

Ramsar Information Sheet

Published on 23 July 2019 Update version, previously published on : 1 January 2007

PolandWarta River Mouth National Park



Designation date 3 January 1984
Site number 282
Coordinates 52°35'51"N 14°46'12"E
Area 7 956,00 ha

https://rsis.ramsar.org/ris/282 Created by RSIS V.1.6 on - 8 May 2020

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 National Park "Warta River Mouth" is situated in the Toruń-Eberswalde Old Glacial Valley (Western Poland) and constitutes one of the most important bird areas not only in Poland but also in Central Europe. The area embraces floodplains of Warta river around its outlet to the Odra river, the lower portion of Postomia river and the low terrace of Warta river. The former ornithological Słońsk Reserve is now within the Park. The Park has characteristic open landscape of temporarily inundated meadows and pastures dotted with willow shrubs and crisscrossed by a dense network of river arms, ditches, canals, oxbows and small reservoirs.

Annual fluctuation in Warta river water level may reach 3.5 m and regular flooding favours the development of special vegetation of reedbeds, willow shrub and wet meadows. Such habitats create excellent conditions for supporting one of the largest concentration of waterfowl in Europe. The site was selected in consideration of huge numbers of migratory and wintering birds gathering every year in the Warta floodplains. Usually these numbers exceed 100 000 individuals. The Park consists of three protective areas: Chyrzyno, Słońsk and the Northern Polder.

2 - Data & location

2.1 - Formal data

2.1	1.1	-	Name	and	ado	Iress	of	the	com	piler	of	this	RIS
-----	-----	---	------	-----	-----	-------	----	-----	-----	-------	----	------	-----

Compiler 1

Name	Marek Jobda, Rafał Rzepkowski, Paweł Szałański
Institution/agency	Pracownia Przyrodnicza
	•
Postal address	ul. Bohaterów Powstania Styczniowego 4, 05-480 Karczew, Poland
Postal address	
E-mail	pracownia@przyrodnicza.eu
Phone	+48 509 029 647
	'

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

From year 2007

To year 2015

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Warta River Mouth National Park

Unofficial name (optional)

Park Narodowy Ujście Warty; originally designated as 'Słońsk Nature Reserve'

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A Changes to Site boundary Yes O No

(Update) B. Changes to Site area No change to area

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?

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 boundary of the Ramsar site is the same as of the existing Warta River Mouth National Park.

2.2.2 - General location

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

Lubuskie

b) What is the nearest town or population Kostrzyn on Odra River

2.2.3 - For wetlands on national boundaries only

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

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes O No \odot

2.2.4 - Area of the Site

Official area, in hectares (ha): 7956

Area, in hectares (ha) as calculated from GIS boundaries 8072.97

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region						
EU biogeographic regionalization	Continetal						
Udvardy's Biogeographical Provinces	11. Mddle European Forest						
Bailey's Ecoregions	220 Hot Continental Division						
WWF Terrestrial Ecoregions	Temperate broadleaf and mixed forest						

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 floodplains of the "Warta River Mouth" National Park plays an important role as a semi-natural storage reservoir for flood control in the lower course of the Odra river.

Research

National Park "Warta River Mouth" also in the past as the former Reserve "Słońsk" has always been a site of interest, owing to its unique hydrological situation, for researchers, mainly ornithologists, from various universities both from within and outside the country. The Board of the National Park is located in Chyrzyno village a Centre was built of the Park Management, Ecological Education and Research. Main research in the Park involves the monitoring of breeding and migrating birds as well as monitoring of predators and study on the status of invasive alien species as American Mink Mustela vison for example.

Other ecosystem services provided

Extensive fishery and agriculture

The site is of a general importance for an extensive agriculture. In addition, in the Park it is possible to amateur fishing in accordance with an applicable order of the Director of the National Park and protective tasks. The site is close to being a kind of model of wetland wise use at the time being since the Park Management has initiated activities to maintain the traditional agricultural methods in the area and its surroundings, in particular, to restore cattle grazing and haymaking, and low-intensity agriculture by way of land lease to local farmers, recently about 5 thousand ha embraced by contracts under agri-environmental agreements.

Other reason

"Warta River Mouth" National Park is located in regularly flooded terrace of Warta river and contains a representative example of a semi natural wetland in the broad floodplain of medium size lowland river. However, at the end of 18th and in 19th century large hydro-technical work was done consisting of draining of the river valley, construction of levees on the northern and southern banks of Warta river and in building of a several kilometer long channel which today constitutes a mouth reach of the river. The place, in part, has retained its original character of former inland delta covered by vast wetlands. The Park area is important for supporting vulnerable habitats threatened with extinction at European scale, including habitats listed in Habitats Directive.

Criterion 2 : Rare species and threatened ecological communities

☑ Criterion 3 : Biological diversity

The site is very important for many waterbird species, especially during spring and autumn migration. It is also an important moulting site for geese, ducks, swans and cranes and their wintering. The area of the National Park is important for maintain breeding populations of such globally threatened species as the aquatic warbler Acrocephalus paludicola. Out of 279 recorded species of birds within the area of the Park, more than 170 are breeding. The wetland is also an internationally important spawning ground and migration path for many species of fish.

Justification

So far 106 plant associations and 572 species of vascular plants have been found within the area of the Park. The Park is important for survival of rare and critically endangered plant species.

- Criterion 4 : Support during critical life cycle stage or in adverse conditions
- ☑ Criterion 5 : >20,000 waterbirds

Overall waterbird numbers	200,000
Start year	1990
Source of data:	Warta River Mouth National Park

- ☑ Criterion 6 : >1% waterbird population
- ☑ Criterion 8 : Fish spawning grounds, etc.

Justification

In spring when the water level in Warta and Postomia rivers is usually the highest, vast tracts of flood water provide a very good spawning ground for fishes: it is an important spawning ground for the northern pike Esox lucius in Central Europe. Moreover, it is an important area for migrating Atlantic salmon Salmo salar and brown trout Salmo trutta m. Trutta to their spawning grounds in Drawa river.

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
Nymphaea candida		✓	₽				Polish Red Data Book of Plants (VU)	
Nymphoides peltata	Fringed Water Lily	₽	2		LC		Polish Red Data Book of Plants (VU)	
Thesium ebracteatum		V	₽				EU Habitats Directive Annex II	

In the past, the area of "Warta River Mouth" National Park was overgrown mainly by riparian forest. As a result of changes in hydraulic engineering, extensive agriculture and deforestation, vast open ecosystems have been created.

Nowadays Park's landscape is a mosaic of meadows, pastures and areas overgrown by sedge and reed. The existing plant communities are typical for agriculturally developed valleys of lowland rivers. The remnants of its original character are willow shrubs that formed secondarily at the Warta River bed, communities of carr forest as well as single, grand willows and elms.

So far 106 plant associations and 572 species of vascular plants have been found within the area of the Park. The Park is important for survival of rare and critically endangered plant species as e.g. Thesium ebracteatum, listed by the Annex II to Habitat Directive. Noteworthy is also the presence of two red listed plants: Nymphaea candida and Fringed Water-lily Nymphoides peltata (Polish Red Data Book of Plants).

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

Phylum	Scientific name	Common name	qua ur crit	ecies alifies ader erion 6 9	con	pecies ntribute under riterior 5 7	es I	Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CMS Appendix I	Other Status	Justification
Birds														
CHORDATA/ AVES	Acrocephalus paludicola	Aquatic Warbler						7	2011		w		Annex I and II Birds Directive (Directive 2009/147/EC) Polish Red Data Book of Animals (VU)	pop. size: 7 singing males
CHORDATA/ AVES	Anas crecca	Eurasian Teal; Green-winged Teal						1000	2010	0.8	LC			pop. size: <4000 individuals; nearly 1 % of the European breeding population (NE Europe) - source: Wetlands International; Important site for flight-feather exchange and during spring and autumn migration
CHORDATA/ AVES	Anas penelope	Eurasian Wigeon	V					6000					Annex II, III Birds Directive, Polish Red Data Book of Animals (CR)	pop. size: up to 6000 during migrations

Phylum	Scientific name	Common name	qua ui crit	ecies alifies nder terion	С	Specie ontribu under criterio	tes . Po Siz	p. Period of pop. Est.	% occurrence 1)		CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Anas platyrhynchos	Mallard		90] 120	00 2008	1.2	LC				pop. size: <12.000 individuals ca. 1 % of the European breeding population Important site for flight-feather exchange and during spring and autumn migration. Population name: platyrhynchos, Northern Europe/West Mediterranean
CHORDATA/ AVES	Anser albifrons	Greater White- fronted Goose		90	V		600	00 2005-2008	5	LC				<60.000 individuals during spring and autumn migration; app. 5 % of European population in winter (NE Europe population)
CHORDATA/ AVES	Anser anser	Greylag Goose						1995-2009		LC				<750 breeding pairs, present in migrations and during mild winters (max 5000 birds)
CHORDATA/ AVES	Anser fabalis	Bean Goose		90	J		500	00 2005-2008	9.1	LC				<130.000 individuals during spring and autumn migration; <50.000 in mild winters; up to 30 % of European population in winter (rossicus, West & Central Siberia/NE & SW Europe)
CHORDATA/ AVES	Ardea alba	Great Egret	V	12			50	0	1	LC	✓		Annex I Birds Directive (Directive 2009/147/EC)	pop. size: < 500 individuals during migration; around 1 % of breeding European population (Central European population) - source: Wetlands International
CHORDATA/ AVES	Aythya fuligula	Tufted Duck					560	2011		LC				pop. size: <5.600 individuals; ca. 1 % of the European breeding population; Important site for flight-feather exchange and during spring and autumn migration.
CHORDATA/ AVES	Botaurus stellaris	Eurasian Bittern	V				1	1 2008		LC			Annex I Birds Directive, Polish Red Data Book of Animals (LC)	pop. size: up to 11 males
CHORDATA/ AVES	Ciconia ciconia	White Stork	V] _ 2	2012		LC			Annex I Blrds Directive	regularly present, in the National park 2 breeding pairs
CHORDATA/ AVES	Ciconia nigra	Black Stork	V							LC			Annex I Birds Directive	regularly present, nesting outside the National Park
CHORDATA/ AVES	Circus aeruginosus	Western Marsh Harrier	2				B 🔲	2012		LC			Annex I Birds Directive	pop. size: 8 pairs
CHORDATA/ AVES	Crex crex	Corn Crake	V					2011		LC			Annex I Birds Directive (Directive 2009/147/EC)	pop. size: 149 males
CHORDATA/ AVES	Cygnus cygnus	Whooper Swan	V				300	2005-2008	5	LC			Annex I Birds Directive (Directive 2009/147/EC)	pop. size: <3000 individuals during migration; ~5 % of European population in winter (NE Europe population)
CHORDATA/ AVES	Fulica atra	Eurasian Coot					500	2010		LC				pop. size: >5.000 individuals Important site for flight-feather exchange and during spring and autumn migration.
CHORDATA/ AVES	Grus grus	Common Crane	V	900			190	00 2013	15	LC			Annex I Birds Directive (Directive 2009/147/EC)	pop.size: 19 breeding pairs, Up to 19.000 individuals during migration <15% of breeding European population
CHORDATA/ AVES	Haliaeetus albicilla	White-tailed Eagle	2] 50)	0.8	LC	V		Annex I Birds Directive (Directive 2009/147/EC Polish Red Data Book of Animals (LC)	pop. size: 2 pairs, regular visitor in winter (<50 individuals) ca. 0.8 % of winter population in Europe
CHORDATA/ AVES	Himantopus himantopus	Black-winged Stilt	2					2011		LC			Annex I Birds Directive	irregularly breeding, 1 pair
CHORDATA/ AVES	Milvus migrans	Black Kite	2							LC	V		Annex I Birds Directive, Polish Red Data Book of Animals (NT)	regularly present, nesting outside the park's area
CHORDATA/ AVES	Milvus milvus	Red Kite	V							NT	/		Annex I Birds Directive, Polish Red Data Book of Animals (NT)	regularly present, nesting outside the park's area
CHORDATA/ AVES	Nycticorax nycticorax	Black-crowned Night Heron; Black-crowned Night-Heron	2 C							LC			Annex I Birds Directive, Polish Red Data Book of Animals (LC)	irregularny present, potentially breeding
CHORDATA/ AVES	Philomachus pugnax		V				180	00					Annex I Birds Directive, Polish Red Data Book of Animals (EN)	up to 1800 ind. during migrations

Phylum	Scientific name	Common name	q	pecies ualifie under riterio 4 6	es on	cont ui cri	ecies ributes nder terion	Size		% occurrence 1)		CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Porzana parva	Little Crake	V] 1	2013					Annex I Birds Directive, Polish Red Data Book of Animals (NT)	pop. size: 1 male
CHORDATA/ AVES	Recurvirostra avosetta	Pied Avocet	1						2012		LC			Annex I Birds Directive	nesting irregularly, up to 4 pairs
CHORDATA/ AVES	Sternula albifrons	Little Tern	V	7 0)			LC			Annex I, II Birds Directive, Polish Red Data Book of Animals (NT)	breeding
Fish, Mollusc a	and Crustacea														
CHORDATA/ ACTINOPTERYGII	Cobitis taenia	Spine Loach	1			1)			LC			Annex II of the Habitats Directive (Council Directive 92/43/EEC)	
CHORDATA/ ACTINOPTERYGII	Leuciscus aspius	Asp	1			1)			LC			Annex II of the Habitats Directive (Council Directive 92/43/EEC)	
CHORDATA/ ACTINOPTERYGII	Rhodeus sericeus	Amur Bitterling	V		ı 🗆 🛭	/][Annex II of the Habitats Directive (Council Directive 92/43/EEC) Polish Red Data Book of Animals (NT)	
CHORDATA/ ACTINOPTERYGII	Salmo salar	Atlantic Salmon	Ø.			/		ם						Polish Red Data Book of Animals (CR)	
CHORDATA/ ACTINOPTERYGII	Salmo trutta	Brown Trout				/]			LC				
Others									_						
CHORDATA/ REPTILIA	Anguis fragilis	Slow Worm	V											Annex IV Habitats Directive	
CHORDATA/ MAMMALIA	Barbastella barbastellus	Western Barbastelle	1								NT			Annex II Habitats Directive	
CHORDATA/ AMPHIBIA	Bombina bombina	Fire-bellied Toad	V)			LC			Annex II, IV Habitats Directive	
CHORDATA/ MAMMALIA	Castor fiber	Eurasian Beaver	V					460			LC			Annex II, IV Habitats Directive, Polish Red Data Book of Animals (NT)	
ARTHROPODA/ INSECTA	Lycaena dispar	Large Copper	V											Annex II, IV Habitats Directive, Polish Red Data Book of Animals (LR-lower risk)	
CHORDATA/ MAMMALIA	Mustela erminea	Ermine	V]			LC	\checkmark			
CHORDATA/ MAMMALIA	Myotis bechsteinii	Bechstein's Myotis	V								NT			Annex II Habitats Directive, Polish Red Data Book of Animals (NT)	
CHORDATA/ MAMMALIA	Myotis myotis	Mouse-eared Bat; Mouse-eared Myotis	V								LC			Annex II Habitats Directive	
ARTHROPODA/ INSECTA	Ophiogomphus cecilia	Green Snaketail	V								LC			Annex II, IV Habitats Directive	

The site is very important for many waterbird species, especially during spring and autumn migration. It is also an important moulting site for geese, ducks, swans and cranes and their wintering. The area of the National Park is important for maintain breeding populations of such globally threatened species as the aquatic warbler Acrocephalus paludicola. Out of 279 recorded species of birds within the area of the Park, more than 170 are the breeding. The wetland is also internationally important spawning ground and migration path for many species of fish.

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

¹⁾ Percentage of the total biogeographic population at the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
2330 Inland dunes with open Corynephorus and Agrostis grasslands vegetation	V	Currenly the xerothermic sand grasslands are present in the biggest density near viewing tower, on the border of National Park, next to Czarnów.	EU Habitats Directive Annex I
3130 Edges or drained reservoirs` bottoms with the communities of Isoëto-Nanojuncetea	Ø	Occurence of the habitat in the "Warta River Mouth" National Park is dependent on periodical flooding with fertile surface waters.	EU Habitats Directive Annex I
3270 Muddy river banks with Chenopodion rubri p.p. and Bidention p.p.	Ø	Occurence of the habitat in the "Warta River Mouth" National Park is dependent on periodical flooding with fertile surface waters.	EU Habitats Directive Annex I
3150 Natural eutrophic lakes with Hydrocharition – type vegetation	V	The area of Warta River Mouth, especially the National Park, is one of the sites richest in oxbows in Western Poland.	EU Habitats Directive Annex I
91E0 Riparian forests Fraxino-Alnetum and Salicetum albae 91E0(1) willow risparian forest (Salicetum albae) 91E0(3) lowland risparian forest with Alnus glutinosa and Fraxinus excelsior (Fraxino-Alnetum)	Ø	Warta River Mouth is one of the most important sites for riparian willow forests in Poland. In the past the habitat was present almost in the whole land depression (more than ten kilometers wide).	EU Habitats Directive Annex I
6430 Hydrophilous tall herb fringe communities of plains (Convolvuletalia sepium)	V	Adynamic habitat, the development of which depends on hydrological conditions in particular year. It is developing along the borders of landscape patches, between forests, brush and water bodies: rivers, ditches, oxbows.	EU Habitats Directive Annex I

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

4.1 - Ecological character

The wetland lies in the Lower Warta Valley, in Gorzów Valley, within the former river delta, later transformed into one mouth discharging into the Odra River. The Gorzów Valley was formed as a result of merging of two valleys of Warta and Notec rivers in the postglacial period. The valley is filled in with peats overlying a bed of sands and covered by wet meadows, beds of sedges, grasses - Glyceria spp and Phalaris arundinacea as well as by willow shrubs. Formerly the area was drained and relics of that activity remained as ditches, canals and dikes. In some places, dry dunes with xerotherm vegetation (Czarnowska Hill) protrude over the area. Local climate has a distinct maritime character with mild winters, the average temperature of the coldest month – January is -1C and warm summers (average temperature for July is +18C. The vegetation season belongs to the longest in the territory of Poland and lasts around 220 days. Average precipitation is ca. 550 mm. Snow covers the ground only for 50-60 days. The majority of soils are hydrogenic peats and muds but other soil types are also encountered including grey-brown podzol soils, podzol, rusty podzol, brown and black soils. The Warta River together with its left-side tributary – Postomia and small river Racza Struga combine to create the hydrological network of the Park along with numerous canals, oxbows and ditches. The largest oxbow Old Warta flows through the northern part of the Park, it was formerly (before the 17th century) one the most important beds of the river. The dam at the left side of Warta is situated further aside from the river bed, thus flooding water spills freely over the meadows. This area stays under water over the larger part of the year. The northern part of the Park, called the Northern Polder, is separated from Warta river by a massive dam. Water accumulating in this reservoir is being pumped to Warta river and the water levels remains more stable and lower than in the wetland southern part. In the Polder landscape, the prevailing surface is taken by meadows cut by oxbows and canals. The water level and surface within the site are subject to strong fluctuations, at times the water stretch is 10 km wide covering the whole valley. Annual fluctuations of water table may reach up to 4 m what is conditioned mainly by the water level in Odra river. The water level usually rises in late autumn and remains stable over winter. The highest water usually occurs in March/April and can last over 10 weeks. Later water level decreases and lowest levels can be observed from August to October.

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

nland 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 >> Mt Permanent rivers/ streams/ creeks		4		Representative
Fresh water > Lakes and pools >> P: Seasonal/ intermittent freshwater lakes		1		Representative
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		2		Representative
Fresh water > Marshes on peat soils >> U: Permanent Nonforested peatlands		3		Representative
Fresh water > Marshes on inorganic soils >> W: Shrub- dominated wetlands		4		Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		4		Representative

Human-made wetlands

i luman-made wellands				
Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
4: Seasonally flooded agricultural land		0		Representative
6: Water storage areas/Reservoirs		0		Representative
9: Canals and drainage channels or ditches		0		Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Xerothermic grassland (Koelerion glaucae)	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Angelica archangelica litoralis	Garden Angelica	Protected species under Polish law
Carex arenaria	sand sedge	Protected species under Polish law
Centaurium pulchellum	Lesser centaury	Protected species under Polish law
Dianthus arenarius	sand pink	Protected species under Polish law
Galanthus nivalis	common snowdrop	Protected species under Polish law
Helichrysum arenarium	dwarf everlast	Protected species under Polish law
Lathyrus palustris	Marsh Pea;Marsh Vetchling	Protected species under Polish law
Nasturtium officinale	watercress	Protected species under Polish law
Neottia ovata	Common Twayblade	Protected species under Polish law
Nymphaea alba	European White Waterlily	Protected species under Polish law
Ophioglossum vulgatum	southern adderstongue	Protected species under Polish law
Ranunculus trichophyllus trichophyllus		Protected species under Polish law

Invasive alien plant species

Scientific name	Common name	Impacts	Changes at RIS update
Acorus calamus	sweet flag	Potentially	unknown
Bidens frondosa		Potentially	unknown
Echinocystis lobata		Potentially	unknown
Elodea canadensis	canadian waterweed	Potentially	unknown
Impatiens parviflora	small-flowered touch-me-not	Potentially	unknown
Reynoutria japonica	japanese knotweed	Potentially	unknown
Solidago canadensis	Canada golden-rod	Potentially	unknown
Xanthium albinum		Potentially	unknown

4.3.2 - Animal species

Other noteworthy animal species

Other noteworthy anima Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	Anas clypeata	Northern Shoveler	1500			Annex II, III Birds Directive (Directive 2009/147/EC), pop. size: 10-30 breeding pairs, Up to 1500 during migration
CHORDATA/AMPHIBIA	Bufo bufo	European Toad				Protected Species under Polish law
CHORDATA/AVES	Chlidonias leucopterus	White-winged Black Tern		2012		Polish Red Data Book of Animals (NT), pop size: 1 pair, regular visitor during migration
CHORDATA/AMPHIBIA	Epidalea calamita	Natterjack Toad				Protected Species under Polish law
CHORDATA/AMPHIBIA	Hyla arborea	European Tree Frog				Protected Species under Polish law
CHORDATA/REPTILIA	Lacerta agilis	Sand Lizard				Protected Species under Polish law
CHORDATA/REPTILIA	Natrix natrix	Grass Snake				Protected Species under Polish law
CHORDATA/AMPHIBIA	Pelobates fuscus	Common Spadefoot				Protected Species under Polish law
CHORDATA/AMPHIBIA	Pseudepidalea viridis	European Green Toad				Protected Species under Polish law
CHORDATA/AVES	Tadorna tadorna	Common Shelduck				Polish Red Data Book of Animals (LC), breeding species
CHORDATA/REPTILIA	Zootoca vivipara	Common Lizard				Protected Species under Polish law

Invasive alien animal species

Phylum	Scientific name	Common name	Impacts	Changes at RIS update
MOLLUSCA/BIVALVIA	Dreissena polymorpha	Zebra mussel	Potentially	unknown
CHORDATA/MAMMALIA	Neovison vison	American Mink	Actually (major impacts)	No change
CHORDATA/MAMMALIA	Nyctereutes procyonoides	Raccoon dog	Actually (major impacts)	No change
MOLLUSCA/GASTROPODA	Potamopyrgus antipodarum	New-Zealand mudsnail	Potentially	unknown
CHORDATA/MAMMALIA	Procyon lotor	Raccoon	Actually (major impacts)	No change

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude	Dfb: Humid continental (Humid with severe winter,
climate with cold winters	no dry season, warm
	summer)

4.4.2 - Geomorphic setting

····
a) Maximum elevation above sea level (in metres)
Entire river basin
Upper part of river basin ☐
Mddle part of river basin ☐
Lower part of river basin 🗹
More than one river basin ☐
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.

Basin of Warta river and its tributary - Postomia river

4.4.3 - Soil

Organic

(Update) Changes at RIS update No change
Increase
Decrease
Unknown

No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)?

Yes
No

No

Please provide further information on the soil (optional)

The majority of soils are hydrogenic peats and muds but other soil types are also present including grey-brown podzol soils, podzol, rusty podzol, and brown soils.

4.4.4 - Water regime

Water permanence

vvator permanence		
Presence?	Changes at RIS update	
Usually permanent water present		

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from rainfall	✓	No change
Water inputs from surface water	2	No change
Water inputs from groundwater		No change

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change

Stability of water regime

Cabinty of Mator regime		
	Presence?	Changes at RIS update
	Water levels fluctuating (including tidal)	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.

A massive dam on the northern part of Warta river separates the Northern Polder of the Park from the Warta river flooding. Water accumulating in this reservoir is partially being pumped to Warta river and the water levels remains stable and lower than in the wetland southern part. In the Polder landscape the prevailing surface is taken by meadows cut by oxbows and canals. The water level and surface within the site are subject to strong fluctuations, at times the water stretch is 10 km wide covering the whole valley. Annual fluctuations of water table may reach up to 4 m what is conditioned mainly by the water level in Odra river. The water level usually rises in late autumn and remains stable over winter. The highest water usually occurs in March/April and can last over 10 weeks. Later water level decreases and lowest levels can be observed from August to October.

4.4.5 - Sediment regime

Significant accretion or deposition of sediments occurs on the site 🗹	
(Update) Changes at RIS update No change	
Significant transportation of sediments occurs on or through the site $\ensuremath{\overline{\omega}}$	
(Update) Changes at RIS update No change	
Sediment regime is highly variable, either seasonally or inter-annually $\overline{m{\omega}}$	
(Update) Changes at RIS update No change	
Sediment regime unknown □	
4.4.6 - Water pH	
Unknown ☑	
4.4.7 - Water salinity	
Fresh (<0.5 g/l)	
(Update) Changes at RIS update No change	
Unknown □	
4.4.8 - Dissolved or suspended nutrients in water	
Eutrophic ☑	
(Update) Changes at RIS update No change	
Mesotrophic ☑	
(Update) Changes at RIS update No change	
Unknown □	
4.4.9 - Features of the surrounding area which may affect the Site	
Please describe whether, and if so how, the landscape and ecological	
characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar ○ ii) significantly different ● site itself:	
Surrounding area has greater urbanisation or development \Box	
Surrounding area has higher human population density \Box	
Surrounding area has more intensive agricultural use	
Surrounding area has significantly different land cover or habitat types	

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)	Low
Wetland non-food products	Livestock fodder	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Hazard reduction	Flood control, flood storage	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	High
Recreation and tourism	Picnics, outings, touring	Medium
Recreation and tourism	Nature observation and nature-based tourism	High
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Scientific and educational	educational Educational activities and opportunities	
Scientific and educational	Major scientific study site	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High
Scientific and educational	Long-term monitoring site	High
Scientific and educational	Type location for a taxon	High

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
Nutrient cycling	Carbon storage/sequestration	High

Within the site: 50000

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

4.5.2 - Social and cultural values

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

Description if applicable

The site is close to be a kind of model of wetland wise use at the time being since the Park Management has initiated activities to maintain the traditional agricultural methods in the area and its surroundings, in particular, to restore cattle grazing and haymaking, and low-intensity agriculture by way of land lease to local farmers, recently about 5 thousand ha embraced by contracts under agri-environmental agreements.

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

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

Description if applicable

Agricultural activities are carried out by local farmers.

The local farmers rent the land from the National Park Authority and carried out agricultural practices on wet meadows and grasslands (mowing, grazing cattle). Practices are subject to many requirements: late summer mowing protects birds nests from destruction, mowing inside-out allow escape to wild animals. Thanks to these practices the protection plan for the Site is implemented.

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

Public ownership		
Category	Within the Ramsar Site	In the surrounding area
Public land (unspecified)	✓	
Local authority, municipality, (sub)district, etc.		Ø

Privat			

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

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

The land in the Ramsar site belongs to the state treasury.

5.1.2 - 1	Managemen ^a	t authority

Please list the local office / offices of any	Park Narodowy "Ujście Warty"
agency or organization responsible for	
managing the site:	
Provide the name and title of the person or	Kanadalah salah Disata Atta National Dada (Marta Disa Marta)
people with responsibility for the wetland:	Konrad Wypychowski, Director of the National Park "Warta River Mouth"
Postal address:	Chyrzyno 1, 69-113 Górzyca, Poland
E-mail address:	przyroda@pnujsciewarty.gov.pl

5.2 - Ecological character threats and responses (Management)

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

Water regulation Factors adversely

affecting site				3	3	3
Drainage	unknown impact		✓	No change		No change
Agriculture and aquacultur	TO.					
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and			✓			
ranching			(NC.)			

Biological resource use

ranching

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fishing and harvesting aquatic resources	unknown impact		✓	No change		No change

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	unknown impact		/	No change	2	No change

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Dams and water management/use			2		/	

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	unknown impact		✓	No change	✓	No change
Problematic native species	unknown impact		V	No change	>	No change

Please describe any other threats (optional):

overgrowing the open habitats - actual threat, within the site and in the surrounding area with no changes

5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	SPASCI Ujście Warty/Warta River Mouth PLC080001		whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Park	Warta River Mouth	www.pnujsciewarty.gov.pl	whole

Non-statutory designations

. to otalato. y accignations			
Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Ujście Warty (Warta Mouth) Pl062	www.ostojeptakow.pl	whole

5.2.3 - IUCN protected areas categories (2008)

la Strict Nature Reserve ∟
Wilderness Area: protected area managed mainly for wilderness protection
Il National Park: protected area managed mainly for ecosystem protection and recreation
ural Monument: protected area managed mainly for conservation of specific natural features
oitat/Species Management Area: protected area managed mainly for conservation through management intervention
ected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
naged Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

Logar protoctor.		
Measures	Status	
Legal protection	Implemented	

Habitat

Measures	Status
Catchment management initiatives/controls	Implemented
Improvement of water quality	Implemented
Hydrology management/restoration	Implemented

Species

Measures	Status
Control of invasive alien plants	Partially implemented
Control of invasive alien animals	Partially implemented

Human Activities

Measures	Status
Management of water abstraction/takes	Partially implemented
Regulation/management of wastes	Implemented
Livestock management/exclusion (excluding fisheries)	Implemented
Fisheries management/regulation	Implemented
Harvest controls/poaching enforcement	Implemented
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	Implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation

Has a management effectiveness assessment been undertaken for the site?

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:

Educational activity is conducted by the Education Centre in Chyrzyno, at the Park Management Headquarters. The Centre has an excellent facility for training, a room for practical activities and a laboratory. The Centre provides visitors with the information and publications on the Park. Next to the Park Management building are situated other objects established for educational purposes:

- educational garden: "Natural Garden of Senses",
- nature trail "Wetlands",
- viewing tower,
- educational shed
- fire place with facilities,

Offer of educational activities includes:

- excursions, activity in the field,
- lectures about natural values of National Park "Warta River Mouth",
- projections of a nature documentary about the National Park
- field and laboratory workshops,
- Within the Park 4 nature trails were marked leading across the most attractive areas: "Mokradła", "Ptasim szlakiem", "Olszynki", "Na dwóch kółkach przez Polder Północny

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, the site has already been restored

Further information

LIFE09 NAT/PL/000254 "Restitution and maintenance of breeding habitats of water and marsh birds" 2010-2013 http://www.ograniczeniesukcesji.pl

The project was aimed at improving the habitats occurring in the Warta Mouth National Park by cutting willow shrubs on the area of about 200 ha. A section of these shrubs enabled the Park to regain the rank of a key area for migrating and breeding birds. Actions taken under the project helped preserve the biodiversity of this area.

The primary problem of nature conservation in the Park was secondary succession, which limited or prevented many species of birds from establishing nests and is a major obstacle for migrating and wintering birds. The tasks envisaged within the framework of the project included: cutting willow shrubs, hauling off cut branches, clearing carp, teething wood and branches, crushing carp, environmental monitoring, education of local communities, organization of conferences.

Removal of willow shrubs also allowed cattle to enter the area of the project. Grazing, in turn, helped to inhibit the process of re-growing the surface by willow regrowth. It was beneficial not only for the protection of nature in the Park (open habitats for birds), but also for farmers who have had new areas for cattle grazing.

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented
Animal community	Implemented
Animal species (please specify)	Implemented
Water regime monitoring	Implemented
Water quality	Implemented
Plant community	Implemented
Plant species	Implemented

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Bibliography attached in point 6.1.2 vi.

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

<no file available>

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:



Greylag goose (Olimpiusz Wenhrynowicz, 10-2007)



Geese (Agata Jirak -Leszczyńska, 10-2016



Ruffs (Konrad Wypychowski, 05-2011)



Northern lapwing (Agata Jirak- Leszczyńska, 09-2016)



Pool (Olga Betańska, 04-



Whiskered tem (Olga Betańska, 05-2017)

6.1.4 - Designation letter and related data

Designation letter

<no file available>

Date of Designation 1984-01-03