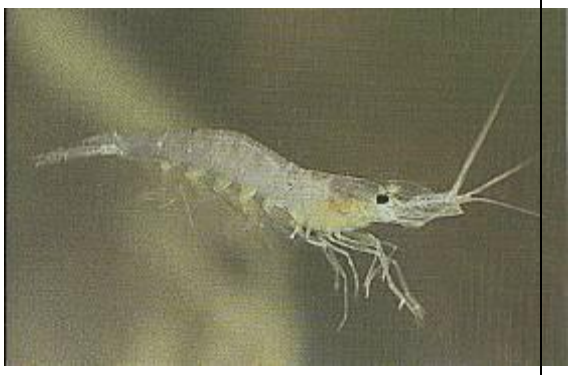
No.	Species	Latin
一	**鱼类**	Pisces
1	白姑鱼	*Argyrosomus argentaus*
2	矛尾鰕虎鱼	*Chaeturichthys stigmatias*
3	斑鰶	*Clupanodon punctatus*
4	凤鲚	*Coilia mystus*
5	棘头梅童鱼	*Collichthys lucidus*
6	中华栉孔鰕虎鱼	*Ctenotrypauchen chinensis*
7	窄体舌鳎	*Cynoglossus gracilis*
8	焦氏舌鳎	*Cynoglossus joyneri*

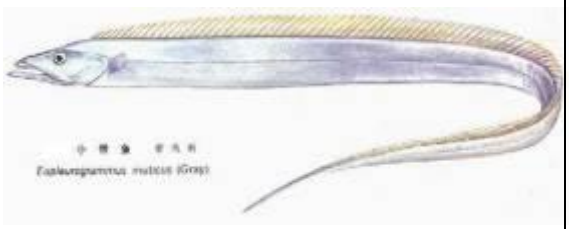
9	龙头鱼	*Harpodon nehereus*
10	海鳗	*Muraenesox cinereus*
11	黄姑鱼	*Nibra albiflora*
12	红狼牙鰕虎鱼	*Odontamblyopus rubicundus*
13	蛹鱼	*Platycephalus indicus*
14	小黄鱼	*Pseudosciaena polyactis*
15	黄鲫	*Setipinna taty*
16	钟馗鰕虎鱼	*Triaenopogon barbatus*
17	长蛇鲻	*Saurida elongata*
18	大黄鱼	*Larimichthys crocea*
19	带鱼	*Trichiurus japonicus*
20	短吻鳐	
21	横纹东方鲀	*Fugu oblongus*
22	灰星鲨	*Mustelus griseus*
23	六丝多指马鲅	*Polydactylus sexfilis*
24	鳗鱼	*Anguilla jponica*
25	条纹东方鲀	
26	脂眼鲱	*Etrumcus teres*
27	竹荚鱼	
二	**甲壳类**	CRUSTACEA
28	鲜明鼓虾	*Alpheus distinguendus*
29	脊尾白虾	*Exopalaemon carinicauda*
30	中国对虾	*Fenneropenaeus chinensis*
31	周氏新对虾	*Metapeaeus joyneri*
32	哈氏仿对虾	*Paeapenaeopsis handwickii*
33	细巧仿对虾	*Paeapenaeopsis tenellus*
34	中华管鞭虾	*Solonocern sinensis*
35	戴氏对虾	
36	锈斑蟳	*Charybdis feriatus*
37	日本蟳	*Charybdis japonica*
38	武士蟳	*Charybdis miles*
39	日本关公蟹	*Dorippe japonica*
40	隆线拳蟹	*Philyra carinata*
41	红星梭子蟹	*Portunus sanguinolentus*
42	三疣梭子蟹	*Portunus trituberculatus*
43	口虾蛄	*Oratosquilla oratotria*
44	窝纹网虾蛄	
三	**头足类**	Cephaliopoda
45	日本枪乌贼	*Loligo japonica*
46	长蛸	*Octopus minor*
47	剑尖枪鱿	*Uroteuthis edulis*
四	**其它**	
48	棒锥螺	*Tutritella bacillum*
49	海地瓜	*Acaudina molpadioides*
50	海仙人掌	*Cavernularia* sp
51	红带织纹螺	*Nassarius succinctus*
52	棘刺锚参	*Patinapta bidentata*

53	假奈拟塔螺	*Turricula nelliae*
54	蓝无壳侧鳃	*Pleurobranchaea novaezealandiae*
55	泥蚶	*Tegillarca granosa*
56	浅缝骨螺	*Murex trapa*
57	砂海星	*Luidia quinaria*
58	习见赤蛙螺	*Bufonaria rana*
59	霞水母	*Cyanea* sp.
60	星虫状海葵	*Eswardsia sipunculoides*
61	爪哇拟塔螺	*Tutricula javana*

Figure 1 Pictures of Ichthyoplankton

<table>
<tr><td>  </td><td>  </td></tr>
<tr><td>Collichthys lucidus</td><td>Harpodon nehereus</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Coilia mystus</td><td>Cynoglossus gracilis</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Pseudosciaena polyactis</td><td>Nibra albiflora</td></tr>
</table>

	
Argyrosomus argentaus	Dasyatis akajei
	
Oratosquilla oratoria	Metapeaeus joyneri
	
Exopalaemon carinicauda	Palaemon gravieri
	

Parapenaeopsis hardwickii	Portunus tritubercutatus
	
Charybdis japonica	Stromateoides argenteus
	
Setipinna taty	Sparus auratus
	
Anchoviella commersonii	Trichiurus muticus

VISurvey of Air Environment Standard

1. Method of Monitoring Analysis of Air Environment Quality

Table 37 Method of Monitoring Analysis on Current Situation of Air Environment Quality

Monitored Item	Analysis Method	Method Source	Detection Limit(mg/m^3)
SO_2	Formaldehyde absorption	HJ 482-2009	Daily averge: 0.004
NO_2	Saltzman	GB/T 15435-1995	Daily averge: 0.003
TSP	Weight	GB/T 15432-1995	0.001
PM_{10}	Weight	HJ 618-2011	0.010

2. Result of Air Environment Quality and Assessment

Table 38 SO_2 Monitoring Data and Assessment Result

Monitoring Place		Hourly Average Concentration			Daily Average Concentration		
		Range (mg/m^3)	Range of Single Factor Index	Over Standard Rate %	Range (mg/m^3)	Range of Single Factor Index	Over Standard Rate %
1#	Sansha Town	0.009~0.018	0.018~0.036	0	0.014~0.017	0.093~0.113	0
2#	Changchun Town	0.011~0.028	0.022~0.056	0	0.015~0.023	0.100~0.153	0
3#	Lv'xia Village	ND~0.011	0.007~0.022	0	0.009~0.013	0.060~0.087	0
Within the Assessed Range		ND ~0.028	0.007~0.056	0	0.009~0.023	0.060~0.153	0

Note: ND=Not Detected, the same below.

Table 39 NO_2 Monitoring Data and Assessment Result

Monitoring Place		Hourly Average Concentration			Daily Average Concentration		
		Range (mg/m^3)	Range of Single Factor Index	Over Standard Rate %	Range (mg/m^3)	Range of Single Factor Index	Over Standard Rate %
1#	Sansha Town	0.007~0.013	0.029~0.054	0	0.009~0.013	0.075~0.108	0
2#	Changchun Town	0.011~0.018	0.046~0.075	0	0.013~0.016	0.108~0.133	0
3#	Lv'xia Village	ND ~0.019	0.010~0.079	0	0.007~0.016	0.058~0.133	0
Within the Assessed Range		ND ~0.019	0.010~0.079	0	0.007~0.016	0.058~0.133	0

Table 40 TSP Monitoring Data and Assessment Result

Monitoring Place		Daily Average Concentration		
		Range	Range of Single Factor	Over Standard Rate
1#	Sansha Town	0.048~0.059	0.160~0.197	0
2#	Changchun	0.042~0.058	0.140~0.193	0
3#	Lv'xia	0.043~0.058	0.143~0.193	0
Within the Assessed		0.042~0.059	0.140~0.197	0

Table 41 PM_{10} Monitoring Data and Assessment Result

Monitoring Place		Daily Average Concentration (mg/m^3)		
		Range	Range of Single Factor	Over Standard Rate
1#	Sansha Town	0.038~0.043	0.253~0.287	0
2#	Changchun	0.030~0.045	0.200~0.300	0

Monitoring Place		Daily Average Concentration (mg/m^3)		
		Range	Range of Single Factor	Over Standard Rate
3#	Lv'xia	0.032~0.046	0.213~0.307	0
Within the Assessed		0.030~0.046	0.200~0.307	0

Ⅶ Survey Result of Sound Environment Standard

Table 42 Monitoring Result of Sound Environment

Monitoring Place		Monitored Value (dB)	
		Day	Night
Dajing Fishing Port	1#	50.2	42.7
	2#	54.2	40.9
	3#	54.3	39.8
	4#	53.3	41.5
	5#	54.6	43.2
Lv'xia Fishing Port	1#	52.8	44.2
	2#	54.4	40.9
	3#	53.1	42.3
	4#	54.7	43.3
	5#	50.8	39.5
Beishuang Fishing Port	1#	53.0	42.3
	2#	54.5	42.7
	3#	52.9	40.9
	4#	53.8	44.7
	5#	54.7	41.2
Wen'ao Fishing Port	1#	52.8	42.8
	2#	54.3	44.1
	3#	52.7	40.9
	4#	50.8	42.4
	5#	51.4	41.8
Sansha Central Fishing Port	1#	51.1	44.9
	2#	54.8	42.8
	3#	53.9	40.7
	4#	54.4	42.8
	5#	52.9	43.5
Changchun Fishing Port	1#	51.0	43.5
	2#	54.7	42.7
	3#	53.1	42.8
	4#	50.6	43.4
	5#	52.4	44.4

Annex D Mathematical Modelling of Oils Spill Risks

Oil slick pollution paths and scope under different scenarios featuring different wind/tide conditions upon the occurrence of oil spill accident.

1. Fuel oil spilled into the sea area at Sansha Fishing Port
2. Fuel oil spilled into the sea area at Lv'xia Fishing Port
3. Fuel oil spilled into the sea area at Wen'ao Fishing Port

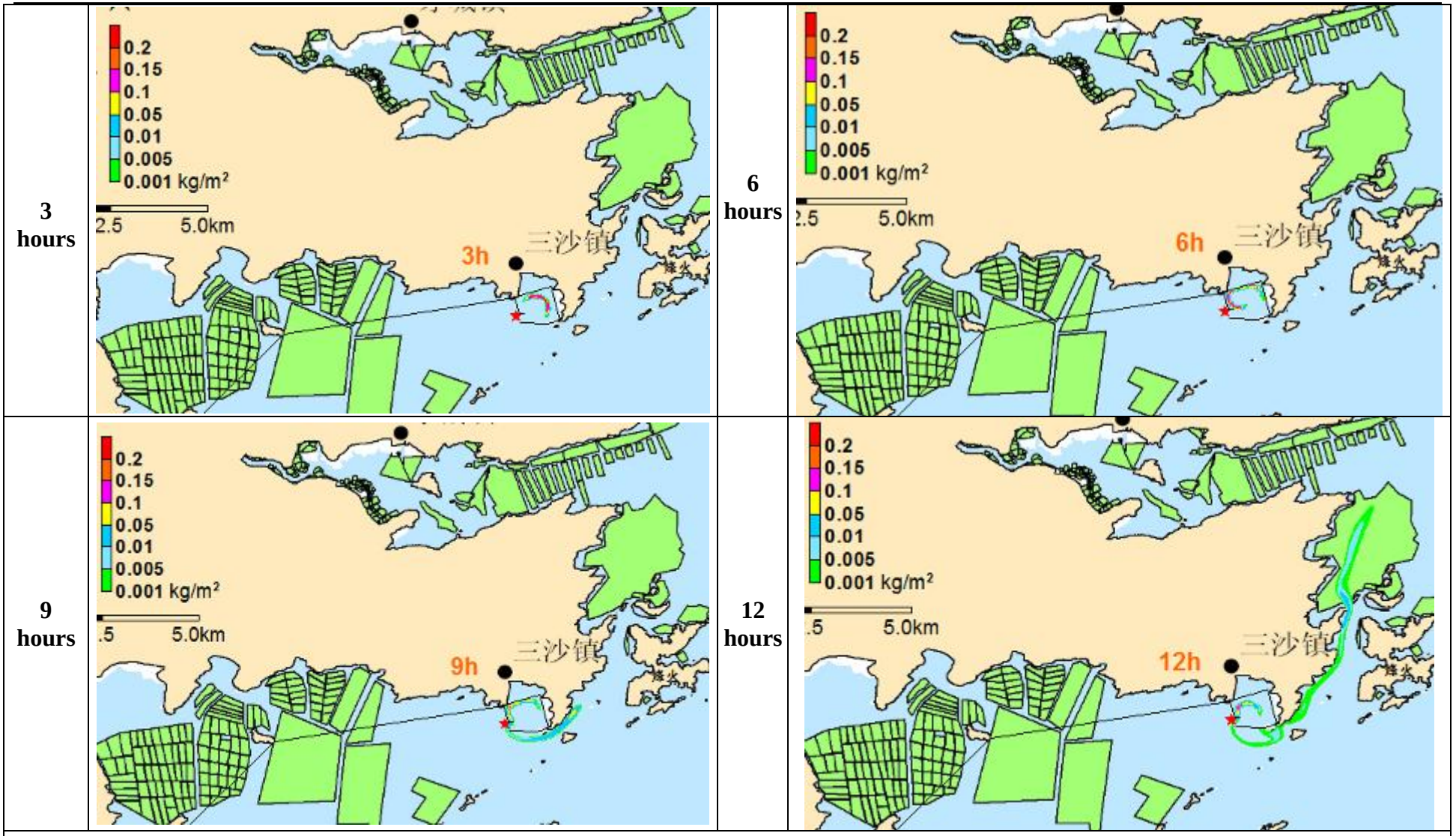


Figure 8.2-1 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Sansha Fishing Port (calm wind, ebb slack)

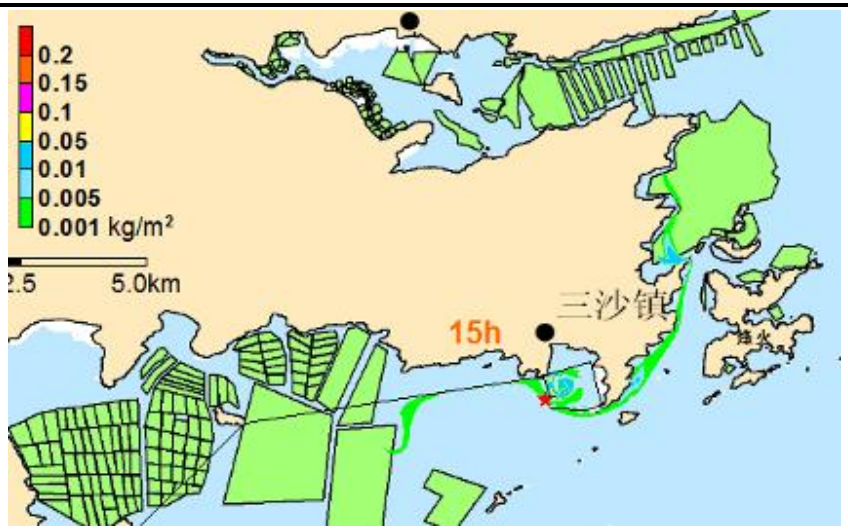
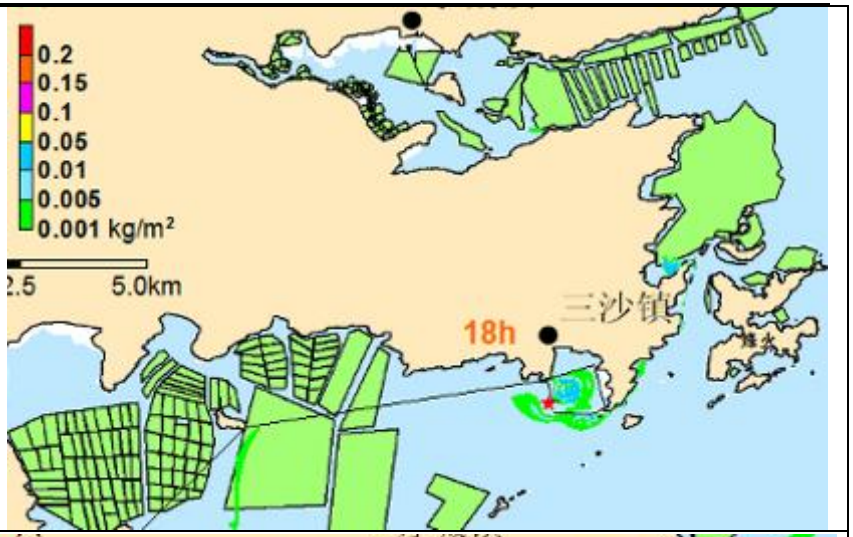
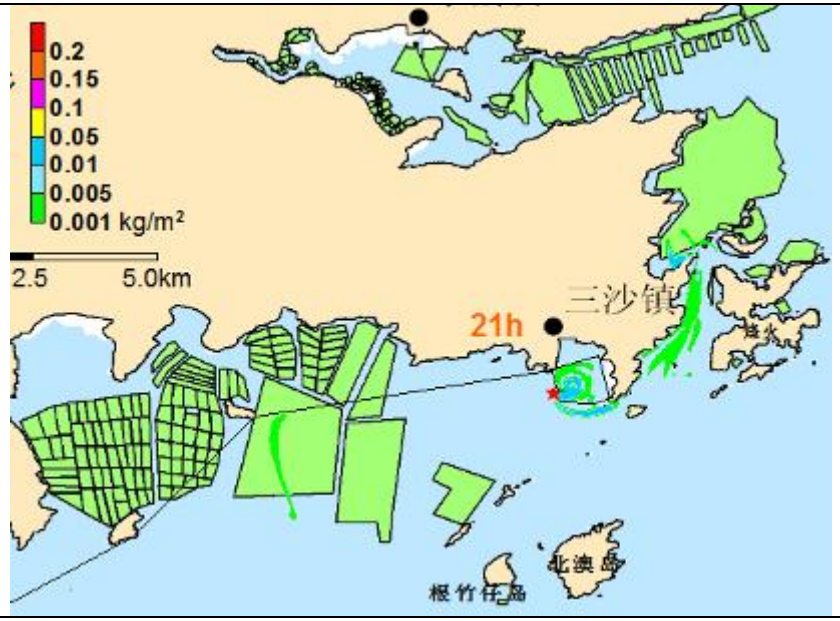
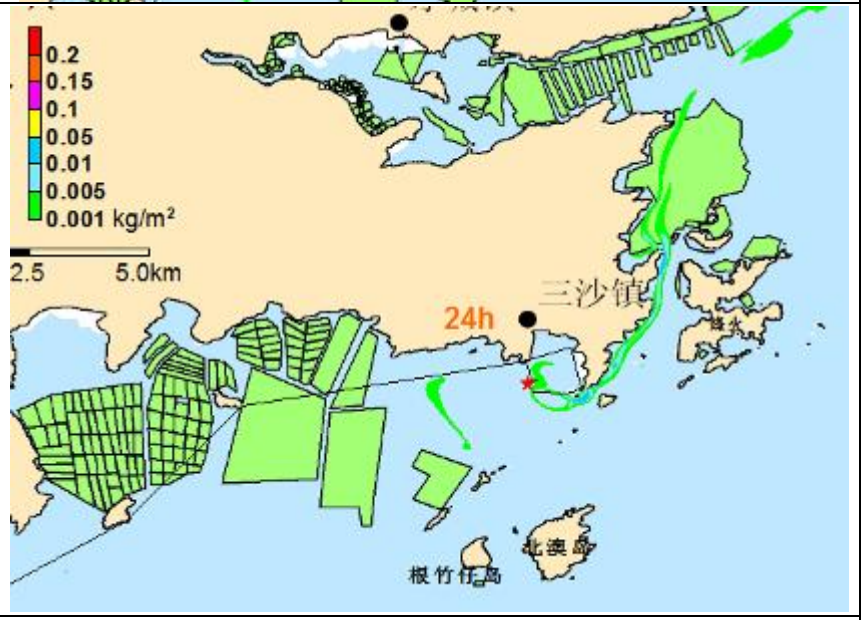
15 hours		**18 hours**	
21 hours		**24 hours**	

Figure 8.2-1 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Sansha Fishing Port (calm wind, ebb slack)

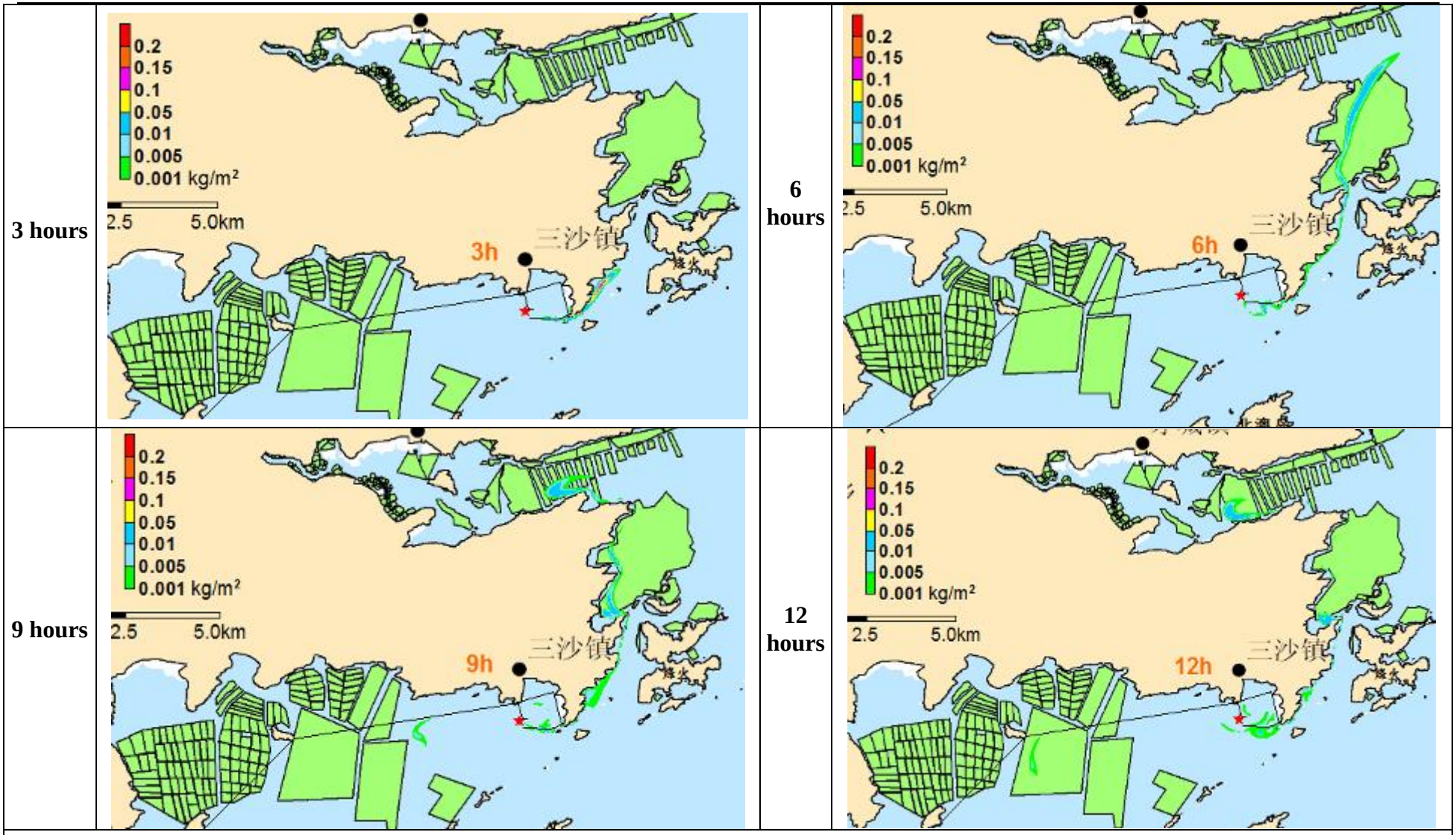


Figure 8.2-2 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Sansha Fishing Port (calm wind, flood slack)

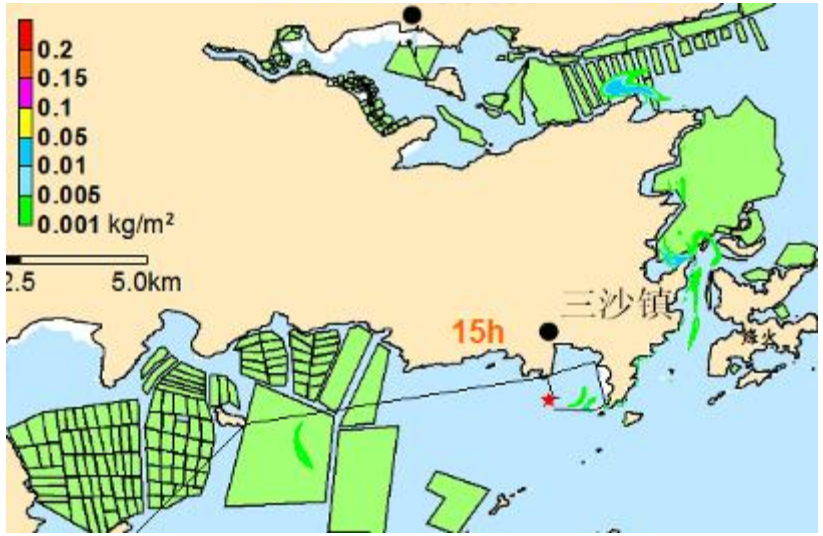
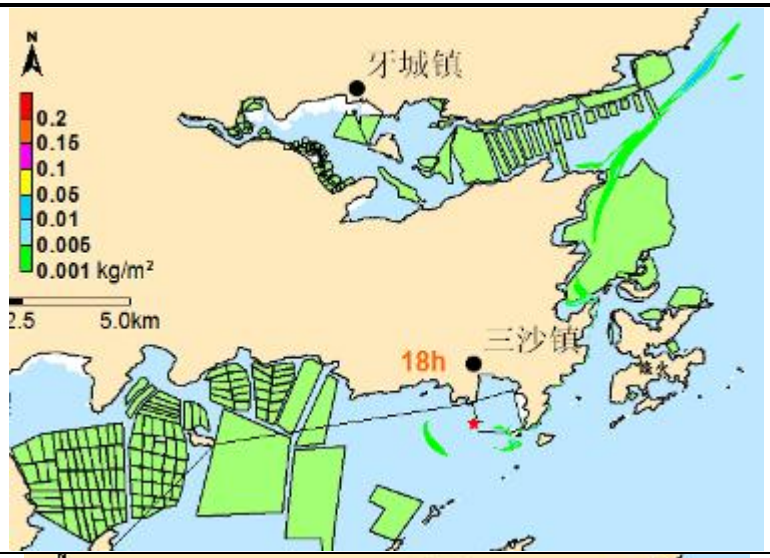
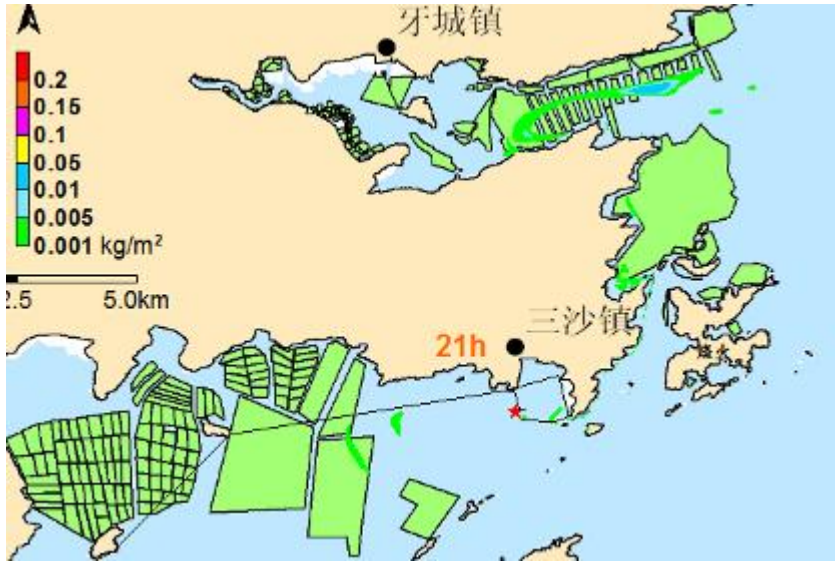
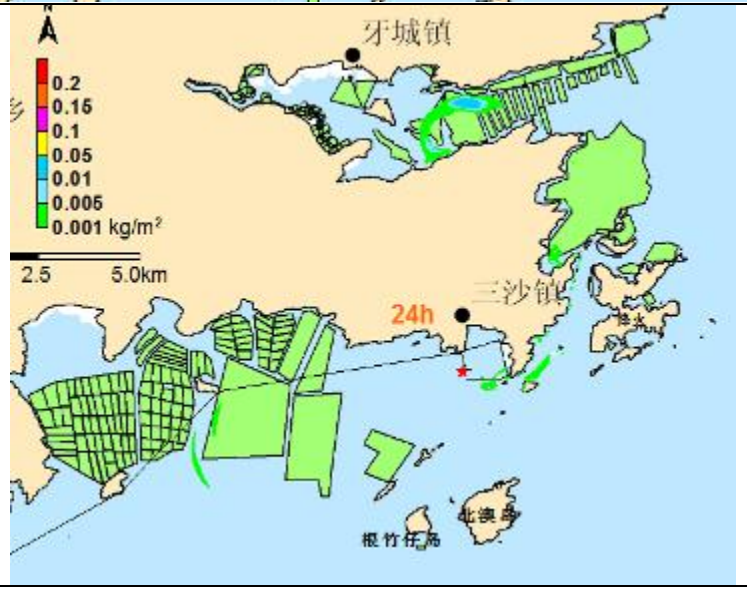
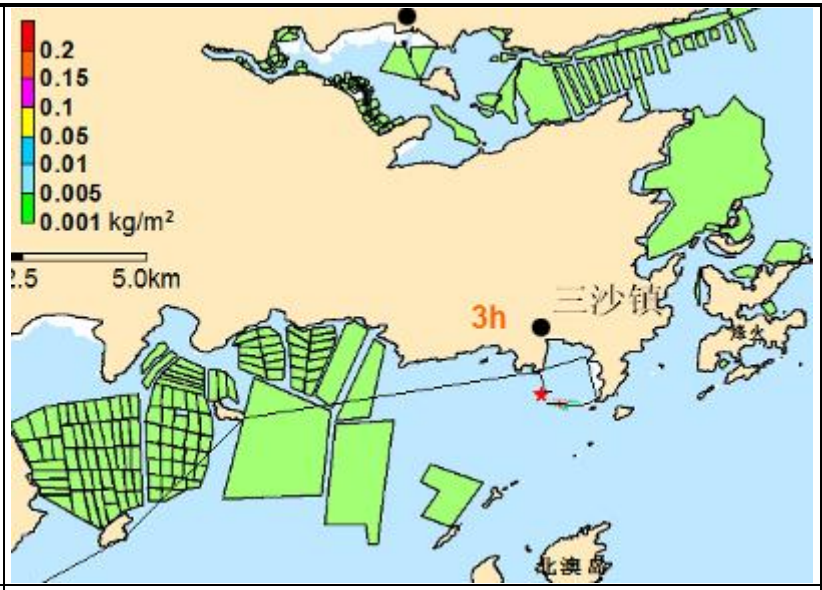
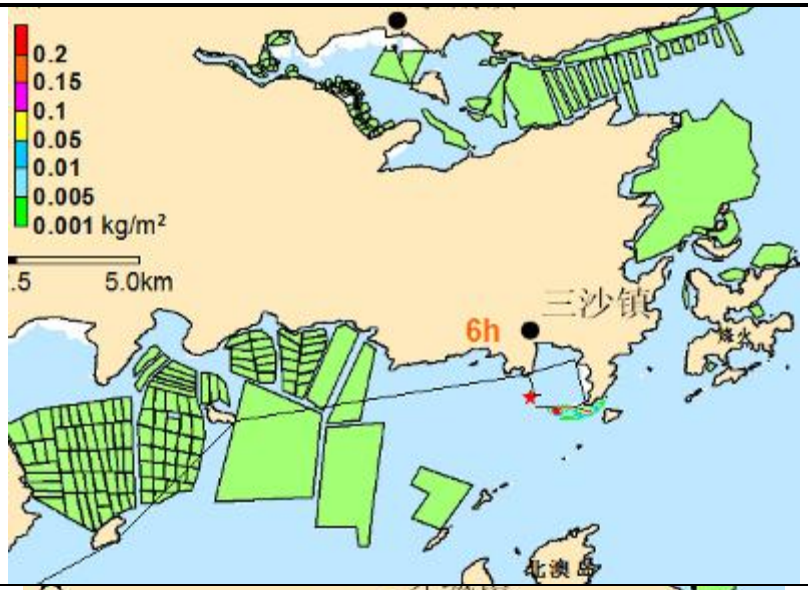
15 hours		**18 hours**	
21 hours		**24 hours**	

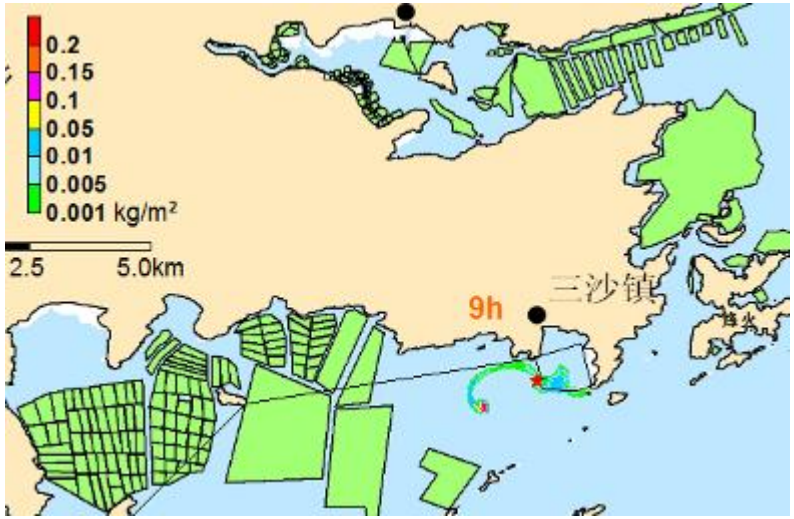
Figure 8.2-2 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Sansha Fishing Port (calm wind, flood slack)



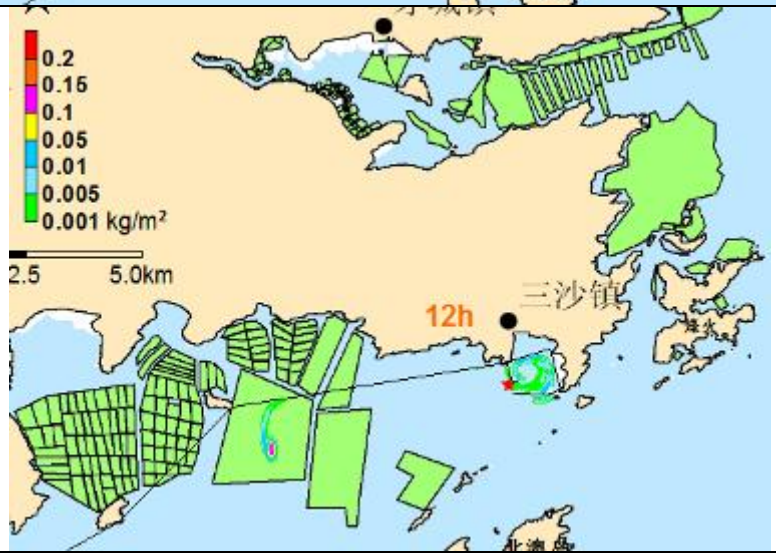
3 hours



6 hours



9 hours



12 hours

Figure 8.2-3 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Sansha Fishing Port (calm wind, flood tide)

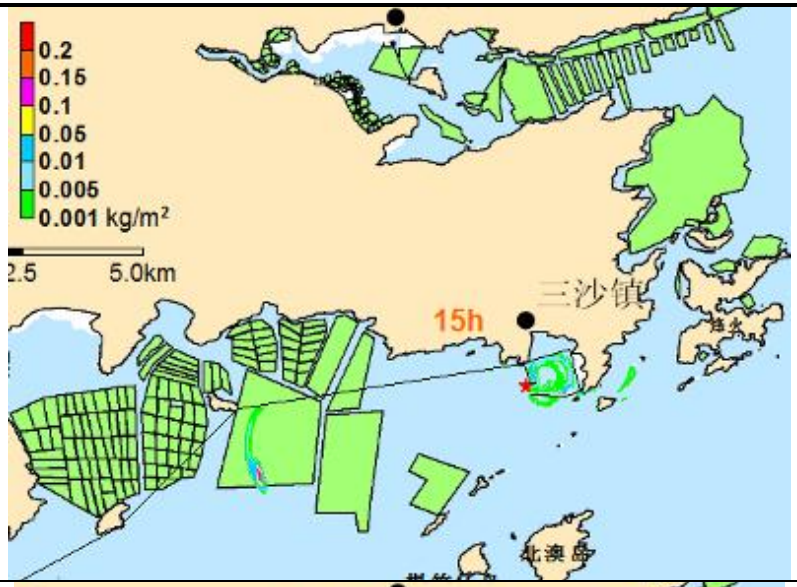
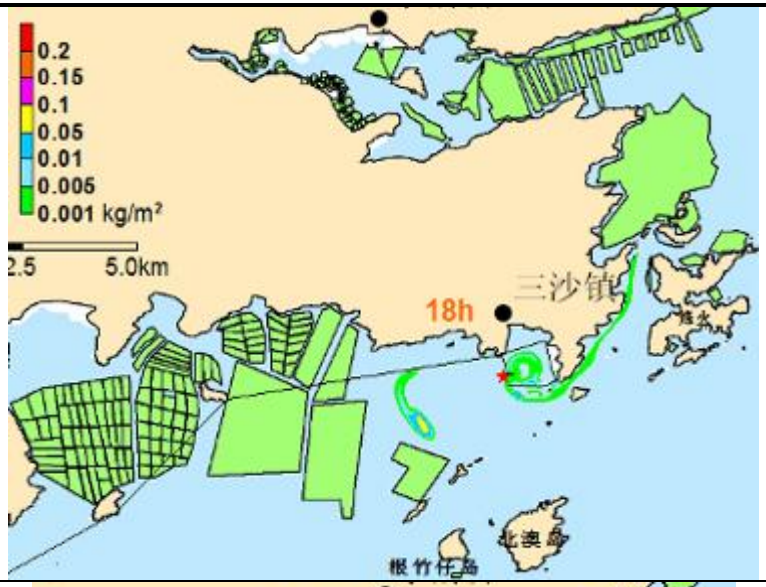
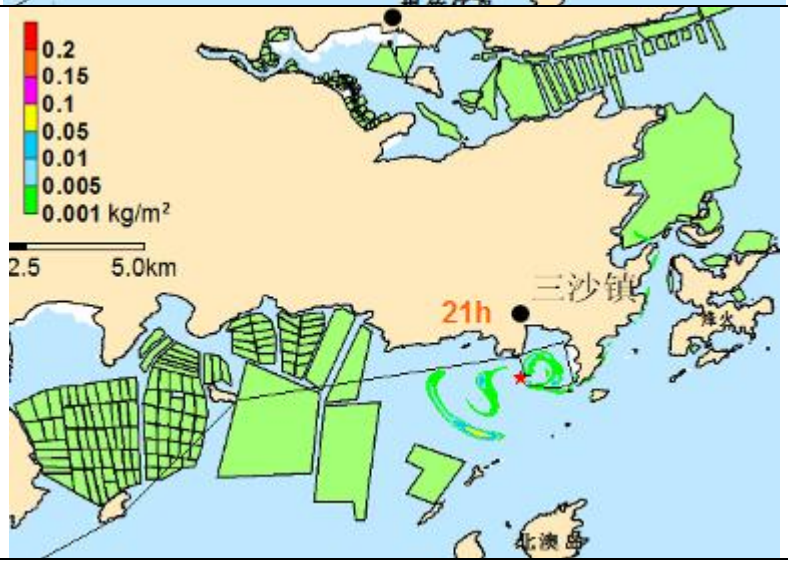
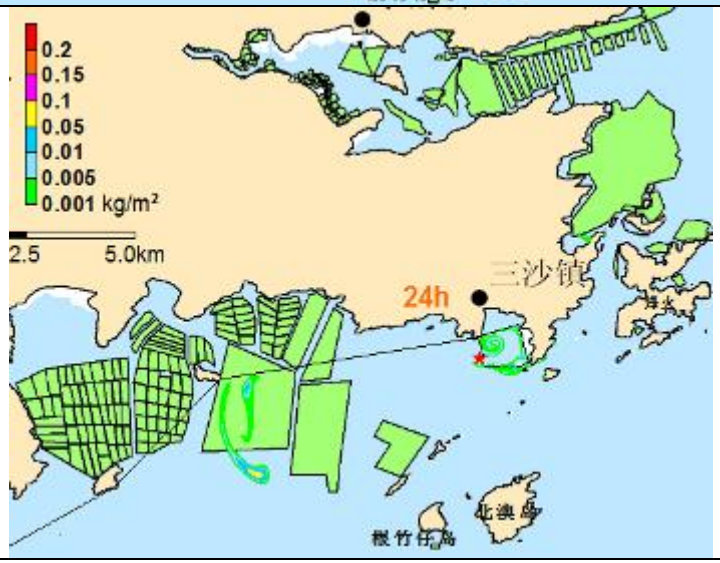
15 hours		**18 hours**	
21 hours		**24 hours**	

Figure 8.2-3 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Sansha Fishing Port (calm wind, flood tide)

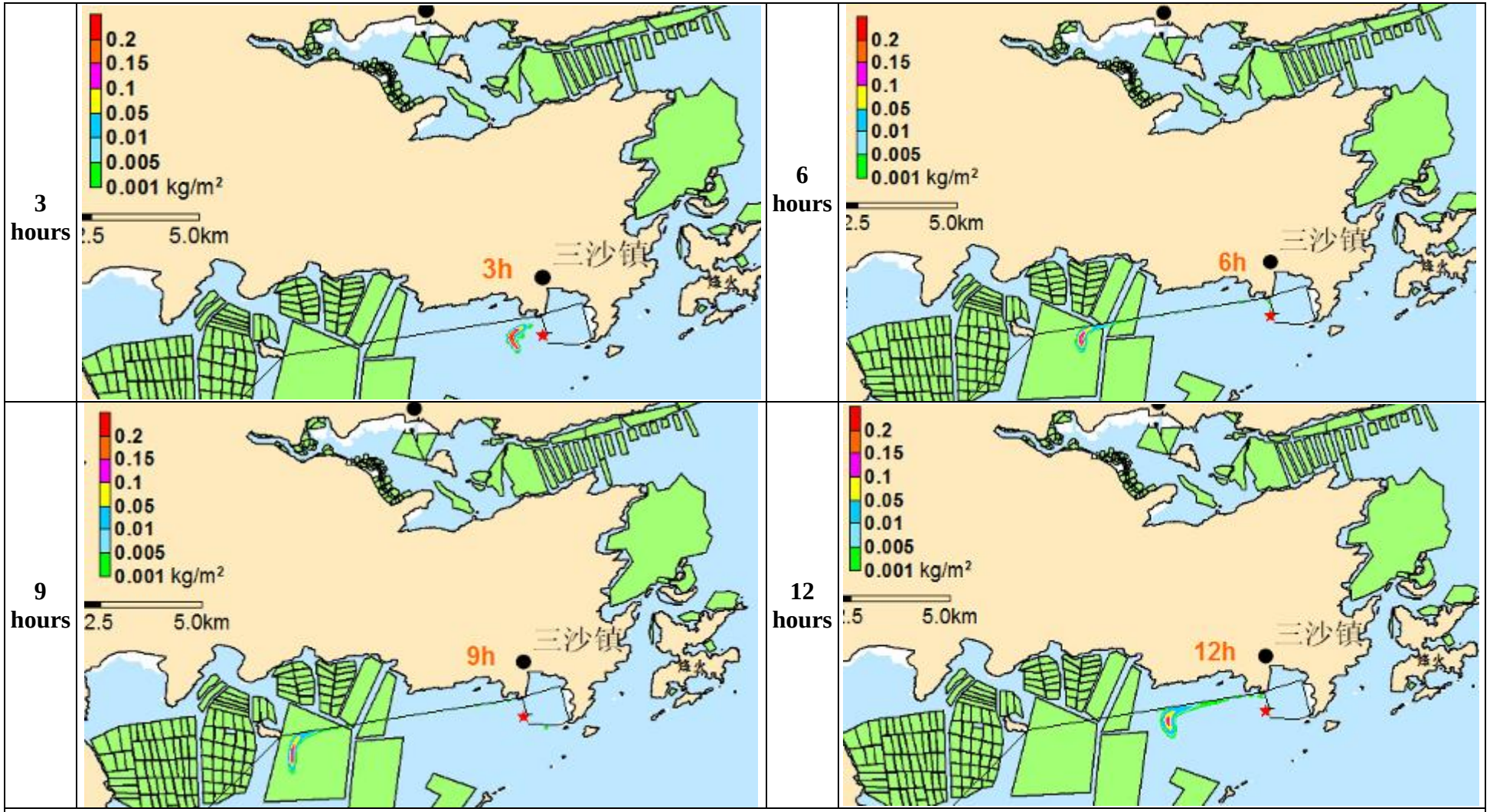


Figure 8.2-4 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Sansha Fishing Port (calm wind, ebb tide)

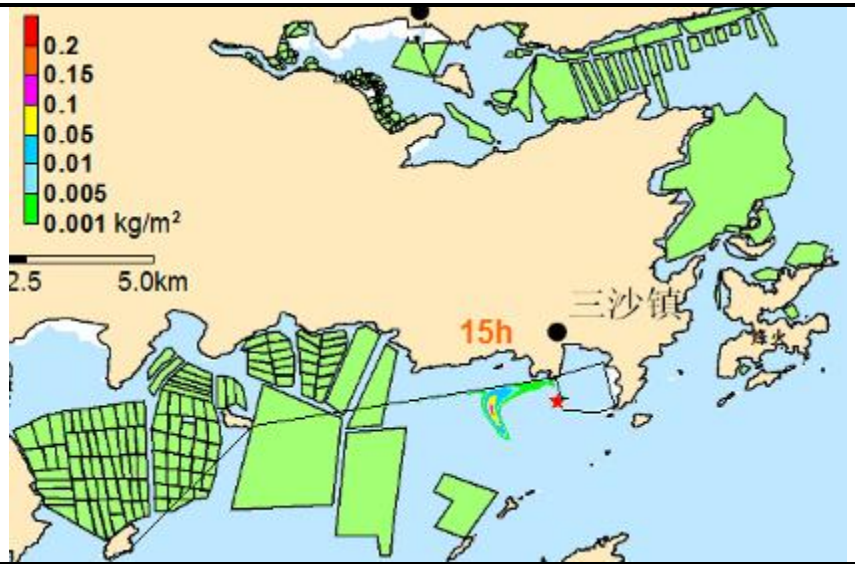
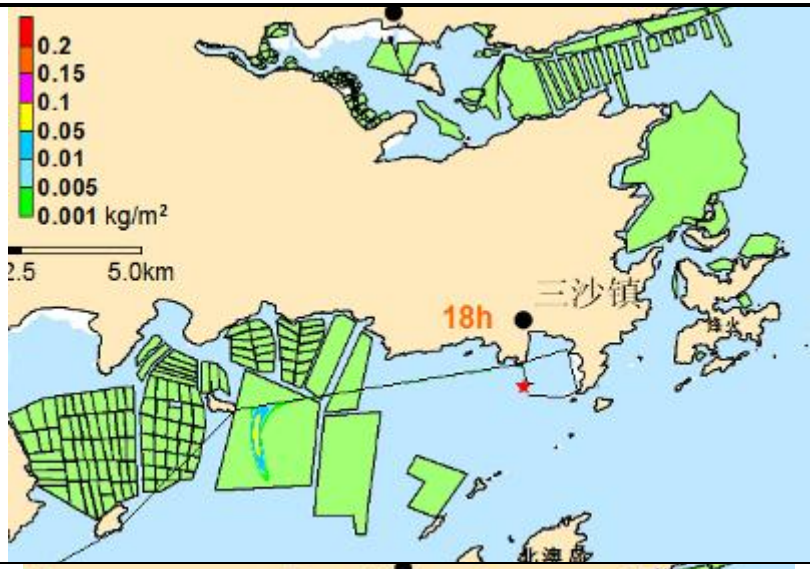
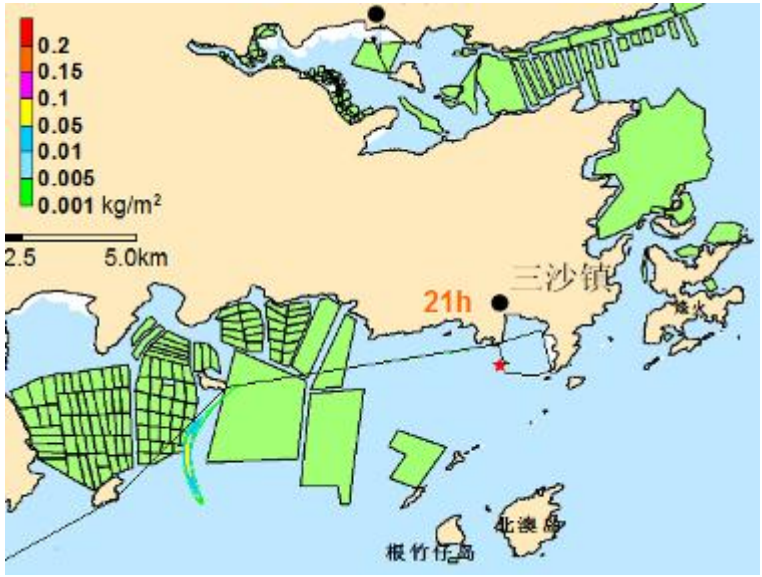
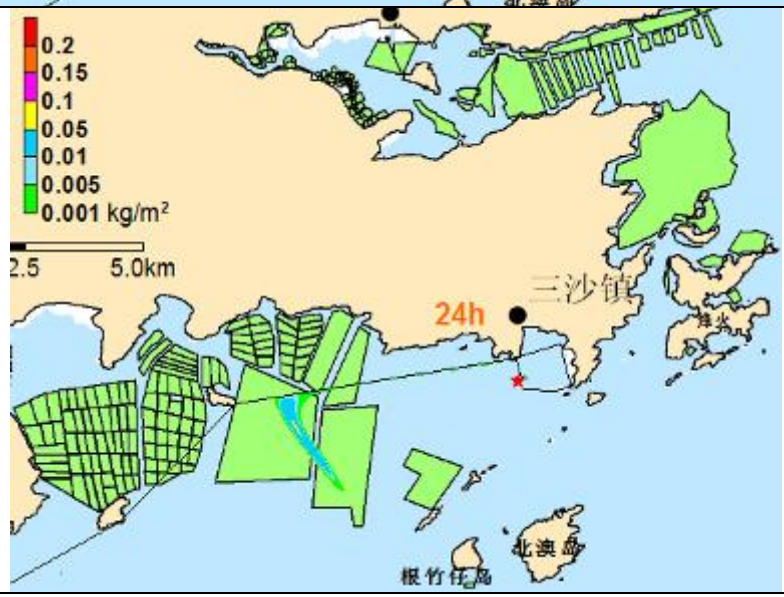
15 hours		**18 hours**	
21 hours		**24 hours**	

Figure 8.2-4 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Sansha Fishing Port (calm wind, ebb tide)

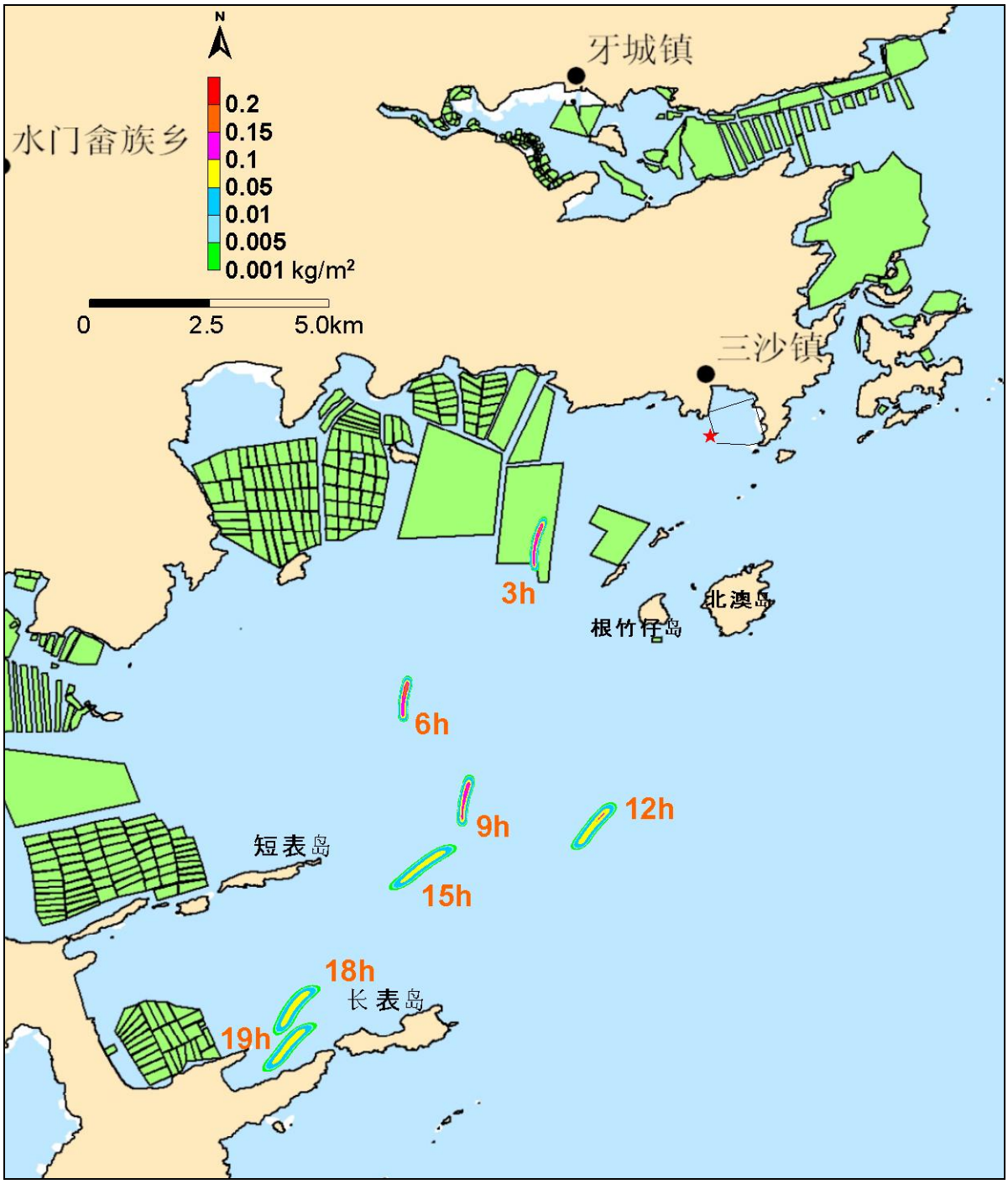


Figure 8.2-5 Oil Slick Migration within 1 Hour upon the Occurrence of Oil Spill Accident at Sansha Fishing Port (NNE, ebb slack)

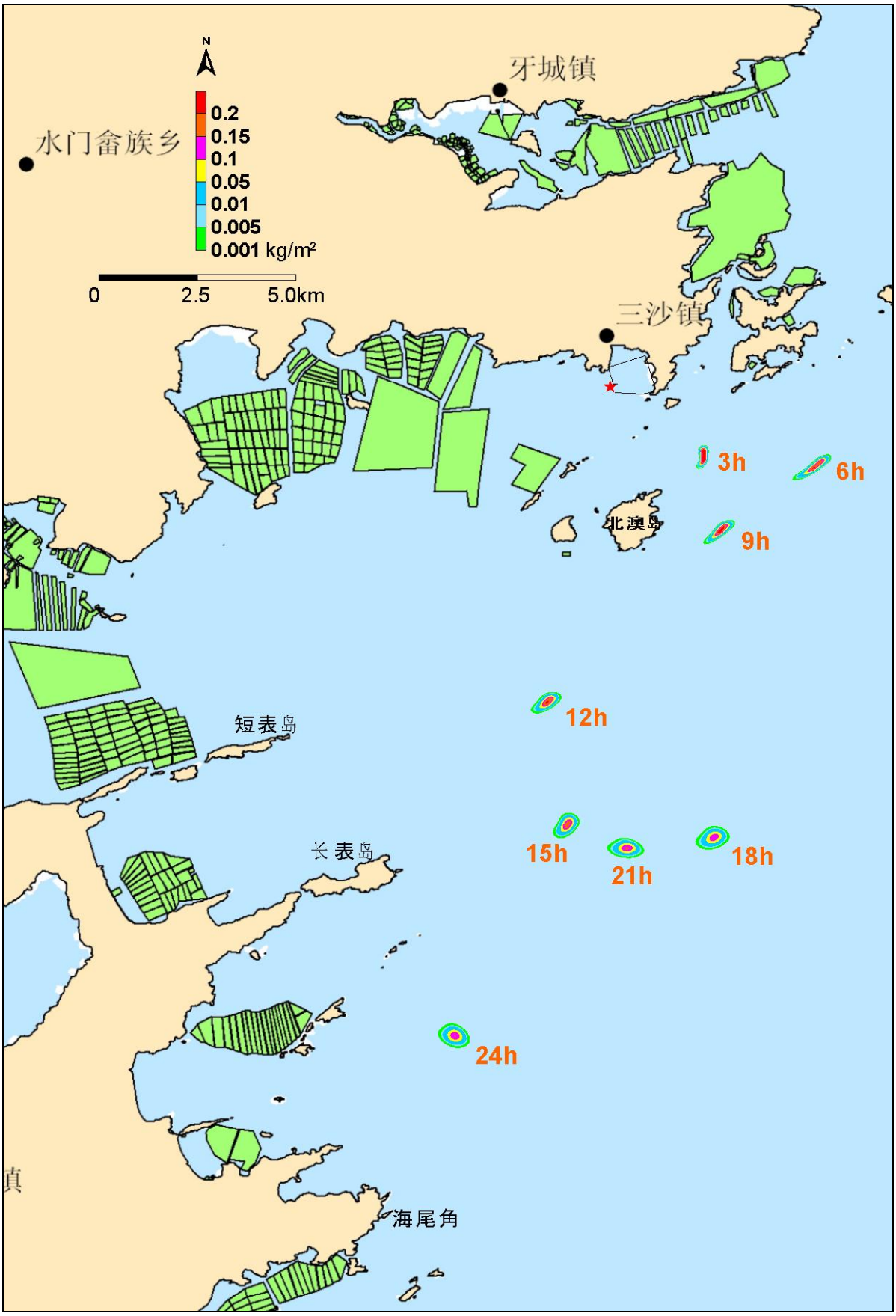
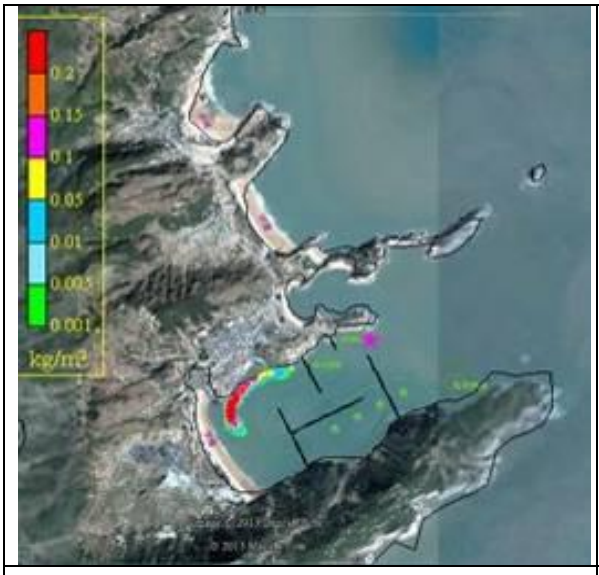


Figure 8.2-6 Oil Slick Migration within 1 Hour upon the Occurrence of Oil Spill Accident at Sansha Fishing Port (NNE, flood slack)

Figure 8.2-7 Oil Slick Migration within 1 Hour upon the Occurrence of Oil Spill Accident at Sansha Fishing Port (NNE, flood tide)

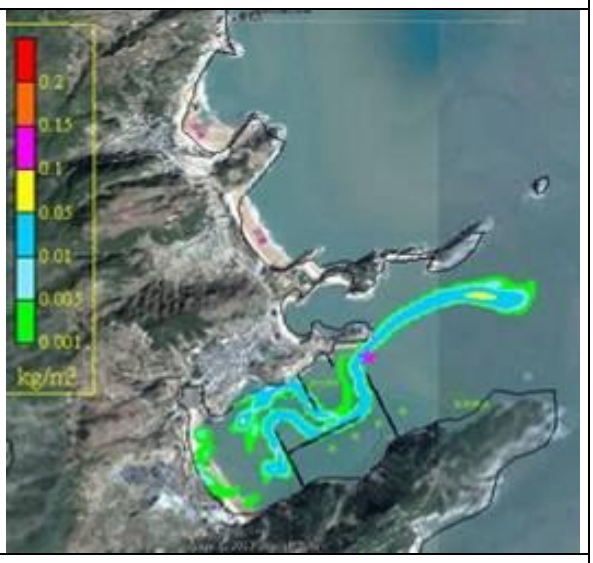
Figure 8.2-8 Oil Slick Migration within 1 Hour upon the Occurrence of Oil Spill Accident at Sansha Fishing Port (NNE, ebb tide)



3 hours

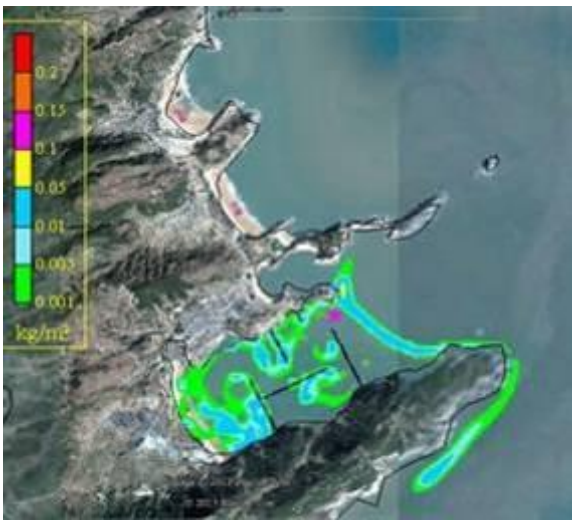
6 hours

9 hours

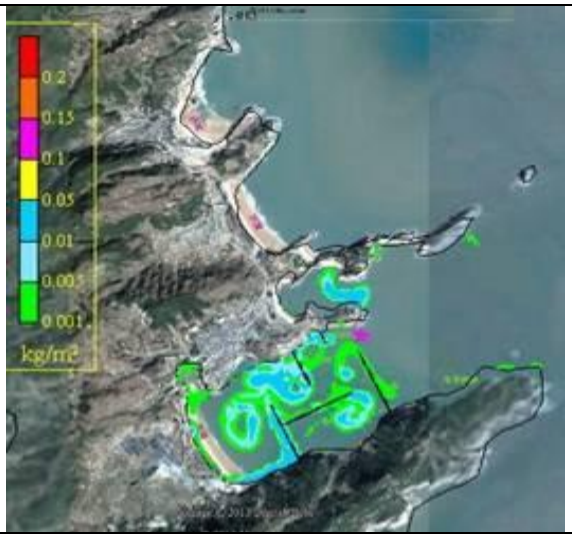


12 hours

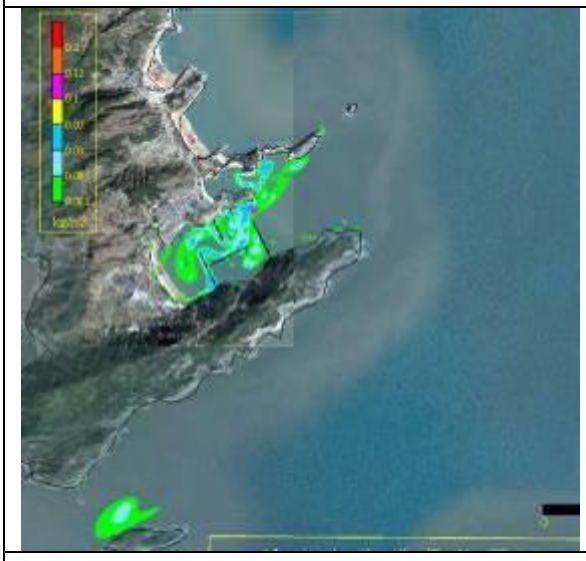
Figure 8.2-9 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Lv'xia Fishing Port (calm wind, ebb slack)



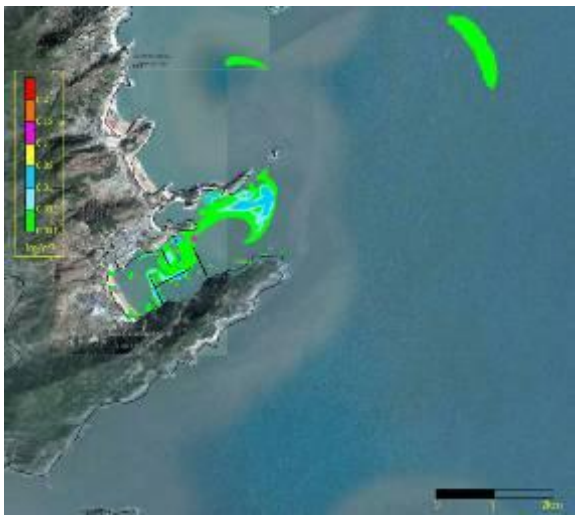
15 hours



18 hours



21 hours

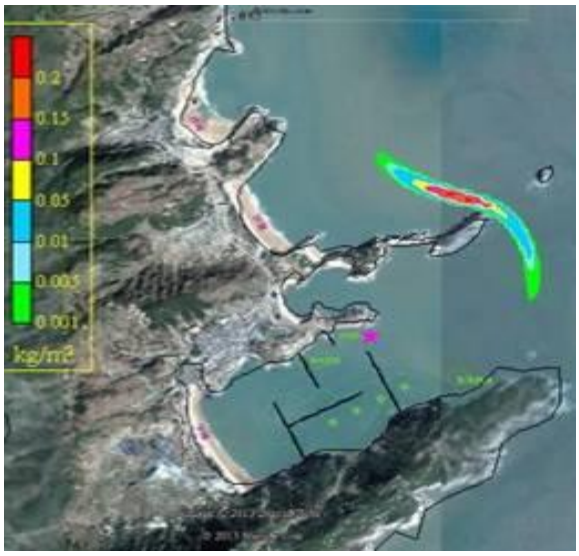


24 hours

Figure 8.2-9 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Lv'xia Fishing Port (calm wind, ebb slack)

3 hours

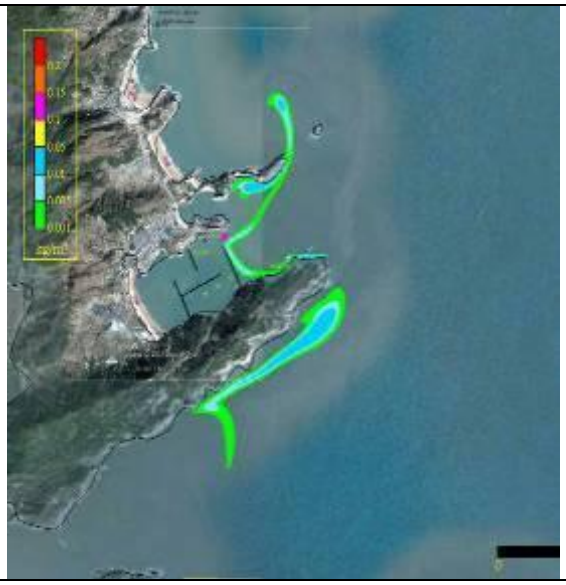
6 hours



9 hours

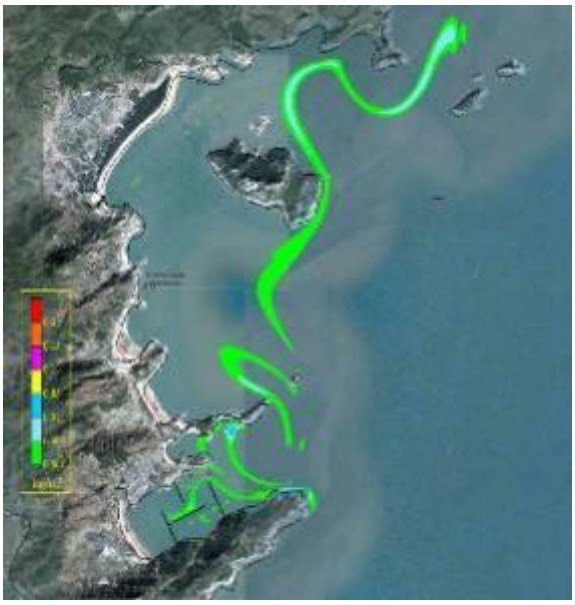
12 hours

Figure 8.2-10 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Lv'xia Fishing Port (calm wind, flood slack)



15 hours

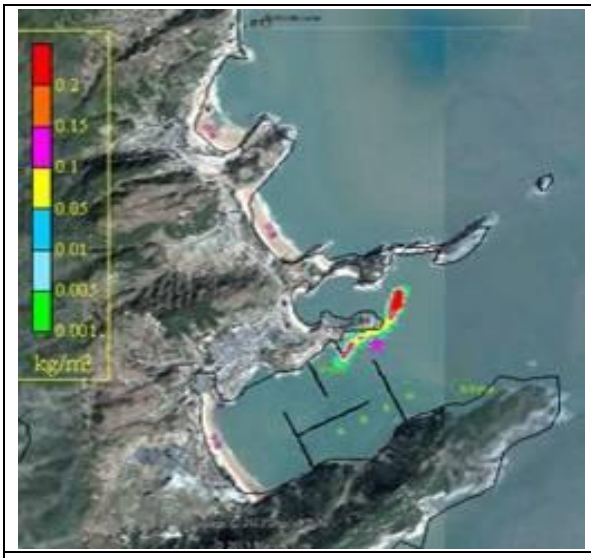
18 hours



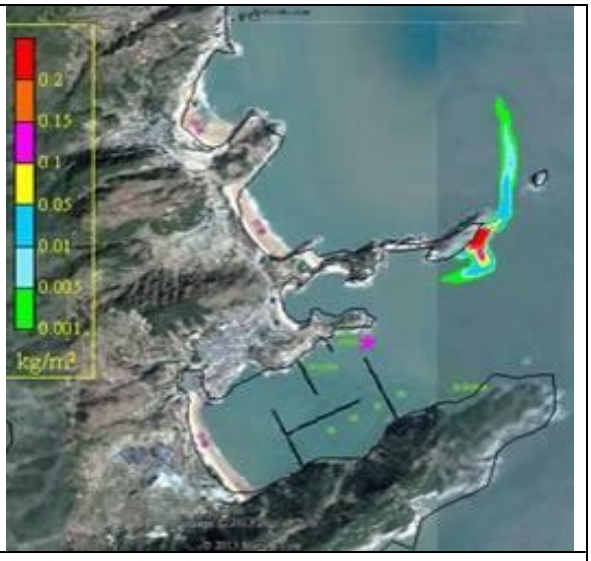
21 hours

24 hours

Figure 8.2-10 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Lv'xia Fishing Port (calm wind, flood slack)



3 hours



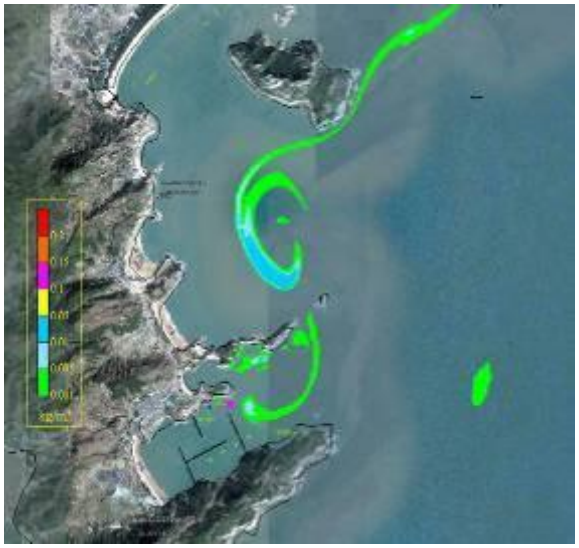
6 hours

9 hours

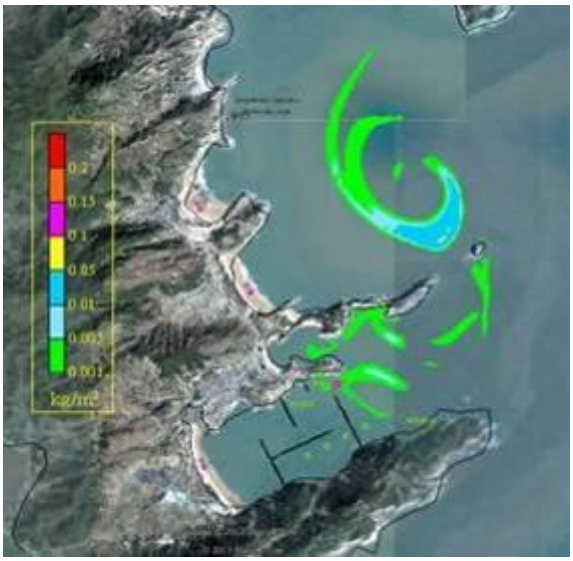
12 hours

Figure 8.2-11 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Lv'xia Fishing Port (calm wind, flood tide)

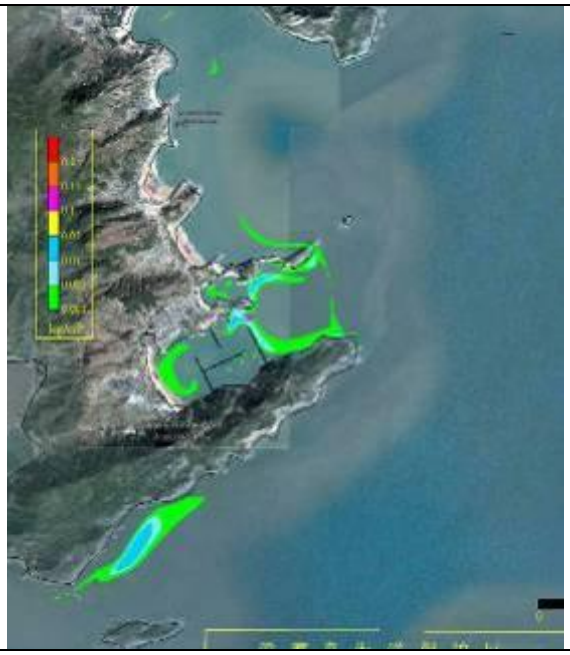
15 hours



18 hours

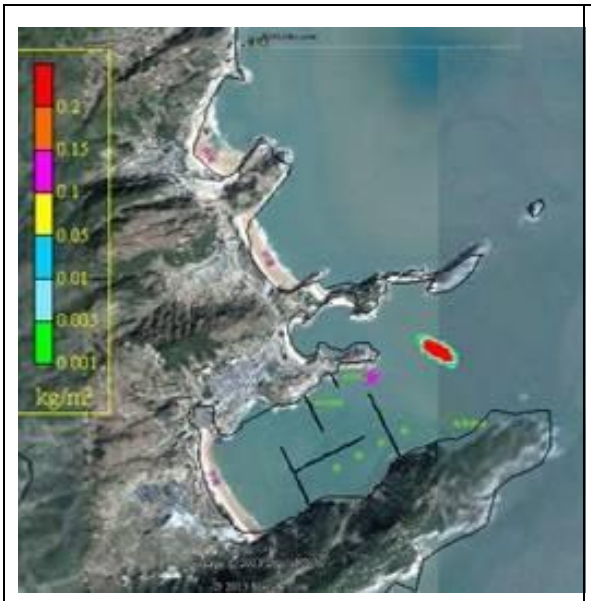


21 hours



24 hours

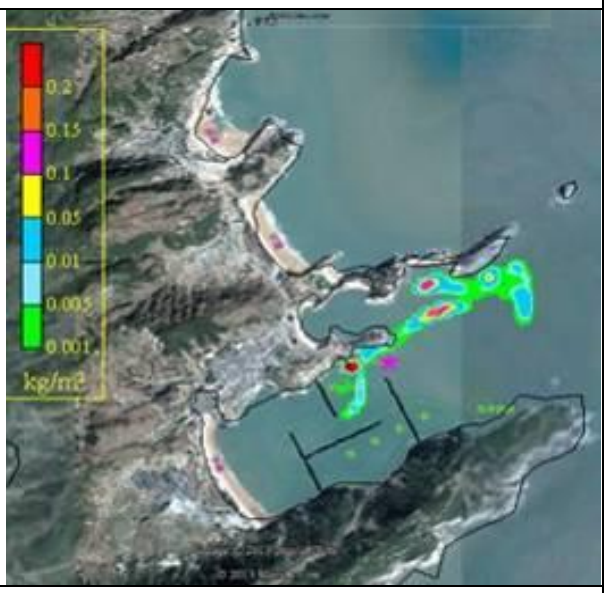
Figure 8.2-11 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Lv'xia Fishing Port (calm wind, flood tide)



3 hours

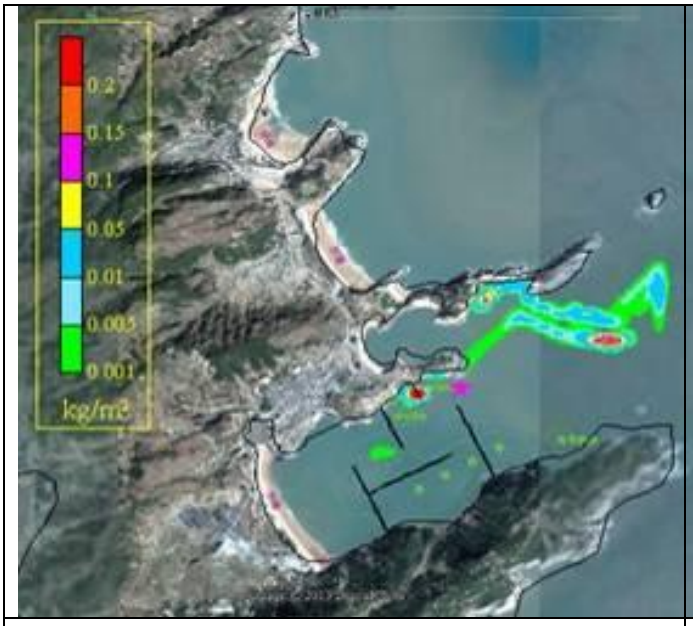
6 hours

9 hours



12 hours

Figure 8.2-12 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Lv'xia Fishing Port (calm wind, ebb tide)



15 hours

18 hours

21 hours

24 hours

Figure 8.2-12 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Lv'xia Fishing Port (calm wind, ebb tide)

	
0.5 hours	**0.5 hours**
	
1.0 hours	**1.0 hours**
	
1.5 hours	**1.5 hours**
Figure 8.2-13 Lv'xia Fishing Port (NNE, ebb slack)	**Figure 8.2-14 Lv'xia Fishing Port (NNE, flood slack)**

0.5 hours

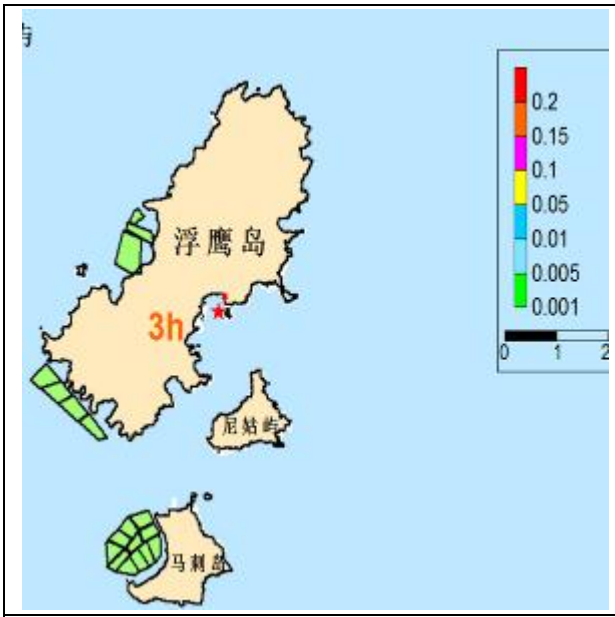
1.0 hours

1.5 hours

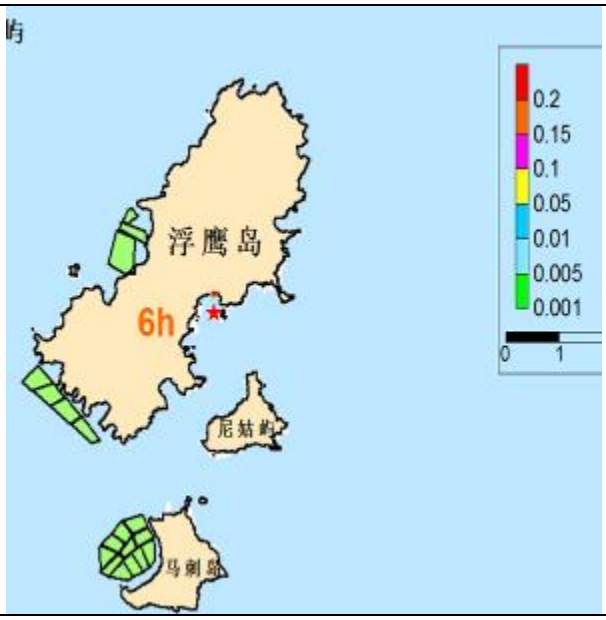
Figure 8.2-15 Lv'xia Fishing Port (NNE, flood tide)

0.5 hours		**1.0 hours**	
2.0 hours		**3.0 hours**	
6.0 hours		**9.0 hours**	

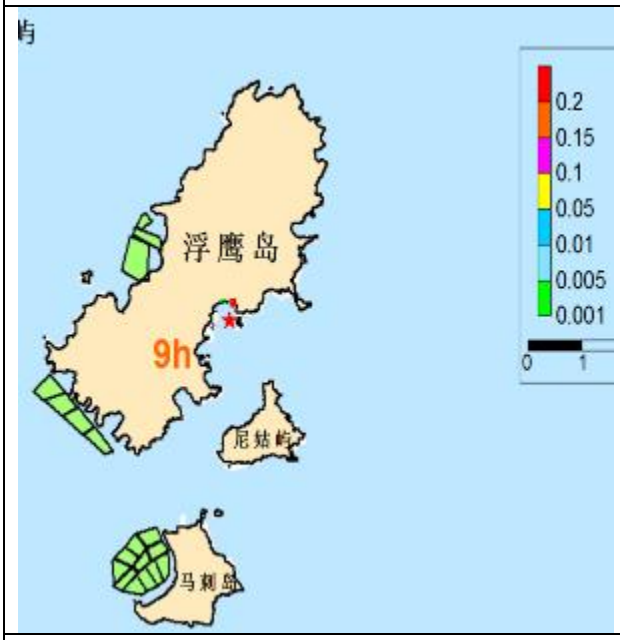
Figure 8.2-16 Lv'xia Fishing Port (NNE, ebb tide)



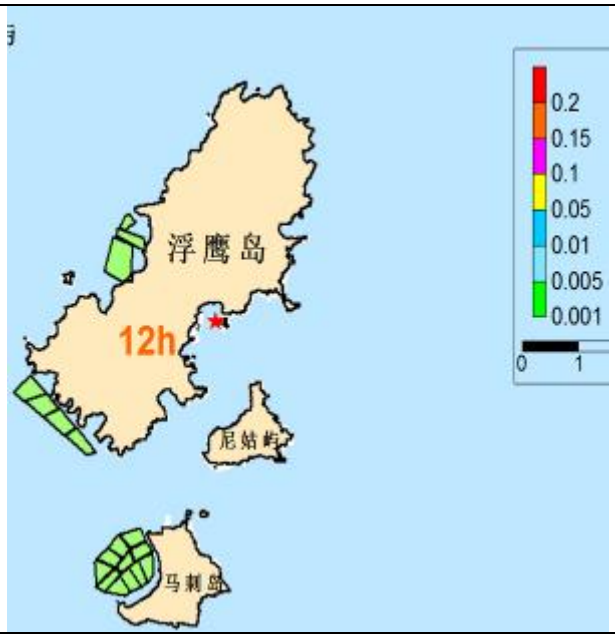
3 hours



6 hours

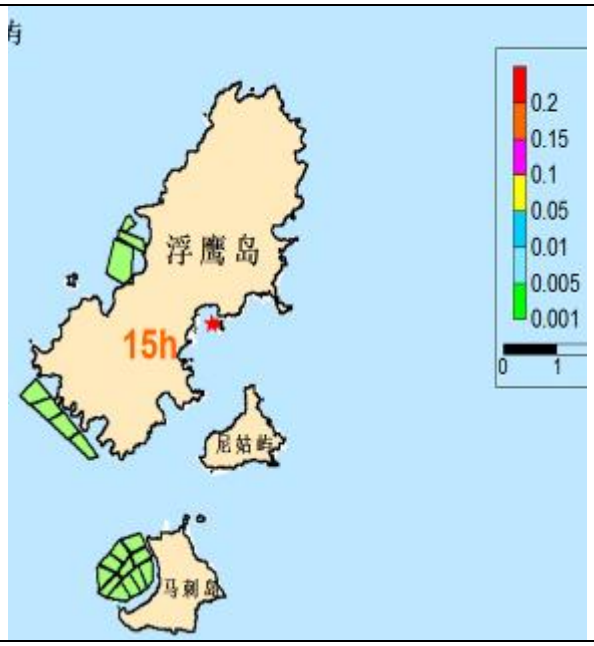


9 hours

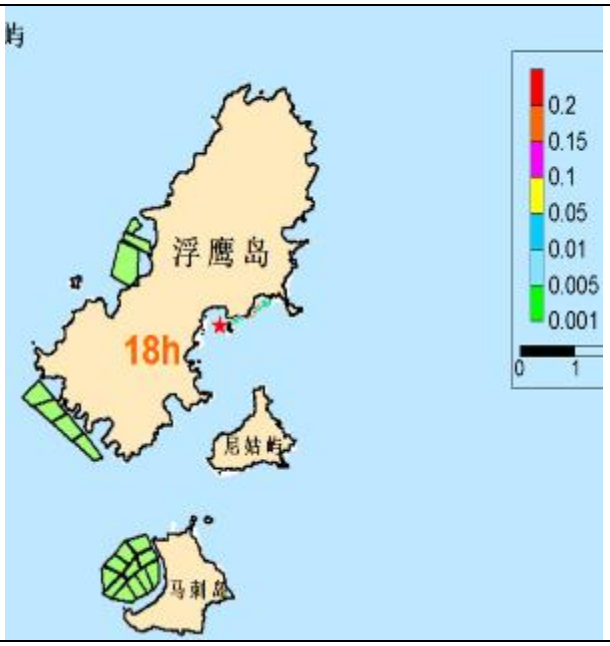


12 hours

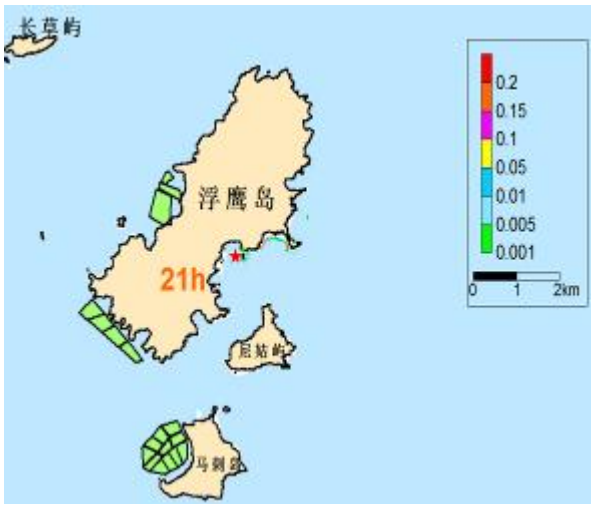
Figure 8.2-17 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Wen'ao Fishing Port (calm wind, ebb slack)



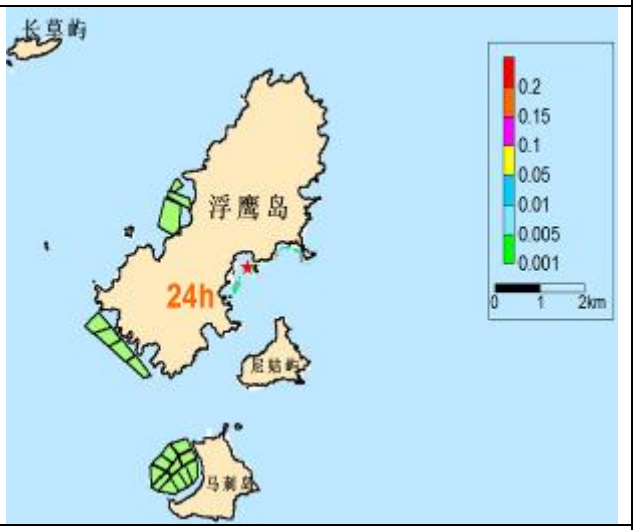
15 hours



18 hours



21 hours



24 hours

Figure 8.2-17 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Wen'ao Fishing Port (calm wind, ebb slack)

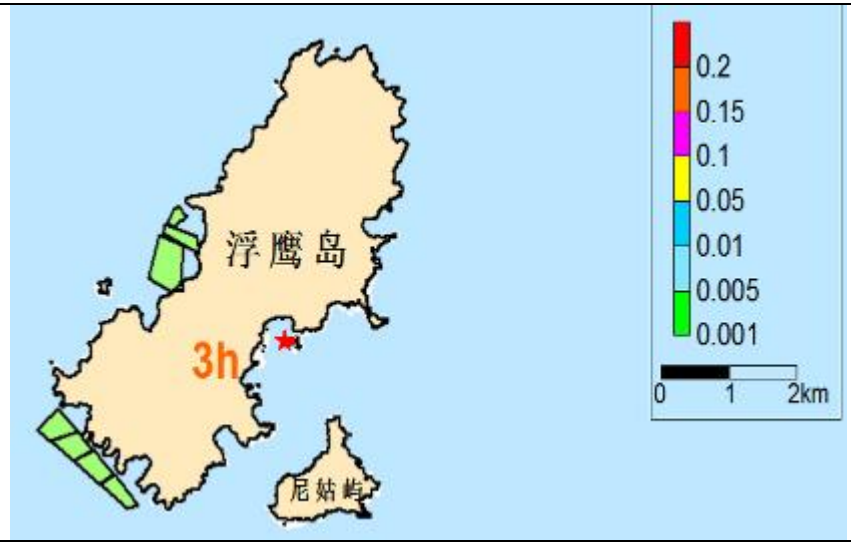
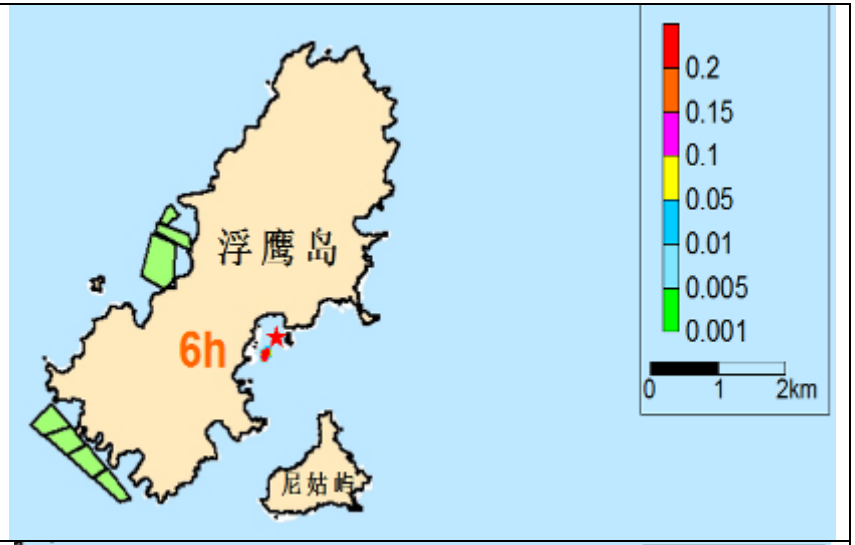
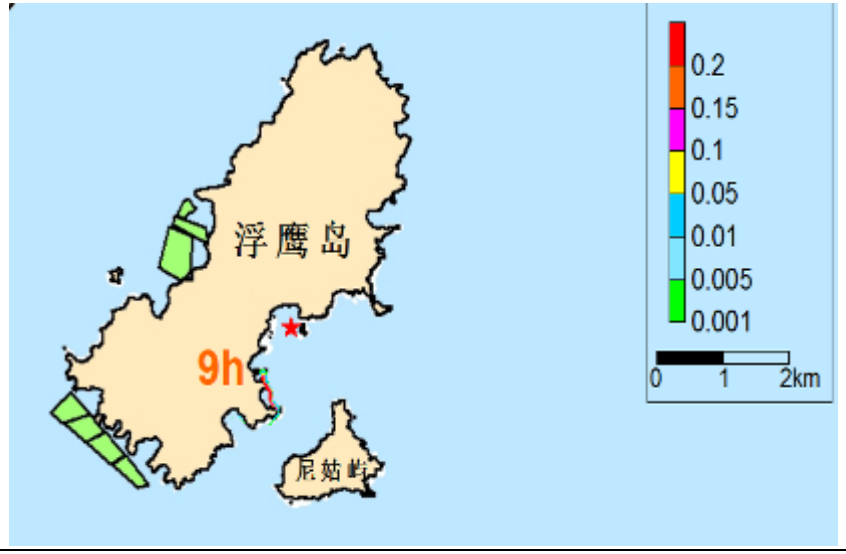
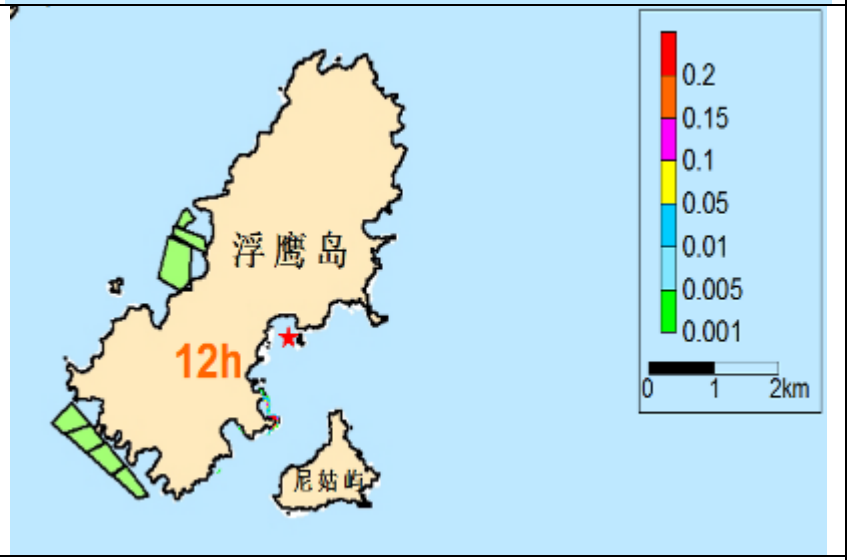
3 hours		**6 hours**	
9 hours		**12 hours**	

Figure 8.2-18 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Wen'ao Fishing Port (calm wind, flood slack)

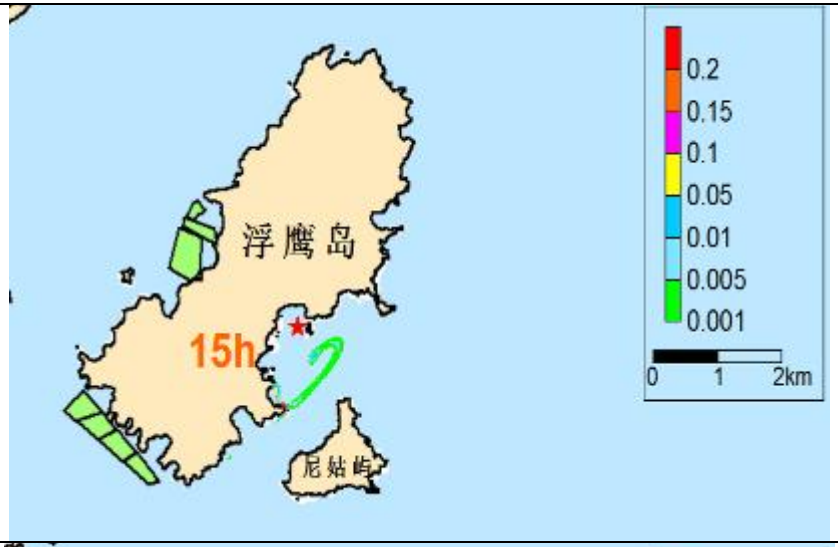
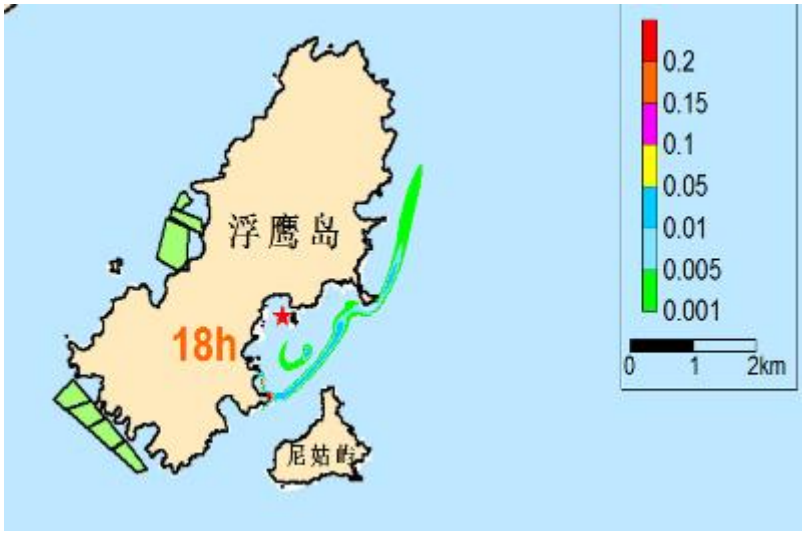
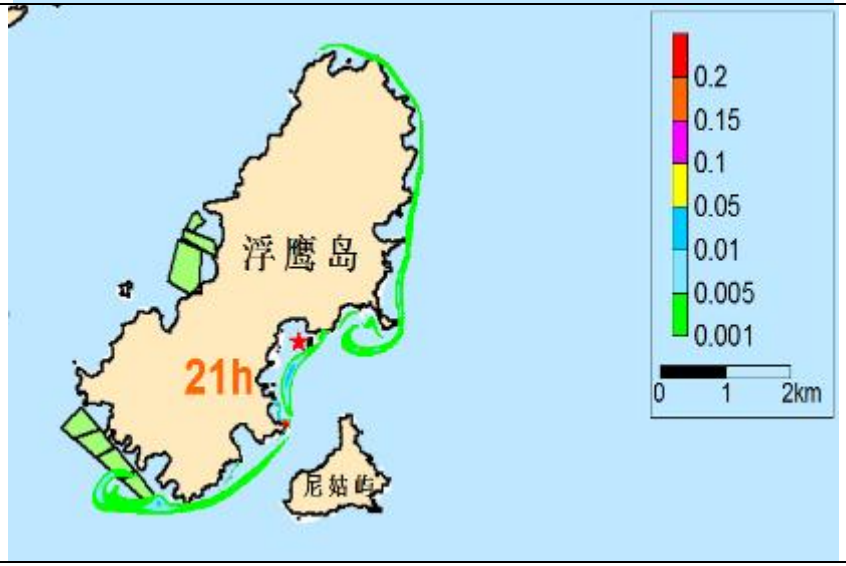
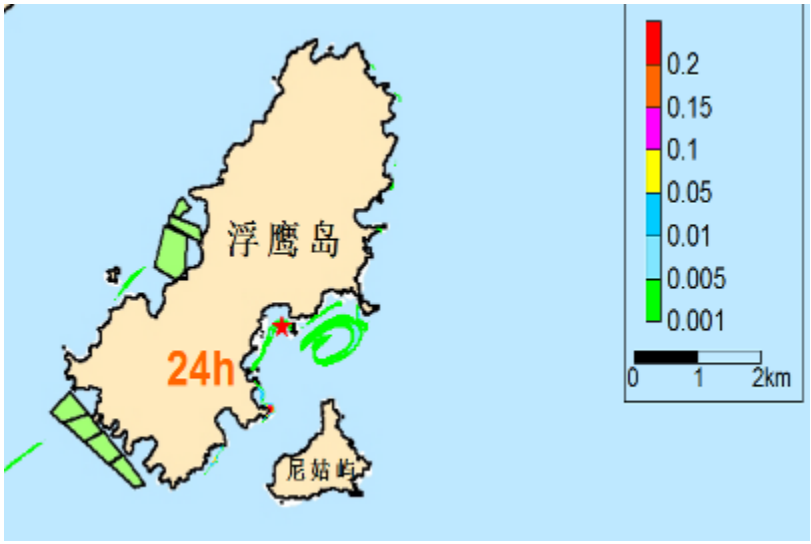
15 hours		**18 hours**	
21 hours		**24 hours**	

Figure 8.2-18 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Wen'ao Fishing Port (calm wind, flood slack)

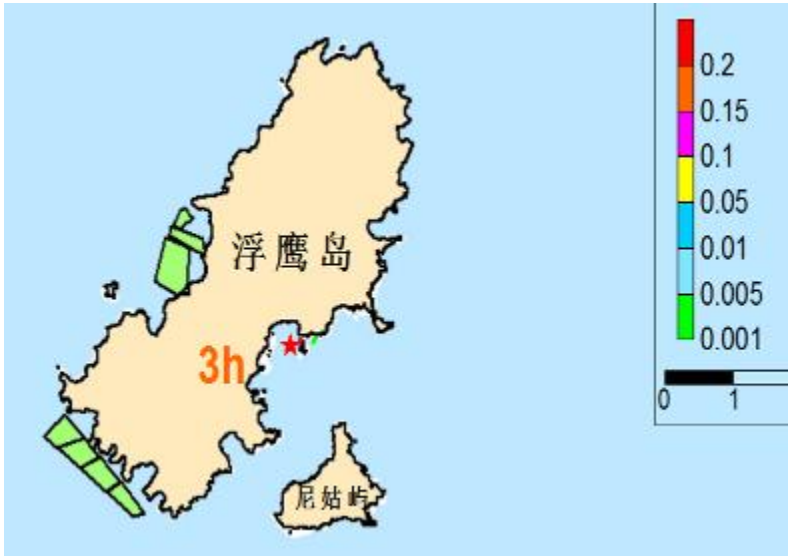
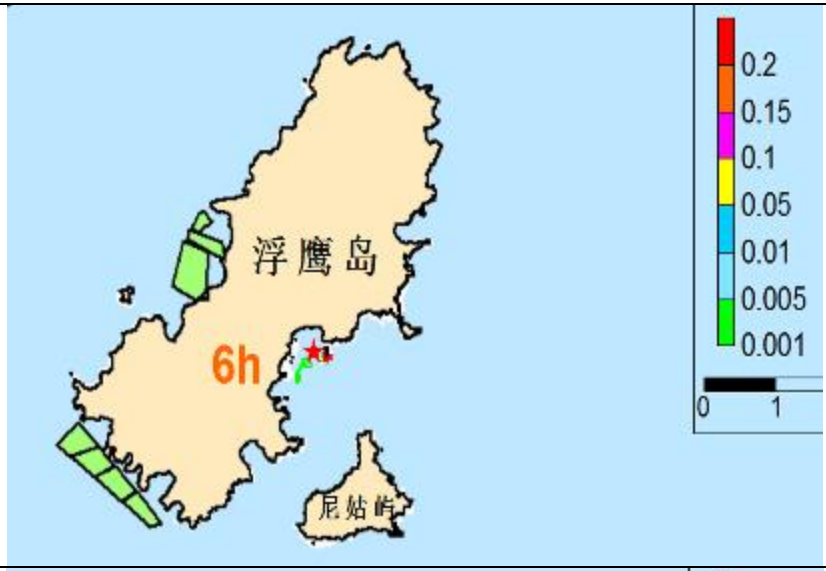
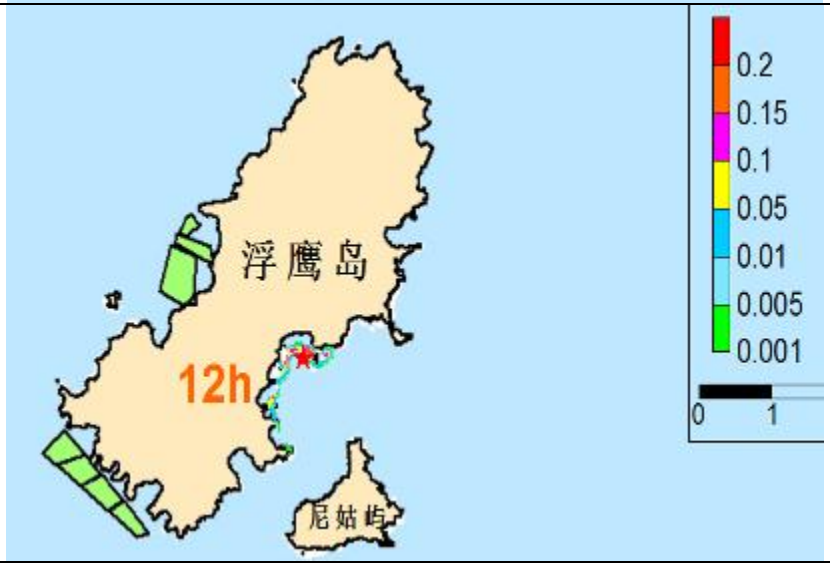
3 hours		**6 hours**	
9 hours		**12 hours**	

Figure 8.2-19 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Wen'ao Fishing Port (calm wind, flood tide)

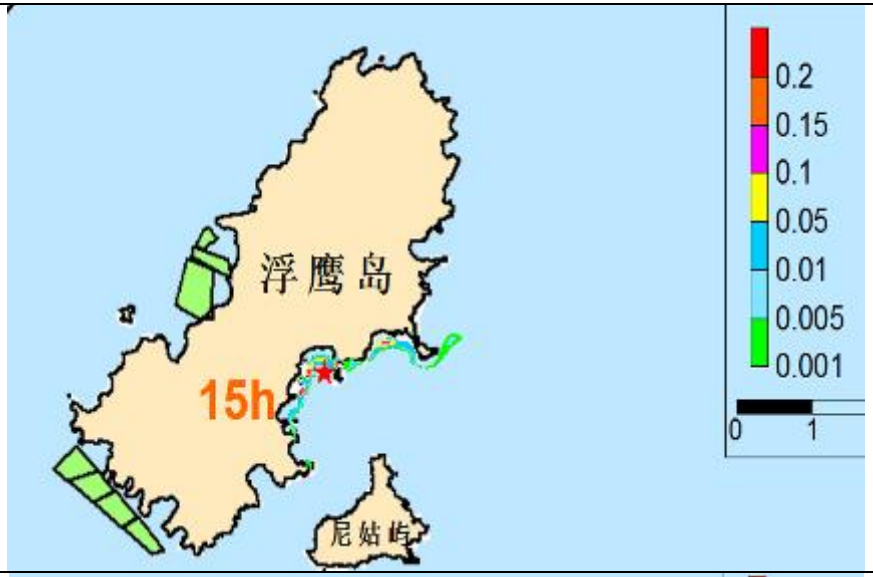
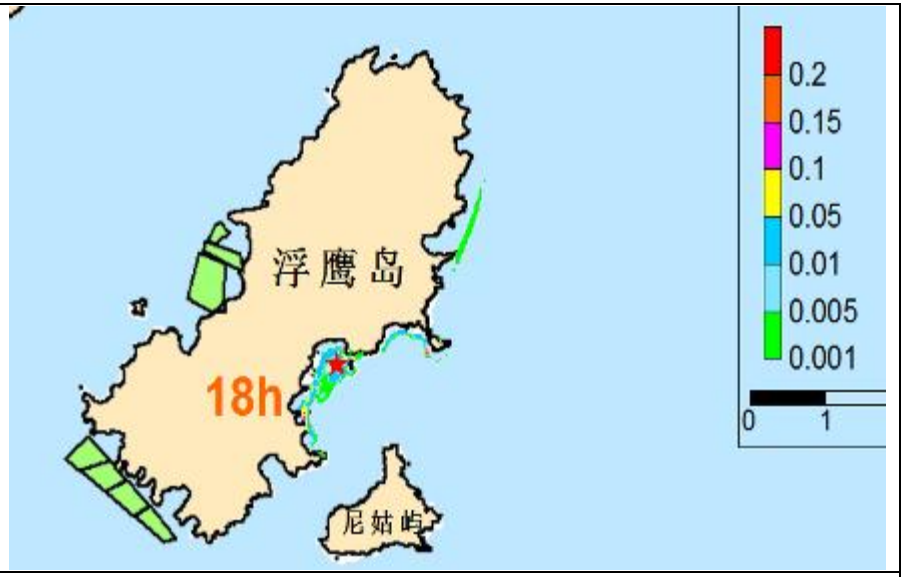
15 hours		**18 hours**	
21 hours		**24 hours**	

Figure 8.2-19 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Wen'ao Fishing Port (calm wind, flood tide)

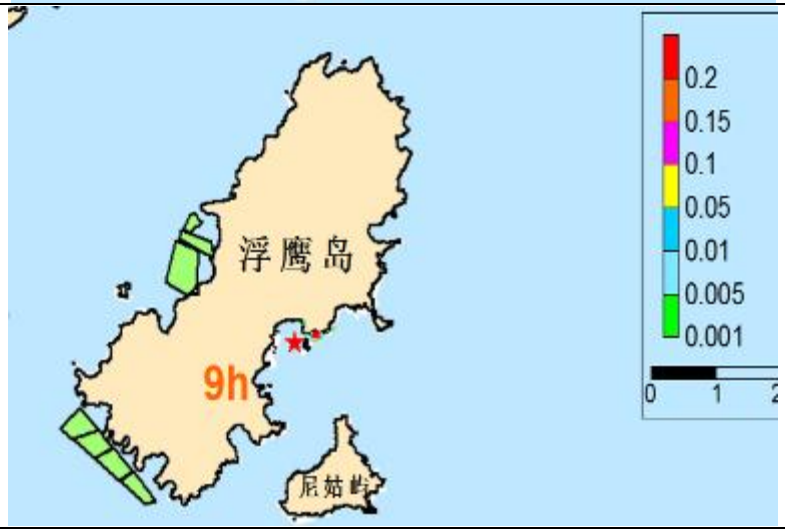
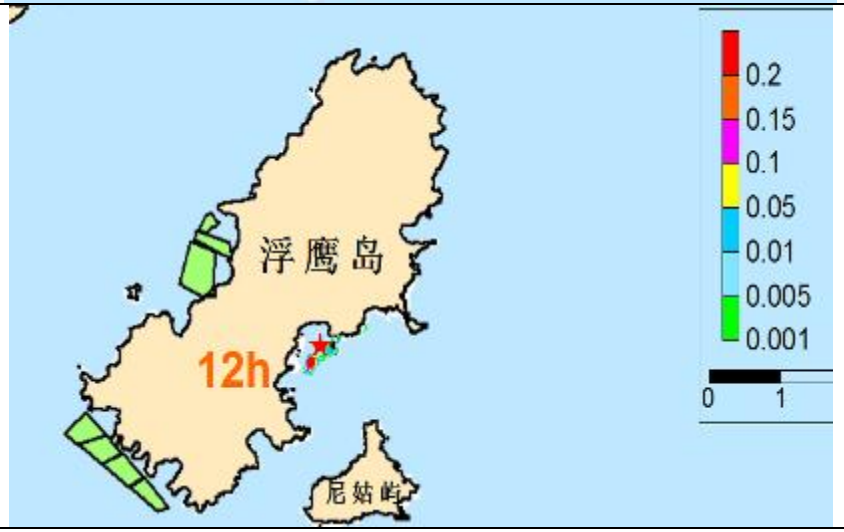
3 hours		**6 hours**	
9 hours		**12 hours**	

Figure 8.2-20 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Wen'ao Fishing Port (calm wind, ebb tide)

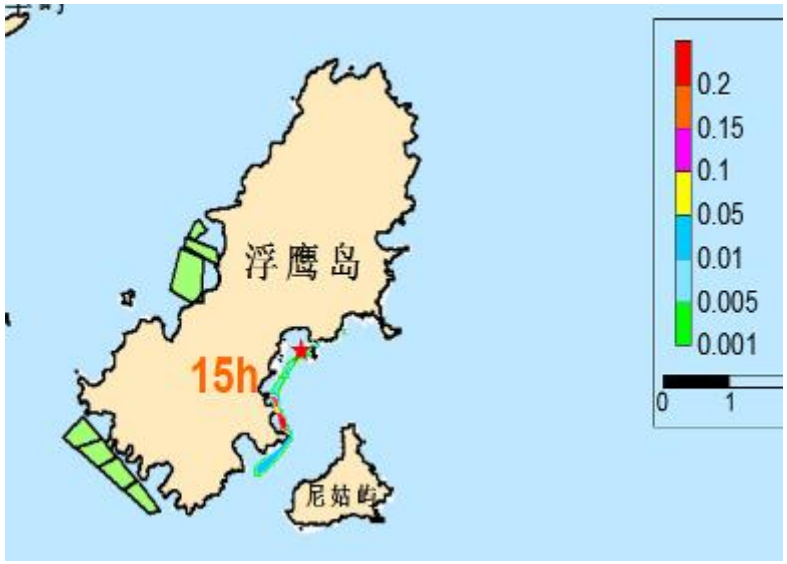
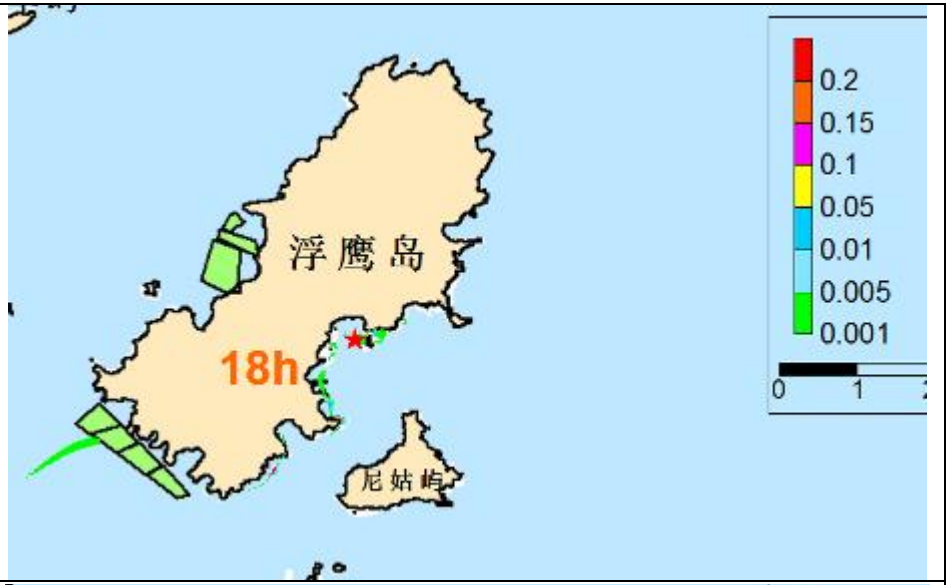
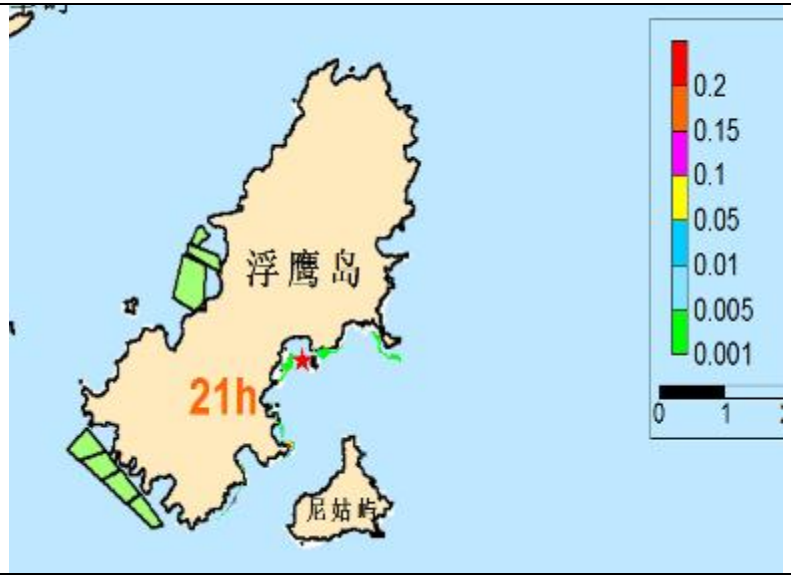
15 hours		**18 hours**	
21 hours		**24 hours**	

Figure 8.2-20 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Wen'ao Fishing Port (calm wind, ebb tide)

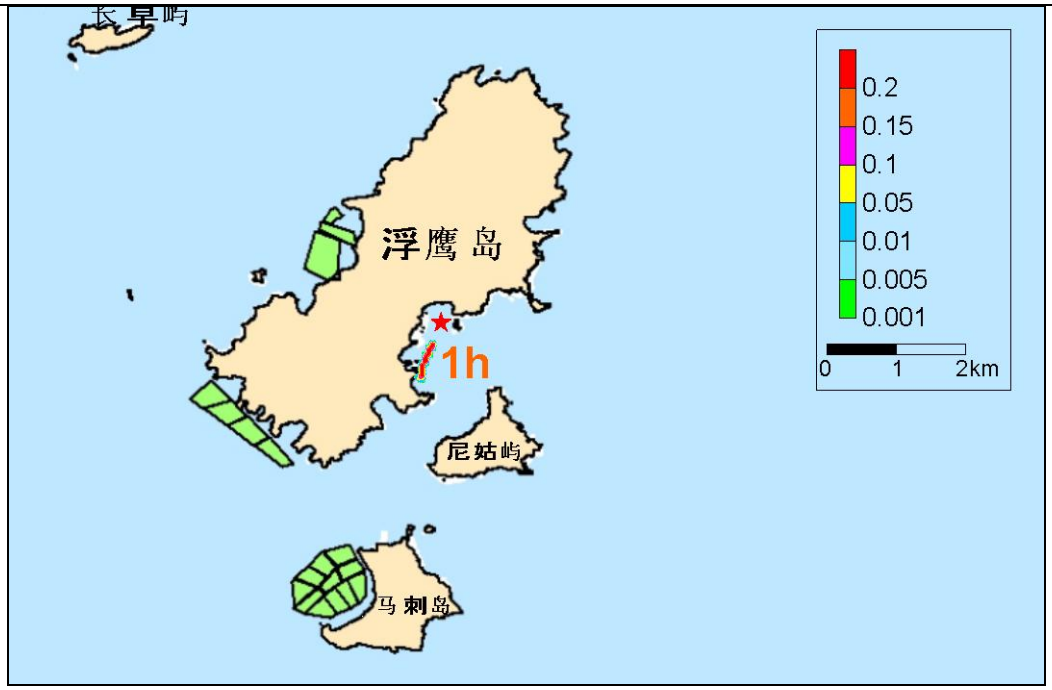


Figure 8.2-21 Oil Slick Migration within 1 Hour upon the Occurrence of Oil Spill Accident at Wen'ao Fishing Port (NNE, ebb slack)

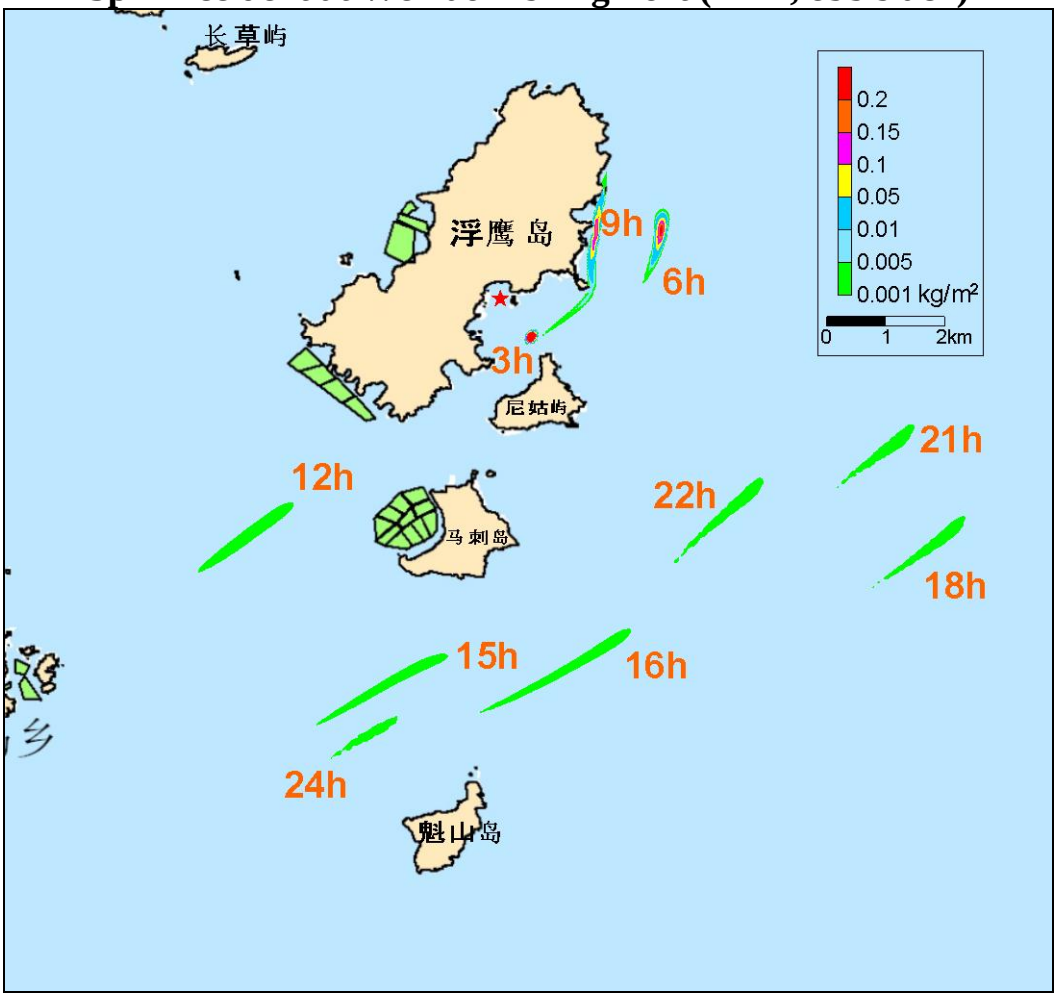


Figure 8.2-22 Oil Slick Migration within 24 Hours upon the Occurrence of Oil Spill Accident at Wen'ao Fishing Port (NNE, flood slack)

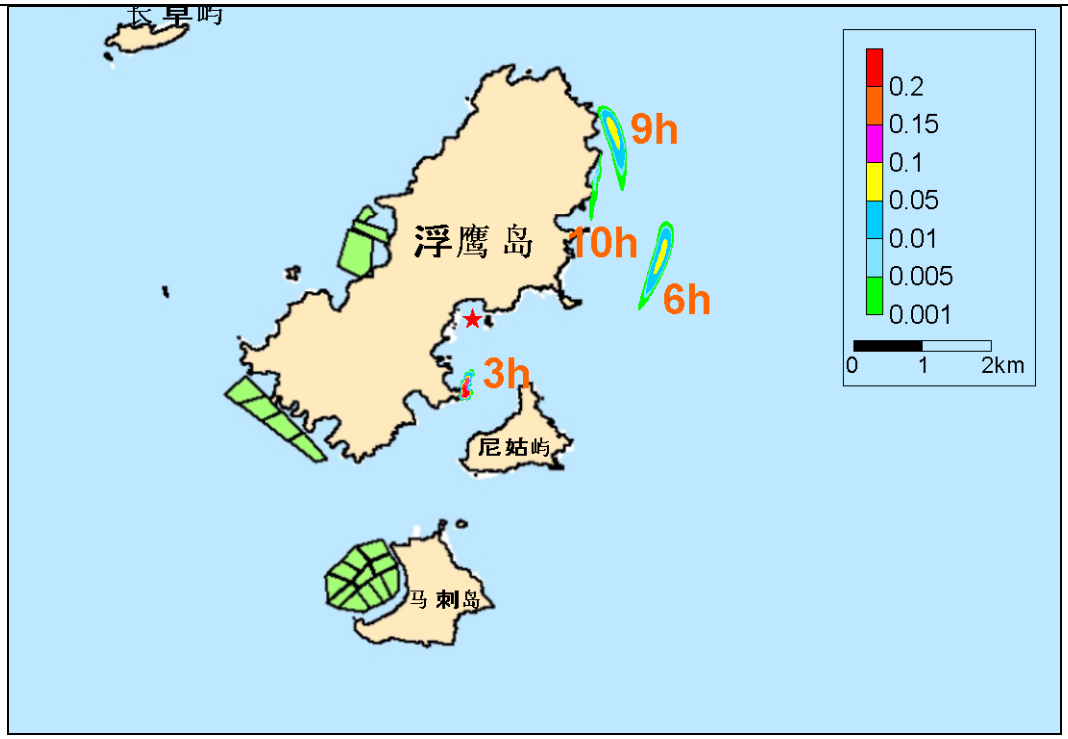


Figure 8.2-23 Oil Slick Migration within 10 Hours upon the Occurrence of Oil Spill Accident at Wen'ao Fishing Port (NNE, flood tide)

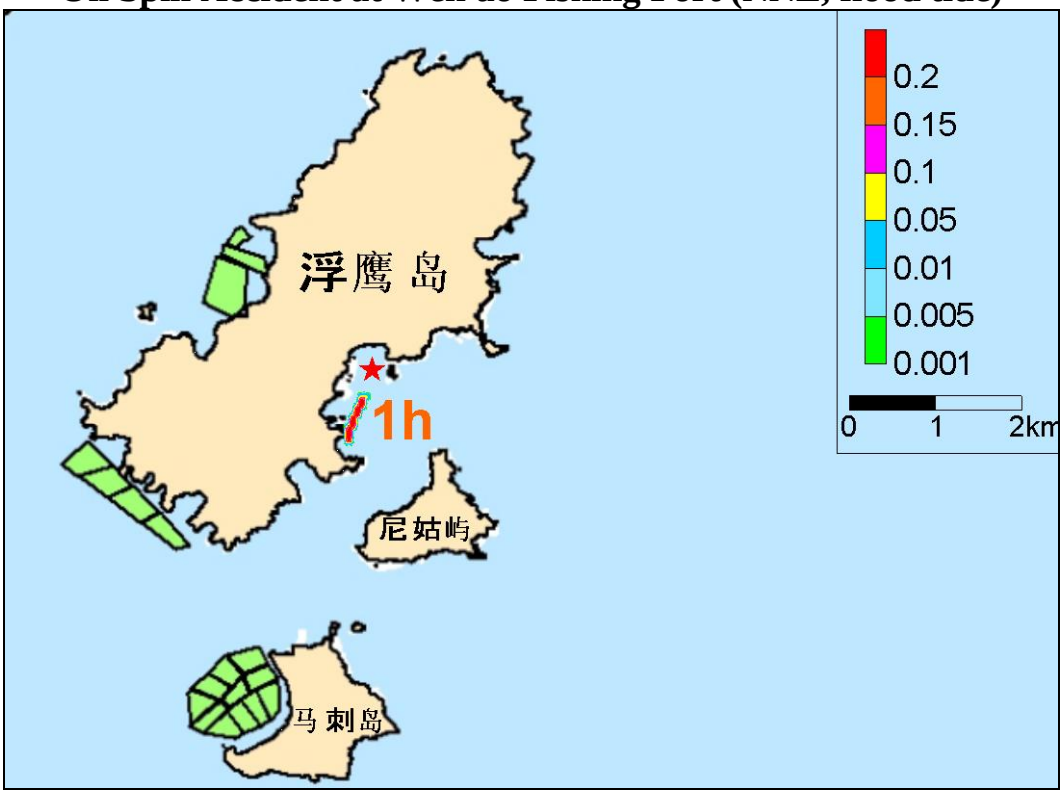


Figure 8.2-24 Oil Slick Migration within 2 Hours upon the Occurrence of Oil Spill Accident at Wen'ao Fishing Port (NNE, flood tide)

Annex E Basic Information of Public Consultation

Figure 1 First Public Disclosure of EIA Information on Assessor's Website

Figure 2 First Public Disclosure of EIA Information on the Website of

Xiapu County Government

First Public Disclosure of EIA Information at Beishuang Village

First Public Disclosure of EIA Information at Dajing Village

First Public Disclosure of EIA Information at Fenghuo Village

First Public Disclosure of EIA Information at Lv'xia Village

First Public Disclosure of EIA Information at Wu'ao Village

First Public Disclosure of EIA Information at Wen'ao Village

Figure 3 First Public Disclosure of EIA Information at Project Site

Figure 4 First Public Disclosure of EIA Information on Mindong Daily

Symposium on Beishuang Fishing Port

Symposium on Lv'xia and Dajing fishing ports

Symposium on Sansha and Fenghuo fishing ports

Symposium on Wen'ao Fishing Port

Figure 5 Symposia Held after the Public Disclosure of EIA Information

Figure 6 Second Public Disclosure of EIA Report on Assessor's Website

Figure 7 Second Public Disclosure of EIA Report on the Website of Xiapu County Government

Figure 8 Public Disclosure of EIA Report on Mindong Daily

Second Public Disclosure of EIA Information at Sansha Town

Second Public Disclosure of EIA Information at Fenghuo Village

Second Public Disclosure of EIA Information at Wu'ao Village

Second Public Disclosure of EIA Information at Changchun Town

Second Public Disclosure of EIA Information at Dajing Village

Second Public Disclosure of EIA Information at Lv'xia Village

Figure 9 Second Public Disclosure of EIA Information at Project Site

Symposium of Beishuan Village and Wen'ao Village

Symposium of Sansha Town

Symposium of Dajing Village

Symposium of Lv'xia Village

Figure 10 Symposia Held after the Public Disclosure of EIA Report

Directory of Respondents in the First Questionnaire Survey for Beishuang Class-2 Fishing Port

SN	Name	Sex	Address	Occupation
1	Zhang Zhuoguan	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
2	Lin Xiuyue	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
3	Xu Liande	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
4	Jiang Huadi	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
5	Jiang Liqin	Female	Beishuang Village, Haidao Town, Xiapu	
6	Jiang Jinyun	Female	Beishuang Village, Haidao Town, Xiapu	
7	Jiang Yinzhu	Female	Beishuang Village, Haidao Town, Xiapu	
8	Chen Wenfeng	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
9	Jiang Lan	Female	Beishuang Village, Haidao Town, Xiapu	
10	Jiang Jinchun	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
11	Shi Yunning	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
12	Liu Haihua	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
13	Zhang Yuanying	Female	Beishuang Village, Haidao Town, Xiapu	
14	Zhang Zhongpin	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
15	Chen Yilong	Male	Beishuang Village, Haidao Town, Xiapu	Merchant
16	Jiang Fayin	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
17	Chen Yuguan	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
18	Jiang Jianyong	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
19	Yi Shui	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
20	Jiang Tianxiong	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
21	Jiang Fang	Female	Beishuang Village, Haidao Town, Xiapu	
22	Jiang Zongxing	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
23	Shi Wenhua	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
24	Cao Yiyue	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
25	Jiang Dingan	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
26	Jiang Yonglu	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
27	Jiang Yizhong	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
28	Jiang Deli	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
29	Zhang Xiangshun	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman
30	Jiang Baoming	Male	Beishuang Village, Haidao Town, Xiapu	Fisherman

Directory of Respondents in the First Questionnaire Survey for Dajing Class-2 Fishing Port

SN	Name	Sex	Address	Occupation
1	Huang Zuohong	Male	Dajing Village, Changchun Town	Fisherman
2	Huang Liangrui	Male	Dajing Village, Changchun Town	Fisherman
3	Cai Yinghua	Male	Dajing Village, Changchun Town	Fisherman
4	Zheng Detuan	Male	Dajing Village, Changchun Town	Fisherman
5	Zhang Deling	Male	Dajing Village, Changchun Town	Fisherman
6	Zhang Muping	Male	Dajing Village, Changchun Town	Fisherman
7	Zheng Aiwu	Male	Dajing Village, Changchun Town	Fisherman
8	Zheng Chaoyou	Male	Dajing Village, Changchun Town	Fisherman
9	Zheng Dehong	Male	Dajing Village, Changchun Town	Fisherman
10	Lin Ruimin	Male	Dajing Village, Changchun Town	Fisherman
11	Lin Zhiyou	Male	Dajing Village, Changchun Town	Fisherman
12	Lin Ru	Male	Dajing Village, Changchun Town	
13	Wu Yansheng	Male	Dajing Village, Changchun Town	Fisherman
14	Huang Zuobiao	Male	Dajing Village, Changchun Town	Fisherman
15	Huang Zuozhou	Male	Dajing Village, Changchun Town	Fisherman
16	Zheng Yihua	Male	Dajing Village, Changchun Town	Driver
17	Huang Zuoying	Male	Dajing Village, Changchun Town	Fisherman
18	Zheng Yixiu	Male	Dajing Village, Changchun Town	Fisherman
19	Zheng Yixing	Male	Dajing Village, Changchun Town	Fisherman
20	You Guihua	Male	Dajing Village, Changchun Town	Fisherman
21	Lin Chunqin	Male	Dajing Village, Changchun Town	Fisherman
22	Lin Liquan	Male	Dajing Village, Changchun Town	Peasant
23	Lin Ping	Male	Dajing Village, Changchun Town	Worker
24	Liu Chengke	Male	Dajing Village, Changchun Town	Fisherman
25	Liu Qingying	Male	Dajing Village, Changchun Town	Fisherman
26	Liu Weiyao	Male	Dajing Village, Changchun Town	Fisherman
27	Xiao Ligeng	Male	Dajing Village, Changchun Town	Fisherman
28	Zheng Wen	Male	Dajing Village, Changchun Town	Fisherman
29	Zheng Qiaoyun	Female	Dajing Village, Changchun Town	Fisherman
30	Zheng Mengchun	Male	Dajing Village, Changchun Town	Merchant
31	Zheng Deyu	Male	Dajing Village, Changchun Town	Fisherman
32	Zhang Dechuan	Male	Dajing Village, Changchun Town	Fisherman
33	Lin Jingui	Male	Dajing Village, Changchun Town	Fisherman
34	Xu Wenming	Male	Dajing Village, Changchun Town	Fisherman
35	Zheng Deqi	Male	Dajing Village, Changchun Town	Fisherman
36	Lin Yiwu	Male	Dajing Village, Changchun Town	Fisherman
37	Huang Yingsheng	Male	Dajing Village, Changchun Town	Fisherman
38	Lin Zhimeng	Male	Dajing Village, Changchun Town	Fisherman
39	Lin Jingdan	Male	Dajing Village, Changchun Town	Fisherman
40	Zeng Gaoying	Male	Dajing Village, Changchun Town	Fisherman
41	Wu Qinshan	Male	Dajing Village, Changchun Town	Fisherman
42	Xiao Duli	Male	Dajing Village, Changchun Town	Fisherman
43	Zheng Dexue	Male	Dajing Village, Changchun Town	Fisherman
44	Lin Chunchang	Male	Dajing Village, Changchun Town	Fisherman
45	Liu Chengquan	Male	Dajing Village, Changchun Town	Fisherman
46	Liu Qingtuan	Male	Dajing Village, Changchun Town	Fisherman
47	Li Guanghua	Male	Dajing Village, Changchun Town	Fisherman
48	Zheng Qin	Male	Dajing Village, Changchun Town	Fisherman

Directory of Respondents in the First Questionnaire Survey for Fenghuo Class-2 Fishing Port

SN	Name	Sex	Address	Occupation
1	Xie Yingchun	Male	Wuwo Village	Fisherman
2	Ye Ling	Female	Wuwo Village	Unemployed
3	Chen Huiming	Male	Wuwo Village	Fisherman
4	Chen Chunming	Male	Wuwo Village	Fisherman
5	Jiang Xuexi	Female	Wuwo Village	Unemployed
6	Lin Lizhen	Male	Wuwo Village Committee	Village cadre
7	Cai Jianzhang	Male	Wuwo Village	Village director
8	Yan Chengquan	Male	Dongtian Village	
9	Wu Xinguo	Male	Wuwo Village	Fisherman
10	Hong Yuqi	Male	Wuwo Village	Fisherman
11	Yu Yuanchun	Male	Central Village Committee	Village cadre
12	Zou Fenghua	Male	Central Village Committee	Village cadre
13	Huang Haiting	Female	Central Village Committee	Village administrator
14	Liu Yongtong	Male	Central Village Committee	Village cadre
15	Pan Chunguang	Male	Central Village Committee	Village cadre
16	Cai Xingzhuang	Female	Central Village Committee	Village cadre
17	Chen Lijuan	Female	Central Village Committee	Village cadre
18	Hou Jincai	Male	Fenghuo Village	Fisherman
19	Zhuang Cana	Male	Fenghuo Village	Fisherman
20	Su Jianqi	Male	Fenghuo Village	Peasant
21	Chen Xiaoming	Male	Fenghuo Village	Unemployed
22	Liu Meiquan	Male	Fenghuo Village	Peasant
23	Liu Zhiwen	Male	Fenghuo Village	Fisherman
24	Liu Lianshui	Male	Fenghuo Village	Fisherman
25	Huang Xingzhong	Male	San’ao Village	
26	Chen Yashi	Male	San’ao Village	
27	Yang Amai	Male	Dongwo Village	Fisherman
28	Li Ming	Male	Dongwo Village	Village cadre
29	Lin Feng	Male	Dongwo Village	Fisherman
30	You Dongdi	Male	Sansha Township Government	Public servant
31	Wu Jianhua	Male	Sansha Township Government	Employee
32	Lin Zhenxi	Male	Sansha Street, Sansha Town	Public servant
33	Hong Jinren	Male	Guzhen Village	Village Party Branch Secretary
34	Kang Xiujin	Male	Kangsheng Fisheries	Fisherman
35	Mei Quanrong	Male		Peasant
36	Chen Bifeng	Male		

Directory of Respondents in the First Questionnaire Survey for Lv'xia Class-1 Fishing Port

SN	Name	Sex	Address	Occupation
1	Wang Changshu	Male	Lv'xia Village, Changchun Town	Fisherman
2	Chen Hui	Male	Lv'xia Village, Changchun Town	Fisherman
3	Chen Pintian	Male	Lv'xia Village, Changchun Town	Fisherman
4	Chen Yingwen	Male	Lv'xia Village, Changchun Town	
5	Lin Tingbing	Male	Lv'xia Village, Changchun Town	Fisherman
6	Lin Haibo	Male	Lv'xia Village, Changchun Town	Fisherman
7	Zheng Ruibing	Male	Lv'xia Village, Changchun Town	Fisherman
8	Zheng Ruihua	Male	Lv'xia Village, Changchun Town	Fisherman
9	He Xiaoming	Male	Lv'xia Village, Changchun Town	Fisherman
10	Lin Xingzhao	Male	Lv'xia Village, Changchun Town	Fisherman
11	Yang Shoufu	Male	Lv'xia Village, Changchun Town	Peasant
12	Lin Haisheng	Male	Lv'xia Village, Changchun Town	Fisherman
13	Chen Jinbao	Male	Lv'xia Village, Changchun Town	Fisherman
14	Yang Shunhua	Male	Lv'xia Village, Changchun Town	Fisherman
15	Zeng Zhiyu	Male	Lv'xia Village, Changchun Town	Fisherman
16	Chen Yanjin	Male	Lv'xia Village, Changchun Town	Fisherman
17	Lin Dong	Male	Lv'xia Village, Changchun Town	Fisherman
18	Xu Wenjian	Male	Lv'xia Village, Changchun Town	Fisherman
19	Chen Wenxing	Male	Lv'xia Village, Changchun Town	Fisherman
20	Du Dehui	Male	Lv'xia Village, Changchun Town	Fisherman
21	Chen Pinyu	Male	Lv'xia Village, Changchun Town	Fisherman
22	Zeng Gaoyu	Male	Lv'xia Village, Changchun Town	Fisherman
23	Guo Ruiqu	Male	Lv'xia Village, Changchun Town	Fisherman
24	Jiang Shigui	Male	Lv'xia Village, Changchun Town	Fisherman
25	Ceng Gaoqi	Male	Lv'xia Village, Changchun Town	Fisherman
26	Zheng Qingsheng	Male	Lv'xia Village, Changchun Town	Fisherman
27	Lin Xingquan	Male	Lv'xia Village, Changchun Town	Fisherman
28	Bian Zhaowei	Male	Lv'xia Village, Changchun Town	Fisherman
29	Chen Shangluan	Male	Lv'xia Village, Changchun Town	Peasant
30	Wu Xiaoyue	Male	Lv'xia Village, Changchun Town	Fisherman
31	Pan Chengqiu	Male	Lv'xia Village, Changchun Town	Fisherman
32	Wei Jinhua	Male	Lv'xia Village, Changchun Town	Fisherman
33	Bian Shizhu	Male	Lv'xia Village, Changchun Town	Fisherman
34	He Shiqi	Male	Lv'xia Village, Changchun Town	Fisherman
35	Chen Qirong	Male	Lv'xia Village, Changchun Town	Fisherman
36	Lin Yanlong	Male	Lv'xia Village, Changchun Town	
37	Lin Qiang	Male	Lv'xia Village, Changchun Town	Fisherman
38	Cao Delin	Male	Lv'xia Village, Changchun Town	
39	He Shikeng	Male	Lv'xia Village, Changchun Town	
40	Du Jiehui	Male	Lv'xia Village, Changchun Town	Fisherman
41	Lin Minxin	Male	Lv'xia Village, Changchun Town	Fisherman
42	Bian Hairong	Male	Lv'xia Village, Changchun Town	Fisherman
43	Yang Shunji	Male	Lv'xia Village, Changchun Town	Fisherman
44	Zhang Qianfu	Male	Lv'xia Village, Changchun Town	Fisherman
45	Chen Chengtong	Male	Lv'xia Village, Changchun Town	Fisherman
46	Lin Xingsheng	Male	Lv'xia Village, Changchun Town	Fisherman

Directory of Respondents in the First Questionnaire Survey for Sansha Fishing Port (Phase-II)

SN	Name	Sex	Address	Occupation
1	Zhuang Zhihui	Male	Sansha Township Government	Employee
2	You Dongdi	Male	Sansha Township Government	Public servant
3	Li Ming	Male	Sansha Township Government	Village cadre
4	Liu Meiquan	Male	Fenghuo Village	Peasant
5	Liu Lianshui	Male	Fenghuo Village	Fisherman
6	Liu Zhiwen	Male	Fenghuo Village	Fisherman
7	Zhuang Cana	Male	Fenghuo Village	Fisherman
8	Hou Jincai	Male	Fenghuo Village	Fisherman
9	Su Jianqi	Male	Fenghuo Village	Peasant
10	Lin Lizhen	Male	Wu'ao Village Committee	Village cadre
11	Wu Xinguo	Male	Wu'ao Village	Fisherman
12	Hong Yuqi	Male	Wu'ao Village	Fisherman
13	Xie Huangchun	Male	Wu'ao Village	Fisherman
14	Ye Ling	Female	Wu'ao Village	Unemployed
15	Chen Huiming	Male	Wu'ao Village	Fisherman
16	Chen Chunming	Male	Wu'ao Village	Fisherman
17	Jiang Xuexiang	Female	Wu'ao Village	Unemployed
18	Cai Xingzhuang	Female	Sansha Central Village Committee	Village cadre
19	Yu Yuanchun	Male	Sansha Central Village Committee	Village cadre
20	Zou Fenghua	Male	Sansha Central Village Committee	Village cadre
21	Huang Haiting	Female	Sansha Central Village Committee	Village administrator
22	Liu Yongtong	Male	Sansha Central Village Committee	Village cadre
23	Pan Chunguang	Male	Sansha Central Village Committee	Village cadre
24	Cai Jianzhang	Male	San'ao Village	Village director
25	Huang Xingzhong	Male	San'ao Village	
26	Chen Pishi	Male	San'ao Village	
27	Chen Lijuan	Female	San'ao Village Committee	Village cadre
28	Lin Zhenxi	Male	Sansha Street, Sansha Town	Public servant
29	Chen Xiaoming	Male	Sansha Street, Sansha Town	Unemployed
30	Yao Penghui	Male	Xi'ao Village Committee	Fisherman
31	Chen Zhongping	Male	Xi'ao Village Committee	Fisherman
32	Yan Chengquan	Male	Dong'ao Village	
33	Lin Feng	Male	Dong'ao Village	Fisherman
34	Kang Xiujin	Male	Kangsheng Fisheries	Fisherman
35	Yang Abiao	Male	Xitian Village	Fisherman
36	Hong Jinren	Male	Guzhen Village	Village Party Branch Secretary
37	Chen Bifeng	Male	Sansha Gongxiao Residential Quarter	Public servant

38	Mei Quanrong	Male		Peasant

Directory of Respondents in the First Questionnaire Survey for Wen'ao Class-2 Fishing Port

SN	Name	Sex	Address	Occupation
1	Chen Zongyang	Male	Wen'ao Village, Haidao Town, Xiapu	Doctor
2	Chen Qiuling	Female	Wen'ao Village, Haidao Town, Xiapu	
3	Lin Guoqiang	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
4	Chen Tiancai	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
5	Chen Tianhe	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
6	Yang Meiyu	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
7	Jiang Zhaohai	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
8	Mu Peng	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
9	Lin Mian	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
10	Lin Anming	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
11	Jiang Yigui	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
12	Ling Guoping	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
13	Zheng Mukun	Male	Wen'ao Village, Haidao Town, Xiapu	
14	Lin Yunming	Male	Wen'ao Village, Haidao Town, Xiapu	
15	Chen Deyong	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
16	Lin Feng	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
17	Chen Jie	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
18	Chen Feng	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
19	Lin Xuebing	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
20	Ye Dezhong	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
21	Lin Hai	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
22	Liao Yongyi	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
23	Chen Wenhua	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
24	Chen Zongzhuo	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
25	Ling Guofu	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman
26	Chen Jingkai	Male	Wen'ao Village, Haidao Town, Xiapu	Fisherman

Directory of Respondents in the Second Public Participation Survey for World Bank Financed Fishing Port Construction Project of Fujian, China

SN	Name	Sex	Address	Occupation
1	Huang Zuowen	Male	Dajing Village, Changchun Town	Fisherman
2	Liu Chengqin	Male	Dajing Village, Changchun Town	Fisherman
3	Huang Zuozhou	Male	Dajing Village, Changchun Town	Peasant
4	Jiang Yuqing	Male	Dajing Village, Changchun Town	Fisherman
5	Zhang Qiuyong	Male	Dajing Village, Changchun Town	Fisherman
6	Zeng Gaoyong	Male	Dajing Village, Changchun Town	Fisherman
7	Chen Fangjie	Male	Dajing Village, Changchun Town	Fisherman
8	Zheng Jiancai	Male	Dajing Village, Changchun Town	Fisherman
9	Lin Jinxian	Male	Dajing Village, Changchun Town	Fisherman
10	Zhuo Lihua	Male	Dajing Village, Changchun Town	Fisherman
11	Zhang Qiuwei	Male	Dajing Village, Changchun Town	Fisherman
12	Huang Zuocun	Male	Dajing Village, Changchun Town	Fisherman
13	Gao Changping	Male	Dajing Village, Changchun Town	Fisherman
14	Lin Judong	Male	Dajing Village, Changchun Town	Fisherman
15	Zeng Gaoguan	Male	Dajing Village, Changchun Town	Fisherman
16	Chen Jingkai	Male	Wen'ao Village	Fisherman
17	Lin Guobing	Male	Wen'ao Village	Fisherman
18	Lin Guoqiang	Male	Wen'ao Village	Fisherman
19	Lin Nongzhao	Male	Wen'ao Village	Fisherman
20	Ling Guoping	Male	Wen'ao Village	Village Cadre
21	Chen Meiling	Female	Wen'ao Village	Worker
22	Chen Jingan	Male	Wen'ao Village	Fisherman
23	Jiang Fang	Female	Wen'ao Village	
24	Shi Gui	Male	Lv'xia Village	Fisherman
25	Fan Tingfu	Male	Lv'xia Village	Fisherman
26	Chen Xiaoming	Male	Lv'xia Village	Fisherman
27	Lin Yuexin	Male	Lv'xia Village	Fisherman
28	Chen Pinyun	Male	Lv'xia Village	Fisherman
29	Zheng Qingsheng	Male	Lv'xia Village	Fisherman
30	Lin Guangling	Male	Lv'xia Village	Fisherman
31	Chen Chengfa	Male	Lv'xia Village	Fisherman
32	Chen Linsen	Male	Lv'xia Village	Fisherman
33	Jian Baosheng	Male	Lv'xia Village	Fisherman
34	Ceng Maojiang	Male	Lv'xia Village	Fisherman
35	Zheng Rui	Male	Lv'xia Village	Fisherman
36	Xu Wenjian	Male	Lv'xia Village	Fisherman
37	Lu Chengti	Male	Lv'xia Village	Peasant
38	Zheng Ruibing	Male	Lv'xia Village	Fisherman
39	Lin Yuexin	Male	Lv'xia Village	Fisherman
40	Ceng Canguang	Male	Lv'xia Village	Fisherman
41	Liu Haizhen	Female	Beishuang Village	
42	Chen Zhuhe	Male	Beishuang Village	Fisherman
43	Zhang Zhuoguan	Male	Beishuang Village	Fisherman
44	Shi Changrong	Male	Beishuang Village	Fisherman
45	Ye Yuping	Male	Beishuang Village	Fisherman
46	Jiang Yong	Male	Beishuang Village	Village Cadre
47	Zheng Xinjian	Male	Beishuang Village	Fisherman

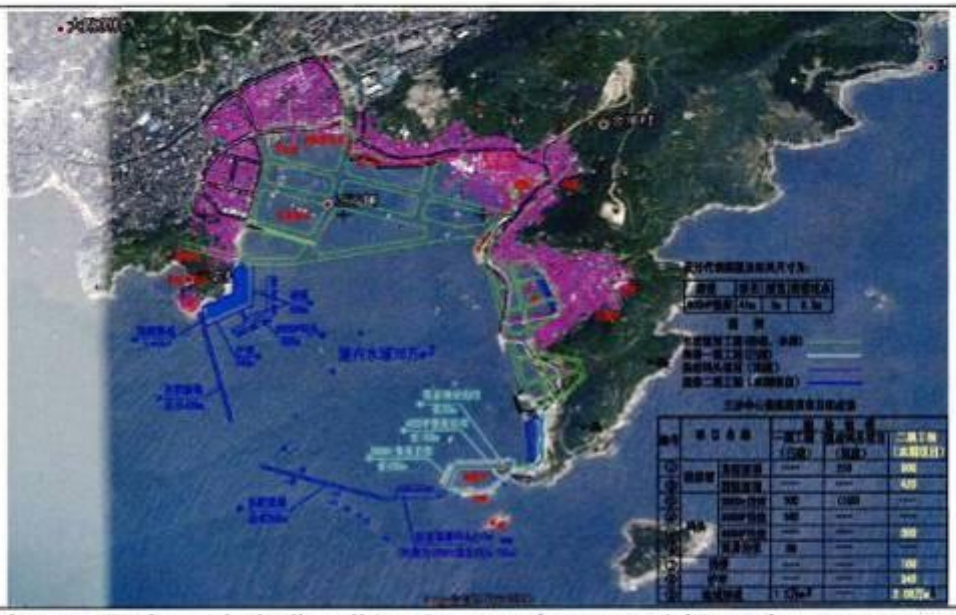
48	Cao Yiyue	Male	Beishuang Village	Fisherman
49	Jiang Jindi	Male	Beishuang Village	Fisherman
50	Lin Qin	Male	Beishuang Village	Fisherman
51	Jiang Kun	Male	Beishuang Village	Fisherman
52	Jiang Dingfu	Male	Beishuang Village	Fisherman
53	Jiang Guobao	Male	Beishuang Village	Fisherman
54	Jiang Guoli	Male	Beishuang Village	Fisherman
55	Jiang Jinming	Male	Beishuang Village	Fisherman
56	Cai Zhiqing	Male	Beishuang Village	Fisherman
57	Cao Yibao	Male	Beishuang Village	Fisherman
58	Cao Jinming	Male	Beishuang Village	Fisherman
59	Wu Chunsheng	Male	Beishuang Village	Fisherman
60	Jiang Zhonglin	Male	Beishuang Village	Fisherman
61	Kang Youjin	Male	Wen'ao Village	Fisherman
62	Wu Xinguo	Male	Wen'ao Village	Fisherman
63	Xu Yuqin	Female	Wen'ao Village	Unemployed
64	Ke Xueping	Female	Wen'ao Village	Unemployed
65	Zeng Lizhen	Female	Wen'ao Village	
66	Yang Yuefang	Male	Wen'ao Village	
67	Huang Qingyu	Male	Wen'ao Village	
68	Zeng Gui	Male	Wen'ao Village	Procurement
69	Ye Ling	Female	Wen'ao Village	Village Cadre
70	Hong Renbiao	Male	Wen'ao Village	Aquatic product merchant
71	Ceng Ruifu	Male	San'ao Village	Fisherman
72	Zeng Wenlai	Male	San'ao Village	Fisherman
73	Zeng Ruiguo	Male	San'ao Village	Fisherman
74	Huang Baozhong	Male	San'ao Village	Fisherman
75	Zeng Jianhua	Male	San'ao Village	Fisherman
76	Zeng Liang	Male	San'ao Village	Fisherman
77	Zhang Xiangqing	Male	San'ao Village	Fisherman
78	Zeng Baozhen	Female	San'ao Village	
79	Chen Pishi	Male	San'ao Village	
80	Wang Chenggui	Male	San'ao Village	Fisherman
81	Jiang Xue	Female	San'ao Village	
82	Chen Lijuan	Female	San'ao Village	Village Cadre
83	Liu Lianshui	Male	Fenghuo Village	Fisherman
84	Zheng Dongfeng	Female	Fenghuo Village	Fisherman
85	Gao Minghua	Female	Fenghuo Village	Fisherman
86	Chen Fayong	Male	Fuying Village, Haidao Town	
87	Jiang Zhusheng	Male	Fuying Village, Haidao Town	Fisherman
88	Chen Yuqin	Female	Fuying Village, Haidao Town	
89	Deng Yuqing	Male	Haidao Township Government	Public Servant
90	Chen Feng	Male	Fuying Village	Village Cadre
91	Shi Dingkang	Male	Fuying Village, Haidao Town	Fisherman

92	Li Dengyong	Female	Yumiaoshi Village	Worker
93	Dai Zujin	Male	49 Erhui, Sansha Center	Worker
94	Tong Yikai	Male	Sansha Baolai Fishing Co., Ltd	Accountant
95	Chen Hengfeng	Male	Sansha Baolai Fishing Co., Ltd	Accountant
96	Jin Maiqing	Male	Xi'ao Village	Fisherman
97	Ye Dezhong	Male		

World Bank Financed Fishing Port Construction Project of Fujian, China (Dajing Fishing Port)
Directory of Respondents in the Second Public Participation Survey

SN	Name	Sex	Address	Occupation
1	Lin Jinxian	Male	Dajing Village, Changchun Town	Fisherman
2	Chen Fangjie	Male	Dajing Village, Changchun Town	Fisherman
3	Huang Zuoying	Male	Dajing Village, Changchun Town	Fisherman
4	Liu Qingtuan	Male	Dajing Village, Changchun Town	Fisherman
5	Liu Jiazhang	Male	Dajing Village, Changchun Town	Fisherman
6	Zhang Qiuwei	Male	Dajing Village, Changchun Town	Fisherman
7	Huang Zuozhou	Male	Dajing Village, Changchun Town	Fisherman
8	Liu Zhuangjing	Male	Dajing Village, Changchun Town	Fisherman
9	Zhuo Lihua	Male	Dajing Village, Changchun Town	Fisherman

世行贷款福建渔港示范项目（三沙中心渔港二期工程）概况

项目名称	世行贷款福建渔港示范项目（三沙中心渔港二期工程）
位置	
项目简介	本项目是在三沙渔港一期工程（已建 3000 吨级码头、400HP 码头）的基础上进行扩建，二期工程包括新建东侧防波堤 500m 长、西侧防波堤 420m 长、600HP 码头岸线 300m 长、高桩栈桥 100m 长，形成 70 万平方米的避风水域。
施工期主要环境影响	(1) 石料抛填过程造成悬浮物入海，造成工程区附近的海水中悬浮物增加，对海水水质、沉积物环境和海洋生态环境造成影响； (2) 工程占用潮间带，导致潮间带底栖生物永久损失； (3) 施工过程扬尘对周边敏感目标的影响。 (4) 运输车辆噪声对周边敏感目标的影响。
运营期主要环境影响	(1)为渔船和渔民提供安全的避风港，保护生命、财产安全，起到防灾减灾的目的，且能提高渔民收入。 (2)各种渔业船舶发生交通事故时，船舶燃料油入海的风险影响。 (3)渔船的废水和船舶垃圾未能收集并得到有效处置，将对海域造成污染。

世行贷款福建渔港示范项目（三沙中心渔港二期工程）
环评信息公示阶段（第一次）公众参与调查表

姓名	吴新国	性别	男	文化程度	初中	职业	渔民
年龄	□18~30 □30~45 □45~50 □50以上			联系电话	13706023823		
住址或单位	三沙镇 西五环村					是否直接利益关系	①是 ②否

一、请您在下列征询意见项目中以√方式选择、发表意见

1、本项目建设信息，您从以下哪方面得到的？

□报纸新闻 ☑有关会议 ☑建设单位 □公众议论 □网络新闻 □其它 □没有听说

2、您认为拟建项目（防波堤、石料场、运输路线）周边需要特别关注的环境保护对象是什么？

□海上水产养殖 □围垦养殖 ☑居民住宅 □风水林、名木古树 □寺庙或神龛 □坟墓

3、您认为拟建渔港防波堤地理位置是否合理，能否起到保护船舶和人员安全的作用？

☑位置合理 □位置不合理(请解释理由：_____，请提出进一步优化的建议：_____)

☑能起到保护作用 □不能起到保护作用(请解释理由：_____，请提出进一步优化的建议：_____)

4、您认为拟建渔港防波堤布局是否合理，能否起到保护船舶和人员安全的作用？

☑布局合理 □布局不合理(请解释理由：_____，请提出进一步优化的建议：_____)

☑能起到保护作用 □不能起到保护作用(请解释理由：_____，请提出进一步优化的建议：_____)

5、您认为本工程建设对当地经济建设和社会发展是否有利？

☑很有利 ☑有利 □一般 □不利 □不表态

6、您认为本工程建设施工期间可能带来哪些环境问题？(可多选)

□石料抛填扬尘污染 □海洋环境影响 □生态环境影响 □养殖影响 □石料场植被破坏
□施工噪声 ☑船舶垃圾 □其它(　　)

7、您认为本工程建成后，运营期间可能带来哪些影响？(可多选)

(1)不利影响：□生态破坏 ☑海水污染 □船舶事故影响 □其它(　　)

(2)有利影响：☑保护财产安全 ☑促进经济发展 □其它(　　)

8、您对该项目产生影响的基本态度是：

☑接受 □基本接受 □不能接受(理由：_____)

9、如果您的利益受到影响，对业主单位有何要求？

□采取环保措施 □工程代替措施 ☑按国家规定补偿
□不表态 □其它(　　)

10、您对该项目的基本态度是：

☑赞成 □基本赞成 □不赞成(理由：_____)

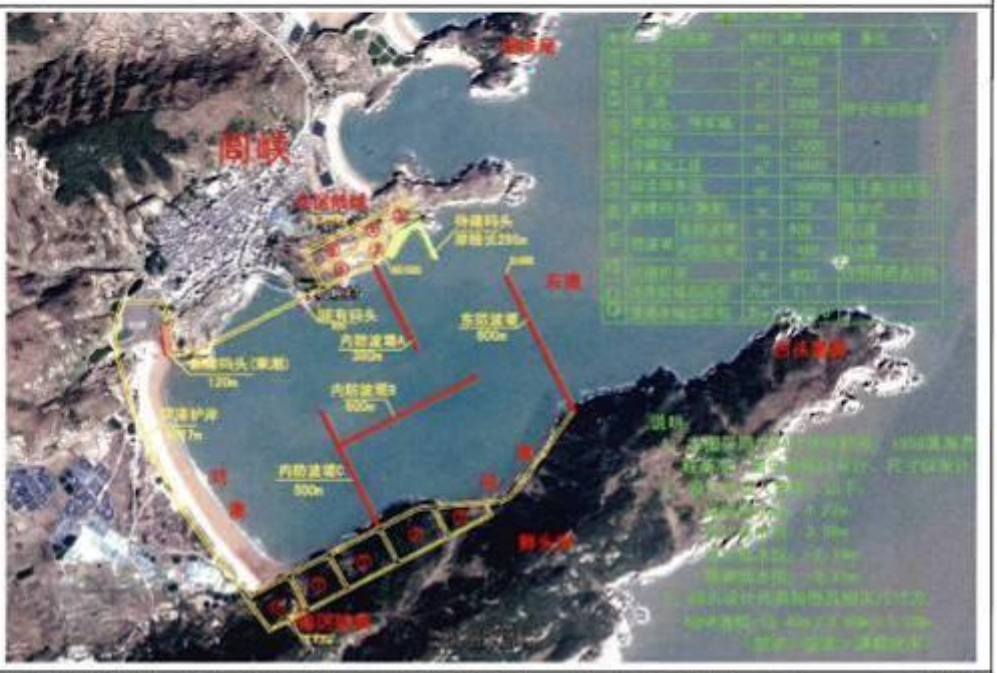
注：不赞成者请说明理由，否则本调查表视为无效。

二、请您对该项目建设内容方面提出书面意见和建议。

三、请您对该项目环境保护工作方面提出书面意见和建议。

调查人：　　填表日期：　　年　　月　　日

世行贷款福建渔港示范项目（闾峡一级渔港）概况

项目名称	世行贷款福建渔港示范项目（闾峡一级渔港）
位置	
项目简介	本项目建设内容为建设 4 道防波堤，其中东堤长 600m，口门宽 258m、A 防波堤长 380m、B 防波堤长 600m、C 防波堤长 500m，形成有效避风水域面积约 120 万平方米。港区近岸新建长 4027m 的环港护岸，护岸内侧设有宽度 12m 的道路。在港区口门附近新建顺岸式码头 120m，设 7 个 40HP 的渔船泊位。
施工期主要环境影响	(1) 石料抛填过程造成悬浮物入海，造成工程区附近的海水中悬浮物增加，对海水水质、沉积物环境和海洋生态环境造成影响； (2) 工程占用潮间带，导致潮间带底栖生物永久损失； (3) 施工过程扬尘对周边敏感目标的影响。 (4) 运输车辆噪声对周边敏感目标的影响。
运营期主要环境影响	(1)为渔船和渔民提供安全的避风港，保护生命、财产安全，起到防灾减灾的目的，且能提高渔民收入。 (2)各种渔业船舶发生交通事故时，船舶燃料油入海的风险影响。 (3)渔船的废水和船舶垃圾未能收集并得到有效处置，将对海域造成污染。

世行贷款福建渔港示范项目（闾峡一级渔港）
环评信息公示阶段（第一次）公众参与调查表

姓名	朱川鑫	性别	男	文化程度	初中	职业	渔民
年龄	□18~30 ☑30~45 □45~50 □50以上				联系电话	18059435601	
住址或单位	霞浦县长春镇为性村小西街3-乔七号				是否直接利益关系	①是	②否

一、请您在下列征询意见项目中以√方式选择、发表意见

1、本项目建设信息，您从以下哪方面得到的？

□报纸新闻 ☑有关会议 □建设单位 □公众议论 □网络新闻 □其它 □没有听说

2、您认为拟建项目（防波堤、石料场、运输路线）周边需要特别关注的环境保护对象是什么？

□海上水产养殖 □围垦养殖 □居民住宅 □风水林、名木古树 □寺庙或神龛 □坟墓 ☑沙滩

3、您认为拟建渔港防波堤地理位置是否合理，能否起到保护船舶和人员安全的作用？

☑位置合理 □位置不合理（请解释理由：_____，请提出进一步优化的建议：_____）

☑能起到保护作用 □不能起到保护作用（请解释理由：_____，请提出进一步优化的建议：_____）

4、您认为拟建渔港防波堤布局是否合理，能否起到保护船舶和人员安全的作用？

☑布局合理 □布局不合理（请解释理由：_____，请提出进一步优化的建议：_____）

☑能起到保护作用 □不能起到保护作用（请解释理由：_____，请提出进一步优化的建议：_____）

5、您认为本工程建设对当地经济建设和社会发展是否有利？

☑很有利 □有利 □一般 □不利 □不表态

6、您认为本工程建设施工期间可能带来哪些环境问题？（可多选）

☑石料抛填扬尘污染 □海洋环境影响 □生态环境影响 □养殖影响 □石料场植被破坏
□施工噪声 □船舶垃圾 □其它（ ）

7、您认为本工程建成后，运营期间可能带来哪些影响？（可多选）

（1）不利影响：□生态破坏 □海水污染 □船舶事故影响 □其它（ ）

（2）有利影响：☑保护财产安全 ☑促进经济发展 □其它（ ）

8、您对该项目产生影响的基本态度是：

☑接受 □基本接受 □不能接受（理由：_____）

9、如果您的利益受到影响，对业主单位有何要求？

□采取环保措施 □工程代替措施 ☑按国家规定补偿
□不表态 □其它（ ）

10、您对该项目的基本态度是：

☑赞成 □基本赞成 □不赞成（理由：_____）

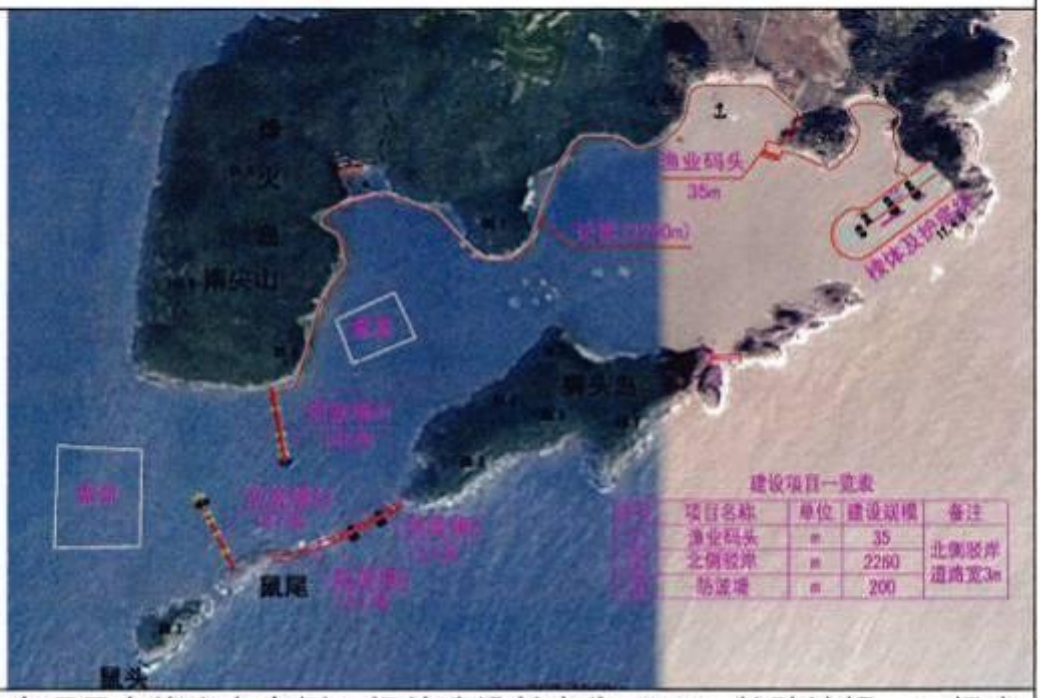
注：不赞成者请说明理由，否则本调查表视为无效。

二、请您对该项目建设内容方面提出书面意见和建议。

三、请您对该项目环境保护工作方面提出书面意见和建议。

调查人： 填表日期： 年 月 日

世行贷款福建渔港示范项目（烽火二级渔港）概况

项目名称	世行贷款福建渔港示范项目（烽火二级渔港）
位置	
项目简介	本项目在烽火岛东侧口门处建设长度为 200m 的防波堤，口门宽度为 40m 供小船进出，在北岸中段孤山西侧利用岸边礁石建设一座顺岸式简易码头，长度为 35m，同时北岸建设环港护岸 2260m，护岸宽 3m。
施工期主要环境影响	(1) 石料抛填过程造成悬浮物入海，造成工程区附近的海水中悬浮物增加，对海水水质、沉积物环境和海洋生态环境造成影响； (2) 工程占用潮间带，导致潮间带底栖生物永久损失； (3) 施工过程扬尘对周边敏感目标的影响。 (4) 运输车辆噪声对周边敏感目标的影响。
运营期主要环境影响	(1)为渔船和渔民提供安全的避风港，保护生命、财产安全，起到防灾减灾的目的，且能提高渔民收入。 (2)各种渔业船舶发生交通事故时，船舶燃料油入海的风险影响。 (3)渔船的废水和船舶垃圾未能收集并得到有效处置，将对海域造成污染。

世行贷款福建渔港示范项目（烽火二级渔港）
环评信息公示阶段（第一次）公众参与调查表

姓名	刘荣生	性别	男	文化程度	高中	职业	务农
年龄	□18~30 ☑30~45 □45~50 □50以上			联系电话	15859328467		
住址或单位	三沙镇烽火村					是否直接利益关系	①是 ②否

一、请您在下列征询意见项目中以√方式选择、发表意见

1、本项目建设信息，您从以下哪方面得到的？
☑报纸新闻 □有关会议 □建设单位 □公众议论 □网络新闻 □其它 □没有听说

2、您认为拟建项目（防波堤、石料场、运输路线）周边需要特别关注的环境保护对象是什么？
☑海上水产养殖 □围垦养殖 ☑居民住宅 □风水林、名木古树 □寺庙或神龛 □坟墓

3、您认为拟建渔港防波堤地理位置是否合理，能否起到保护船舶和人员安全的作用？
☑位置合理 □位置不合理（请解释理由：_____，请提出进一步优化的建议：_____）
☑能起到保护作用 □不能起到保护作用（请解释理由：_____，请提出进一步优化的建议：_____）

4、您认为拟建渔港防波堤布局是否合理，能否起到保护船舶和人员安全的作用？
☑布局合理 □布局不合理（请解释理由：_____，请提出进一步优化的建议：_____）
☑能起到保护作用 □不能起到保护作用（请解释理由：_____，请提出进一步优化的建议：_____）

5、您认为本工程建设对当地经济建设和社会发展是否有利？
☑很有利 □有利 □一般 □不利 □不表态

6、您认为本工程建设施工期间可能带来哪些环境问题？（可多选）
□石料抛填扬尘污染 ☑海洋环境影响 □生态环境影响 ☑养殖影响 □石料场植被破坏
☑施工噪声 □船舶垃圾 □其它（ ）

7、您认为本工程建成后，运营期间可能带来哪些影响？（可多选）
（1）不利影响：□生态破坏 ☑海水污染 ☑船舶事故影响 □其它（ ）
（2）有利影响：□保护财产安全 ☑促进经济发展 □其它（ ）

8、您对该项目产生影响的基本态度是：
☑接受 □基本接受 □不能接受（理由：_____）

9、如果您的利益受到影响，对业主单位有何要求？
☑采取环保措施 □工程代替措施 □按国家规定补偿
□不表态 □其它（ ）

10、您对该项目的基本态度是：
☑赞成 □基本赞成 □不赞成（理由：_____）
注：不赞成者请说明理由，否则本调查表视为无效。

二、请您对该项目建设内容方面提出书面意见和建议。

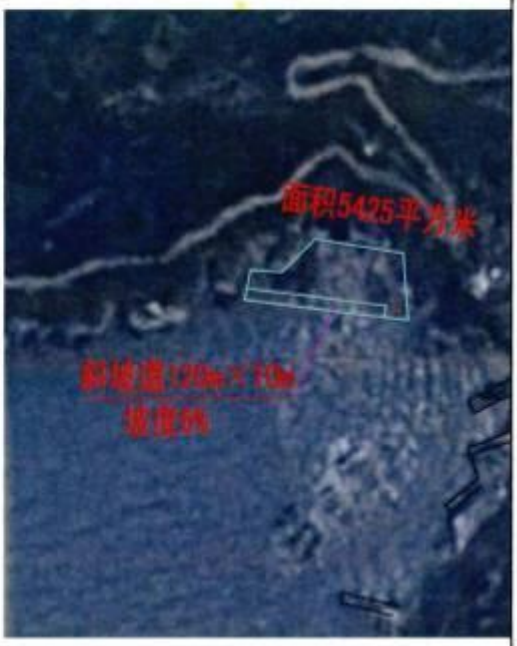
无

三、请您对该项目环境保护工作方面提出书面意见和建议。

无

调查人：刘荣生　　填表日期：2015年7月2日

世行贷款福建渔港示范项目（北霜二级渔港）概况

项目名称	世行贷款福建渔港示范项目（北霜二级渔港）	
位置		
方案	方案一（防波堤）	方案二（填海方案）
项目简介	本项目设计二种方案，方案一建设内容为防波堤 300m，口门朝西，防波堤建成后将形成约 4.8 万平方米避风水域面积。 方案二建设内容为后方填海 5425 平方米，设置斜坡道 120m，渔船通过斜坡道进入后方靠泊。	
施工期主要环境影响	(1) 石料抛填过程造成悬浮物入海，造成工程区附近的海水中悬浮物增加，对海水水质、沉积物环境和海洋生态环境造成影响； (2) 工程占用潮间带，导致潮间带底栖生物永久损失； (3) 施工过程扬尘对周边敏感目标的影响。 (4) 运输车辆噪声对周边敏感目标的影响。	
运营期主要环境影响	(1)为渔船和渔民提供安全的避风港，保护生命、财产安全，起到防灾减灾的目的，且能提高渔民收入。 (2)各种渔业船舶发生交通事故时，船舶燃料油入海的风险影响。 (3)渔船的废水和船舶垃圾未能收集并得到有效处置，将对海域造成污染。	

世行贷款福建渔港示范项目（北霞二级渔港）
环评信息公示阶段（第一次）公众参与调查表

姓名	陈文峰	性别	男	文化程度	职专	职业	渔民
年龄	□18~30 ☑30~45 □45~50 □50以上				联系电话	13505452591	
住址或单位	霞浦海岛北霞					是否直接利益关系	①是 ②否

一、请您在下列征询意见项目中以√方式选择，发表意见

1、本项目建设信息，您从以下哪方面得到的？

□报纸新闻 ☑有关会议 □建设单位 □公众议论 □网络新闻 □其它 □没有听说

2、您认为拟建项目（防波堤、石料场、运输路线）周边需要特别关注的环境保护对象是什么？

☑海上水产养殖 □围垦养殖 □居民住宅 □风水林、名木古树 □寺庙或神龛 □坟墓

3、您认为拟建渔港防波堤地理位置是否合理，能否起到保护船舶和人员安全的作用？

☑位置合理 □位置不合理（请解释理由：_____，请提出进一步优化的建议：_____）

□能起到保护作用 □不能起到保护作用（请解释理由：_____，请提出进一步优化的建议：_____）

4、您认为拟建哪种方案更为合理，更能否起到保护船舶和人员安全的作用？

☑方案一（建设防波堤） □方案二（后方填海）

5、您认为本工程建设对当地经济建设和社会发展是否有利？

☑很有利 □有利 □一般 □不利 □不表态

6、您认为本工程建设施工期间可能带来哪些环境问题？（可多选）

☑石料抛填扬尘污染 □海洋环境影响 □生态环境影响 □养殖影响 □石料场植被破坏
□施工噪声 □船舶垃圾 □其它（ ）

7、您认为本工程建成后，运营期间可能带来哪些影响？（可多选）

（1）不利影响：□生态破坏 □海水污染 □船舶事故影响 □其它（ ）

（2）有利影响：□保护财产安全 ☑促进经济发展 □其它（ ）

8、您对该项目产生影响的基本态度是：

☑接受 □基本接受 □不能接受（理由：_____）

9、如果您的利益受到影响，对业主单位有何要求？

□采取环保措施 □工程代替措施 ☑按国家规定补偿
□不表态 □其它（ ）

10、您对该项目的基本态度是：

☑赞成 □基本赞成 □不赞成（理由：_____）

注：不赞成者请说明理由，否则本调查表视为无效。

二、请您对该项目建设内容方面提出书面意见和建议。

三、请您对该项目环境保护工作方面提出书面意见和建议。

调查人： 填表日期： 年 月 日

世行贷款福建渔港示范项目（大京二级渔港）概况

项目名称	世行贷款福建渔港示范项目（大京二级渔港）
位置	
项目简介	本项目建设内容为拆除现有虾塘，新建护岸及护岸修整总长1000m，形成约港内水域面积 59290m^2 的避风水域。在东侧海域建设码头长 60m，宽 15m，引堤 75m，宽 8m。引堤后方道路新建及旧路拓宽总长 1290m，宽 8m。
施工期主要环境影响	(1) 石料抛填过程造成悬浮物入海，造成工程区附近的海水中悬浮物增加，对海水水质、沉积物环境和海洋生态环境造成影响； (2) 工程占用潮间带，导致潮间带底栖生物永久损失； (3) 施工过程扬尘对周边敏感目标的影响。 (4) 运输车辆噪声对周边敏感目标的影响。
运营期主要环境影响	(1)为渔船和渔民提供安全的避风港，保护生命、财产安全，起到防灾减灾的目的，且能提高渔民收入。 (2)各种渔业船舶发生交通事故时，船舶燃料油入海的风险影响。 (3)渔船的废水和船舶垃圾未能收集并得到有效处置，将对海域造成污染。

世行贷款福建渔港示范项目（大京二级渔港）
环评信息公示阶段（第一次）公众参与调查表

姓名	郑钦	性别	男	文化程度	初中	职业	渔民
年龄	□18-30 ☑30-45 □45-50 □50以上					联系电话	18596139[?]21
住址或单位	大京村					是否直接利益关系	①是 ②否

一、请您在下列征询意见项目中以√方式选择、发表意见

1、本项目建设信息，您从以下哪方面得到的？
□报纸新闻 □有关会议 □建设单位 ☑公众议论 □网络新闻 □其它 □没有听说

2、您认为拟建项目（防波堤、石料场、运输路线）周边需要特别关注的环境保护对象是什么？
□海上水产养殖 □围垦养殖 ☑居民住宅 □风水林、名木古树 □寺庙或神龛 □坟墓 □沙滩

3、您认为拟建渔港防波堤地理位置是否合理，能否起到保护船舶和人员安全的作用？
☑位置合理 □位置不合理（请解释理由：______，请提出进一步优化的建议：______）
☑能起到保护作用 □不能起到保护作用（请解释理由：______，请提出进一步优化的建议：______）

4、您认为拟建渔港防波堤布局是否合理，能否起到保护船舶和人员安全的作用？
☑布局合理 □布局不合理（请解释理由：______，请提出进一步优化的建议：______）
☑能起到保护作用 □不能起到保护作用（请解释理由：______，请提出进一步优化的建议：______）

5、您认为本工程建设对当地经济建设和社会发展是否有利？
☑很有利 □有利 □一般 □不利 □不表态

6、您认为本工程建设施工期间可能带来哪些环境问题？（可多选）
☑石料抛填扬尘污染 □海洋环境影响 □生态环境影响 □养殖影响 □石料场植被破坏
☑施工噪声 □船舶垃圾 □其它（ ）

7、您认为本工程建成后，运营期间可能带来哪些影响？（可多选）
(1) 不利影响：□生态破坏 ☑海水污染 □船舶事故影响 □其它（ ）
(2) 有利影响：☑保护财产安全 ☑促进经济发展 □其它（ ）

8、您对该项目产生影响的基本态度是：
☑接受 □基本接受 □不能接受（理由：______）

9、如果您的利益受到影响，对业主单位有何要求？
□采取环保措施 □工程代替措施 ☑按国家规定补偿
□不表态 □其它（ ）

10、您对该项目的基本态度是：
☑赞成 □基本赞成 □不赞成（理由：______）
注：不赞成者请说明理由，否则本调查表视为无效。

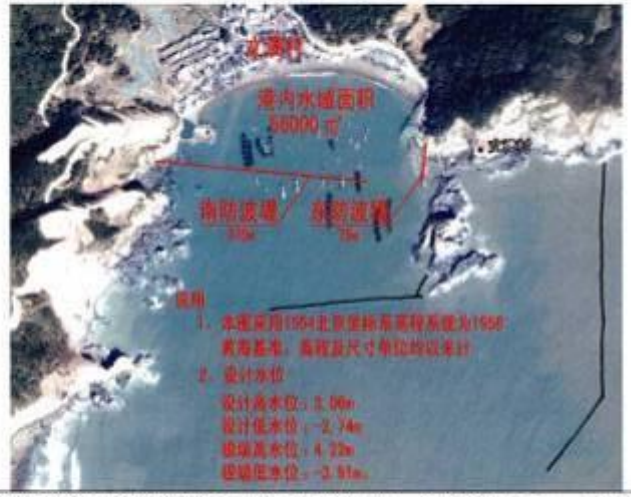
二、请您对该项目建设内容方面提出书面意见和建议。

[illegible handwriting] 加宽

三、请您对该项目环境保护工作方面提出书面意见和建议。

调查人：　　　　填表日期：2017年7月7日

世行贷款福建渔港示范项目（文澳二级渔港）概况

项目名称	世行贷款福建渔港示范项目（文澳二级渔港）
位置	
项目简介	本项目建设内容为新建南防波堤长 370m，东防波堤 75m。形成有效避风水域面积约 5.6 万平方米。
施工期主要环境影响	(1) 石料抛填过程造成悬浮物入海，造成工程区附近的海水中悬浮物增加，对海水水质、沉积物环境和海洋生态环境造成影响； (2) 工程占用潮间带，导致潮间带底栖生物永久损失，可能对龟足资源造成一定影响； (3) 施工过程扬尘对周边敏感目标的影响。 (4) 运输车辆噪声对周边敏感目标的影响。
运营期主要环境影响	(1)为渔船和渔民提供安全的避风港，保护生命、财产安全，起到防灾减灾的目的，且能提高渔民收入。 (2)各种渔业船舶发生交通事故时，船舶燃料油入海的风险影响。 (3)渔船的废水和船舶垃圾未能收集并得到有效处置，将对海域造成污染。

浮鹰岛遥感图

世行贷款福建渔港示范项目（文澳二级渔港）
环评信息公示阶段（第一次）公众参与调查表

姓名	陈宗养	性别	男	文化程度	中专	职业	乡村医生
年龄	□18~30 □30~45 □45~50 ☑50以上			联系电话	13635205400		
住址或单位	文澳村					是否直接利益关系	①是 ②否

一、请您在下列征询意见项目中以√方式选择、发表意见

1、本项目建设信息，您从以下哪方面得到的？
□报纸新闻 □有关会议 □建设单位 ☑公众议论 □网络新闻 □其它 □没有听说

2、您认为拟建项目（防波堤、石料场、运输路线）周边需要特别关注的环境保护对象是什么？
□海上水产养殖 □围垦养殖 ☑居民住宅 □风水林、名木古树 □寺庙或神龛 □龟足资源 ☑沙滩

3、您认为拟建渔港防波堤地理位置是否合理，能否起到保护船舶和人员安全的作用？
☑位置合理 □位置不合理（请解释理由：_____，请提出进一步优化的建议：_____）
☑能起到保护作用 □不能起到保护作用（请解释理由：_____，请提出进一步优化的建议：_____）

4、您认为拟建渔港防波堤布局是否合理，能否起到保护船舶和人员安全的作用？
□布局合理 ☑布局不合理（请解释理由：_____，请提出进一步优化的建议：改围东边）
□能起到保护作用 ☑不能起到保护作用（请解释理由：_____，请提出进一步优化的建议：不能抗台

5、您认为本工程建设对当地经济建设和社会发展是否有利？
☑很有利 □有利 □一般 □不利 □不表态

6、您认为本工程建设施工期间可能带来哪些环境问题？（可多选）
□石料抛填扬尘污染 □海洋环境影响 □生态环境影响 □养殖影响 □石料场植被破坏
□施工噪声 □船舶垃圾 □其它（利大于失。

7、您认为本工程建成后，运营期间可能带来哪些影响？（可多选）
（1）不利影响：□生态破坏 □海水污染 □船舶事故影响 □其它（ 无 ）
（2）有利影响：□保护财产安全 □促进经济发展 □其它（ 无 ）

8、您对该项目产生影响的基本态度是：
☑接受 □基本接受 □不能接受（理由：_____）

9、如果您的利益受到影响，对业主单位有何要求？
□采取环保措施 □工程代替措施 ☑按国家规定补偿
□不表态 □其它（ ）

10、您对该项目的基本态度是：
☑赞成 □基本赞成 □不赞成（理由：_____）
注：不赞成者请说明理由，否则本调查表视为无效。

二、请您对该项目建设内容方面提出书面意见和建议。改建东防波堤，能起到抗台的作用。

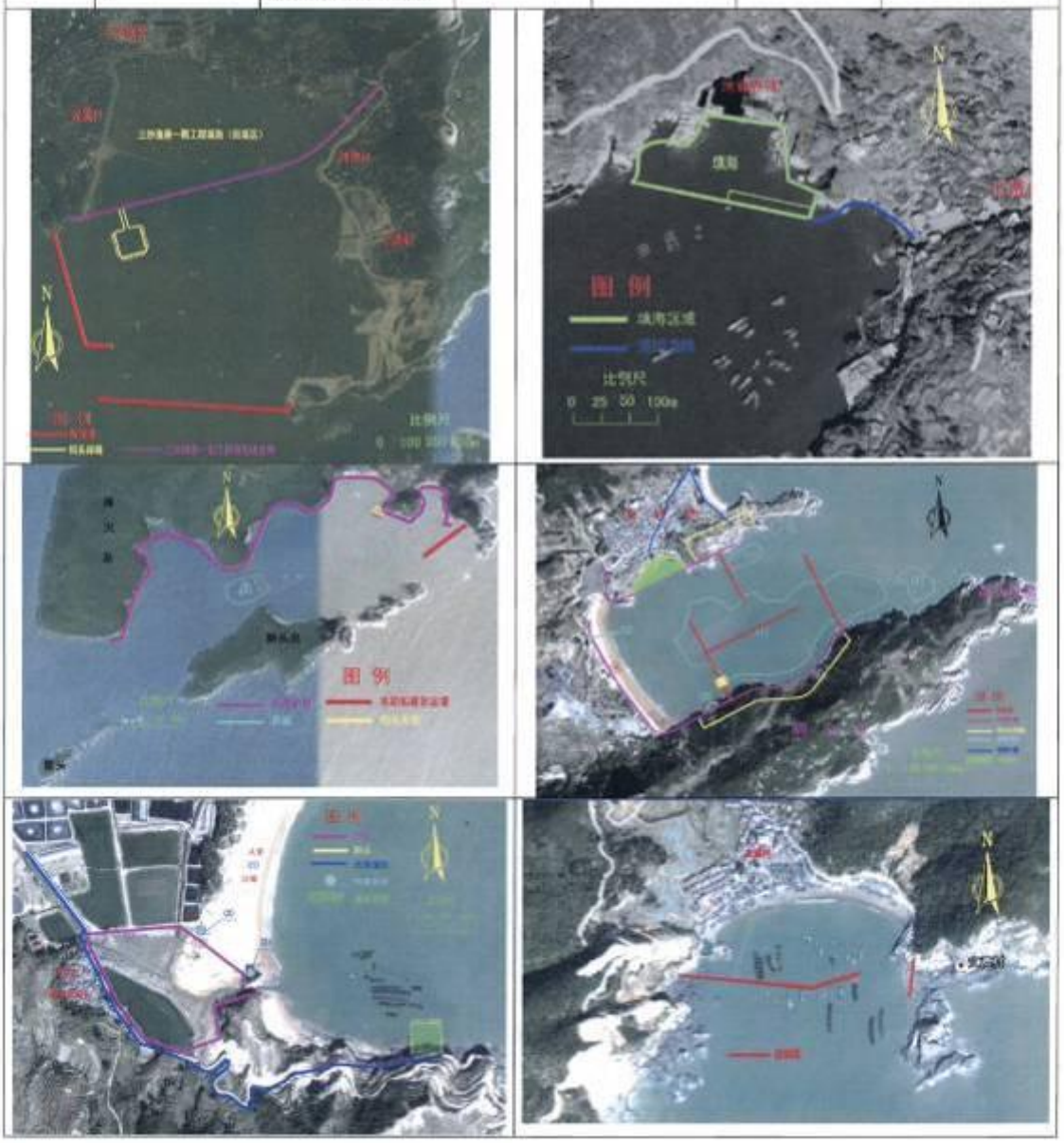
三、请您对该项目环境保护工作方面提出书面意见和建议 选福3、31后代，利大于失，能接受。

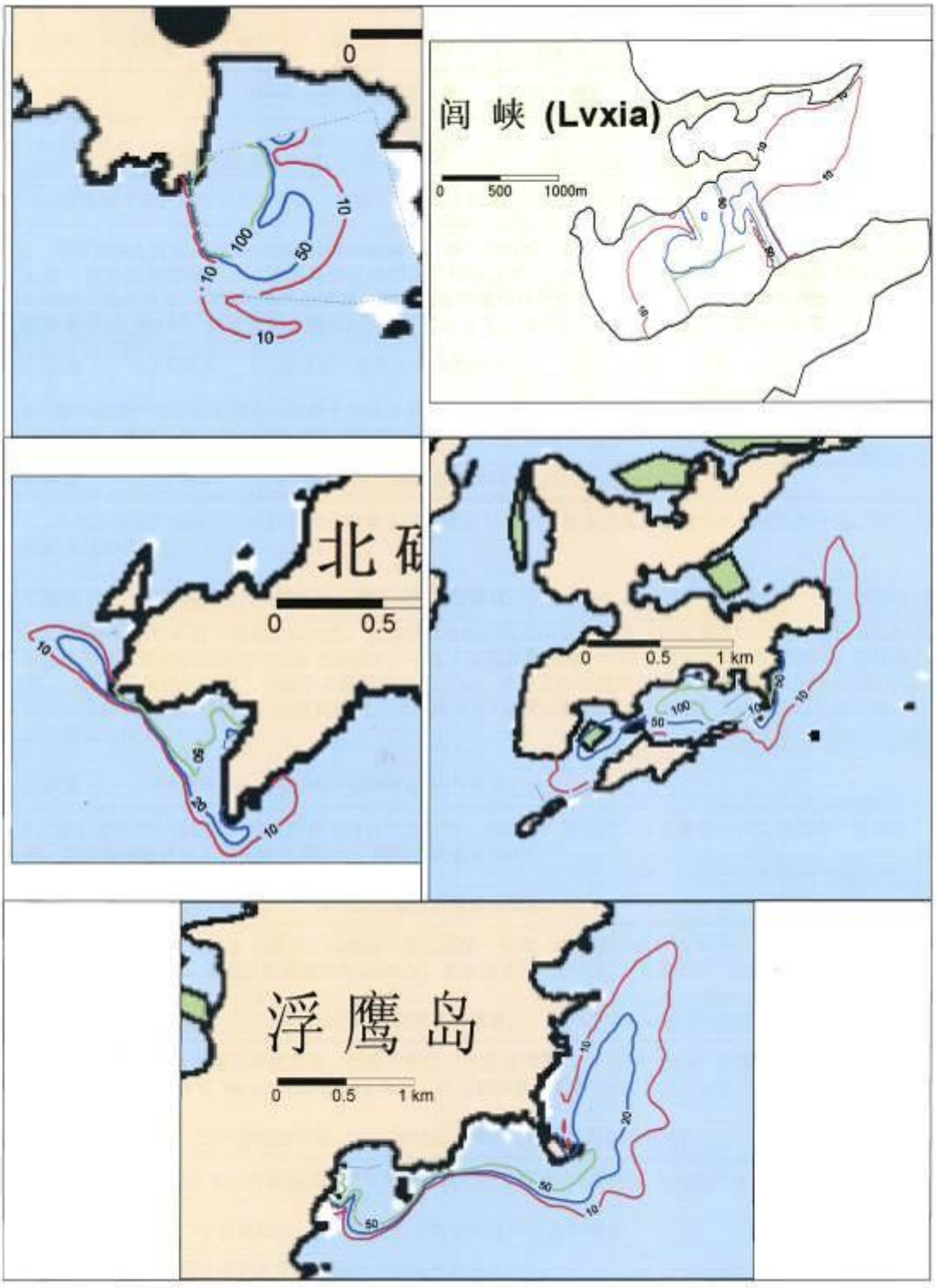
四、请根据您的经验，说明龟足的集中分布区域（在上图标出）、习性、觅食方式等信息。

调查人： 填表日期：2013年 7月 4日。

世行贷款中国福建渔港建设项目概况

项目名称 项目组成	三沙	闽峡	潭头	北礁	大京	文澳
级别	中心渔港	一级渔港	二级渔港	二级渔港	二级渔港	二级渔港
防波堤	南防波堤 750m、 西防波堤 545m	外防波堤 600m、 内防波堤 A-380m 内防波堤 B-680m 内防波堤 C-600m	200m	/	/	东防波堤 75m，南防波堤 370m
码头	总长 300m	2 座长 74m 的码头	长 35m	/	长 65m	/
栈桥	80m	/	/	/	/	/
护岸	/	护岸 1（1,186m），护岸 2（2,418m），	2,260m	90m	1,065m	/
陆地形成		陆域面积 18.7hm² 填海面积 3.3hm²	/	填海 8,200m²	填海 3,715m²	/
建筑物	管理用房及渔民避难所 2500m²	含管理用房、鼓励中心 2500m²	管理用房 500m²	管理用房 500m²	管理用房 500m²	/
疏港公路	利用现有疏港公路	护岸内侧设有宽 12m 的道路	护岸北侧道路宽 3m	利用现有疏港公路	港区道路长 285、宽 4m	利用现有疏港公路
施工工艺	防波堤基槽开挖后抛石	外堤和内堤 A 采用爆破挤淤，其它采用抛石挤淤	采用抛石挤淤	采用抛石挤淤	采用抛石挤淤	采用抛石挤淤





注：红色线条为施工期悬浮物超标范围、

世行贷款中国福建渔港建设项目环境影响报告书公示阶段（第二阶段）公众参与调查表

姓名	姜[illegible]	性别	男	文化程度	初中	职业	渔民
年龄	□18-30 □30-45 □45-50 ☑50以上			联系电话	[illegible]		
住址或单位	霞浦县海岛乡北霜村					是否直接利益关系	①是 ②否

一、请您在下列征询意见项目中以√方式选择、发表意见

1、拟建渔港工程共占用 38.2295 公顷的潮间带、潮下带海域，占霞浦县全部 696 平方公里潮间带的万分之五，其中文澳渔港所在“浮鹰岛海洋保护区”保护面积为 8702 公顷，文澳渔港占用保护区面积的 0.035%。由此可见，栖息地损失量很少，对当地生物多样性影响的不显著。拟建渔港共造成潮间带生物损失量为 15.904 吨。对于底栖生物永久损失，拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

☑满意 □不满意 请给出不满意的原由与建议：_____

2、数学模型已确认施工活动引起的水体混浊度上升限于施工区域（见附图），仅占整个霞浦东部海域的很小部分，这对于该区域海洋生物资源的影响是暂行性的，且影响范围很小。请问你的意见如何？

☑满意 □不满意 请给出不满意的原由与建议：_____

3、闾峡渔港水下爆破导致鱼虾等游泳动物总损失量为 16.19t。拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

☑满意 □不满意 请给出不满意的原由与建议：

4、浮鹰岛保护区不属于国家级保护区，其潮间带生物和龟足均未被列入《国家重点保护野生动物名录》和《世界自然保护联盟濒危动物红色名录》，不属于珍稀濒危物种，不属于需要特殊保护的物种。由此可见，“浮鹰岛海洋保护区”不属于关键的自然栖息地。渔港工程的建设导致龟足生境长度缩小占保护区岸线长度的比例为万分之七，由此造成的经济损失仅为160元。拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

☑满意 □不满意 请给出不满意的原由与建议：

5、施工过程产生的扬尘、施工噪声等将对三沙镇区、北霜村、闾峡村、大京港里村和文澳造成一定的影响，这些影响随着施工结束而结束影响。请问你的意见如何？

☑可接受 □不可接受 请给出不接受的原由与建议：

6、三沙渔港扩建工程污水拟进入三沙渔港一期工程统一处理，增加处理能力为 300t/d。闾峡渔港北片区处理能力为 550t/a，南片区处理能力为 250t/d。大京渔港污水处理能力为 60t/d，请问你的意见如何？

☑满意 □不满意 请给出不满意的原由与建议：

7、三沙渔港、烽火渔港、闾峡渔港、北霜渔港口门处流速增量在 0.05-0.2m/s，文澳渔港和大京渔港口门处流速增量在 0.3-0.4m/s。从安全行船角度，请问你的意见如何？

☑能安全行船 □不能安全行船 请给出不能安全行船的原由与建议：

8、综合渔港提供 178.315 万平方米的避风港池面积和短期环境不利影响，请问您的意见如何？

☑同意建设 □不同意建设 请给出不同意建设的原由与建议：

三、请您对该项目环境保护工作方面提出书面意见和建议。

调查人： 填表日期：2015 年 10 月 5 日

世行贷款中国福建渔港建设项目环境影响报告书公示阶段（第二阶段）公众参与调查表

姓名	草丽琴	性别	女	文化程度	高中	职业	渔民
年龄	□18-30 □30-45 □45-50 ☑50以上			联系电话	15860780[illegible]		
住址或单位	大金村					是否直接利益关系	①是 ②否

一、请您在下列征询意见项目中以√方式选择、发表意见

1、拟建渔港工程共占用 38.2295 公顷的潮间带、潮下带海域，占霞浦县全部 696 平方公里潮间带的万分之五，其中文澳渔港所在“浮鹰岛海洋保护区”保护面积为 8702 公顷，文澳渔港占用保护区面积的 0.035%。由此可见，栖息地损失量很少，对当地生物多样性影响的不显著。拟建渔港共造成潮间带生物损失量为 15.904 吨。对于底栖生物永久损失，拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

☑满意 □不满意 请给出不满意的原由与建议：_____

2、数学模型已确认施工活动引起的水体混浊度上升限于施工区域（见附图），仅占整个霞浦东部海域的很小部分，这对于该区域海洋生物资源的影响是暂行性的，且影响范围很小。请问你的意见如何？

☑满意 □不满意 请给出不满意的原由与建议：_____

3、闾峡渔港水下爆破导致鱼虾等游泳动物总损失量为 16.19t，拟通过人工渔礁方式进行生态补偿，请问你的意见如何？

☑满意 □不满意 请给出不满意的原由与建议：

4、浮鹰岛保护区不属于国家级保护区，其潮间带生物和龟足均未被列入《国家重点保护野生动物名录》和《世界自然保护联盟濒危动物红色名录》，不属于珍稀濒危物种，不属于需要特殊保护的物种。由此可见，“浮鹰岛海洋保护区”不属于关键的自然栖息地。渔港工程的建设导致龟足生境长度缩小占保护区岸线长度的比例为万分之七，由此造成的经济损失仅为160元。拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

☑满意 □不满意 请给出不满意的原由与建议：

5、施工过程产生的扬尘、施工噪声等将对三沙镇区、北霜村、闾峡村、大京港里村和文澳造成一定的影响，这些影响随着施工结束而结束影响。请问你的意见如何？

☑可接受 □不可接受 请给出不接受的原由与建议：

6、三沙渔港扩建工程污水拟进入三沙渔港一期工程统一处理，增加处理能力为 300t/d。闾峡渔港北片区处理能力为 550t/a，南片区处理能力为 250t/d。大京渔港污水处理能力为 60t/d。请问你的意见如何？

☑满意 □不满意 请给出不满意的原由与建议：

7、三沙渔港、烽火渔港、闾峡渔港、北霜渔港口门处流速增量在 0.05-0.2m/s，文澳渔港和大京渔港口门处流速增量在 0.3-0.4m/s。从安全行船角度，请问你的意见如何？

☑能安全行船 □不能安全行船 请给出不能安全行船的原由与建议：

8、综合渔港提供 178.315 万平方米的避风港池面积和短期环境不利影响，请问您的意见如何？

☑同意建设 □不同意建设 请给出不同意建设的原由与建议：

三、请您对该项目环境保护工作方面提出书面意见和建议。

为保护渔民的财产和生命的安全，建议加强。

调查人： 填表日期： 年 月 日

世行贷款中国福建渔港建设项目环境影响报告书公示阶段（第二阶段）公众参与调查表

姓名	康友金	性别	男	文化程度	中专	职业	渔民
年龄	□18-30 □30-45 □45-50 ☑50以上			联系电话	18060449785		
住址或单位	霞浦县三沙镇五沃村委					是否直接利益关系	☑①是 ②否

一、请您在下列征询意见项目中以√方式选择、发表意见

1、拟建渔港工程共占用 38.2295 公顷的潮间带、潮下带海域，占霞浦县全部 696 平方公里潮间带的万分之五，其中文澳渔港所在“浮鹰岛海洋保护区”保护面积为 8702 公顷，文澳渔港占用保护区面积的 0.035%。由此可见，栖息地损失量很少，对当地生物多样性影响的不显著。拟建渔港共造成潮间带生物损失量为 15.904 吨。对于底栖生物永久损失，拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

☑满意 □不满意 请给出不满意的原由与建议：_____

2、数学模型已确认施工活动引起的水体混浊度上升限于施工区域（见附图），仅占整个霞浦东部海域的很小部分，这对于该区域海洋生物资源的影响是暂行性的，且影响范围很小。请问你的意见如何？

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3、闾峡渔港水下爆破导致鱼虾等游泳动物总损失量为 16.19t。拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

☑满意 □不满意 请给出不满意的原由与建议：

4、浮鹰岛保护区不属于国家级保护区，其潮间带生物和龟足均未被列入《国家重点保护野生动物名录》和《世界自然保护联盟濒危动物红色名录》，不属于珍稀濒危物种，不属于需要特殊保护的物种。由此可见，“浮鹰岛海洋保护区”不属于关键的自然栖息地。渔港工程的建设导致龟足生境长度缩小占保护区岸线长度的比例为万分之七，由此造成的经济损失仅为160元。拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

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调查人： 填表日期： 年 月 日

世行贷款中国福建渔港建设项目环境影响报告书公示阶段（第二阶段）公众参与调查表

姓名	刘[illegible]	性别	男	文化程度	初中	职业	渔民
年龄	□18-30 □30-45 □45-50 ☑50以上				联系电话	13[illegible]3783763	
住址或单位	沙埕镇大[illegible]村					是否直接利益关系	①是✓ ②否

一、请您在下列征询意见项目中以✓方式选择、发表意见

1、拟建渔港工程共占用38.2295公顷的潮间带、潮下带海域，占霞浦县全部696平方公里潮间带的万分之五，其中文澳渔港所在"浮鹰岛海洋保护区"保护面积为8702公顷，文澳渔港占用保护区面积的0.035%。由此可见，栖息地损失量很少，对当地生物多样性影响的不显著。拟建渔港共造成潮间带生物损失量为15.904吨。对于底栖生物永久损失，拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

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2、数学模型已确认施工活动引起的水体混浊度上升限于施工区域（见附图），仅占整个霞浦东部海域的很小部分，这对于该区域海洋生物资源的影响是暂行性的，且影响范围很小。请问你的意见如何？

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☑满意 □不满意 请给出不满意的原由与建议：

4、浮鹰岛保护区不属于国家级保护区，其潮间带生物和龟足均未被列入《国家重点保护野生动物名录》和《世界自然保护联盟濒危动物红色名录》，不属于珍稀濒危物种，不属于需要特殊保护的物种。由此可见，"浮鹰岛海洋保护区"不属于关键的自然栖息地。渔港工程的建设导致龟足生境长度缩小占保护区岸线长度的比例为万分之七，由此造成的经济损失仅为160元。拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

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8、综合渔港提供178.315万平方米的避风港池面积和短期环境不利影响，请问您的意见如何？

☑同意建设 □不同意建设 请给出不同意建设的原由与建议：

三、请您对该项目环境保护工作方面提出书面意见和建议。

调查人： 填表日期：2013年10月5日

世行贷款中国福建渔港建设项目环境影响报告书公示阶段（第二阶段）公众参与调查表

姓名	林国兵	性别	男	文化程度	初中	职业	渔民
年龄	□18-30 □30-45 □45-50 ☑60以上			联系电话	15159329060		
住址或单位	霞浦县溪南镇文澳村					是否直接利益关系	①是 ②否

一、请您在下列征询意见项目中以√方式选择、发表意见

1、拟建渔港工程共占用 38.2295 公顷的潮间带、潮下带海域，占霞浦县全部 696 平方公里潮间带的万分之五，其中文澳渔港所在“浮鹰岛海洋保护区”保护面积为 8702 公顷，文澳渔港占用保护区面积的 0.035%。由此可见，栖息地损失量很少，对当地生物多样性影响的不显著。拟建渔港共造成潮间带生物损失量为 15.904 吨。对于底栖生物永久损失，拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

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2、数学模型已确认施工活动引起的水体混浊度上升限于施工区域（见附图），仅占整个霞浦东部海域的很小部分，这对于该区域海洋生物资源的影响是暂行性的，且影响范围很小。请问你的意见如何？

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3、闾峡渔港水下爆破导致鱼虾等游泳动物总损失量为 16.19t。拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

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4、浮鹰岛保护区不属于国家级保护区，其潮间带生物和龟足均未被列入《国家重点保护野生动物名录》和《世界自然保护联盟濒危动物红色名录》，不属于珍稀濒危物种，不属于需要特殊保护的物种。由此可见，“浮鹰岛海洋保护区”不属于关键的自然栖息地。渔港工程的建设导致龟足生境长度缩小占保护区岸线长度的比例为万分之七，由此造成的经济损失仅为160元。拟通过人工渔礁方式进行生态补偿。请问你的意见如何？

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8、综合渔港提供 178.315 万平方米的避风港池面积和短期环境不利影响，请问您的意见如何？

☑同意建设 □不同意建设 请给出不同意建设的原由与建议：

三、请您对该项目环境保护工作方面提出书面意见和建议。

调查人： 填表日期：2013 年 10 月 5 日

世行贷款中国福建渔港建设项目环境影响报告书公示阶段（第二阶段）公众参与调查表

姓名	郑瑞	性别	男	文化程度	初中	职业	渔民
年龄	□18~30 ☑30~45 □45~50 □50以上				联系电话	18054855156	
住址或单位	霞浦县长春镇牙峡村				是否直接利益关系	①是	②否

一、请您在下列征询意见项目中以√方式选择、发表意见

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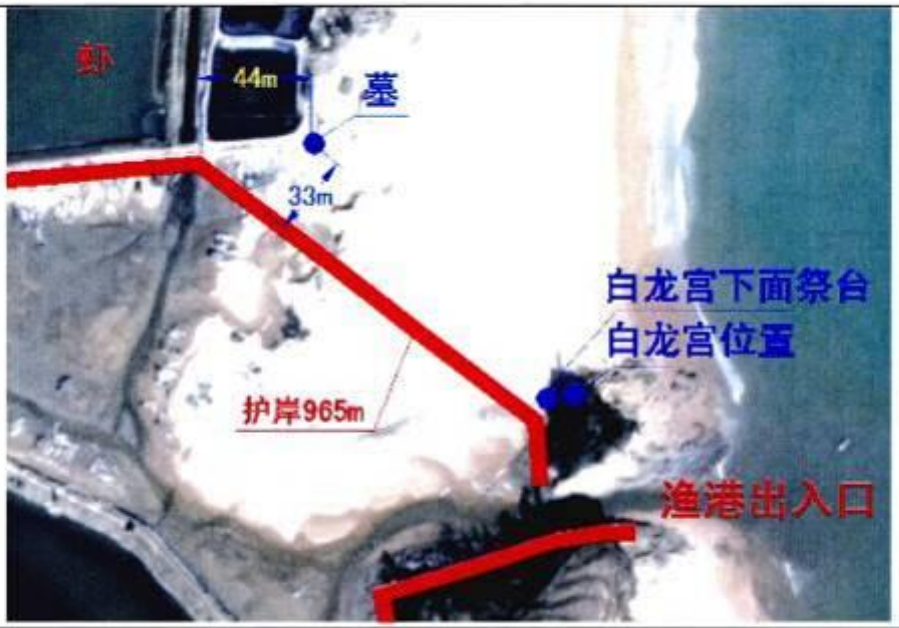
调查人： 填表日期：2015 年 10 月 6 日

世行贷款中国福建渔港建设项目（大京二级渔港）概况

位置	
项目简介	本项目建设内容为拆除现有虾塘，新建护岸及护岸修整总长1000m，形成约港内水域面积 59290m2 的避风水域。在东侧海域建设码头长 60m。
主要环境影响	■墓：防波堤距墓地仍有一定距离（最近距离 33m），大京渔港防波堤施工过程无爆破挤淤等产生振动影响的施工过程，因此，防波堤施工不会对墓地造成破坏。 ■白龙宫：神龛高程为 17m，防波堤高程为 5，神龛高于防波堤 12m。从平面布局来看，项目占地未涉及白龙宫所在山包，大京渔港防波堤施工过程主要是防波堤基槽开挖后堆砌块石，无爆破挤淤等产生振动影响的施工过程，因此，防波堤施工不会对山包造成破坏。
拟采取措施	大京渔港项目在施工期间，应注意对其避让和保护，不得对墓和白龙宫所在山坡及其山间进行砍挖；同时可在两处物资文化资源周边树立警示标志，注明禁止涂鸦、踩踏等破坏行为的内容。此外，要对施工工人和渔民提供物质资源文化方面的教育和培训，并将“尊重当地传统文化、风速习惯与传统活动”列入行为准则。

世行贷款中国福建渔港建设项目（大京二级渔港）
环评报告书公示阶段（第二次）公众参与调查表

姓名		性别		文化程度		职业	
年龄	□18~30 □30~45 □45~50 □50以上			联系电话			
住址或单位						是否直接利益关系	①是 ②否

一、请您在下列征询意见项目中以√**方式**选择、发表意见

1、大京渔港建设不会对墓造成影响，请问你的意见如何？

□可接受　　□不可接受　　请给出不接受的原由与建议：

2、大京渔港建设不会对白龙宫造成影响，请问你的意见如何？

□可接受　　□不可接受　　请给出不接受的原由与建议：

二、请您对该项目环境保护工作方面提出书面意见和建议。

调查人：　　填表日期：　　年　　月　　日

世行贷款中国福建渔港建设项目（大京二级渔港）
环评报告书公示阶段（第二次）公众参与调查表

姓名	卓[illegible]	性别	男	文化程度	高中	职业	渔民
年龄	□18~30 □30~45 □45~50 ☑50以上					联系电话	15860678054
住址或单位	大京村					是否直接利益关系	✓①是 ②否

一、请您在下列征询意见项目中以√**方式**选择、发表意见

1、大京渔港建设不会对墓造成影响，请问你的意见如何？

✓□可接受　　□不可接受　　**请给出不接受的原由与建议：**

2、大京渔港建设不会对白龙宫造成影响，请问你的意见如何？

✓□可接受　　□不可接受　　**请给出不接受的原由与建议：**

二、请您对该项目环境保护工作方面提出书面意见和建议。

支持护渔民的财产和生命的安全，保护好环境。

调查人：　　填表日期：　　年　　月　　日