

Jeju Civilian-Military Complex Port and Environmental Conservation



The Port Status

What is Jeju Civil–Military Complex Port?

A project to install **civil–military complex port** on south of Jeju to hold **navy ships & civilian cruises** through 2006~2015



- **Gross Area: 490,000 m² (5,274,316 sf₂)**
 - Acquisition 290,000 m²
 - reclaimed 200,000 m²
- **Port Construction**
 - Navy port: 2,400m
 - Cruise port: 2,500m
(holds 2 150,000GT cruise ships)
- **Water front Construction:**
 - command/administrative / maintenance facilities, ETC
- **Access Road to Cruise: 2.5km**
- **Cruise Facilities: 50,000 m²**

What is the present state?

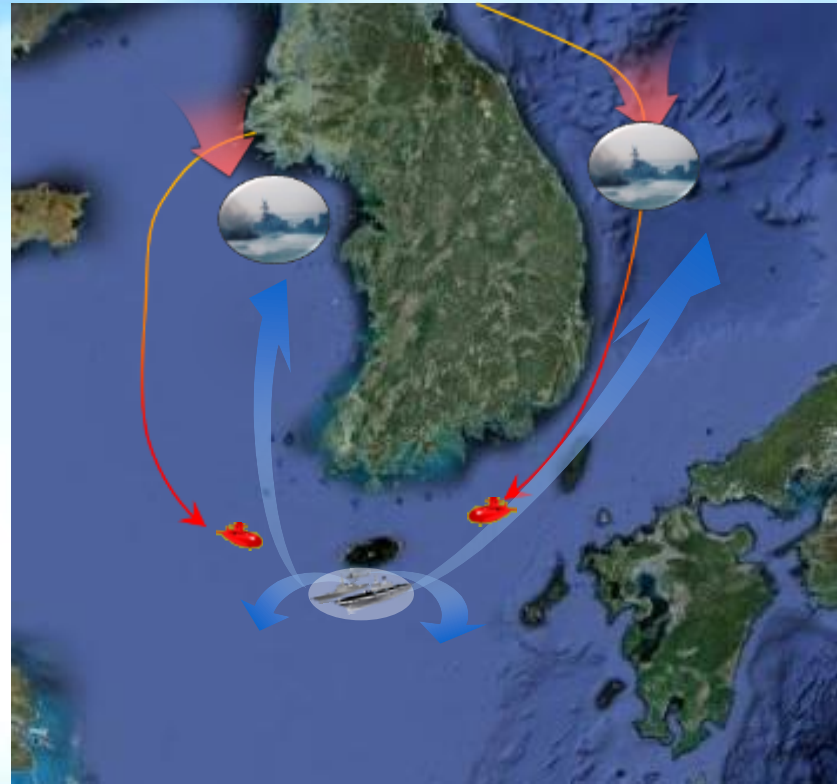
- **Goal: Making an Eco-Friendly civil-military complex port**
- **Budget executed: 22% (Aug. 2012)**
 - * Acquisition of land & compensation for fisheries completed(2010)
- **Port Construction process rate : 19% (Aug. 2012)**
 - * Port structure/protection blocs manufactured/installed,
dredging, site preparation on-going
- **Water-front Construction: Basic planning started (May 2012)**

Carry Out the Plan to Complete the Project by 2015

2-1. Why Jeju?

Military Function

- **Need for a home port to hold middle/large-sized naval vessels**
- **East - West Sea assets easily dispersed & stationed**
- **Peace time: SLOC easily protected, Operation easily carried out**
eg) Chunghae Unit, Multinational Operations (humanitarian)
- **Wartime: easily reinforced, Supplies protected**

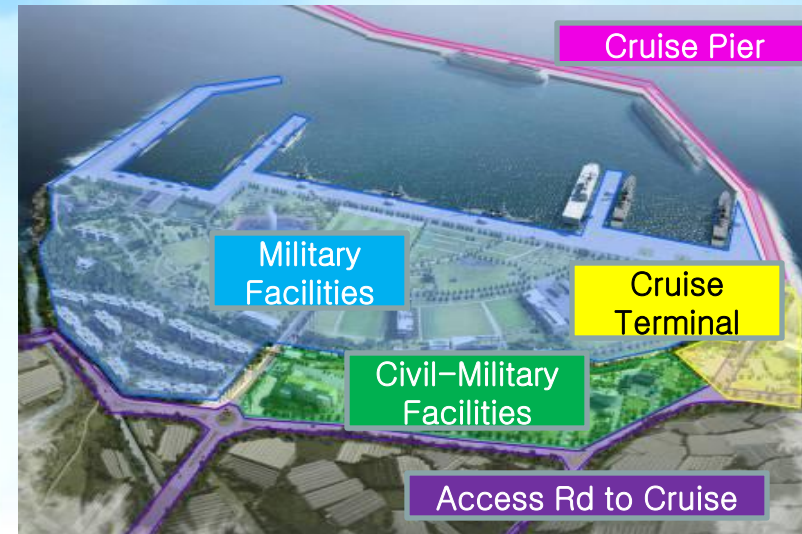


Guarantees Flexibility & Mobility Geographically & Strategically

2-2. Why Jeju?

Civilian Function

- **Reflected local opinion of Jeju**
 - National plan/will to settle the controversy
- **Contributes to Jeju tourism industry**
 - No port for 100,000GT+ cruise ships
 - Maximize utilizing nature of Jeju into tourism
- **A port that coexists with locals**
 - Maximize local development support from the central government



Synergy Effect of Development of Jeju & Civil-Military Port

Overall Process

- Dec. '93 : **the first national plan** for national security
- '05 ~ '07 : Project presentation for people of Jeju
(more than 100 debates and presentations)
- Apr. '07 : **Gangjeong Village proposed as a site for the base**
- June '07 : **Jeju, decided on a final candidate based on a poll**
- Sept.'08 : Decision to build a **civilian-military complex port**
(Council for National Policy Coordination)
- '08 ~ '11 : **Approved**(Environmental Effect Assessment, reclaiming,
cultural property assessment, etc.)
- Jan. '10 : **Harbor construction contracted/started**(Mar.'12)
- May '12 : **On-Shore construction basic planning started**

**A National Security Project by Democratic Process
with Approval from 4 Gov. for 20 Years**

Site Selection Process

- Jan.~Mar.'07 : Mass-Discussion of Jeju on the base(TV, twice)
- Apr. '07 : Jeju Gov.-Assembly agreeing on policies regarding the base
 - * Candidates selected based on public poll by people of Jeju
- Apr. '07 : **Gangjeong proposed for candidacy** (→Jeju)
 - * 7 Opinion-gathering process with various councils of the village
 - * 110 residents present, 87 voted in favor (quorum:51)
 - * 695 residents of Ganjeong signed consent forms(16 Aug.)
- May '07 : **Jeju, notified selected candidacy** (→ MND)
 - * People of Jeju: 1,500 / Candidate area: 1,000 each
 - * Jeju: 54.3% in favor, Daecheon(Gangjeong): 56.0% in favor
 - * Namwon(Wimi): 36.1%, Anduk(Hwasoon): 42.2% in favor
- June '07: MND, site decided & confirmed(→ Jeju)

**Gathered Local Opinion,
Construction Site Selected by Democratic Process**

Approval Process

- Aug.'07~Oct.'08 : Pre-environmental assessment
- Jan.~June'09 : **Co-Investigation on biosphere** (twice)
 - * Opponent recommended agencies participated
- Sept.'09 : **Construction Site, Change of Status** (C.H.A)
- Dec. '09 : **Agreement on environmental effect assessment, Absolute Conservation Area changed** (Jeju/Assembly)
 - * exhibition for residents(14 Apr.~13 May)
presentation(24 Apr.), hearing(24 June)
- Mar. '10 : **Defense · military facility execution plan change approved** (MND)
- Apr. '10 : **Reclaim/execution plan approved**
(Busan Regional Maritime Affairs & Port Office)
- Jan. '12 : **Cultural heritage excavation completed**
on construction site/usage approved (C.H.A)
- July '12 : **Legitimacy recognized by the Supreme Court**

**Opponents Participated,
Abided by Legal Agreement Process**

Conservation Measures

■ Building Eco-Friendly Civilian-Military Port (Green Base)

⇒ Applying eco-friendly construction methods from the planning to construction

■ Eco-Friendly Methods for Harbor Construction

- Free-current pier
- Solar energy lighthouse
- Wave power generation system
- Cruise 'Ole' walking path
- Contamination Prevention Film & Adaptors
(Preventing diffusion of floating sand, foundation rocks dropped through pipes)

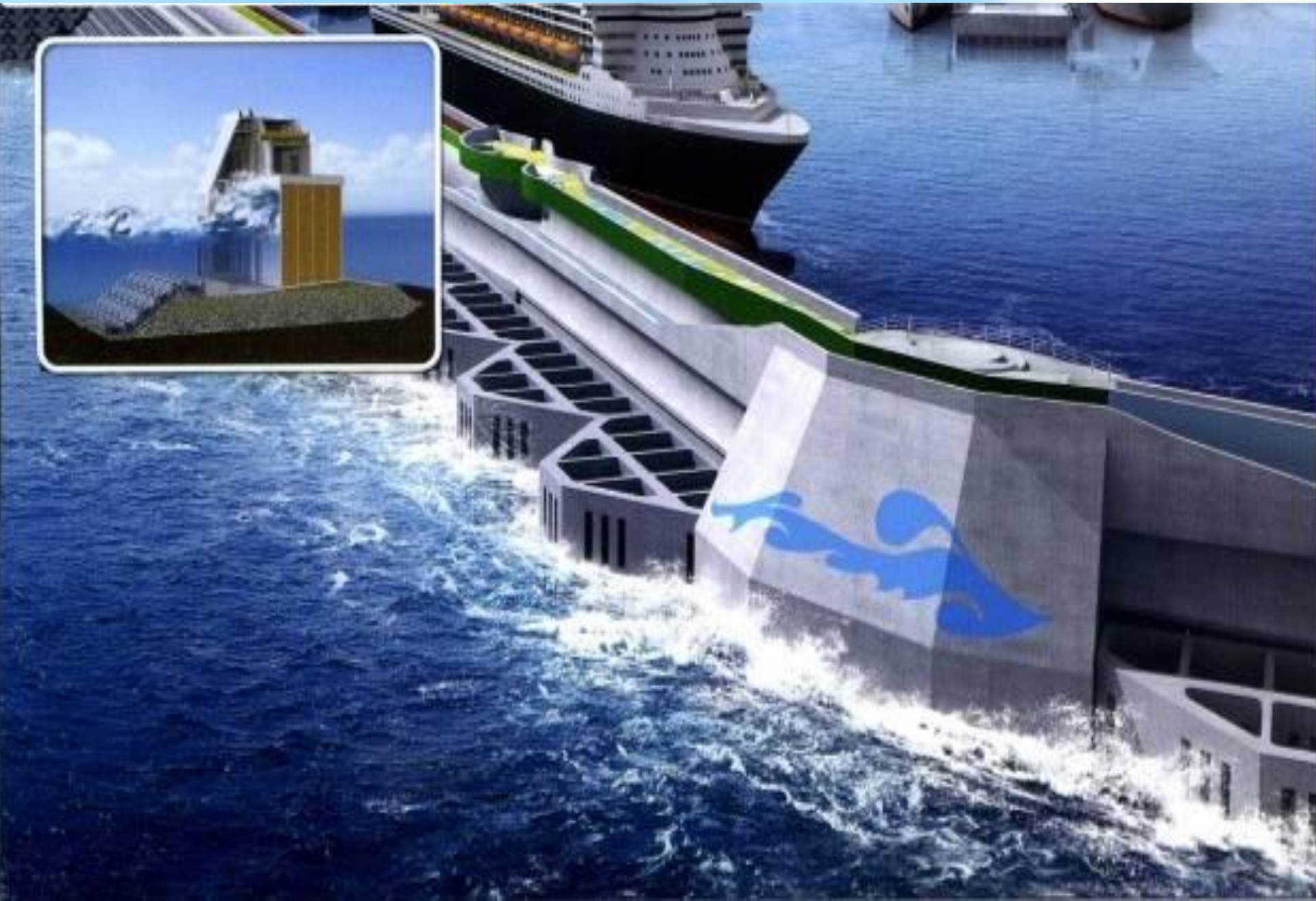
Free-Current Pier



☐ Solar Energy Lighthouse



Waver Power Generation System



Cruise 'Ole' Walking Path



■ Installing Double Contamination Prevention Film (Preventing Diffusion of Floating Sand)



Conservation Measures

■ Eco-Friendly Methods for On-Shore Construction

- Waterside Parks Conserving Natural Coastline
- Green Buffer Zone around the Base
- Green Zone on Rooftops
- High-Efficient LED Lights
- Solar Energy Generation System

Waterside Parks Conserving Natural Coastline



Green Buffer Zone around the Base



Green Zone on Rooftops



High-Efficient LED Lights



☐ Solar Energy Generation System



Effects on the Nature of Jeju

At least 10km away from World Heritage / No Effect



Effects on the Nature of Jeju

Global Geoparks Widely Spread on Jeju Island, with No Direct Effect

* JusangJeolidae, Seogwipo Shellfish Fossils are at least 5km away / No Effect



Effects on the Nature of Jeju

■ Biosphere Conservation Area at least 1.5km away
/ No Effect

* Seogwipo Harbor was built only 500m away from nearby Isle Moon, still no effect on coral reef observed

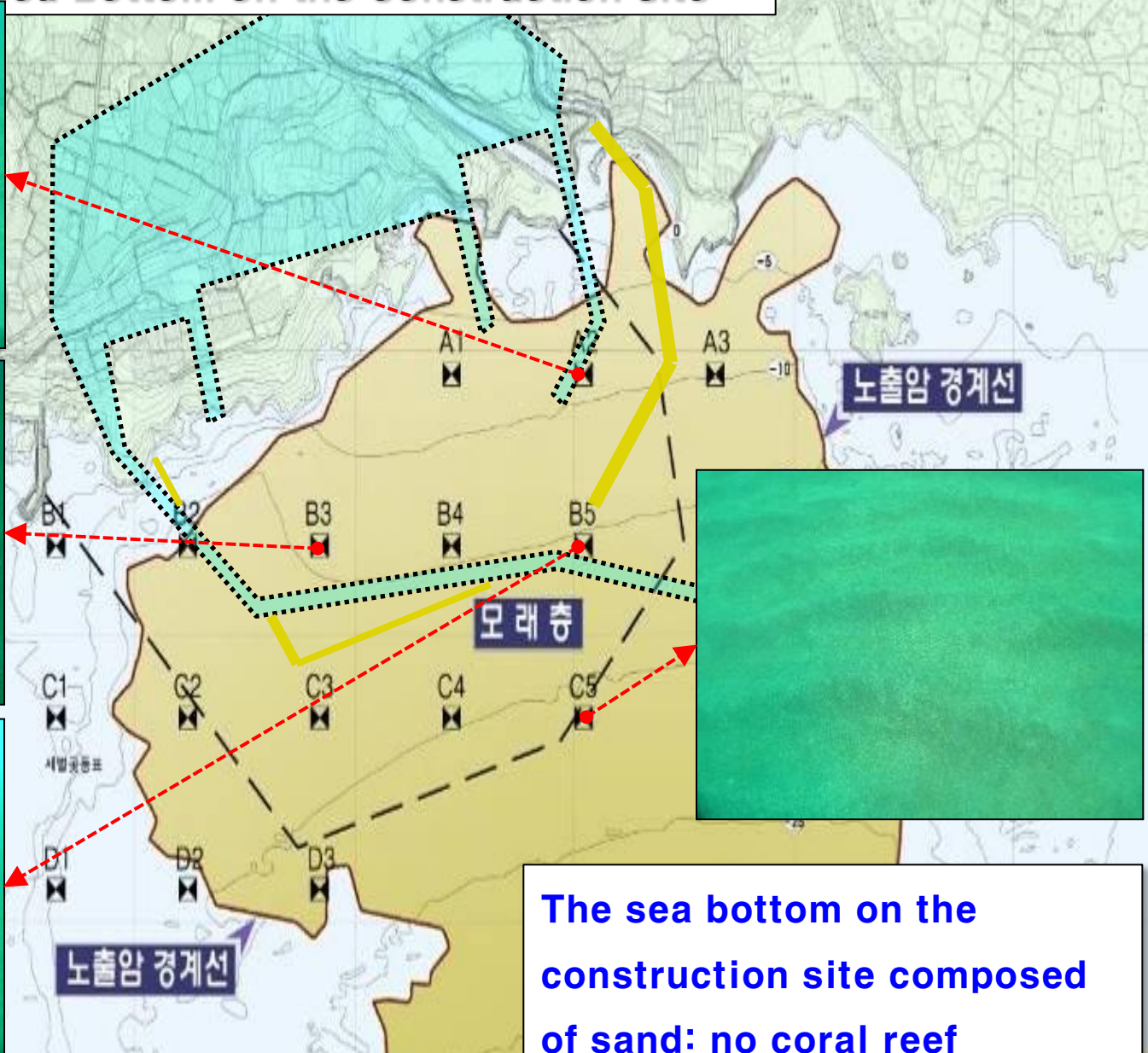
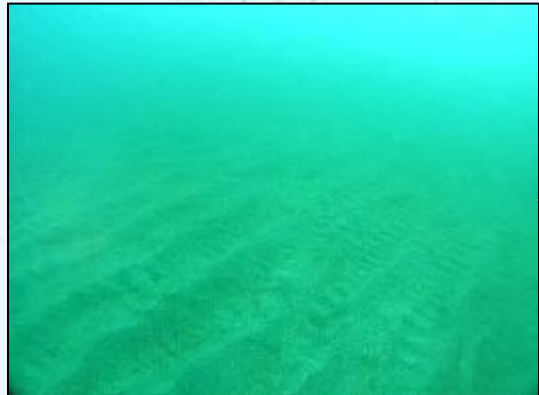


Conservation of Coral Reef

■ No Coral Reef Found in the Construction Site, but Carrying out Conservation Measures for Nearby Coral Reef

- Status Change Considered by and Approved from Cultural Heritage Administration: No Coral Reef Found
 - * No coral reef found in the investigation by 5 opposition parties (May, '11) and environmental organizations (July, '11)
- **Early-Warning System Established Observing Density of Floating Sand: with Periodic Examination and Management**
 - surface buoy, floating sand density change, oxygen level change
- **Seasonally Monitoring the Inhabitation of Coral Reef, So far 6 examination carried out: No disturbance**
- **Inductor for Natural Insertion of Coral Reef Installed (17 Feb. '11 / 10 Specially Manufactured Inductors)**

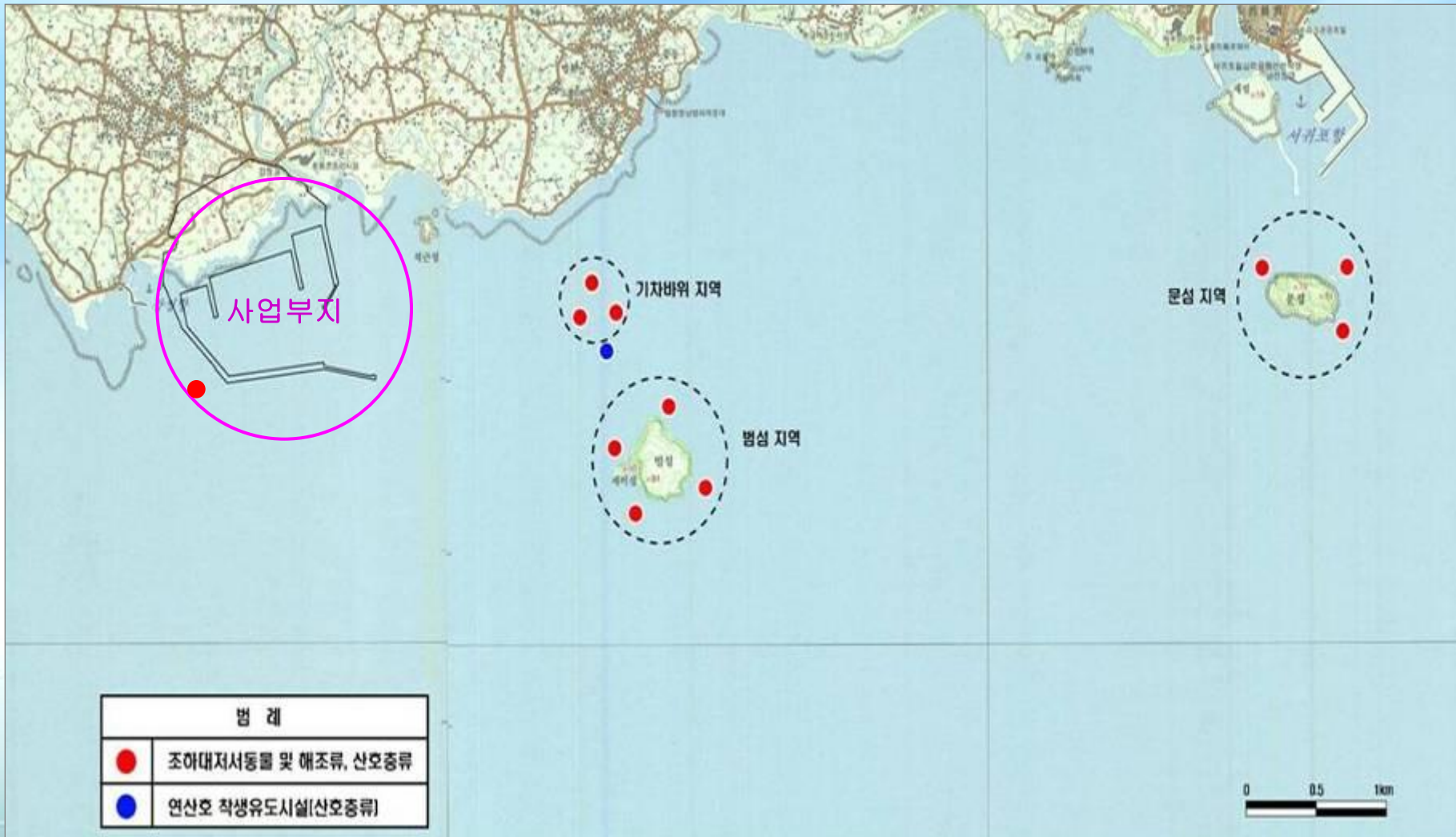
Result from Underwater Investigation on Sea Bottom on the Construction Site



The sea bottom on the construction site composed of sand: no coral reef

Conservation of Coral Reef

Monitoring Coral Reef Inhabitation



Conservation of Coral Reef

- Installing Inductors for Natural Insertion of Coral Reef
(17 Feb. '12 / 10 specially manufactured inductors)



Conservation of Endangered Species

■ **Red-Foot Crabs** : 328 relocated

(May~Sept. '11: 322/Aug.~Sept. '12: 6) / *Yakchensa Sunguetnae*

⇒ **Seasonally monitoring: Inhabitation well settled**



Conservation of Endangered Species

- **Narrow-Mouthed Toads** : 8 adult form(July '12),
900 tadpole(June~Sept. '11) / Stone Cultural Park
- ⇒ **Continually monitoring, and additionally relocating**



Conservation of Other Species

■ **Fresh Water Shrimps** : 5,300 relocated

(Oct.~Nov. '11) / Gangjeong stream

⇒ **Seasonally monitoring through post-environmental assessment**

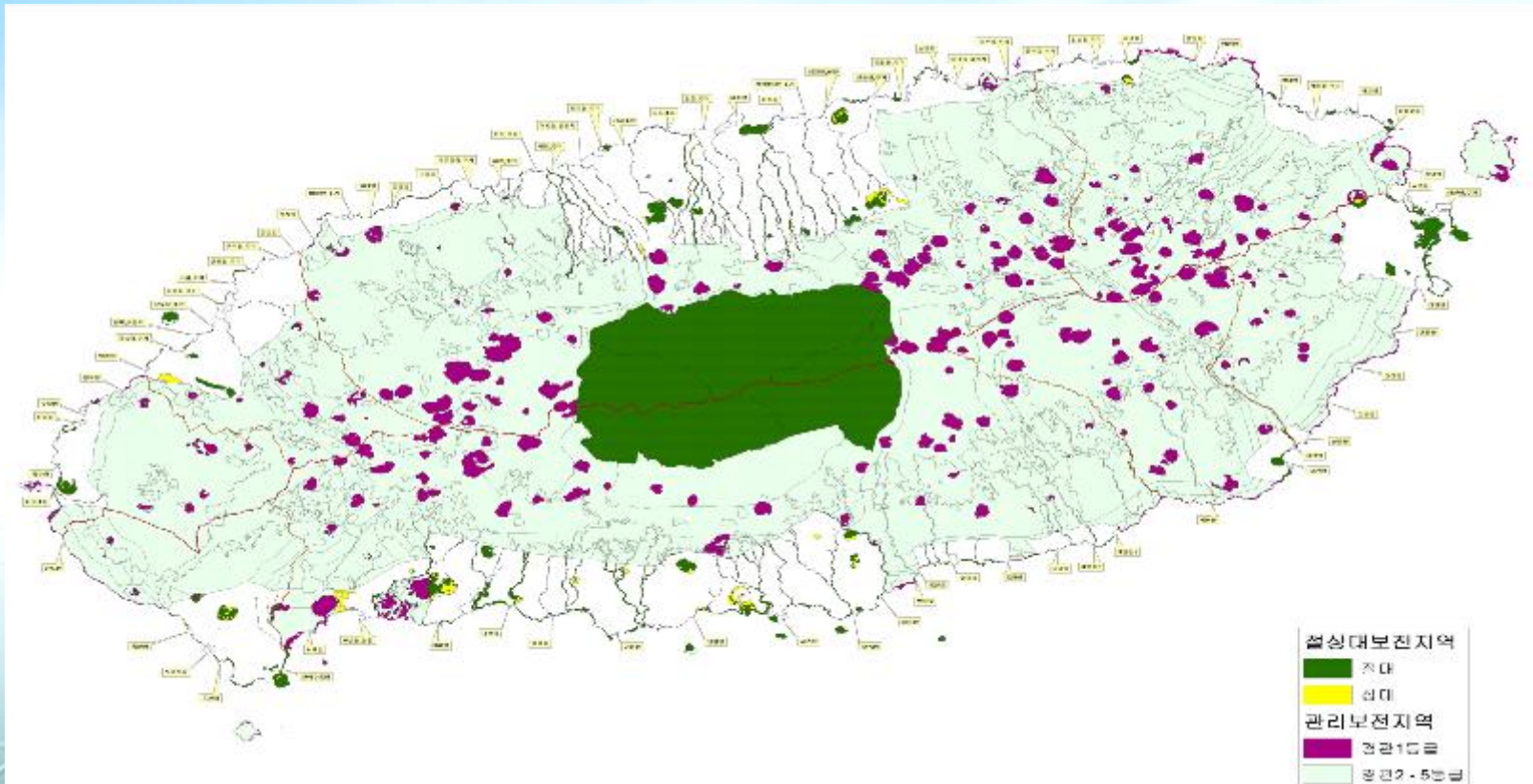


Understanding Absolute Conservation Area

■ 0.06% (0.105 km²) of the Conservation Area (183.84 km²)
reduced due to the construction

* Status change considered and approved: Dec. '09

(Jeju Government/Assembly)



Understanding the Coast Rock, Gureumbi

■ Origin of the Name

- “Litsea japonica Juss” a kind of broadleaf tree, also known as “Gureumbinang” widely spread over the Gangjeong coastline.
- Sanctified and idolized by some religious/social organizations since April '11. 4
 - * 10% of Jeju coastline(40km) has similar geological characteristics

■ Necessity of Conservation

- Result of Site Examination by Cultural Heritage Administration:
no need for conservation
 - * No unique volcanic landscape found around Gangjeong coastline
- Some part of the rock **to be preserved as the waterside park** considering local sentiments



 **Waterside Park Plan**