



# Ramsar Information Sheet

Published on 29 May 2015

## Japan

### Higashiyoka-higata



Designation date: 28 May 2015  
Ramsar ID: 2234  
Coordinates: 33°10'30"N 130°15'47"E  
Official area (ha): 218,00  
Number of zones: 1

## 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)*

Higashiyoka-higata is a tidal mudflat located at the mouths of Honshoe River and Hattae River in the north shore of the Ariake Bay. Although Higashiyoka-higata belongs to the Central Kuroshio Current biogeographic region, it has the characteristics of brackish waters rather than sea waters because it is located in the innermost section of the Ariake Bay.

About 7000 migratory shorebirds stay on Higashiyoka-higata from autumn to spring. It is an important stopover and a wintering spot for migratory shorebirds in East Asia including the critically endangered *Eurynorhynchus pygmeus* (Spoon-billed Sandpiper), endangered *Platalea minor* (Black-faced Spoonbill), and the vulnerable *Chroicocephalus saundersi* (Saunders's Gull), *Eurynorhynchus pygmeus* (Spoon-billed Sandpiper) and *Numenius madagascariensis* (Eastern Curlew). The site is also important as a habitat for benthos, fish and halophytic plant.

The richness in biological production of the mudflat is attributed to warm climate, huge tidal variation, and shoal which facilitates sediment deposition. Since the mudflats of the Ariake Bay have been subject to land reclamation over the years, existent mudflats have increased in importance as habitat for benthos, fish, and shorebirds feed on them. The mudflats are also important for human's livelihood such as fishing and cultural practices.

## 2 - Data & location

### 2.1 - Formal data

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

Name

Institution/agency

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

E-mail

Phone

Fax

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

From year

To year

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Unofficial name (optional)

### 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 Higashiyoka-higata Special Protection Area within Higashiyoka-higata National Wildlife Protection Area.

## 2.2.2 - General location

a) In which large administrative region does the site lie?

b) What is the nearest town or population centre?

## 2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes  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):

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

## 2.2.5 - Biogeography

Biogeographic regions

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





## 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 qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA / AVES	<i>Chroicocephalus saundersi</i> 	Saunders's Gull	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	867	2009-2013	10.2	VU 	<input type="checkbox"/>	<input type="checkbox"/>	VU, National Red List	Criterion 4: a key staging site in the non-breeding season Criterion 6: 1% population size in NE Asia (bre) = 85 2009 - 640 2010 - 1,050 2011 - 753 2012 - 900 2013 - 990	
CHORDATA / AVES	<i>Eurynorhynchus pygmeus</i> 	Spoon-billed Sandpiper	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2005-2014	0.2	CR 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	CR, National Red List	Criterion 6: 1% population size in E Siberia (bre) = 3 2005 - 1 2006 - 0 2007 - 2 2008 - 1 2009 - 1 2010 - 2 2011 - 0 2012 - 0 2013 - 0 2014 - 1	
CHORDATA / AVES	<i>Numenius madagascariensis</i> 	Eastern Curlew; Far Eastern Curlew	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	52	2010-2014	0.1	VU 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	VU, National Red List	Criterion 4: a key staging site in the non-breeding season Criterion 6: 1% population size in C & E Asia (bre) = 320 2010 - 68 2011 - 30 2012 - 55 2013 - 46 2014 - 60	
CHORDATA / AVES	<i>Platalea minor</i> 	Black-faced Spoonbill	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20	2009-2013	1	EN 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EN, National Red List	Criterion 4: a key staging site in the non-breeding season Criterion 6: 1% population size = 20 2009 - 14 2010 - 11 2011 - 16 2012 - 28 2013 - 33	
CHORDATA / AVES	<i>Pluvialis squatarola</i> 	Grey Plover	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1146	2010-2014	1.2	LC 	<input type="checkbox"/>	<input type="checkbox"/>		Criterion 4: a key staging site in the non-breeding season Criterion 6: 1% population size in E, SE Asia and Australia (non-bre) = 1,000 2010 - 930 2011 - 1130 2012 - 1240 2013 - 1260 2014 - 1170	

### 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)*

Higashiyoka-higata is a mudflat, located at the north 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, 100km away from the mouth of the Bay. The mudflat has been isolated from the outer sea since the geological era and is an important habitat for some species originated from Eurasian continent such as Great Blue-spotted Mudskipper (*Boleophthalmus pectinirostris*) and *Suaeda japonica*, which proves that Japan was once contiguous to the Eurasian Continent.

The richness in biological production of the mudflat is attributed to warm climate, huge tidal variation, and shoal which facilitates sediment deposition. Since the mudflats of the Ariake Bay have been subject to land reclamation over the years, existent mudflats have increased in importance as habitat for benthos, fish, and shorebirds feed on them. The mudflats are also important for human's livelihood and culture such as fishing and recreational activities.

### 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	Higashiyoka-higata	1	218	

## 4.3 - Biological components

### 4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Suaeda japonica</i>		A large community of Suaeda japonica is found only in Higashiyoka-higata and its surrounding area in Japan.

### 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
MOLLUSCA/BIVALVIA	<i>Barnea japonica</i>					
CHORDATA/ACTINOPTERYGII	<i>Boleophthalmus pectinirostris</i>	Great Blue-spotted Mudskipper				
CHORDATA/AVES	<i>Calidris alpina</i>	Dunlin	6308	2010-2014	0.6	Population name: sakhalina (1% = 10,000), 2010 - 5350, 2011 - 5690, 2012 - 6380, 2013 - 6400, 2014 - 7720
CHORDATA/AVES	<i>Calidris ruficollis</i>	Red-necked Stint	511	2010-2014	0.2	Population name: NE Siberia (bre) (1% = 3200), 2010 - 35, 2011 - 19, 2012 - 740, 2013 - 720, 2014 - 1040
CHORDATA/AVES	<i>Calidris tenuirostris</i>	Great Knot	260	2010-2014	0.1	Population name: SE Asia, Australia (non-bre) (1% = 2900), 2010 - 160, 2011 - 290, 2012 - 401, 2013 - 412, 2014 - 38
CHORDATA/AVES	<i>Charadrius alexandrinus</i>	Kentish Plover; Snowy Plover	259	2009-2013	0.34	Population name: dealbatus (1% = 1,000), 2009 - 244, 2010 - 187, 2011 - 282, 2012 - 257, 2013 - 324
CHORDATA/AVES	<i>Charadrius mongolus mongolus</i>	Mongolian Plover	125	2009-2013	0.96	Population name: stegmanni (1% = 130), 2009 - 41, 2010 - 97, 2011 - 160, 2012 - 172, 2013 - 154
CHORDATA/AVES	<i>Limosa lapponica</i>	Bar-tailed Godwit	573	2010-2014	0.4	Population name: baueri (1% = 1,300), 2010 - 377, 2011 - 542, 2012 - 407, 2013 - 760, 2014 - 780

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
CHORDATA/AVES	<i>Numenius arquata</i>	Eurasian Curlew	178	2009-2013	0.2	Population name: orientalis, E & SE Asia (non-bre) (1% = 1,000), 2009 - 130, 2010 - 156, 2011 - 173, 2012 - 209, 2013 - 224
CHORDATA/AVES	<i>Numenius phaeopus</i>	Whimbrel	243	2010-2014	0.4	Population name: variegatus, E & SE Asia (non-bre) (1% = 550), 2010 - 125, 2011 - 1, 2012 - 415, 2013 - 465, 2014 - 210
MOLLUSCA/BIVALVIA	<i>Sinonovacula lamarcki</i>	-				
CHORDATA/AVES	<i>Tadorna tadorna</i>	Common Shelduck	1126	2009-2013	0.9	Population name: E Asia (non-bre) (1% = 1,200), 2009 - 340, 2010 - 540, 2011 - 1130, 2012 - 1160, 2013 - 2460
MOLLUSCA/BIVALVIA	<i>Tegillarca granosa</i>	-				
CHORDATA/AVES	<i>Tringa nebularia</i>	Common Greenshank	312	2010-2014	0.3	Population name: E, SE Asia, Australia (non-bre) (1% = 1000), 2010 - 320, 2011 - 300, 2012 - 330, 2013 - 437, 2014 - 172

## 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)

a) Maximum elevation above sea level (in metres)

Lower part of river basin

More than one river basin

Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean. *(This field is limited to 1000 characters)*

#### 4.4.3 - Soil

Mineral

Organic

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes  No

Please provide further information on the soil (optional) *(This field is limited to 1000 characters)*

#### 4.4.4 - Water regime

Water permanence

Presence?
Usually permanent water present

Source of water that maintains character of the site

Presence?	Predominant water source
Marine water	<input type="checkbox"/>

Water destination

**Presence?**

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 Higashiyoka-higata is located at, has a water catchment area of 800,000 ha and the annual amount of precipitations averages at 2,000 mm. A large amount of fresh water and sand flows into the bay through rivers of various sizes. Among the rivers, the most significant determinants for the formation of Higashiyoka-higata are Honshoe River, Hattae River and Chikugo River. Honshoe River and Hattae River run into each edge of the mudflat. Chikugo River runs on the east area of the mudflat and has the water catchment area of 300,000 ha.

#### 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)*

Higashiyoka-higata is 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 that are transported through the rivers into the bay are accumulated by tidal force. The level of accumulation is the highest in the northeast part of the Ariake Bay because a large volume of mud carried from Chikugo River catches tidal current across the bay anticlockwise, drifts towards west along the north bank. Around the area of Higashiyoka-higata, the mudflat thickness increases by 3 to 4cm by 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: 7.9 on average (minimum: 7.4, maximum: 8.8)\*  
\*According to the results counted by Saga Prefectural Government in 2009 to 2013 at strn. C, 2 km west of Higashiyoka-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)*



2.2g/l?30.7g/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 off 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: 1.01mg/L on average (minimum: 0.34 mg/L, maximum: 1.90 mg/L)\*

Total phosphorus: 0.20mg/L on average (minimum: 0.10mg/L, maximum: 0.85mg/L)\*

\*According to the results counted by Saga Prefectural Government in 2009 to 2013 at stn. C, 2 km west of Higashiyoka-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 site differ from the site itself:  
 i) broadly similar  ii) significantly different

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 are widely distributed in the surrounding land area.

### 4.5 - Ecosystem services

#### 4.5.1 - Ecosystem services/benefits

##### Provisioning Services

Ecosystem service	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	Medium
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Long-term monitoring site	High

## Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, 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: 10

Outside the site: 30,000

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes  No  Unknown

## 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 Higashiyoka-higata, the traditional fishing techniques, unique to the mudflat, have been practiced over the years. It helps maintain biological cycling at the mudflat.

## 4.6 - Ecological processes

RIS for Site no. 2234, Higashiyoka-higata, Japan

<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)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 people with responsibility for the wetland:

Director Reiji Kamezawa

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	Actual threat	Potential threat	Within the site	In the surrounding area
Housing and urban areas		Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Commercial and industrial areas		Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tourism and recreation areas	Low impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Drainage	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Water abstraction	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Dredging	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Salinisation	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Water releases	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Canalisation and river regulation	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Annual and perennial non-timber crops	Low impact	Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Livestock farming and ranching	Low impact	Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Marine and freshwater aquaculture	Low impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Renewable energy		Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Roads and railroads		Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Utility and service lines (e.g., pipelines)		Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Shipping lanes	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Gathering terrestrial plants		Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fishing and harvesting aquatic resources	Low impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	Low impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Fire and fire suppression		Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Dams and water management/use	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Vegetation clearance/ land conversion		Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Invasive non-native/ alien species		Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Problematic native species		Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Introduced genetic material		Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## 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	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Industrial and military effluents	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Agricultural and forestry effluents	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Garbage and solid waste	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Air-borne pollutants	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Geological events

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Earthquakes/tsunamis	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Habitat shifting and alteration	Low impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Droughts		Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Temperature extremes	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Storms and flooding	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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 Higashiyoka-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 as it may adversely impact ecological character of Ariake Bay.

## 5.2.2 - Legal conservation status

## National legal designations

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

## Non-statutory designations

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

## 5.2.5 - Management planning

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

Has a management effectiveness assessment been undertaken for the site? Yes  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)*

As of 2015, two organizations, namely, Mudflat Expedition and Higashiyoka Ramsar Club, are involved in the mudflat conservation.

The Mudflat Expedition is a local group initiated by Higashiyoka Urban Planning Association, which aims to learn locally treasured species through conducting environmental conservation activities. It was launched on November 2013 and now has 30 members.

The Higashiyoka Ramsar Club is a public organization initiated/led by Saga City government, established in April 2014. The club is engaged in learning activities to accumulate specialized knowledge and skills, which could contribute to grooming new leaders and raising public awareness in environment conservation. It has 45 members.



### 5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

### 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Animal community	Proposed
Birds	Implemented

*(This field is limited to 2500 characters)*

Shorebird population census has been conducted in spring, summer and winter every year under "Monitoring sites 1000" project by Ministry of the Environment.

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

*(This field is limited to 2500 characters)*

?Compilation committee of Higashiyoka town history, 1982, Higashiyoka town history, published by Higashiyoka town  
?Compilation committee of Ariake reclamation history 1969, Ariake reclamation history, published by Ariake Reclamation  
Construction Office of Kyusyu Regional Agricultural Administration Office  
?Ministry of the Environment, Government of Japan, 2002, 500 Important Wetlands in Japan  
[http://www.sizenken.biodic.go.jp/pc/wet\\_en/](http://www.sizenken.biodic.go.jp/pc/wet_en/)  
?Ministry of the Environment, Government of Japan, 2012-2013, Red List in Japan (4th)  
[http://www.biodic.go.jp/rdb/rdb\\_f.html](http://www.biodic.go.jp/rdb/rdb_f.html)  
?Ministry of the Environment, Government of Japan, 2009-2014, Monitoring Sites 1000 (Shorebirds)  
<http://www.biodic.go.jp/moni1000/moni1000/index.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 available>

v. site management plan

<no file available>

vi. other published literature

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

Please provide at least one photograph of the site:

RIS for Site no. 2234, Higashiyoka-higata, Japan



A flock of shorebirds ( *Ministry of Environment, Japan, 20-01-2011* )



Overview ( *Ministry of Environment, Japan, 23-03-2015* )



Near view ( *Ministry of Environment, Japan, 03-09-2014* )

## 6.1.4 - Designation letter and related data

### Designation letter

<1 file(s) uploaded>

Date of Designation