

# Ramsar Information Sheet

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# **Brazil**

# Environmental Protection Area of Cananéia-Iguape-Peruíbe



Designation date 4 September 2017

Site number 2310

Coordinates 24°40'33"S 47°35'53"W

Area 202 307,00 ha

# 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

The Environmental Protection Area of Cananéia-Iguape-Peruibe has a total area of 234,000 hectares, covering the municipalities of Cananéia, Iguape, Ilha Comprida, Itariri, Miracatu and Peruibe, and the oceanic islands of Queimada Pequena, Bom Abrigo, Ilhote, Cambriú, Castilho and Figueiras (ICMBio, 2010).

The region has a highly diverse landscape, an important lagoon channel system and rivers, which connect the estuarine-lagoon area with the ocean. These areas are called the bars of lcapara, Cananéia and Ararapira, which are located in the north, center and southern coastal systems.

The main objectives of the Site are: 1. Enable the caiçaras (fishing communities who live along the São Paulo and Paraná coasts) to perform their activities within the established historical-cultural patterns; 2. Contain slopes subjected to erosion; 3. Protect and preserve ecosystems, from mangroves of the coastal zones, to fields in higher altitude regions; the endangered species; the seabirds nesting and migratory areas; archaeological sites; the remnants of the Atlantic Forest and the quality of water resources (Federal Decree No. 90,347 / 1984).

# 2 - Data & location

### 2.1 - Formal data

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

#### Compiler 1

Name	EMERSON AUSTIN NEPOMUCENO MARCONDES
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#### 2.1.2 - Period of collection of data and information used to compile the RIS

From year 2014

To year 2017

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Environmental Protection Area of Cananéia-Iguape-Peruíbe
Spanish)	
Unofficial name (optional)	Cananéia-Iguape-Peruíbe

#### 2.2 - Site location

#### 2.2.1 - Defining the Site boundaries

#### b) Digital map/image

<1 file(s) uploaded>

Former maps 0

#### Boundaries description

The Environmental Protection Area of Cananéia-Iguape-Peruíbe covers the municipalities of Cananéia, Iguape, Ilha Comprida, Itariri, Miracatu and Peruibe, and the oceanic islands of Queimada Pequena, Bom Abrigo, Ilhote, Cambriú, Castilho and Figueiras, in São Paulo and Paraná States (ICMBio, 2010).

In the Environmental Protection Area of Cananéia Iguape Peruíbe, on its boundaries and surroundings, there are several other protected areas, which include State Parks (Campina do Encantado, Cardoso Island, Intervales, Carlos Botelho and Superagui), Ecological Stations (Juréia-Itatins, Chauás and Tupiniquins), the Environmental Protection Areas (Ilha Comprida, Serra do Mar and Guaraqueçaba), the Mandira Extractive Reserve and the Relevant Ecological Interest Area (oceanic islands of Queimada Grande and Queimada Pequena), but also the indigenous lands of Guarani (Rio Branco de Cananéia, Serra do Itatins in Itariri and Peruibe). This makes it a mosaic of Conservation Units (ICMBio, 2010).

The Ramsar Site of Cananéia Iguape Peruíbe Environmental Protection Area has the following delimitation: from de northeast of Iguape municipality at Una do Prelado River mouth, at Juréia beach until the boundaries of Iguape and Peruíbe Municipality to the north, then in straight line in northest direction, until the junction of Pereque and Urubuçucaba River, then in direction east and the west until the Quatinga River, then Cabuçu River, Salga and Cachoeira do Martins stream, then continued until the boundaries of Peruibe e Itaritri municipalities, the Pedro Toledo and Itariri Municipalities, then continues until Miracatu Municipality. The southwest perimeter is from Iguape municipalities, until the north of Cardoso Island, Cananéia Bar in direction south until Comprida Island. The area of Ramsar Site is the one that faces the Cananeia, Cubatão Itapetinga Seas and Trapandé Bay.

### 2.2.2 - General location

a) In which large administrative region does the site lie?	São Paulo state
b) What is the nearest town or population centre?	Peruibe city

#### 2.2.3 - For wetlands on national boundaries only

Yes O No @	f one or more other	e territory of	onto	l extend	wetland	Does t	a)
	countries?						

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?

# 2.2.4 - Area of the Site

Official area, in hectares (ha): 202307

Area, in hectares (ha) as calculated from GIS boundaries 202308.12

# 2.2.5 - Biogeography

# Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Freshwater Ecoregions of the World (FEOW)	tropical and subtropical coastal river
Udvardy's Biogeographical Provinces	Neotropical Region, in the province of the Serra do Mar

# 3 - Why is the Site important?

## 3.1 - Ramsar Criteria and their justification

☑ Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided

The Environmental Protection Area of Cananéia Iguape Peruíbe is associated to a broad and relatively well-protected mangrove forest, is in a coastal area and is a representative wetland area in the São Paulo and Paraná States. The estuarine whole system is limited by a long barrier island, which settles two main connections to the Atlantic Ocean: Icapara Inlet, in the north, and Cananéia Inlet in the south. The inner geomorphologic structure leads to an intricate circulation pattern, with higher freshwater discharge in the northern portion due to an artificial channel, Valo Grande (VG), which connects the Ribeira de Iguape River to the estuary. This channel releases an annual mean runoff of 435 m3/s to the northern portion of the system. In the other hand, the sum of freshwater contribution to the southern portion is about 47.24 m3/s (Barrera-Alba et al, 2012). http://file.scirp.org/Html/4-1470023\_17068.htm

Other reason

The region has mangroves, estuaries, rivers, lagoon channels, coastal plains, waterfalls and marine and coastal islands. It also features sandbank forests, dunes, wetlands and the most extensive and conserved stretch of Atlantic Forest in the country. This mosaic of landscapes is an example of wetlands with high natural diversity, besides having a rare scenic beauty, threatened and endemic species, among other characteristics.

☑ Criterion 2 : Rare species and threatened ecological communities

Criterion 3 : Biological diversity

The Environmental Protection Area Cananéia Iguape Peruíbe hosts the most extensive and conserved mangrove areas of the state of São Paulo, in the soueast of Brazil (Cunha-Lignon et al., 2009a), which is approximately 15,193 hectares (Cunha-Lignon et al., 2011a). There area also other ecossistems such as:Atlantic Forest, one of the 25 hotspot of biodiversity in the world, mountains, estuary, rivers, coastal ecossistems: beach, sand dunes,mangroves,primary forest. Typical mangrove plant species in the region are the red mangrove (Rhizophora mangle), the white mangrove (Laguncularia racemosa) and the black mangrove (Avicennia schaueriana) (Schaeffer-Novelli, 1990). The presence of mangroves in the region are in great condition, and provide shelter and food for numerous bird species, marine and freshwater fish, as well as crustaceans, making them extremely important to the region's biodiversity and fisheries production.

lustification

In addition, in the Atlantic Forest, the juçara palm (Euterpe edulis) is a staple food for many bird species, including the channel-billed toucan (Ramphastos vitellinus), the green-billed toucan (Ramphastos dicolorus), the black-fronted piping guan (Pipile jacutinga), several species of thrush (Turdus spp) and the bare-throated bellbird (Procnias nudicollis) among others. The vegetative parts of the jussara palm are used as food for several animal species, such as the capuchin monkey (Cebus apella), the collared peccary (Pecari tajacu), the spotted paca (Cuniculus paca), the tapir (Tapirus sp.), the brown howler monkey (Allouata sp), among other species mammals and insects (Barroso et al., 2010).

Moreover, there is a great amount of birds that are endemic species to the Atlantic Domain (based on Cracaft, 1985). The area has the biggest remaining area of natural vegetation of jungu, a costal vegetation adapted to the tidal variation and protected the coastal biodiversity. Baillonius bailloni , Automolus leucophthalmus, Attila rufus, Batara cinerea , Chiroxiphia caudata, Cyanocorax caeruleus , Drymophila squamata, Dysithamnus mentalis , Haplospiza unicolor , Hemitriccus nidipendulus , Hemitriccus obsoletus , Herpsilochmus rufimarginatus are endemic species in the region .

- ☑ Criterion 4 : Support during critical life cycle stage or in adverse conditions
- ☑ Criterion 8 : Fish spawning grounds, etc.

The CIP EPA hosts the most extensive and conserved mangrove areas of the state of São Paulo (Cunha-Lignon et al., 2009) (approximately 15,193 hectares) (Cunha-Lignon et al., 2011a), which provide shelter and food for numerous species of marine and freshwater fishes and crustaceans, making the region extremely important for local fishing (Mendonca et al., 2010). In the CIP EPA, the annual average production of fish is greater than 4,000 tons. The mangrove oyster (Crassostrea brasiliana), which attaches itself to the prop roots of the red mangroves (R. mangle), is also an important resource in the southern CIP EPA (Mendonça & Machado, 2010).

Justilicatio

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

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Avicennia schaueriana			Ø		LC			Typical mangrove plant species in region that provide shelter and food for numerous bird species, marine and freshwater fish, as well as crustaceans, making them extremely important to the region's biodiversity and fisheries production.
Euterpe edulis			Ø					It is a staple food for many bird species, including the Ramphastos vitellinus, the Ramphastos dicolorus, the Pipile jacutinga, several species of thrush (Turdus spp) and the bare-throated bellbird (Procnias nudicollis) among others.
Laguncularia racemosa			Ø		LC ●数 ●解			Typical mangrove plant species in region that provide shelter and food for numerous bird species, marine and freshwater fish, as well as crustaceans, making them extremely important to the region's biodiversity and fisheries production.
Rhizophora mangle			<b>2</b>		LC			Typical mangrove plant species in region that provide shelter and food for numerous bird species, marine and freshwater fish, as well as crustaceans, making them extremely important to the region's biodiversity and fisheries production.

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

Phylum	Scientific name	Common name	Species qualifies under criterion 2 4 6	Species contributes under criterion 9 3 5 7 8	Size Period of pop. Est.	% occurrence 1)	IUCN Red Ap List	CITES ppendix	CMS Appendix I	Other Status	Justification
Birds											
CHORDATA/ AVES	Accipiter poliogaster	Gray-bellied Hawk; Grey- bellied Hawk					NT Str			endangered at the São Paulo State, endangered species in Brazil.	
CHORDATA/ AVES	Actitis macularius			0000			LC ©#				migrant
CHORDATA/ AVES	Amazona brasiliensis	Red-tailed Amazon	<b>2</b> 000				VU •:	<b>V</b>		endangered at the São Paulo State, endangered species in Brazil,	Endemic species to the Atlantic Domain (based on Cracaft, 1985
CHORDATA/ AVES	Amazonetta brasiliensis	Brazilian Teal					LC ●数 ●瞬				migrant
CHORDATA/ AVES	Anas bahamensis	White-cheeked Pintail					LC ●数 ●翻			endangered at the São Paulo State	migrant
CHORDATA/ AVES	Anas georgica	Yellow-billed Pintail					LC Sign				migrant

Phylum	Scientific name	Common name	Species qualifies under criterion 2   4   6   9	criterion	Pop. Size	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Anous stolidus	Brown Noddy					LC ©#				migrant
CHORDATA/ AVES	Anthracothorax nigricollis	Black-throated Mango					LC Sign				migrant
CHORDATA/ AVES	Anthus correndera	Correndera Pipit					LC Sign				migrant
CHORDATA/ AVES	Anthus lutescens	Yellowish Pipit					LC ©				migrant
CHORDATA/ AVES	Aramides mangle	Little Wood Rail					LC Sign			endangered at the São Paulo State	
CHORDATA/ AVES	Arenaria interpres	RuddyTurnstone					LC ©SF				migrant
CHORDATA/ AVES	Attila phoenicurus	Rufous-tailed Attila					LC ©				migrant
CHORDATA/ AVES	Attila rufus	Grey-hooded Attila		<b>2</b> 000			LC ©SP				Endemic species to the Atlantic Domain (based on Cracaft, 1985); migrant
CHORDATA/ AVES	Automolus leucophthalmus	White-eyed Foliage-gleaner		<b>2</b> 000			LC ●部				Endemic species to the Atlantic Domain (based on Cracaft, 1985
CHORDATA/ AVES	Baillonius bailloni			<b>2</b> 000							Endemic species to the Atlantic Domain (based on Cracaft, 1985
CHORDATA/ AVES	Bartramia Iongicauda	Upland Sandpiper					LC ●部				migrant
CHORDATA/ AVES	Batara cinerea	Giant Antshrike		<b>2</b> 000			LC Sign				Endemic species to the Atlantic Domain (based on Cracaft, 1985
CHORDATA/ AVES	Bubulcus ibis	Cattle Egret; Western Cattle Egret					LC Sin				migrant
CHORDATA/ AVES	Buteogallus aequinoctialis	Rufous Crab Hawk	Ø000				NT			endangered at the São Paulo State	
CHORDATA/ AVES	Cacicus haemorrhous	Red-rumped Cacique					LC Star				migrant
CHORDATA/ AVES	Calidris alba	Sanderling					LC ©SF				migrant
CHORDATA/ AVES	Calidris canutus	Red Knot					NT ©\$3 ©TSF				migrant
CHORDATA/ AVES	Calidris fuscicollis	White-rumped Sandpiper					LC ●部				migrant
CHORDATA/ AVES	Calidris melanotos	Pectoral Sandpiper					LC				migrant
CHORDATA/ AVES	Calidris pusilla	Semipalmated Sandpiper					NT Str				migrant
CHORDATA/ AVES	Calonectris diomedea	Cory's Shearwater					LC Sign				migrant

Phylum	Scientific name	Common name	q	Specie ualifie under riterio 4 6	es r on	Species contributes under criterion 3 5 7 8	Pop. Size Period of pop. Est. occurrence 1)	IUCN Red List	<b>Appendix</b>	CMS Appendix I	Other Status	Justification
	Campephilus	<u> </u>										T
CHORDATA/ AVES	robustus	Robust Woodpecker	1					LC ©#			endangered species in Brazil	
CHORDATA/ AVES	Carpornis cucullata					<b>z</b> aaa		NT				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Carpornis melanocephala		V					VU •#			endangered at the São Paulo State, endangered species in Brazil,	
CHORDATA/ AVES	Charadrius collaris	Collared Plover		<b>2</b>				LC Sign				migrant
CHORDATA/ AVES	Charadrius falklandicus	Two-banded Plover		<b>V</b>				LC Single				migrant
CHORDATA/ AVES	Charadrius modestus	Rufous-chested Plover		<b>V</b>				LC other				migrant
CHORDATA/ AVES	Charadrius semipalmatus	Semipalmated Plover		<b>Z</b>				LC				migrant
CHORDATA/ AVES	Charadrius wilsonia	Wilson's Plover		<b>7</b>				LC ©#				migrant
CHORDATA/ AVES	Chiroxiphia caudata	Blue Manakin				<b>z</b> ooo		LC © the				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Chloroceryle aenea	American Pygmy Kingfisher	V					LC Sir			probably endangered species	
CHORDATA/ AVES	Chlorophonia cyanea	Blue-naped Chlorophonia		<b>2</b>				LC Single				migrant
CHORDATA/ AVES	Chordeiles acutipennis	Lesser Nighthawk	k 🔲	<b>2</b>				LC © Single				migrant
CHORDATA/ AVES	Chordeiles minor	Common Nighthawk		<b>V</b>				LC Sign				migrant
CHORDATA/ AVES	Coccyzus americanus	Yellow-billed Cuckoo		<b>7</b>				LC ST STR				migrant
CHORDATA/ AVES	Coccyzus melacoryphus	Dark-billed Cuckoo		<b>2</b>				LC •#				migrant
CHORDATA/ AVES	Colonia colonus	Long-tailed Tyrant	ıt 🔲	<b>2</b>				LC ●部				migrant
CHORDATA/ AVES	Conopias trivirgatus			<b>V</b>				LC				migrant
CHORDATA/ AVES	Contopus cooperi							NT ●詳 ●瞬				migrant

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
CHORDATA/ AVES	Cyanocorax caeruleus	Azure Jay					NT ©S				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Cyclarhis gujanensis	Rufous-browed Peppershrike					LC om				migrant
CHORDATA/ AVES	Dacnis cayana	Blue Dacnis					LC om				migrant
CHORDATA/ AVES	Dacnis nigripes	Black-legged Dacnis					NT ©®			Endangered at the São Paulo State, endangered species in Brazil.	Endemic species to the Atlantic Domain (based on Cracaft, 1985); migrant.
CHORDATA/ AVES	Daption capense	Cape Petrel		10000			LC Sign				migrant
CHORDATA/ AVES	Dendrocygna autumnalis	Black-bellied Whistling Duck; Black-bellied Whistling-Duck					LC Sign				migrant
CHORDATA/ AVES	Dendrocygna bicolor	Fulvous Whistling Duck; Fulvous Whistling-Duck					LC ●部				migrant
CHORDATA/ AVES	Dendrocygna viduata	White-faced Whistling Duck; White-faced Whistling-Duck					LC ●許 ●開				migrant
CHORDATA/ AVES	Diomedea exulans	Wandering Albatross									migrant
CHORDATA/ AVES	Dromococcyx phasianellus	Pheasant Cuckoo					LC om				migrant
CHORDATA/ AVES	Drymophila squamata	Scaled Antbird					LC om				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Dysithamnus mentalis	Plain Antvireo					LC Str				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Elaenia obscura	Highland Elaenia					LC ©SF				migrant
CHORDATA/ AVES	Elanoides forficatus	Swallow-tailed Kite					LC OM				migrant
CHORDATA/ AVES	Elanus caeruleus	Black-winged Kite					LC STR				migrant
CHORDATA/ AVES	Emberizoides herbicola	Wedge-tailed Grass-Finch; Wedge-tailed Grass Finch					LC •#			endangered at the São Paulo State,	
CHORDATA/ AVES	Empidonomus varius	Variegated Flycatcher					LC •\$3 • TSF				migrant
CHORDATA/ AVES	Eudocimus ruber	Scarlet lbis	<b>200</b>				LC ©SP	V		endangered species in the state of São Paulo; endangered species in Brazil.	
CHORDATA/ AVES	Euphonia chlorotica	Purple-throated Euphonia					LC Sign				migrant

Phylum	Scientific name	Common name	Species qualifies under criterion 2 4 6 9	Species contributes under criterion	Pop. Size Period of pop. Est. occurrence 1) IUC Re Lis	d Append	Cther Status	Justification
CHORDATA/ AVES	Euphonia musica	Antillean Euphonia		0000	LC			migrant
CHORDATA/ AVES	Euphonia pectoralis	Chestnut-bellied Euphonia			LC			Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Falco deiroleucus	Orange-breasted Falcon			NT ST		Endangered at the São Paulo State, endangered species in Brazil.	migrant
CHORDATA/ AVES	Falco femoralis	Aplomado Falcon						migrant
CHORDATA/ AVES	Falco rufigularis	Bat Falcon		10000	LC			migrant
CHORDATA/ AVES	Falco sparverius	American Kestrel		10000	LC			migrant
CHORDATA/ AVES	Fulmarus glacialoides	Southern Fulmar			LC			migrant
CHORDATA/ AVES	Furnarius rufus	Rufous Hornero		10000	LC			migrant
CHORDATA/ AVES	Haematopus palliatus	American Oystercatcher	<b>2</b> 200		LC S		Endangered at the São Paulo State	migrant
CHORDATA/ AVES	Haplospiza unicolor	Uniform Finch			LC			Endemic species to the Atlantic Domain (based on Cracaft, 1985); migrant
CHORDATA/ AVES	Harpia harpyja	Harpy Eagle	770		NT S			migrant
CHORDATA/ AVES	Hemitriccus nidipendulus	Hangnest Tody- Tyrant			LC			Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Hemitriccus obsoletus	Brown-breasted Bamboo Tyrant			LC			Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Herpsilochmus rufimarginatus	Rufous-winged Antwren			LC			Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Hirundinea ferruginea	Cliff Flycatcher			LC			migrant
CHORDATA/ AVES	Hirundo rustica	Barn Swallow			LC			migrant
CHORDATA/ AVES	Hylocharis cyanus	White-chinned Sapphire			LC			Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	llicura militaris	Pin-tailed Manakir			LC %			Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Laniisoma elegans	Brazilian Laniisoma	Ø000		LC		Endangered at the São Paulo State, endangered species in Brazil,	Endemic species to the Atlantic Domain (based on Cracaft, 1985),
CHORDATA/ AVES	Legatus Ieucophaius	Piratic Flycatcher			LC			migrant

Phylum	Scientific name	Common name	c	und und rite	rion	cc	Species ontributes under criterion 8	Period of pop. Est. occurrence	UCN Red /	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Leucochloris albicollis	White-throated Hummingbird				<b>V</b>		L	LC OBS			Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Leucopternis lacernulatus		V						VU • Sis		Endangered at the São Paulo State, endangered species in Brazil.	
CHORDATA/ AVES	Leucopternis polionotus		V						NT		endangered at the São Paulo State, endangered species in Brazil.	
CHORDATA/ AVES	Limosa haemastica		V	1				L	LC Sign		endangered at the São Paulo State	migrant
CHORDATA/ AVES	Lipaugus Ianioides	Cinnamon-vented Piha	V					1	NT		endangered at the São Paulo State, endangered species in Brazil,	
CHORDATA/ AVES	Machetornis rixosa			<b>V</b>				L	LC Sin			migrant
CHORDATA/ AVES	Macronectes giganteus	Southern Giant Petrel		1				L	LC • iii			migrant
CHORDATA/ AVES	Macropsalis forcipata		V					L	LC OBS		endangered species in Brazil.	
CHORDATA/ AVES	Malacoptila striata	Chestnut-crested Puffbird; Crescent- chested Puffbird				Ø			NT			Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Melanerpes candidus			1					LC Sign			migrant
CHORDATA/ AVES	Melanerpes flavifrons	Yellow-fronted Woodpecker		1					LC Sign			migrant
CHORDATA/ AVES	Merulaxis ater	Slaty Bristlefront				Ø			NT ●\$} ●®			Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Mimus triurus	White-banded Mockingbird		V					LC Sis			migrant
CHORDATA/ AVES	Mionectes rufiventris	Grey-hooded Flycatcher				<b>V</b>			LC OSF			Endemic species to the Atlantic Domain (based on Cracaft, 1985),
CHORDATA/ AVES	Molothrus bonariensis	Shiny Cowbird		V					LC Sin			migrant
CHORDATA/ AVES	Muscipipra vetula	Shear-tailed Grey Tyrant		V				L	LC OTH			migrant
CHORDATA/ AVES	Myiarchus ferox	Short-crested Flycatcher		1					LC © is:			migrant
CHORDATA/ AVES	Myiarchus tuberculifer	Dusky-capped Flycatcher		<b>V</b>				L	LC Sin			migrant
CHORDATA/ AVES	Myiarchus tyrannulus	Brown-crested Flycatcher		V				L	LC ©			migrant

Phylum	Scientific name	Common name	Species qualifies under criterior 2 4 6	contributes under	Pop. Size	% occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Myrmeciza squamosa	Squamate Antbird			]		LC ©SF				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Myrmotherula unicolor	Unicolored Antwren			]		NT Sign			Endangered species in the state of São Paulo	Endemic species to the Atlantic Domain (based on Cracaft, 1985),
CHORDATA/ AVES	Numenius phaeopus	Whimbrel		ممممم	]		LC •#				migrant
CHORDATA/ AVES	Oceanites oceanicus	Wilson's Storm Petrel; Wilson's Storm-Petrel			]		LC ©S				migrant
CHORDATA/ AVES	Odontophorus capueira	Spot-winged Wood Quail			]		LC ●数 ●瞬				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Onychorhynchus coronatus	Royal Flycatcher; Amazonian Royal Flycatcher	<b>2</b> 00	ممممم	]		LC ●数 ●瞬			endangered at the São Paulo State,	
CHORDATA/ AVES	Ortalis guttata squamata		<b>2</b> 00		]					endangered at the São Paulo State.	Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Orthogonys chloricterus	Olive-green Tanager		مممم	]		LC ●部				migrant
CHORDATA/ AVES	Oryzoborus angolensis	Lesser Seed Finch		مممم			LC Sign			endangered at the São Paulo State,	
CHORDATA/ AVES	Pachyptila belcheri	Slender-billed Prion		مممم			LC ©S				migrant
CHORDATA/ AVES	Pachyptila desolata	Antarctic Prion		مممم	]		LC ©SF				migrant
CHORDATA/ AVES	Pachyramphus castaneus	Chestnut-crowned Becard		ممممم	]		LC ●数 ●瞬				migrant
CHORDATA/ AVES	Pachyramphus polychopterus	White-winged Becard		00000			LC Sign				migrant
CHORDATA/ AVES	Pachyramphus rufus	Cinereous Becard		00000			LC ©S				migrant
CHORDATA/ AVES	Pachyramphus validus			00000			LC ©SF				migrant
CHORDATA/ AVES	Pachyramphus viridis	Green-backed Becard		00000			LC ©SF				migrant
CHORDATA/ AVES	Pandion haliaetus	Osprey, Western Osprey		00000	]		LC •\$			endangered species in Brazil.	migrant
CHORDATA/ AVES	Parabuteo unicinctus	Harris's Hawk		00000			LC Sign			endangered at the São Paulo State	

Phylum	Scientific name	Common name	0	qual uno crite	rion	C	Species ontributes under criterion 5 7 8	Pop. Size Period of pop. Est. occurre	ence Re	d Appendix	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Penelope obscura	Dusky-legged Guan	<b>/</b>						EN © Si			endangered at the São Paulo State, endangered species in Brazil.	
CHORDATA/ AVES	Petrochelidon pyrrhonota	American Cliff Swallow; Cliff Swallow		Ø					LC				migrant
CHORDATA/ AVES	Phaetusa simplex	Large-billed Tern		1					LC				migrant
CHORDATA/ AVES	Phalacrocorax brasilianus	Neotropic Cormorant		1					LC				migrant
CHORDATA/ AVES	Phalaropus tricolor			Ø									migrant
CHORDATA/ AVES	Phibalura flavirostris	Swallow-tailed Cotinga	<b>/</b>	V					NT			endangered at the São Paulo State, endangered species in Brazil,	migrant
CHORDATA/ AVES	Philydor atricapillus	Black-capped Foliage-gleaner				<b>V</b>			LC ●\$3 ●簡				Endemic species to the Atlantic Domain (based on Cracaft, 1985
CHORDATA/ AVES	Phimosus infuscatus	Bare-faced lbis		<b>4</b>					LC ●\$3 ●簡				migrant
CHORDATA/ AVES	Phoenicopterus ruber	American Flamingo; Greater Flamingo	r 🗷	1					LC ©S	<b>2</b>		endangered species in Brazil.	migrant
CHORDATA/ AVES	Phylloscartes kronei	Restinga Tyrannulet	V						VU © iii			endangered at the São Paulo State	
CHORDATA/ AVES	Phylloscartes oustaleti	Oustalet's Tyrannulet							NT				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Phylloscartes paulista		V			<b>V</b>			NT			Endangered at the São Paulo State,	Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Picumnus temminckii	Ochre-collared Piculet							LC				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Pionopsitta pileata	Pileated Parrot	<b>/</b>	V					LC	<b>2</b>		endangered at the São Paulo State, probably endangered species in Brazil	Endemic species to the Atlantic Domain (based on Cracaft, 1985); migrant
CHORDATA/ AVES	Platyrinchus leucoryphus	Russet-winged Spadebill	V			<b>V</b>			VU •\$3 •\$3			Endangered at the São Paulo State, endangered species in Brazil	Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Plegadis chihi	White-faced Ibis		V					LC				migrant
CHORDATA/ AVES	Pluvialis dominica	American Golden Plover; American Golden-Plover		V					LC				migrant
CHORDATA/ AVES	Pluvialis squatarola	Black-bellied Plover; Grey Plove	er 🗆	<b>4</b>					LC Si				migrant
CHORDATA/ AVES	Podager nacunda	Nacunda Nighthawk		¥)									migrant

Phylum	Scientific name	Common name	Species qualifies under criterion 2 4 6 9	Species contribute under criterion 3 5 7	Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Procellaria aequinoctialis	White-chinned Petrel						VU ©\$ ®®				migrant
CHORDATA/ AVES	Procnias nudicollis	Bare-throated Bellbird						VU ©\$ ®®			endangered at the São Paulo State	migrant
CHORDATA/ AVES	Progne chalybea	Grey-breasted Martin; Gray- breasted Martin						LC ●部				migrant
CHORDATA/ AVES	Progne subis	Purple Martin						LC OMP				migrant
CHORDATA/ AVES	Progne tapera	Brown-chested Martin						LC ©#				migrant
CHORDATA/ AVES	Psilorhamphus guttatus	Spotted Bamboowren						NT STEP				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Pterodroma incerta	Atlantic Petrel						EN Sign				migrant
CHORDATA/ AVES	Puffinus gravis											migrant
CHORDATA/ AVES	Puffinus griseus	Sooty Shearwater										migrant
CHORDATA/ AVES	Puffinus puffinus	Manx Shearwater						LC Sign				migrant
CHORDATA/ AVES	Pulsatrix koeniswaldiana	Tawny-browed Owl	<b>2</b> 000					LC ©S			endangered at the São Paulo State	Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Pyriglena leucoptera	White-shouldered Fire-eye						LC ●辭				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Pyrocephalus rubinus	Vermilion Flycatcher						LC Sign				migrant
CHORDATA/ AVES	Pyroderus scutatus	Red-ruffed Fruitcrow	<b>2</b> 000					LC ©SF			endangered at the São Paulo State	
CHORDATA/ AVES	Ramphastos dicolorus	Green-billed Toucan						LC Sign				Endemic species to the Atlantic Domain (based on Cracaft, 1985); migrant
CHORDATA/ AVES	Ramphastos vitellinus	Channel-billed Toucan	<b>YYO</b> C					VU ●\$* ●\$#				migrant
CHORDATA/ AVES	Ramphocelus bresilius	Brazilian Tanager		<b>2</b> 00				LC •#				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Ramphodon naevius	Saw-billed Hermit						NT				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Rhytipterna simplex	Greyish Mourner	0000					LC S				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Saltator similis	Green-winged Saltator						LC ©SF				migrant

Phylum	Scientific name	Common name	qı u cr	pecies lalifies linder iterion	co	Species ontribute under criterion	Pop. Size	% occurrenc 1)		CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Satrapa icterophrys	Yellow-browed Tyrant		<b>2</b> 00					LC © the				migrant
CHORDATA/ AVES	Schiffornis virescens	Greenish Schiffornis							LC ©				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Schistochlamys ruficapillus	Cinnamon Tanager	V.	<b>Z</b> OC					LC •\$			endangered at the São Paulo State,	migrant
CHORDATA/ AVES	Sicalis flaveola	Saffron Finch		<b>2</b> 00					LC Single				migrant
CHORDATA/ AVES	Sirystes sibilator	Sirystes; Eastern Sirystes		<b>2</b> 00					LC Sign				migrant
CHORDATA/ AVES	Spheniscus magellanicus	Magellanic Penguin		20C					NT © TSF				migrant
CHORDATA/ AVES	Spizaetus ornatus	Ornate Hawk- Eagle	<b>V</b>						NT STEP			endangered at the São Paulo State, endangered species in Brazil.	
CHORDATA/ AVES	Spizaetus tyrannus	Black Hawk-Eagle	<b>.</b>						LC			endangered at the São Paulo State, endangered species in Brazil.	
CHORDATA/ AVES	Sporophila caerulescens	Double-collared Seedeater		<b>Z</b> OC					LC •\$				migrant
CHORDATA/ AVES	Sporophila falcirostris	Temminck's Seedeater	V.	<b>2</b> 00					VU ©ST			endangered at the São Paulo State, endangered species in Brazil.	Endemic species to the Atlantic Domain (based on Cracaft, 1985); migrant
CHORDATA/ AVES	Sporophila frontalis	Buffy-fronted Seedeater	✓.	<b>Z</b> OC					VU © iii © TSF			endangered at the São Paulo State, endangered species in Brazil.	Endemic species to the Atlantic Domain (based on Cracaft, 1985); migrant
CHORDATA/ AVES	Sporophila lineola	Lined Seedeater		<b>2</b> 00					LC ©				migrant
CHORDATA/ AVES	Stercorarius Iongicaudus	Long-tailed Jaeger		<b>2</b> 00					LC ©				migrant
CHORDATA/ AVES	Stercorarius parasiticus	Parasitic Jaeger		<b>2</b> 00					LC ©				migrant
CHORDATA/ AVES	Stercorarius pomarinus	Pomarine Jaeger; Pomarine Skua		<b>Z</b> OC					LC Sim				migrant
CHORDATA/ AVES	Stercorarius skua	Great Skua		20c									migrant
CHORDATA/ AVES	Sterna hirundinacea	South American Tern	✓.	<b>2</b> 00					LC			endangered at the São Paulo State	migrant
CHORDATA/ AVES	Sterna hirundo	Common Tern		20C					LC				migrant
CHORDATA/ AVES	Sterna trudeaui	Snowy-crowned Term		20c					LC •\$: •\$				migrant
CHORDATA/ AVES	Sturnella superciliaris	White-browed Blackbird		<b>Z</b> OC					LC				migrant

Phylum	Scientific name	Common name	Species qualifies under criterion 2 4 6	С	Species ontribute under criterion	Size Pe	eriod of pop. Est.	% occurrence 1)		CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Tachyphonus coronatus	Ruby-crowned Tanager							LC ©#				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Tangara cyanocephala	Red-necked Tanager							LC © is				migrant
CHORDATA/ AVES	Tangara peruviana	Black-backed Tanager							VU Sisseman			endangered at the São Paulo State,	Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Tangara preciosa	Chestnut-backed Tanager							LC Sign			endangered at the São Paulo State	migrant
CHORDATA/ AVES	Tapera naevia	Striped Cuckoo							LC ●翻				migrant
CHORDATA/ AVES	Terenura maculata	Streak-capped Antwren							LC ©#				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Tersina viridis	Swallow Tanager							LC ●部				migrant
CHORDATA/ AVES	Thalassarche melanophris								NT ST ST ST ST ST ST ST ST ST S				migrant
CHORDATA/ AVES	Thalasseus maximus	Royal Tern							LC ©			endangered at the São Paulo State	
CHORDATA/ AVES	Thraupis cyanoptera	Azure-shouldered Tanager							NT © 53 © 1587				Endemic species to the Atlantic Domain (based on Cracaft, 1985); migrant
CHORDATA/ AVES	Thraupis ornata	Golden-chevroned Tanager							LC Sign				migrant
CHORDATA/ AVES	Tiaris fuliginosus								LC Single				migrant
CHORDATA/ AVES	Tityra cayana	Black-tailed Tityra							LC ©#				migrant
CHORDATA/ AVES	Tityra inquisitor	Black-crowned Tityra							LC Str				migrant
CHORDATA/ AVES	Todirostrum poliocephalum	Yellow-lored Tody- Flycatcher	000						LC other				Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Triclaria malachitacea	Blue-bellied Parro	t 🗷 🗆 🗆 (						NT Sign			endangered at the São Paulo State, endangered species in Brazil	Endemic species to the Atlantic Domain (based on Cracaft, 1985)
CHORDATA/ AVES	Tringa flavipes	Lesser Yellowlegs							LC ©#				migrant
CHORDATA/ AVES	Tringa solitaria	Solitary Sandpiper							LC ©#				migrant
CHORDATA/ AVES	Tryngites subruficollis	Buff-breasted Sandpiper									V		migrant
CHORDATA/ AVES	Turdus albicollis	White-necked Thrush							LC ©				migrant
CHORDATA/ AVES	Turdus amaurochalinus	Creamy-bellied Thrush							LC ●部				migrant

Phylum	Scientific name	Common name	Species qualifies under criterion 2 4 6	unde	r Pop	% occurrence 1)	IUCN Red A	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Turdus leucomelas	Pale-breasted Thrush					LC Sisseman				migrant
CHORDATA/ AVES	Tyrannus savana	Fork-tailed Flycatcher					LC Sign				migrant
CHORDATA/ AVES	Vireo olivaceus	Red-eyed Vireo					LC © 63 © 1587				migrant
CHORDATA/ AVES	Volatinia jacarina	Blue-black Grassquit					LC Star				migrant
CHORDATA/ AVES	Zenaida auriculata	Eared Dove					LC © 63 © 1587				migrant
Fish, Mollusc	and Crustacea										
CHORDATA/ ACTINOPTERYGII	Anchoviella lepidentostole	Broadband anchovy					LC Single				One of the most fished specie
MOLLUSCA/ BIVALVIA	Crassostrea brasiliana	Mangrove oyster			•						One of the most fished specie
CHORDATA/ ACTINOPTERYGII	Macrodon ancylodon	King weakfish			•		LC © 53 © 158				One of the most fished specie
CHORDATA/ ACTINOPTERYGII	Micropogonias furnieri	Croaker					LC Sign				One of the most fished specie
CHORDATA/ ACTINOPTERYGI	Mugil liza				<b></b>						
ARTHROPODA/ MALACOSTRACA		swamp ghost crab									It performs a 'walk' between November and February when it is most active and reproducing
ARTHROPODA/ MALACOSTRACA	Xiphopenaeus kroyeri	Seabob shrimp									One of the most fished specie
Others											
CHORDATA/ REPTILIA	Caiman latirostris							<b></b> ✓			
CHORDATA/ MAMMALIA	Leontopithecus caissara	Black-faced Lion Tamarin; Superagui Lion Tamarin	Ø00				CR	V			
CHORDATA/ MAMMALIA	Panthera onca						EN OTH	V			
CHORDATA/ MAMMALIA	Sotalia guianensis							<b>✓</b>			groups of more than 100 individuals of Guiana dolphin (Sotalia guianensis) use the area to rest, breed and feed

<sup>1)</sup> Percentage of the total biogeographic population at the site

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

# RIS for Site no. 2310, Environmental Protection Area of Cananéia-Iguape-Peruíbe, Brazil

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Atlantic Forest		11 mammals species are listed as threatened, and 18 are endemic to the Atlantic Forest.	The Atlantic Forest is characterized by a high species diversity and endemism
Mangrove		The CIP EPA hosts the most extensive and conserved mangrove areas in a region with great human pressures.	The mangroves in the region are in great condition, and provide shelter and food for numerous bird species, marine and freshwater fish, as well as crustaceans, making them extremely important to the region's biodiversity and fisheries production.

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

# 4.1 - Ecological character

The region has mangroves, estuaries, rivers, lagoon channels, coastal plains, waterfalls and marine and coastal islands. It also features sandbank forests, dunes, wetlands and the most extensive and conserved stretch of Atlantic Forest in the country. This mosaic of landscapes is a unique example of wetlands with high natural diversity, besides having a rare scenic beauty, threatened and endemic species, among other characteristics.

# 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
A: Permanent shallow marine waters		4		
D: Rocky marine shores		4		
E: Sand, shingle or pebble shores		4		
F: Estuarine waters		1		Representative
G: Intertidal mud, sand or salt flats		4		
H: Intertidal marshes		4		
l: Intertidal forested wetlands		2	15193	Representative

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M Permanent rivers/ streams/ creeks		3		
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		4		

Human-made wetlands

Harrian made wedande				
Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
3: Irrigated land		4		
4: Seasonally flooded agricultural land		4		
7: Excavations		4		
9: Canals and drainage channels or ditches		4		

#### 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/AVES	Aburria jacutinga					
CHORDATAAVES	Fregata magnificens	Magnificent Frigatebird				
CHORDATA/AVES	Hypoedaleus guttatus	Spot-backed Antshrike				
CHORDATAVAVES	Penelope superciliaris	Rusty-margined Guan				
CHORDATAVAVES	Sula leucogaster	Brown Booby				
CHORDATA/MAM/MALIA	Alouatta guariba guariba					
CHORDATA/MAM/MALIA	Brachyteles arachnoides	Southern Muriqui				
CHORDATA/MAM/MALIA	Cuniculus paca	Spotted Paca				
CHORDATA/MAMMALIA	Leopardus pardalis	Ocelot				
CHORDATA/MAMMALIA	Pecari tajacu	collared peccary				
CHORDATA/MAMMALIA	Puma concolor	Cougar				
CHORDATA/MAMMALIA	Sapajus apella	Capuchin Monkey				
CHORDATA/MAMMALIA	Sciurus aestuans	Brazilian Squirrel				

Invasive alien animal species

mindonio dinom di immai opodioc	•			
Phylum	Scientific name	Common name	Impacts	
CHORDATA/AVES	Passer domesticus	House Sparrow	Potentially	

#### 4.4 - Physical components

#### 4.4.1 - Climate

Climatic region	Subregion	
A: Tropical humid climate	Af: Tropical wet (No dry	
A Tropical Harris diffiate	season)	

According to the Köppen classification, the CIP EPA region's climate is of a humid tropical climate characteristic, with humidity averaging around 88%. The average rainfall is approximately 2200 mm per year, with a marked rainy season between January and March (monthly average: 266 mm), and a less rainy season in July and August (monthly average: 95 mm). The region has an average annual temperature of 23.8oC (Silva, 1989). The tide is of a mixed type, with two higher tides and two lower tides a day, with an average level of 0.81 m, characteristic of micro tidal systems (Mesquita and Harari, 1983).

## 4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)
a) Maximum elevation above sea level (in metres)
Entire river basin
Upper part of river basin ☐
Middle part of river basin ☐
Lower part of river basin ☑
More than one river basin $\square$
Not in river basin $\square$
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.

The municipalities that make up the CIP EPA, and have 100% of its territory within the Ribeira watershed and coastline, include Cananéia, Iguape, Comprida Island and Miracatu and it is located at Atlantic Ocean. The municipalities of Itariri and Peruibe, which are also part of the CIP EPA, have about 80% of its territory within this watershed. The watershed can be divided into three sub-basins: the High Ribeira, the Low Ribeira and Ribeira de Iguape River. They have a drainage area and bathe different municipalities.

#### 4.4.3 - Soi

- Soil
Mneral □
Organic □
No available information $\Box$
re soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)?

#### Please provide further information on the soil (optional)

In the region, dominate soils are quite clayey, generally deep and differentiated. The relief is quite corrugated and it rains a lot throughout the year. Despite the relief being mountainous, there are quite deep soils rich in organic matter, and there are also shallow soils poor in organic matter and smoothed in terms of relief (Theodorovicz & Theodorovicz, 2007).

# RIS for Site no. 2310, Environmental Protection Area of Cananéia-Iguape-Peruíbe, Brazil 4.4.4 - Water regime Water permanence Presence? Usually permanent water present Source of water that maintains character of the site Predominant water source Presence? Water inputs from surface Marine water П 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. The watershed region has a dense drainage system with formations of waterfalls and natural pools (Theodorovicz & Theodorovicz, 2007). Most of the watershed land area is characterised as mountainous, and has soils and rocks with low permeability. It is therefore a relevantly fast runoff environment, unfavorable to the infiltration of rainwater underground, vulnerable to accelerated erosion and massive landslides. At the regional level, we highlight two large compartments with distinct relief conditions. The medium to high Ribeira Valley dominates a relief, ranging from strong corrugated to hilly, between 100 m to more than 300 m in the majority of areas. On medium to high areas of the Ribeira Valley, there is a sudden change in the relief pattern, with the main drainage system containing large floodplains, the same happens in a more smoothed but quite corrugated and irregular way, with amplitudes ranging between 100 and 150 metres (Theodorovicz & Theodorovicz, 2007). 4.4.5 - Sediment regime Significant erosion of sediments occurs on the site Significant accretion or deposition of sediments occurs on the site Significant transportation of sediments occurs on or through the site $\Box$ Sediment regime is highly variable, either seasonally or inter-annually $\Box$ Sediment regime unknown Please provide further information on sediment (optional): Mangroves are in an excellent condition and provide important ecosystem services, such as nurseries for marine species, sediment retention and shoreline protection. White mangroves colonise areas where there is intense sediment deposition. The Valo Grande artificial channel, built in the 19th century, links the Ribeira River to the estuary in Iguape region. Currently, the artificial channel became a preferential passage of Ribeira river water, significantly reducing the flow passing by the original stretch of the river, which has led to siltation from around the natural route (Brasil, 2012). This resulted in major changes to the coastal system, such as increased sedimentation rates, reduction of salinity and a change in local biota (Mahiques et al, 2009; & Cunha-Lignon Kampel, 2011). 4.4.6 - Water pH Acid (pH<5.5) □ Circumneutral (pH: 5.5-7.4) Alkaline (pH>7.4) □ Unknown 🗹 447 - Water salinity Fresh (<0.5 a/l) Mixohaline (brackish)/Mixosaline (0.5-30 g/l) ☑ Euhaline/Eusaline (30-40 g/l) Hyperhaline/Hypersaline (>40 g/l) □ Unknown Please provide further information on salinity (optional): In 1852, a canal was opened linking the Ribeira River to the estuarine system near the Iguape city, in order to facilitate rice transport to the port The canal opening brought drastic changes in sedimentary rates and reduced the low salinity of estuarine and interstitial waters in regions close to the Valo Grande (Mahiques et al., 2009). Low salinity in the estuary does not directly affect the mangroves, but it does greatly facilitate the installation and development of aquatic macrophytes that prevent the establishment of mangrove seedlings and colonization of new forests (Cunha-Lignon et al., 2011a).

Eutrophic □

Mesotrophic □

Oligotrophic □

Dystrophic □

Unknown ☑

4.4.8 - Dissolved or suspended nutrients in water

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

i) broadly similar $O$ ii) significantly different $\odot$	Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself:
	Surrounding area has greater urbanisation or development
	Surrounding area has higher human population density
<b>⊘</b>	Surrounding area has more intensive agricultural use
✓	Surrounding area has significantly different land cover or habitat types

Please describe other ways in which the surrounding area is different:

Cities surrounding the CIP EPA include Registro (54,000 inhabitants), Pariquera-Acu (18,446 inhabitants), Jacupiranga (17,208 inhabitants), Itariri (15,471 inhabitants) and Pedro de Toledo (10,204 inhabitants) (IBGE, 2010). None of them are coastal cities, but instead are located along the Ribeira River.

Banana and tea plantations dot the landscape surrounding the CIP EPA. The Miracatu municipality has about 5000 hectares of cultivated banana areas (http://www.miracatu.sp.gov.br). Along the Ribeira River, sand and limestone extraction are activities that also stand out (São Paulo, 2012).

The CIP EPA is located in the catchment area of Petrobras' oil activities, which includes 11 wells (with its flow lines) and navigational paths for supporting vessels that operate between a sea base in Itajaí (Santa Catarina) and the coastal zone (ICS, 2010). Bearing in mind that the navigation route of support boats is considered to be a catchment area for marine mammals. They therefore face the possibility of a collision with these species and birds, due to the proximity to nesting areas.

#### 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)		Medium	
	Fresh water	Drinking water for humans and/or livestock	Medium	

#### Regulating Services

	regulating oel vices		
		Examples	Importance/Extent/Significance
		Soil, sediment and nutrient retention	Medium
	Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	Medium

#### Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Medium
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium

Supporting Services

Ecosystem service	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

Within the site:	10000s
Outside the site:	100000s

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

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland

Description if applicable

Caiçaras are coastal communities of Portuguese, indigenous and African origin, extending from the south of Rio de Janeiro state to the south of São Paulo. They have close connections with the natural coastal environments, removing food such as fish and crustaceans, which are now the basis of most local revenue (Ferreira & Jankowsky, 2009). Caiçaras use 22 types of artisanal fishing gear for marine, estuarine and riverine fishing in the well-conserved municipalities of Cananéia, Iguape and Peruibe (Mendonça & Miranda, 2008).

The maroon communities are considered to be traditional populations of escaped slaves (Diegues & Viana 2004). In the Ribeira Valley, these communities live on subsistence farms and collect the juçara palm (Euterpe edulis) to supplement family income. The juçara palm has an important ecological and economic role for the Atlantic Rainforest and the local rural communities (Barroso et al., 2010). In Mandira maroon, the traditional community with the support of researchers from the University of São Paulo organised the management and sale of mangrove oysters (Crassostrea brasiliana).

Thirty-six archaeological sites were found in the regions of Comprida Island, Cananéia and Iguape. Shell middens are the prevailing archaeological feature in the region of the CIP EPA Ramsar Site. This region has the highest concentration of coastal shell middens in the country (Uchôa, 1989). In Cananéia, eight shell middens were found underwater that date back to 8000 years BP, showing a marine regression in the region (Calippo, 2004). The shell middens are sites related to prehistoric inhabitants of the coastal plains and they are protected by Federal Law No. 3924/61 (Almeida & Suguio, 2011). Nomadic human populations lived in groups of approximately 100 individuals in the CIP EPA region and used its natural resources for generations (Almeida & Suguio, 2011). A lot of these archaeological sites indicate an abundance of food during this period. The shell midden's faunal composition is dominated by fish and shellfish fragments, as well as Anomalocardia brasiliana, Crassostrea brasiliana and Lucina pectinata mollusk shells (Uchôa, 1989). In CIP EPA Ramsar site, middens dating between 1000 and 8000 years BP were found along the Ribeira River, on Comprida Island and Cananéia's sandy plains, and submerged in lagoon channels (Calippo, 2004; Adams & Suguio, 2011).

	iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples
_	iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological
	character of the wetland

#### 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

Pu				

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)	<b>2</b>	<b>2</b>

#### Provide further information on the land tenure / ownership regime (optional):

According to the National Conservation Unit System, the management category of Environmental Protection Area (EPA) of the Sustainable Use Protected Areas is made up of public and private land, where rules and restrictions for its use may be made (Brasil, 2000). Thus, part of the CIP EPA is occupied by cities between 12,000 inhabitants (Cananéia) and 60,000 (Peruibe) (IBGE, 2010).

#### 5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for	Chico Mendes Institute for Biodiversity Conservation (Instituto Chico Mendes de Conservação da Biodiversidade); Rua da Saudade, nº 350 - Bairro Canto do Morro.  Postal Code: 11920-000 - Iguape-SP Iguape , São Paulo State
Provide the name and title of the person or people with responsibility for the wetland:	EMERSON AUSTIN NEPOMUCENO MARCONDES, Head of the Environmental Protection Area Cananéia-Iguape-Peruíbe
Poetal address:	Rua da Saudade, nº 350 - Bairro Canto do Morro Postal Code: 11920-000 - Iguape-SP
E-mail address:	emerson.marcondes@icmbio.gov.br

 $\checkmark$ 

 $\checkmark$ 

 $\checkmark$ 

# 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	unknown impact	unknown impact	✓	✓	
Tourism and recreation areas	unknown impact	unknown impact		<b>2</b>	
Water regulation					
Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area	
Canalisation and river regulation	unknown impact	unknown impact	<b>/</b>		
Agriculture and aquaculture					
Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area	
Annual and perennial non- timber crops	unknown impact	unknown impact	<b>✓</b>		
Energy production and mining					
Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area	
Oil and gas drilling	unknown impact	unknown impact		✓	
	Transportation and service corridors				
Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area	
Shipping lanes	unknown impact	unknown impact		✓	
Biological resource use					
Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area	

unknown impact

unknown impact

Logging and wood

harvesting
Fishing and harvesting

aquatic resources

unknown impact

unknown impact

#### Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	unknown impact	unknown impact		<b>&gt;</b>

#### Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Household sewage, urban waste water	unknown impact	unknown impact	✓	✓
Garbage and solid waste	unknown impact	unknown impact		✓

#### 5.2.2 - Legal conservation status

#### Global legal designations

Grobal regal decignations			
Designation type	Name of area	Online information url	Overlap with Ramsar Site
UNESCO Biosphere Reserve	Atlantic Forest SouthEast Biosphere Reserve	http://www.rbma.org.br/index.asp	
World Heritage site	Atlantic Forest South-East Reserves	http://whc.unesco.org/en/list/89 3	partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Protected area	Cananéia-Iguape-Peruíbe Environmental Protection Area	http://www.icmbio.gov.br/portal/ apa-de- cananeia-iguape-peruibe	whole
mosaic of Conservation Units	Lagamar Mosaic	http://www.icmbio.gov.br/portal/o-que- fazemos/mosaicos-e-corredo res- ecologicos/moscaicos-reconhe cidos- oficialmente/1870-mosaico- de- unidades-de-conservacao-donli toral- sul-de-sao-paulo-e-do-lito ral-do- parana-lagamar.html	whole

## 5.2.3 - IUCN protected areas categories (2008)

		4.4	Reserve	$\overline{}$
lo.	Strict	Matura	Racana	

Ib Wilderness Area: protected area managed mainly for wilderness protection

II National Park: protected area managed mainly for ecosystem protection and recreation

III Natural Monument: protected area managed mainly for conservation of specific natural features

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

V Protected Landscape/Seascape: protected area managed mainly for 

landscape/seascape conservation and recreation

M Managed Resource Protected Area: protected area managed mainly 
for the sustainable use of natural ecosystems

# 5.2.4 - Key conservation measures

## Legal protection

Legal protection		
Measures	Status	
Legal protection	Implemented	

#### Human Activities

Measures	Status	
Communication, education, and participation and awareness activities	Partially implemented	

Other:

The Environmental Protected Area Cananeia Iguape Peruibe is one of the sites chosen to be part of the Brazil Mangrove Project (http://www.icmbio.gov.br/portal/o-que-fazemos/programas-e-projetos/projeto-manguezais-do-brasil.htm I), created by the Ministry of Environment (MMA) and executed by the Chico Mendes Institute for Biodiversity Conservation (ICMBio), with support from UNDP and funded by the Fund for the Global Environment Facility (GEF). This project has aimed to improve Brazil's ability to promote effective conservation and sustainable use of resources in mangrove ecosystems based on strengthening the National Conservation Unit System, and the appointment of permanent preservation areas to all mangroves in the country.

The Ribeira de Iguape watershed and South Coast, which are districts within the Environmental Protected Area Cananeia Iguape Peruibe has a committee that has been meeting regularly and organising events and debates on topics related to the Ribeira River since 1996 (UGRHI-11, 2013b). The Geographic Information System of the Ribeira de Iguape and South Coast (GIS-RB) provides information about the region, which is useful for Territorial and Environmental Management. Professionals from public institutions and active civil society in the Ribeira Valley and South Coast, as well as universities (University of São Paulo, Paulista University and State University of Campinas) frequently update the GIS-RB (UGRHI-11, 2013b). The Committee of the Environmental Protected Area Cananeia Iguape Peruibe was created in 2002 and it is a forum that have different institution to discuss problems of the Environmental Protected Area Cananeia Iguape Peruibe.

## 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 O

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning Yes O No 

processes with another Contracting Party?

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

The Cananéia Research Institute offers courses for biology undergraduates, geography and related fields, which have been focusing on the biology and ecology of estuarine and marine birds, the Guiana dolphin, sea turtles and carnivorous mammals.

The SOS Atlantic Forest Foundation has been operating in the region since 1988 with the Lagamar Program. The NGO works on environmental conservation, and values human presence, culture and traditional populations.

Research from the University of São Paulo Oceanographic Institute has promoted visiting local schools and educational activities, using a mockup of the Lagamar region.

The BiomaBrasil Institute (IBB) has been offering training courses for state and local schoolteachers of Cananéia about the Marvellous Mangroves in Brazil.

The ISA that operates to support the construction of public water resource policies and traditional communities.

The Ribeira Valley's Riparian Forests Campaign.

URL of site-related webpage (if relevant):

http://ipecpesquisas.org.br; http://www.sosma.org.br/projeto/lagamar/; http://www.usp.br/aun/exibir.php?id=6043&edicao = 1061; https://www.facebook.com/institutobiomabrasil?ref\_type=bookmark; http://www.socioambiental.org/prg/rib.shtm;

#### 5.2.6 - Planning for restoration

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

#### Further information

The management plan has a zoning that indicates the need for closure of the Valo Grande artificial channel for the recovery of ecosystem services and adaptability to ecosystem-based climate change.

#### 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Animal species (please specify)	Implemented

The Cananéia Fishing Institute (http://www.pesca.sp.gov.br/centros.php), under the supervision of the state of São Paulo, collects data, socioeconomic information and fisheries statistics (production and fishing effort) in the CIP EPA region. Monitoring is carried out continuously and involves artisanal and commercial fishermen. Since 2004, the institute has been developing a project called the 'Participatory Management of the Fisheries Resources' Use in the Complex Estuarine-lagoon of Iguape, Cananéia, Comprida Island and adjacent coastal area' (http://www.pesca.sp.gov.br/noticia. php? id\_not = 381).

# 6 - Additional material

## 6.1 - Additional reports and documents

### 6.1.1 - Bibliographical references

See it in 6.1.2 section.

## 6.1.2 - Additional reports and documents

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

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

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

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<1 file(s) uploaded>

vi. other published literature

<1 file(s) uploaded>

## 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Instituto Chico Mendes de ristituto Crico Mendes de Conservação da Biodiversidade ( Instituto Chico Mendes de Conservação da Biodiversidade, 01-01-

## 6.1.4 - Designation letter and related data

#### Designation letter

<1 file(s) uploaded>

Date of Designation 2017-09-04