History of Kasai Marine Park

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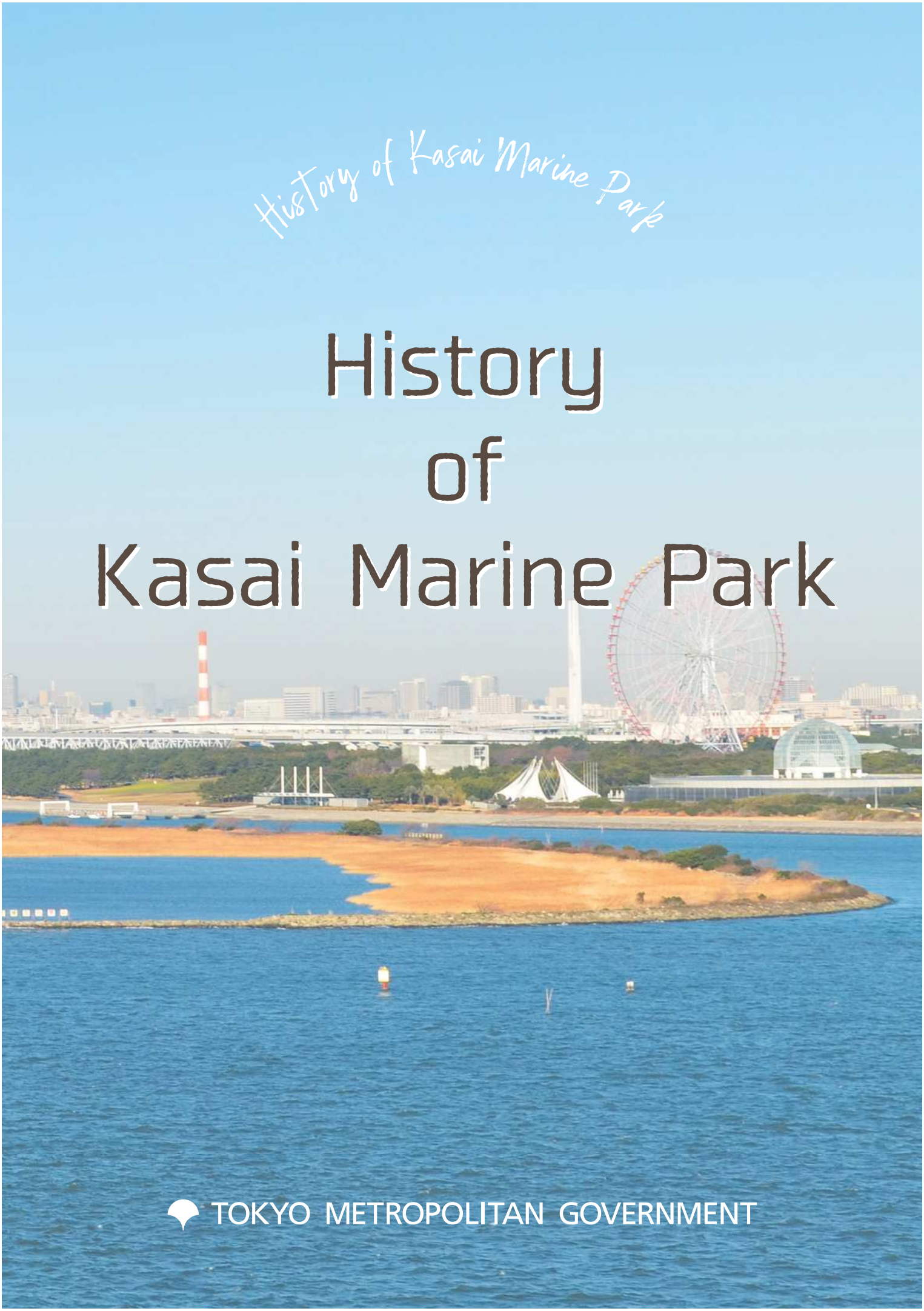


TOKYO METROPOLITAN GOVERNMENT

Contents

Bird's-Eye View of Kasai Marine Park

The Kasai Marine Park is comprised of marine areas including natural shoals and tidal flats, as well as two artificial beaches (West Beach and East Beach).

The large sandy beaches of the West Beach come alive with multitudes of visitors in the summer, including families who come here to swim and play on the beach. People also come for clam digging to this spot known for its clams. Since the area is connected by the Nagisa Bridge to the Kasai Rinkai Park, visitors can also take in the Tokyo Sea Life Park, plus the Giant Ferris Wheel.

A nature conservation area, the East Beach is not open to the general public.

This pamphlet provides an overview of the history of Kasai Marine Park, activities offered here, the unique attributes of the tidal flats, as well as the animals that make their home in this place.

History of Kasai Marine Park

References

- Ima Yomigaeru Kasai Oki
  (Kasai Offshore Area Returns to Life)
  (Tokyo Metropolitan Government)
- Ministry of the Environment Website

Photo Credits

- Edogawa Local History Room
- Tokyo Metropolitan Parks Association
- Tokyo Zoological Park Society

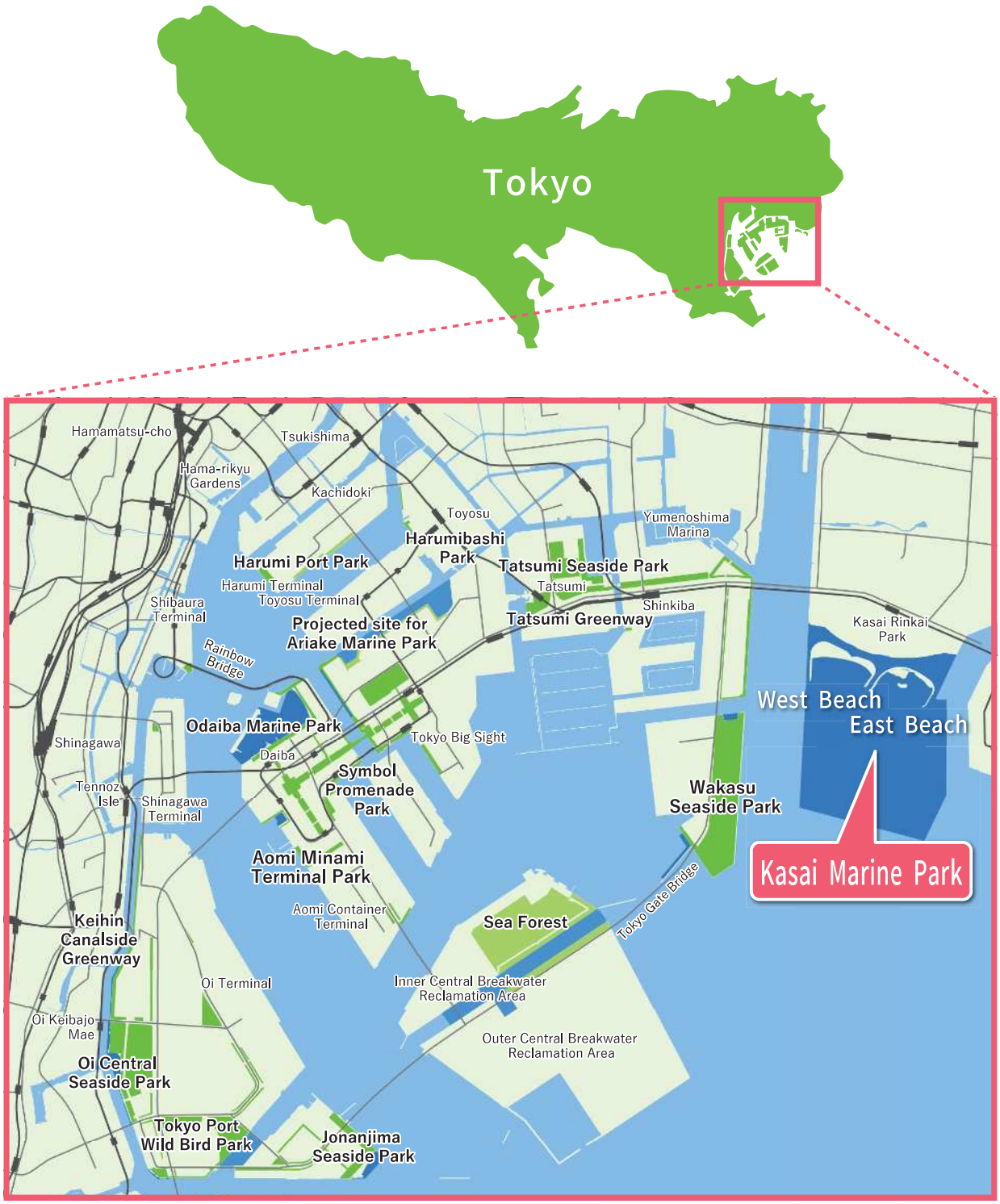
The bustling West Beach

Overview of Kasai Marine Park

Park location and size

The Kasai Marine Park, located offshore of Rinkai-cho, Edogawa Ward, Tokyo, is a marine park boasting some 412 hectares and stretching two kilometers into the ocean (approximately 25 times as large as Hibiya Park).

The marine area of the park is also home to two artificial beaches (West Beach and East Beach) totaling about 800 meters in length.



Overview of Kasai Marine Park

Topographical changes in the Tokyo Bay area

Some 247 million years ago, most of the Japanese archipelago lie submerged under water. Earth and sand flowing from the continent created thick layers of sediment, which became land when the sediment rose during the Mesozoic Period.

The archipelago rose and fell repeatedly, until 6,000 years ago, when the sea level was at its maximum in Tokyo Bay, since which time it has gradually shrunk to its present size.

At one time, some 120 large and small rivers including the Tama River and Arakawa River flowed into Tokyo Bay. Sediment flowed from the headwaters of these rivers over the long period of some 100,000 years, creating large tidal flats and shoals. Around 1955, prior to the launch of large-scale landfill initiatives, Tokyo Bay was home to one of the nation's largest tidal flats.

The Kasai Marine Park area as it is today is home to shallow waters including the Sanmaizu and Takasu areas, comprised of sediment from the Arakawa and the Kyu-Edogawa rivers.

West Beach at low tide

History of the Kasai Offshore Area

Up to around 1960
Time period when the fishing sector was prosperous

The Kasai offshore marine area, an abundant food source, has been an integral part of the lives of the people of the region since ancient times.

A text written during the Edo Period mentions the area's fishing industry as dating back 700 years.

Fishing sector

The fisherman of this area fished local seafood, such as Asari clams and Hamaguri clams in the summer, and Kasai nori—a local specialty—during the winter.

The offshore area was dotted with *takehibi* platforms once used for cultivating the seaweed and hundreds of boats, while on land one could witness endless screens of reed screens used for drying the seaweed.

Wade fishing for Asari clams and Hamaguri clams (Around 1955)

***Norihibi* nori cultivation platforms set up in the ocean (1954)**

Recreation

The Kasai offshore marine area is also a place for fun activities, such as clam digging in the spring, swimming in the summer, goby fishing in the autumn, and *sudate* fishing on boats as a kind of entertainment, drawing tourists from all over Tokyo year round.

Numerous water fowl live in the Sanmaizu tidal flat area. Sanmaizu has been played a critical role in conserving a variety of flora and fauna native to this place.

The ocean at Kasai (1950)

Clam digging at Kasai Bay (Around 1955)

History of the Kasai Offshore Area

Around 1955–1970

Period of time when ocean pollution and ground subsidence problems were severe

Around this time, various issues arose in tandem with the urbanization of Tokyo.

Ocean pollution

As the population of Tokyo increased and industry was concentrated in the metropolitan, Tokyo Bay became extremely contaminated with factory waste and other pollution. Seafood could no longer be harvested in the area, causing the fishing sector to fail. By 1965, the area's once-prosperous fishing villages had all but disappeared.

A mountain of garbage

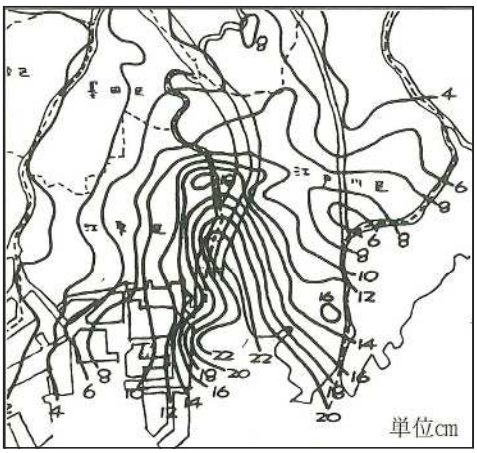
Due to the proximity of the area to the ocean, the Kasai area was prone to damage caused by high tides, typhoons, and more. A coastal embankment 4,450 meters in length was built in 1957 to protect the area.

Because roads and railways were not built behind the embankment, this unused land collected large amounts of water. Vast quantities of earth and sand as well as industrial waste were dumped here during the construction boom of the nation's super-growth period.

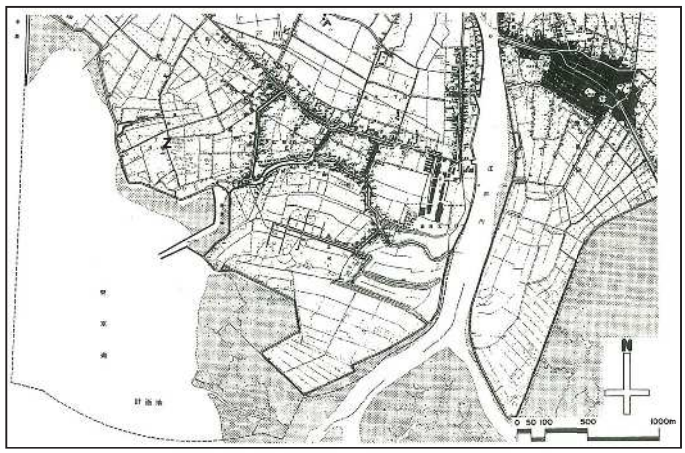
Garbage dumping/ disposal in the Kasai coastal areas

Ground subsidence

Due to the extensive pumping of underground water since the Meiji Period, some 178 hectares of private land in the Kasai area were submerged.



Annual changes in ground subsidence (1968)



Map of Kasai offshore areas (Around 1955)

History of the Kasai Offshore Area

Around 1970–1990

Establishment of Kasai Marine Park as part of natural recovery initiatives

In 1969, the Tokyo Metropolitan Government began to consider development concepts for the area. Many people voiced concerns over the loss of the natural environment—a by-product of urbanization—resulting in accelerated initiatives for nature conservation, establishment of parks, etc., around the nation.

The Kasai Marine Park arose out of this process.

Kasai offshore area development: striking an optimal balance with nature

As landfill works progressed in the ocean areas around Tokyo, the Kasai area alone managed to retain its natural beauty. Various organizations began to call for the protection of the flora and fauna of the area as well as the conservation of Sanmaizu.

In 1972, the Kasai Offshore Development Land Adjustment Project was launched with a view to recovering submerged land, creating new land, and building townscapes striking a balance between nature and essential urban functions.

These land adjustment initiatives led to the recovery of submerged private land and the creation of 348 hectares of new land by way of landfill works in public waters. Construction of roads—considered the arteries of the city—as well as of parks and green spaces, proceeded.

Development of the Kasai Marine Park

Kasai Marine Park was built for the purpose of facilitating the natural recovery of Sanmaizu, as part of plans for the development of the Kasai offshore area. Full-scale development was launched in 1980, with the park opening in 1989.

Two artificial beaches (East and West) were built to facilitate the natural recovery and conservation of the area, especially Sanmaizu.

Kasai offshore area before the Kasai land adjustment initiatives were implemented (1972)

After the Kasai Marine Park was created (1995)

History of the Kasai Offshore Area

The following is a detailed overview of the history of Kasai Marine Park and how it came about.

Concept and planning of Kasai Marine Park

Kasai Marine Park was established based on the marine park development concept formulated in 1970. The initial plan of this time was to make the protected coastline of Kasai Rinkai Park into an artificial beach, instead of the artificial islands we have today. However, in light of issues pertaining to the tides of the Arakawa and Kyu-Edogawa rivers, as well as the need for channels for boats, it was decided that channels would be created between the beaches and the Kasai Rinkai Park, and that the beaches would be constructed to the south of the Kasai Rinkai Park.

The East Beach, which is a sanctuary for flora and fauna, and the West Beach—set up to enable people to enjoy the sea first-hand and to engage in a diverse array of recreational activities—were each planned and developed in accordance with these two different purposes.

Two artificial beaches

Boats ply the channel waters

Construction of landfill and parks offshore of Kasai

Landfill construction initiatives in the Kasai offshore area were launched prior to the creation of the parks, at which time significant volumes of sediment—taken from local water areas by large pump dredgers—were transported via sludge drainage pipes.

Many factors were considered during the park construction process, including landfill materials (sand particle size, place of origin, etc.), beach slope gradient, etc. A massive verification process pertaining to sand input and flow were conducted on-site. The East Beach consists primarily of dredged soil, while the West Beach was created out of mountain sand.

Because the waters off the coast of the parks are shallow, the seabed had to be dredged during the construction process to create large enough channels for boats.

Landfill construction by pump dredger

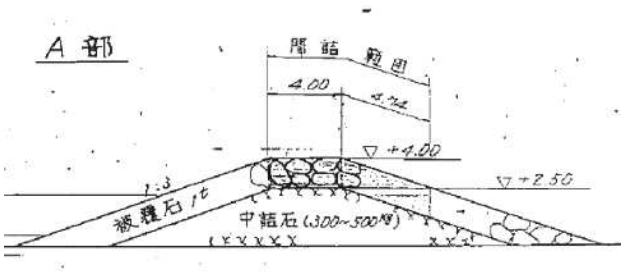
Landfill construction by sludge drainage pipe

History of the Kasai Offshore Area

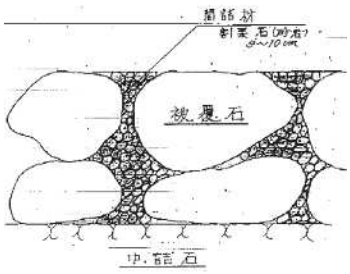
Protection of aquatic organisms and water quality conservation

The flora and fauna of the tidal flats are given priority, for example construction is intentionally avoided during the goby breeding season.

Stone dry walling techniques are used in guide wall construction to create a better habitat for creatures such as goby, and the water of the tidal flats is purified by the seawater flowing through.



Guide wall structure (cross section)



Guide wall structure (details)

Offshore water quality surveying

Mudskipper

Kasai Marine Park opens

Kasai Marine Park was finally completed upon a series of deliberations and verification processes. The park opened in 1989, concurrently with Kasai Rinkai Park, followed by the Tokyo Sea Life Park in October of the same year. These areas have been well-known and loved by countless people since this time.

Inauguration ceremony

Kasai Marine Park when the park opened

History of the Kasai Offshore Area

The Kasai offshore area today

The abundant natural environment of the tidal flats

Thanks to the initiatives of countless concerned parties, the Kasai Marine Park has witnessed the recovery of the magnificent nature of the area.

A rich ecosystem survives in the innermost reaches of Tokyo Bay

These tidal flats support countless flora and fauna, including numerous varieties of wild birds.

Some typical wildlife observed here include flocks of tens of thousands of greater scaup arriving here every winter, plus the great crested grebe. There are also a number of birds now considered rare globally—such as the black-faced spoonbill—as well as wild birds on the verge of extinction in Tokyo including the osprey and red-necked stint.

Flock of greater scaup

Tidal flat environment connecting sea and land

Reed beds stretch far and water at the rear of the East Beach, making the area amenable to fish such as mudskippers as well as creatures of the crab family. The reed beds are also favored by wild birds such as the great reed warbler and the eastern march harrier.

Reed beds of East Beach

A paradise of living creatures in close proximity to the metropolitan

The Kasai Marine Park is just 15 minutes by train from Tokyo Station. The park is one of a very few examples of parks in the world where vast natural conservation lands are tucked away in a corner of a large urban area.

These tidal flats lie in close proximity not only for residents of Tokyo but for the people of the entire metropolitan region. As such the park is an invaluable treasure of a place, where large numbers of people are free to enjoy a natural marine setting as well as marine culture—both now and in the future.

A nature observation tour in progress

The Kasai offshore area today

Activities at the tidal flats

A range of activities are implemented at the Kasai Marine Park, including programs designed to pass on the area's marine culture, as well as classes on the environment.

(The following are some examples of projects held at the present time. Please note that the dates/times shown are subject to change.)

Nori-making workshop

Local elementary school children can learn about the history and environment of the area by cultivating seaweed and making Kasai nori—once a local specialty.

Setting up *takehibi* platforms for oysters

An NPO is currently implementing the Satoumi/Satoyama Collaborative Project ("one *takehibi* per person"). *Takehibi* is an ancient style of fishing tool made by wrapping the branches of the bamboo around the trunks. The objective of the project is to purify the water by setting up *takehibi* platforms and placing oysters here. (The oyster is known for its water-purifying attributes.)

Ocean swimming (second half of July through August)

Visitors are welcome to swim in the ocean, primarily during the summer holiday season. During this period of the year, steps are taken to ensure safety and smooth operations via collaboration with NPOs.

History of the Kasai Offshore Area

Clam digging

Because the ebb and flow of the tides is more dramatic in the spring through early summer, shellfish such as Asari clams and Hamaguri clams can be effortlessly harvested when the tides are low.

Please note that there are restrictions on type of tools and the number of clams visitors are permitted to harvest.

Beach cleanup (March–November)

From March through November, local organization put a call out to volunteers to clean up the West Beach once a month.

Though the East Beach is ordinarily closed to visitors, boats are permitted—with the collaboration of the fishing sector and environmental conservation organizations for the purpose of removing garbage on the beach—in May and November only.

Observation tours of the fish and shellfish, birds, and plant life of the tidal flats are implemented along with beach cleanup projects.

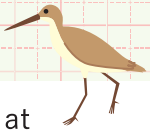
Wild bird watching tours

Bird watching tours are held at Kasai Marine Park, on land or on the West Beach, to observe the wild birds that come to East Beach and West Beach throughout the year.

Birds

Birds

Primary Flora and Fauna Found at the Kasai Marine Park



More than 120 species of birds have been identified at Kasai Marine Park, many of which can be observed in their tidal flat environment.

Through the spring and autumn, numerous sandpiper and plover varieties alight at this area, including the red-necked stint, the gray tailed tattler, the greenshank, and the little ringed plover.

In the winter, in addition to the tens of thousands of greater scaup arriving, flocks of the great crested grebe can also be observed. Species of birds now considered rare not just in Japan but around the world also arrive here, such as the black-faced spoonbill.

Spring Autumn Winter ••• Season

Red-necked stint

Black-faced spoonbill

Greater scaup

Great crested grebe

Primary Flora and Fauna Found at the Kasai Marine Park

Fish

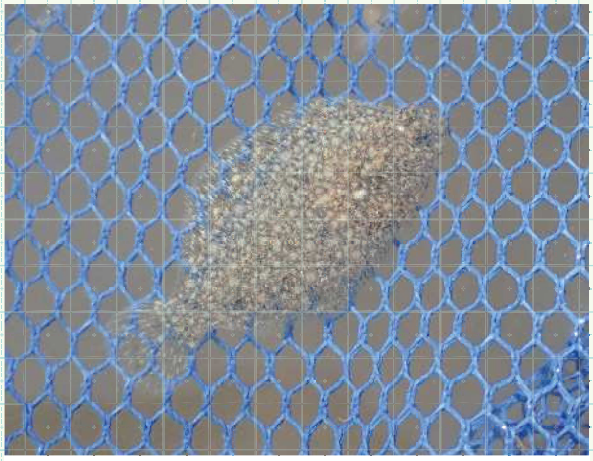
Fishes etc.

The tidal flats are also favored by numerous fish and benthic animals.

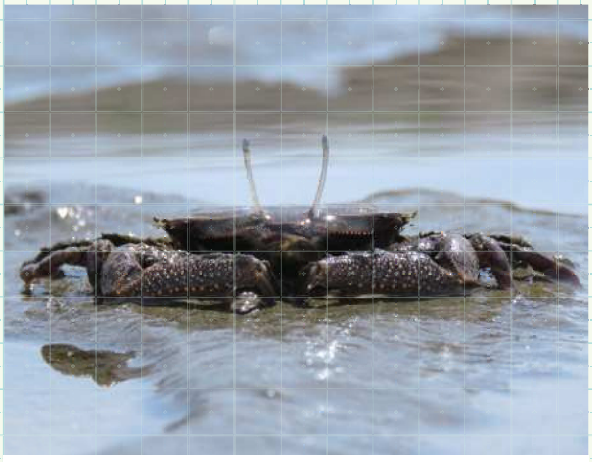
Rare fish including the mudskipper and bigjaw goby also make this their habitat.

In addition to crab varieties such as the macrophthalmus and the sand bubble crab, shellfish food sources such as Asari clams and littoral spoon clams are also found here, primarily on the East Beach tidal flats.

Mudskipper

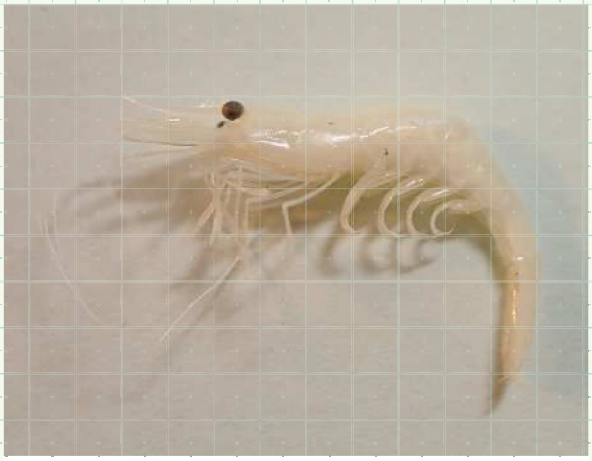


Stone flounder



Macrophtalmus

Sand bubble crab



Exopalaemon holthuis

Palaemon macrodactylus

Asari clams

Hamaguri clams

Littoral spoon clams

Glycera chirori

Plant life

Plants

Primary Flora and Fauna Found at the Kasai Marine Park

The Kasai Marine Park is also home to naturally-growing plants native to the coastline, such as fimbristylis ferruginea and beach vitex.

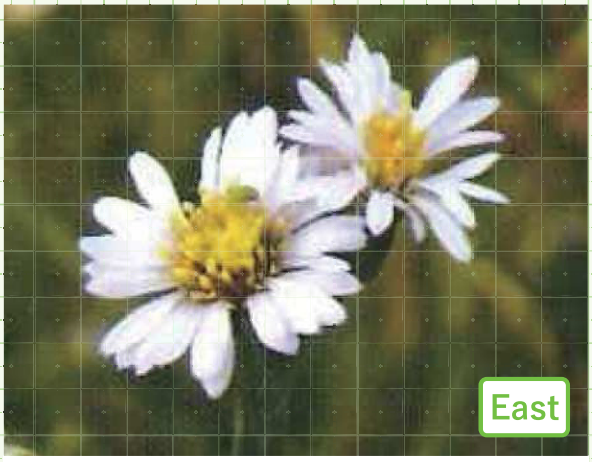
Additionally, sea aster is typical of species found on saline wetlands.

During the time period when the park was being developed, some of the plants that were cultivated were those capable of withstanding strong coastal winds and drying, such as black pine and pittosporum.

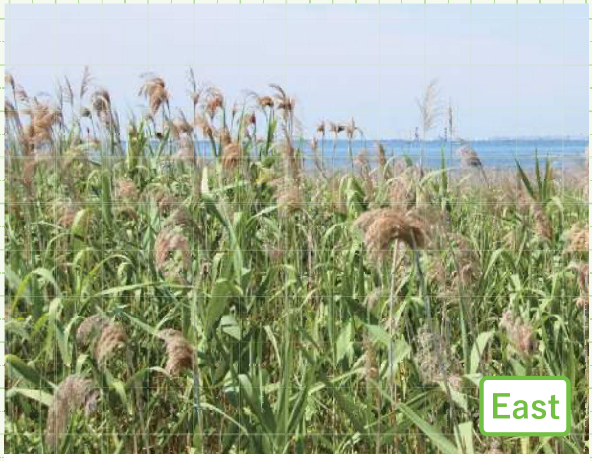
East ・・・Primary examples of flora living at East Beach

Memorial rose

Roundleaf chastetree



Sea aster



Reeds

The Kasai Marine Park includes the first wetlands in Tokyo to be registered under the Ramsar Convention

Registration of Kasai Marine Park wetlands under the Ramsar Convention

The tidal flats at Kasai Marine Park were listed as a Ramsar site (Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat) in October 2018, in recognition of the conservation initiatives pertaining to this large tidal flat environment as well as the successful coexistence of this magnificent natural environment with people engaged in various livelihoods. This was the first site in the Tokyo Metropolitan to be listed.

In Tokyo, initiatives designed to protect the tidal flats and ensure sustainable use are continuously implemented together with the local community and park users.

The Kasai Marine Park meets **three** of nine international criteria.

1 **Wetlands support 20,000-plus water fowl on a regular basis**

→ Anatidae: applicable

2 **Wetlands supporting one percent or more of the population of at least one species or subspecies of water fowl on a regular basis**

→ Greater scaup, great crested grebe: applicable

3 **Wetlands supporting flora/fauna at key stage of the life cycle**

→ Greater scaup, great crested grebe: applicable

Certificate of registration

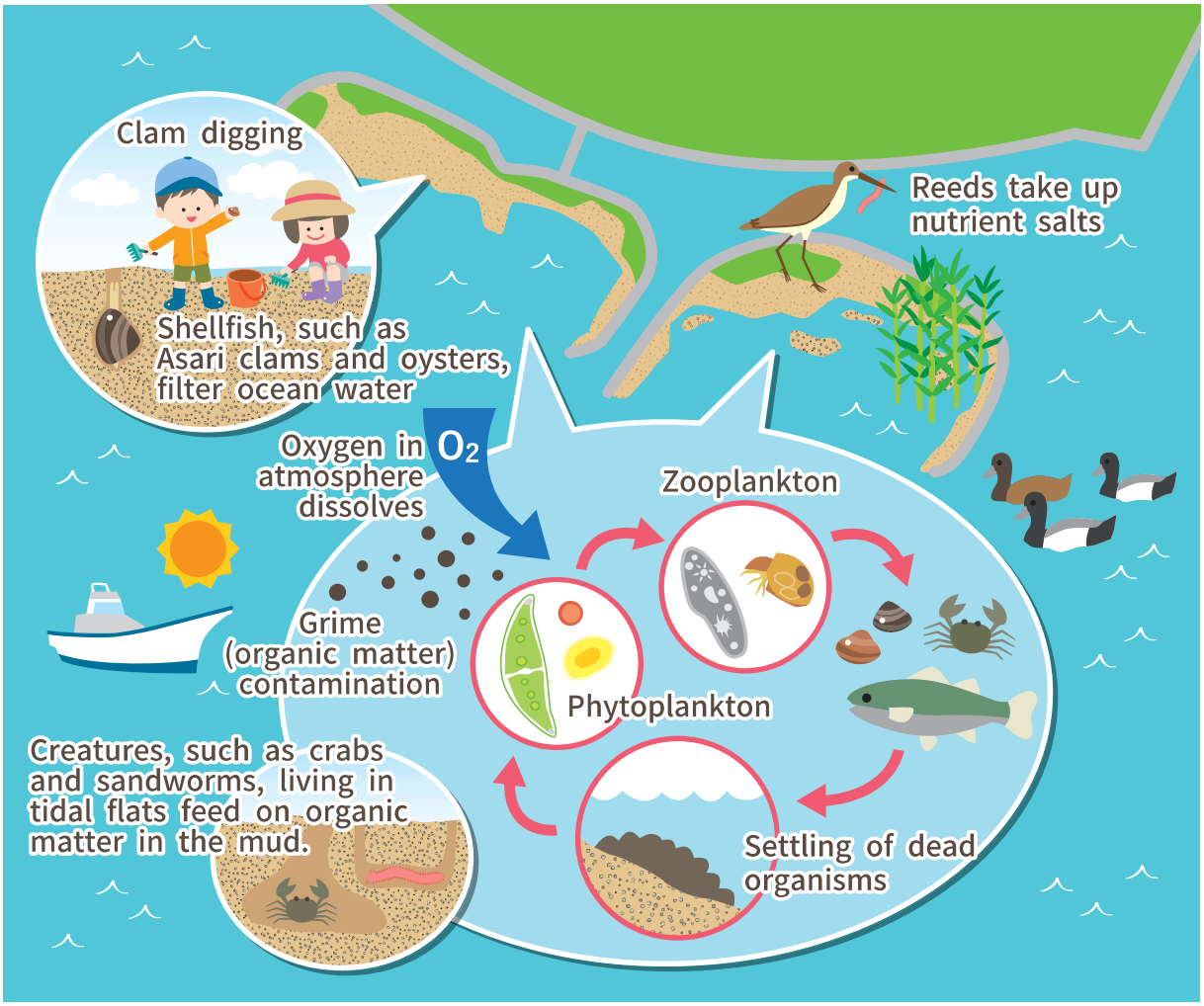
Map of Kasai Marine Park areas

The role of tidal flats

Coastal areas of sand and silt that are submerged and then dry out respectively as the tides go in and out are known as tidal flats.

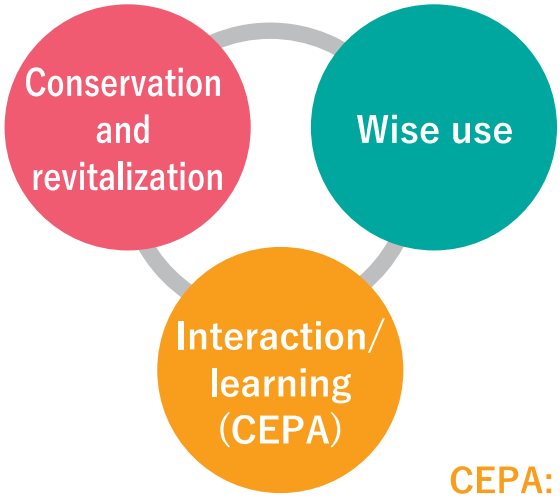
Plankton is found in ample quantities in the area because of the sunlight that reaches it in the shallow waters, as well as the nutrients brought about by the tides. The plankton serves as food for the crab and other shellfish living in the sand and silt. These creatures in turn become the prey of the various fish and bird varieties that live here. The diverse natural environment of the tidal flats plays multiple key roles in the lives of people.

- **Serves as a spot for seaside leisure activities such as clam digging, fishing, and boating;**
- **Supplies food sources such as shellfish and fish;**
- **Marine creatures such as shellfish purify the waters by consuming organic matter;**
- **Helps to mitigate disasters by controlling waves and conserving seashores, etc.**



Attributes of the Ramsar Convention

The Ramsar Convention (officially known as the Convention on Wetlands of International Importance especially as Waterfowl Habitat) is not only designed to protect important wetlands as the habit of various flora and fauna, but also encourages the **wise use** of such wetlands. The Convention approach focuses on interaction between relevant parties, capacity development, education, participation, as well as awareness-building.



CEPA:
Communication
Capacity building
Education
Participation
Awareness

The wise use concept

"Wise use" refers to the concept of using and maintaining the wetlands in such a way that their ecosystems are not lost, and ensuring that the wetlands can continue to enrich the human communities where they are located through industrial and/or cultural use. It also refers to the goal of passing down the wetlands intact to future generations.

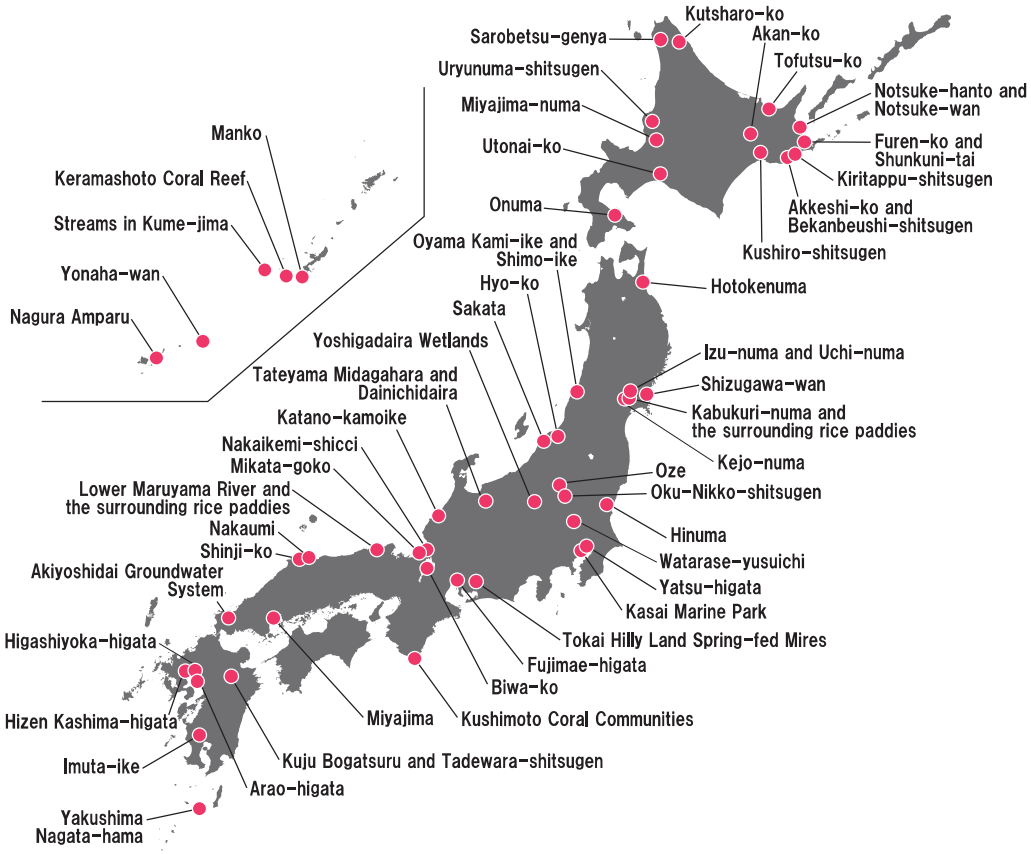
About wetlands

The Ramsar Convention defines wetlands as swamplands, bogs, peatlands, and other water areas where the water measures no deeper than six meters at low tide, regardless of whether said wetlands are natural or man-made, permanent or temporary, stagnant or flowing, or whether the water is fresh, brackish, or saltwater.

Japanese wetlands listed under the Ramsar Convention

There are 154,696 hectares* in 52 different locations of Ramsar sites in Japan, including Kushiro-shitsugen and Oze. The Tokyo Metropolitan collaborates with the municipalities in Japan that own these Ramsar sites—as well as the various relevant organizations—to convey the great appeal and importance of the wetlands, both in Japan and overseas, by way of public relations events, symposiums, and more.

* Current as of 2020.



Ramsar sites in Japan (Source: Wetlands International Japan)

Shizugawa-wan, listed under the Convention at the same time as Kasai Marine Park (Source: Minami Sanriku-cho, Miyagi Prefecture)

Symposium to commemorate the first anniversary of Kasai Marine Park as a Ramsar site

Information on Kasai Marine Park

Information on Kasai Marine Park

Hours

9:00–17:00 (extended depending on the season)

Transport

Access

JR 11-minute walk from JR Keiyo Line Kasai-Rinkai Park Station

Water Bus From Ryogoku/Odaiba Seaside Park, get off the water bus at Kasai Rinkai Park

City bus
1. Take the bus to Kasai-Rinkai-Koen from Nishi-Kasai Station on the Tokyo Metro Tozai Line.
2. Take the bus to Kasai-Rinkai-Koen from Ichinoe Station on the Toei Shinjuku Line or Kasai Station on the Tokyo Metro Tozai Line.
   Get off at Kasai-Rinkai-Koen and walk 11 minutes.

Parking lot(Kasai Rinkai Park parking lot)

Tel 03-3877-0725

Address 6-2 Rinkai-cho, Edogawa Ward, Tokyo 134-0086

Hours Open 24 hours

Usage fee Passenger vehicles: up to one hour, ¥200 (¥100 yen for each additional 30 minutes)
Large vehicles: up to two hours, ¥1,500 (¥500 for each additional 30 minutes)
Note: Large bills (¥10,000, ¥5,000, ¥2,000) not accepted.

Notes Note that the parking lots can be very crowded on weekends and holidays during the tourist season. You may choose public transportation to avoid wait time.

Inquiries

Kasai Marine Park Service Center

Tel 03-5696-4741

Address 6-2-4 Rinkai-cho, Edogawa Ward, Tokyo 134-0086

Major Developments at Kasai Marine Park

Edo to Meiji and Taisho Periods	Fishing village established 700-plus years ago Summer Asari clam, Hamaguri clam　Winter Kasai nori
Around 1940	Typhoon damage Typhoon Katherine (1947), Typhoon Kitty (1949) → Embankment construction (old embankment: 1952, new embankment: 1957)
Up to around 1950	Seaside recreation areas around Tokyo Spring Clam digging　Summer Ocean swimming　Autumn Goby fishing　Winter Boating
Around 1955	Environmental degradation Earth and sand as well as industrial waste were dumped at Kasai coastal area
Around 1960	Eradication of fishing rights Eradication of fishing rights by fishery compensation agreement (1962) Elimination of the fishing port designation at Kasai by the Ministry of Agriculture and Forestry (1964)
Around 1970	Worsening of pollution problems Degradation of ground surface due to groundwater pumping In 1968, 178 hectares of private land were submerged; areas of ground sunk by 23 centimeters in one year
1967	Petitions pertaining to nature conservation Edomae Goby Fish Conservation Society collects one million signatures in a petition to protect the Kasai offshore area Niihama Conservation Society issues a petition to maintain the status quo at the Sanmaizu area (1970) The Wild Bird Society of Japan issues petitions on tidal flat conservation and wild bird conservation (1970)
1969	Launch of Kasai offshore development initiative Tokyo Metropolitan Government begins considering development concept Tokyo Metro Tozai Line launched
1970	Marine park project launched Marine park development concept established
1972	Landfill construction launched Land adjustment project launched
1979	Kasai Marine Park project launched Plan for Kasai Marine Park publicly announced Survey research begins in 1972. Hydraulics testing pertaining to construction of artificial beaches was launched in 1975.
1980	Construction begins on Kasai Marine Park Construction begins on diversion embankment for artificial beaches (as of 1984) Construction begins for Nagisa Bridge (as of 1988)
1987	Landfill works completed via land adjustment project Volume of earth/and used in landfill: 250 million cubic meters
1989	Parks open Kasai Marine Park, Kasai Rinkai Park, and Tokyo Sea Life Park open Hotel Seaside Edogawa (hotel established by Edogawa Ward) opens Water Bus launched
1990	JR Keiyo Line fully launched
1991	Kasai offshore area wins first Cityscape Grand Prize
2012	Initiatives launched to offer ocean swimming at Kasai Marine Park
2018	Kasai Marine Park is first in the Tokyo Metropolitan to be listed as a Ramsar Site

Marine Parks Map


JR Yamanote Line/
Keihin-Tohoku Line
Yurakucho
Tokyo
Shimbashi
Hamamatsucho
Shiodome
Tamachi
Hibiya Line
Sumida
River
N
Oedo Line
Yurakucho Line
Tozai Line
Hinode
Terminal
Takeshiba
Terminal
New Transit
Yurikamome
Kachidoki
Tsukishima
Monzen-Nakacho
baura Minami
t Park
Harumi Port Park
(closing)
Rainbow Bridge
Harumi
Terminal
Harumibashi Park
Toyosu Terminal
Toyosu
Odaiba
Beach
Odaiba
Marine Park
Ariake Kita
Greenway
Ariake Coliseum
Ariake Tennis Park(closing)
Shiomi
Symbol Promenade
Park
Tatsumi Seaside Park
Tatsumi Greenway
Tatsumi
Mizu-no-hiroba
Port Park
Rinkai Line
Yumenoshima Marina
Ariake Nishi
Port Park
Yumenoshima Tropical
Greenhouse Dome
Shin-kiba Park
Shin-Kiba
Yumenoshima
Greenway
Arakawa
River
Shin-kiba Greenway
Tokyo Umi no
Mori Tunnel
JR Keiyo Line
Planned site of
Umi-no-Mori
(Sea Forest)
Kasai Rinkai
Park
Kasairinkaikoen
West
Beach
Koto Ward Wakasu Public Park
(Managed by Koto Ward)
Tokyo
Sea Life Park
Kasai Marine
Park
Wakasu Seaside Park
Tokyo Gate Bridge
East
Beach

This park is designed in keeping with the wishes of the people who live in the local community, the foremost of which is to restore the abundance of the area's oceans. This means conserving the marine culture of the area for upcoming generations; giving children the opportunity to experience ocean life close up; and maintaining and cultivating this environment of magnificent natural beauty.

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