

# Ramsar Information Sheet

Published on 29 May 2015

# **Japan**

## Hizen Kashima-higata



Designation date: 28 May 2015

Ramsar ID: 2235

Coordinates: 33°6'45"N 130°7'45"E

Official area (ha): 57,00

Number of zones: 1

https://rsis.ramsar.org/ris/2235 Created by RSIS V.1.3 on Thursday 12 November 2015

### Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

## 1 - Summary

Summary (This field is limited to 2500 characters)

Hizen Kashima-higata is a tidal mudflat located at the mouths of Shiota River and Kashima River in the western shore of the Ariake Bay in Saga prefecture. Although the Hizen Kashima-higata belongs to the Central Kuroshio Current biogeographical region, it has the characteristics of brackish waters rather than sea waters because of its location, about 100 km away from the mouth of the Bay.

It is an important stopover and a wintering site for globally threatened migratory waterbirds in East Asia such as the endangered Black-faced Spoonbill (Platalea minor), and the vulnerable Saunders's gull (Larus saundersi) and Eastern Curlew (Numenius madagascariensis).

The richness in biological production of the mudflat is attributed to warm climate, huge tidal variation, and shoal which facilitates sediment deposition. Since mudflats of the Ariake Bay have been subject to land reclamation over the years, existent mudflats have increased in their significance as habitat for benthos, fish and shorebirds that feed on them. Therefore, Hizen Kashima-higata together with the two other Ramsar sites, Arao-higata and Higashiyoka-higata, has an important role in the conservation of biodiversity in Ariake Bay. Hizen Kashima-higata is also important for supporting livelihood of the communities in the surrounding areas and holds an important cultural value that stems from traditional fishing and recreational activities carried out at the site.

### 2 - Data & location

### 2.1 - Formal data

### 2.1.1 - Name and address of the compiler of this RIS



### 2.1.2 - Period of collection of data and information used to compile the RIS

From year 2007

To year 2014

### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish) Hizen Kashima-higata

Unofficial name (optional) Kashima Shingomori

### 2.2 - Site location

### 2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Boundaries description (optional) (This field is limited to 2500 characters)

The Boundary is the same as that of the Hizen Kashima-higata Special Protection Area within Hizen Kashima-higata National Wildlife Protection Area.

### 2.2.2 - General location

a) In which large administrative region does

Kashima City, Saga Prefecture, Kyushu Okinawa Area

b) What is the nearest town or population Hizen Kashima-higata is located on the eastern sea of Kashima City (the population of 300,000) of Saga Prefecture (the centre? population of 840,000) in Kyushu Okinawa region located in the south-western part of Japan.

### 2.2.3 - For wetlands on national boundaries only

- a) Does the wetland extend onto the territory of one or more other countries? Yes O No
- b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No ●

### 2.2.4 - Area of the Site

Official area, in hectares (ha): 57

Area, in hectares (ha) as calculated from GIS boundaries 56.57

### 2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Marine Ecoregions of the World (MEOW)	

RIS for Site no. 2235, Hizen Kashima-higata, Japan

Central Kuroshio Current

## 3 - Why is the Site important?

## 3.1 - Ramsar Criteria and their justification

- ☑ Criterion 2 : Rare species and threatened ecological communities
- ☑ Criterion 4 : Support during critical life cycle stage or in adverse conditions
- ✓ Criterion 6 : >1% waterbird population

3.2 - Plant species whose presence relates to the international importance of the site

<no data available>

## 3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species	qualifie	s under o	criterion	Species	contribut	es under	criterion	Bon Sizo	Period of pop. Est.	9/ 000UFF0000	ILICNI Pod Liet	CITES Appendix	L CMS Annondix I	Other Status	Justification
Filylulli	Scientific flame	Common name	2	4	6	9	3	5	7	8	rop. Size	renou or pop. Est.	/8 OCCUITETICE	IOCIV REG LIST	OTILS Appelluix	CWO Appendix I	Other Status	Justilication
CHORDATA / AVES	Chroicocepha saundersi	Saunders's Gull	<b>✓</b>	✓	<b>✓</b>						375	2009-2013	4.4	VU © RET			VU, National Red List	Criterion 4: a key staging site in the non-breeding season, Criterion 6: 1% population in NE Asia (bre) = 85, 2009 - 439, 2010 - 265, 2011 - 300, 2012 - 250, 2013 - 620
CHORDATA / AVES	Numenius madagascari	Eastern Curlew;Far Eastern Curlew	<b>✓</b>								28	2010-2014	0.1	VU © PEF		V	VU, National Red List	1% population size in C & E Asia (bre) = 320. 2010 - 36, 2011 - 18, 2012 - 20, 2013 - 35, 2014 - 31
CHORDATA /	Numenius phaeopus	Whimbrel		<b>✓</b>	<b>✓</b>						997	2010-2014	1.8	LC OUS				Criterion 4: a key staging site in the non-breeding season, Criterion 6: 1% population size (variegatus) in E & SE Asia (non-bre) = 550), 2010 - 870, 2011 - 1140, 2012 - 810, 2013 - 1028, 2014 - 1135
CHORDATA /	Platalea minor	Black-faced Spoonbill	<b>✓</b>								11	2010-2014	0.6	EN © RET		V	EN, National Red List	1% population size = 20), 2010 - 9, 2011 - 8, 2012 - 15, 2013 - 14, 2014 - 9

## 3.4 - Ecological communities whose presence relates to the international importance of the site

<no data available>

## 4 - What is the Site like? (Ecological character description)

### 4.1 - Ecological character

(This field is limited to 2500 characters)

Hizen Kashima-higata is located at the western shore of the Ariake Bay. Although the mudflat belongs to the Central Kuroshio Current biogeographical region, it has the characteristics of brackish waters rather than sea waters due to its location, 100 km away from the mouth of the Bay.

The richness in biological production of the mudflat is attributed to warm climate, huge tidal variation, and shoal which facilitates sediment deposition. Since mudflats of the Ariake Bay have been subject to land reclamation over the years, existent mudflats have increased in their significance as habitat for benthos, fish and shorebirds that feed on them. Therefore, Hizen Kashima-higata together with the two other Ramsar sites, Arao-higata and Higashiyoka-higata, has an important role in the conservation of biodiversity in Ariake Bay. Hizen Kashima-higata is also important for supporting livelihood of the communities in the surrounding areas and holds an important cultural value that stems from traditional fishing and recreational activities carried out at the site.

## 4.2 - What wetland type(s) are in the site?

Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
G: Intertidal mud, sand or salt flats		1	57	

## 4.3 - Biological components

## 4.3.1 - Plant species

<no data available>

### 4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
CHORDATA/ACTINOPTERYGII	Acanthogobius hasta	-				
CHORDATA/ACTINOPTERYGII	Apocryptodon punctatus	-				
CHORDATA/ACTINOPTERYGII	Boleophthalmus pectinirostris	Great blue-spotted mudskipper				In Japan, it occurs only at Ariake Bay and Yatushiro Sea. It is one of the species originated from the Eurasian continent and its occurrence in Japan proves that Japan once had been connected to the continent.
MOLLUSCA/GASTROPODA	Cerithidea largillierti	-				Its habitats are limited in number in Ariake Bay.
MOLLUSCA/GASTROPODA	Cerithidea ornata	-				Its habitats are limited in number in Ariake Bay.
MOLLUSCA/GASTROPODA	Ellobium chinensis	-				

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
MOLLUSCA/BIVALVIA	Glauconome angulata	-				
MOLLUSCA/GASTROPODA	Lactiforis takii					Endemic species. It only inhabits at mudflats in Ariake Bay.
MOLLUSCA/GASTROPODA	Laguncula pulchella					In Japan, it only inhabits at mudflats in Ariake Bay and Setonai-kay Sea.
MOLLUSCA/BIVALVIA	Moerella iridescens					In Japan, it mainly inhabits at mudflats in Ariake Bay and Setonai-kay Sea.
CHORDATA/ACTINOPTERYGII	Odontamblyopus lacepedii	-				In Japan, it only inhabits at mudflats in Ariake Bay.
CHORDATA/AVES	Tadorna tadorna	Common Shelduck	593	2010-2014	0.5	Population name: E Asia (non-bre) (1% = 1,200), 2010 - 298, 2011 - 345, 2012 - 553, 2013 - 760, 2014 - 1010
ARTHROPODA/MALACOSTRACA	Uca arcuata	Fiddler Crab				

## 4.4 - Physical components

## 4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfa: Humid subtropical (Mild with no dry season, hot summer)

4.4.2 - Geomorphic setting		
a) Minimum elevation above sea level (in metres)	-3	
a) Maximum elevation above sea level (in metres)	1	
	Lower part of river basin <a></a>	
	More than one river basin <b>☑</b>	
	Coastal 🗹	
Please name the river basin or basins. If the site (This field is limited to 1000 characters)	lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please also name the larger river basin.	ease name the sea or ocean.
Ariake Sea, Shiota River Basin, Kashima F	River Basin	
4.4.3 - Soil		
	Mineral <b>✓</b>	
	Organic 🗹	
Are soil types subject to change as a hydrological conditions (e.g., increased salinity	result of changing yor acidification)?	
Please provide further information on the soil (op		
The mudflat comprises micron scale (Md?>	-8 mostly) clay	
4.4.4 - Water regime		
Water permanence		
water permanence		
Presence?		
Usually permanent water present		
Source of water that maintains character of the s	site	
Presence? Predominant water source		
Marine water		

Water destination



Marine

#### Stability of water regime

#### Presence?

Water levels fluctuating (including tidal)

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology: (This field is limited to 1000 characters)

The Ariake Bay, where Hizen Kashima-higata is located at, has a water catchment area of 800,000 ha and the annual amount of precipitations average 2,000 mm. A large amount of fresh water and sand flows into the bay through rivers of various sizes. Among the rivers, Shiota River has the most significant impact on the formation of Hizen Kashima-higata. The basin of the Shiota River with 12,500 ha features volcanic influence and the flow from the river includes clays derived from weathered volcanic ashes and shale.

### 4.4.5 - Sediment regime

Significant accretion or deposition of sediments occurs on the site

Please provide further information on sediment (optional): (This field is limited to 1000 characters)

Hizen Kashima-higata is a part of the innermost section of the Ariake Bay. As the bay is highly enclosed and shallow and has huge tidal variations, the area is prone to be reclaimed spontaneously. The mudflat is increasingly formed when the fine sediments from rivers into the bay are accumulated by tidal force. The level of accumulation becomes the highest in the northeast part of the Ariake Bay because a large volume of mud carried from Chikugo River catches tidal current, crosses the bay anticlockwise, drifts towards west along north bank. At Hizen Kashima-higata which is located at the northwest part of Ariake Bay, the mudflat thickness becomes higher by a few centimeters every year.

### 4.4.6 - Water pH

Alkaline (pH>7.4) ✓

Please provide further information on pH (optional): (This field is limited to 1000 characters)

pH: 8.0 on average (minimum: 7.7, maximum: 8.7)\*

\*According to the results counted by Saga Prefectural Government in 2009 to 2013 at stn. B-1, 2 km offshore of Hizen Kashima-higata.

### 4.4.7 - Water salinity

Mixohaline (brackish)/Mixosaline (0.5-30 g/l) ✓

Please provide further information on salinity (optional): (This field is limited to 1000 characters)

### 5.2g/l?34.3g/l\*

The figures were converted from the result of the chloride ion concentration counted by Saga Prefectural Government in 2009 to 2013 at stn. C, 2 km west of Higashiyoka-higata.

### 4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

Please provide further information on dissolved or suspended nutrients (optional): (This field is limited to 1000 characters)

Total nitrogen: 0.52 mg/L on average (minimum: 0.27mg/L, maximum: 0.94 mg/L)\* Total phosphorus: 0.10mg/L on average (minimum: 0.06mg/L, maximum: 0.15mg/L)\*

\*According to the results counted by Saga Prefectural Government in 2009 to 2013 at stn. B-1, 2km west off of Hizen Kashima-higata

### 4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar i) broadly similar O ii) significantly different o Site differ from the site itself:

Surrounding area has more intensive agricultural use

Please describe other ways in which the surrounding area is different: (This field is limited to 1000 characters)

Rice paddies and agricultural fields are widely distributed in the surrounding area.

### 4.5 - Ecosystem services

### 4.5.1 - Ecosystem services/benefits

**Provisioning Services** 

<b>Ecosystem service</b>	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	High

### Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Pollution control and detoxification	Water purification/waste treatment or dilution	High

#### **Cultural Services**

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	High
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Long-term monitoring site	High

### **Supporting Services**

<b>Ecosystem service</b>	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	High
Soil formation	Sediment retention	High
Soil formation	Accumulation of organic matter	High
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	High

Within the site: 100

Outside the site: 30000

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site?

### 4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland

Description if applicable (This field is limited to 2500 characters)

At Hizen Kashima-higata, traditional fishing techniques that are unique to mudflat have been practices over the years. These techniques are called "Mutukake" and "Takappo." and help maintain biological cycling at the mudflat.

## 4.6 - Ecological processes

<no data available>

## 5 - How is the Site managed? (Conservation and management)

## 5.1 - Land tenure and responsibilities (Managers)

### 5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
Public land (unspecified)	✓	✓

#### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)		✓

Provide further information on the land tenure / ownership regime (optional): (This field is limited to 1000 characters)

Public water

### 5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: (This field is limited to 1000 characters)

Kyushu Regional Environmental Office, Ministry of the Environment

Provide the name and title of the person or Director Reiji Kamezawa people with responsibility for the wetland:

Postal address: (This field is limited to 254 characters)

Kumamoto-chihou-goudouchousha B(4F)

2-10-1 Kasuga, nishi-ku, Kumamoto-city, Kumamoto prefecture 860-0047 Japan

E-mail address: REO-KYUSHU@env.go.jp

## 5.2 - Ecological character threats and responses (Management)

## 5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Human settlements (non agricultural)

Factors adversely affecting site	<b>Actual threat</b>	Potential threat	Within the site	In the surrounding area
Housing and urban areas	Low impact	Low impact		✓
Commercial and industrial areas	Low impact	Low impact		✓
Tourism and recreation areas	Low impact	Medium impact	<b>✓</b>	✓

### Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Drainage	Low impact	Low impact	✓	✓
Water abstraction	Low impact	Low impact	✓	✓
Dredging	Low impact	Low impact	✓	✓
Salinisation	Low impact	Low impact	✓	✓
Water releases	Low impact	Low impact	<b>✓</b>	✓
Canalisation and river regulation	Low impact	Low impact	<b>✓</b>	✓

### Agriculture and aquaculture

Factors adversely affecting site	<b>Actual threat</b>	Potential threat	Within the site	In the surrounding area
Annual and perennial non-timber crops	Low impact	Low impact	<b>✓</b>	✓
Livestock farming and ranching	Low impact	Low impact		✓
Marine and freshwater aquaculture	Low impact	Medium impact	<b>✓</b>	✓

### Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Renewable energy		Low impact		✓

### Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Roads and railroads		Low impact		✓
Utility and service lines (e.g., pipelines)		Low impact		✓
Shipping lanes	Low impact	Low impact	✓	✓

### Biological resource use

Factors adversely affecting site	<b>Actual threat</b>	Potential threat	Within the site	In the surrounding area
Gathering terrestrial plants	Low impact	Low impact		✓
Fishing and harvesting aquatic resources	Low impact	Medium impact	✓	✓

### Human intrusions and disturbance

Factors adversely affecting site	<b>Actual threat</b>	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	Low impact	Medium impact	✓	✓

### Natural system modifications

Factors adversely affecting site	<b>Actual threat</b>	Potential threat	Within the site	In the surrounding area
Fire and fire suppression		Low impact		✓
Dams and water management/use	Low impact	Low impact	✓	✓
Vegetation clearance/ land conversion		Low impact		✓

### Invasive and other problematic species and genes

Factors adversely affecting site	<b>Actual threat</b>	Potential threat	Within the site	In the surrounding area
Invasive non-native/ alien species		Low impact	<b>✓</b>	✓
Problematic native species		Low impact	<b>✓</b>	✓
Introduced genetic material		Low impact	<b>✓</b>	✓

### Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Household sewage, urban waste water	Low impact	Low impact	✓	✓
Industrial and military effluents	Low impact	Low impact	✓	✓
Agricultural and forestry effluents	Low impact	Low impact	✓	✓
Garbage and solid waste	Low impact	Low impact	✓	✓
Air-borne pollutants	Low impact	Low impact	<b>✓</b>	✓

### Geological events

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Earthquakes/tsunamis	Low impact	Low impact	✓	✓

#### Climate change and severe weather

Factors adversely affecting site	<b>Actual threat</b>	Potential threat	Within the site	In the surrounding area
Habitat shifting and alteration	Low impact	Medium impact		✓
Droughts		Low impact		✓
Temperature extremes	Low impact	Low impact	✓	✓
Storms and flooding	Low impact	Low impact	✓	✓

#### Please describe any other threats (optional): (This field is limited to 2500 characters)

Recently, there have been growing concerns over water quality degradation (the occurrence of oxygen-deficient water) in the innermost section of Ariake Bay. There are massive land reclamation projects taking place in other parts of Ariake Bay. Although the land reclamation sites are far from Hizen Kashima-higata and don't pose actual threat, they are assumed to have been one of the causes of the occurrence of oxygen-deficient water in Ariake Bay. The mechanism of the occurrence of oxygen-deficient water in Ariake Bay is being studied.

Meanwhile, the occurrence of oxygen-deficient water has a damaging effect on the fish resources that local people depend on and this has been growing into a serious problem at Hizen Kashima-higata.

### 5.2.2 - Legal conservation status

#### Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Other international designation		http://www.eaaflyway.net/the-fly way/flyway-site-network/#japan	partly

#### National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Special Protection Area of National Wildlife Protection Area	HizenKashima-higataSpecialProtectionArea		whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Other non-statutory designation	Ariake-kaiandChikugo-gawaTidalZone,500		partly

### 5.2.3 - IUCN protected areas categories (2008)

IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention

### 5.2.4 - Key conservation measures

#### Legal protection

Measures	Status	
Legal protection	Implemented	

#### **Human Activities**

Measures	Status
Harvest controls/poaching enforcement	Implemented
Communication, education, and participation and awareness activities	Implemented

Other: (This field is limited to 2500 characters)

In September 2014, for the conservation of Hizen Kashima-higata, Kashima City Government established a committee which consists of experts, citizen groups, and representatives of local communities, to clarify the mechanism of the occurrence of oxygen-deficient water affecting fishery species and ecosystem in the mudflat, and to develop an appropriate measure to solve the issue.

Also, Saga Prefecture Government developed "Saga Prefecture Plan concerning Rejuvenation of Ariake Sea" (revised in June 2014) based on "Act on Special Measures concerning Rejuvenation of Ariake Sea and Yatsushiro Sea", and has conducted rejuvenation projects and has promoted researches and public awareness.

### 5.2.5 - Management planning

RIS for Site no. 2235, Hizen Kashima-higata, Japan

Is there a site-specific management plan for the site? Yes

Has a management effectiveness assessment been undertaken for the site? Yes O No

If the site is a formal transboundary site as indicated in section

Data and location > Site location, are there shared management planning processes with another Contracting Party?

Yes ○ No ●

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site: (This field is limited to 1000 characters)

For bird watching and nature observation, viewing platforms and guideboards were already established. There is a visitor center in the nearby area, and the center organizes many environmental education activities including "Children's summer school on Ariake Bay" to study the biology in Ariake Bay. Observation events, such as migratory bird watching, have been conducted for over 1,000 primary school students in Kashima City and for over 400 local residents of Kitakashima reigion every year.

### 5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, but a plan is being prepared

### 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water quality	Proposed
Animal community	Proposed
Birds	Implemented

### 6 - Additional material

### 6.1 - Additional reports and documents

### 6.1.1 - Bibliographical references

(This field is limited to 2500 characters)

?Compilation committee of Kashima city history, 1974, Kashima city history (first volume), published by Kashima City

?Kashima City, 2015, The flying situation of the migratory birds at Kashima Shingomori mudflat.

?Ministry of the Environment, the Government of Japan, 2002, 500 Important Wetlands in Japan

http://www.sizenken.biodic.go.jp/pc/wet\_en/

?Ministry of the Environment, the Government of Japan, 2012-2013, Red List in Japan (4th)

http://www.biodic.go.jp/rdb/rdb\_f.html

?Zenbei uchizima et.al, 1995, Nature of Japan #7 Kyusyu area, published by Iwanami Shoten

### 6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file availables

v. site management plan

<no file availables

vi. other published literature

<no file available>

### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Great Blue-spotted Mudskipper ( Ministry of Environment, Japan, 09-06-2005)



The south side of Hizen Kashima-higata ( *Ministry of Environment, Japan,* 12-07-2014)



The north side of Hizen Kashima-higata ( *Ministry of Environment, Japan,* 12-07-2014)



The east side of Hizen Kashima-higata ( *Ministry of Environment, Japan,* 12-07-2014)



Whinbrel ( Ministry of Environment, Japan, 01-04-2015)



Saunders's Gull ( *Ministry of Environment, Japan,* 02-02-2014)



Overview at low tide ( Ministry of Environment, Japan, 02-03-2015)

### 6.1.4 - Designation letter and related data

### Designation letter

<1 file(s) uploaded>

Date of Designation | 2015-05-28