

A Water Tourist's Guide

www.petla-zulawska.pl



A Water Tourist's Guide

Acknowledgements

The landbrand team and Adam Wołosz wolosz.pl — the authors of the guide — would like to thank all the people, institutions, and other entities whose commitment and kindness made this publication possible.

We thank the staff of the Office of the Marshal of the Pomorskie Voivodeship: Mr. Zbigniew Ptak, Mrs. Władysława Bogacka, Mr. Przemek Brozdowski and Mr. Rafał Wasil, and the staff of the Office of the Marshal of the Warmińsko — Mazurskie Voivodeship with Regional Office in Elbląg, especially the gentlemen: Jerzy Wcisła, Stanisław Justyński and Krzysztof Komorowski. They have been a source of invaluable inspiration and assistance in the course of works on the project.

We thank the staff of the Office of the Marshal of the Pomorskie Voivodeship and the Office of the Marshal of the Warmińsko - Mazurskie Voivodeship for their cooperation.

We also cordially thank the authors of texts: Katarzyna Kachel, Łukasz Krajewski and Piotr Salecki. For invaluable comments, we thank Marek Opitz and Grzegorz Gola, whose devotion to the Vistula Żuławy is boundless. For sharing their collections of photographs, we wish to thank Marek Opitz above all, as well as Piotr Salecki, the Office of the Marshal of the Pomorskie Voivodeship, and "Żuławy Gdańskie" Association. We also thank all the representatives of the sailing, boating, and tourist community who contributed to enriching the content of this publication.

Copyright© Urząd Marszałkowski Województwa Pomorskiego Departament Infrastruktury, ul. Okopowa 21/27, 80-810 Gdańsk

Title:

The Żuławy Loop — A Water Tourist's Guide

Publisher

Office of the Marshal of the Pomorskie Voivodeship

Publication project idea:

www.wolosz.pl, Adam Wołosz www.landbrand.pl, landbrand

Authors of texts:

Boating content: Katarzyna Kachel, Łukasz Krajewski, Piotr Salecki, Marek Opitz, Rafał Wasil Tourist content: Paulina Brzeska-Gonera, Hubert Gonera (the landbrand team), Rafał Wasil Factual consultation: Marek Opitz, Grzegorz Gola, Andrzej Tenderenda Proofreading: Katarzyna Robaczewska

Photographs

Adam Wołosz, Marek Opitz, Hubert Gonera, Paulina Brzeska-Gonera, Rafał Wasil, Przemysław Brozdowski, Dariusz Kufel, Dariusz Paciorek, Fotografia-dronem.pl, iczarter.pl, LOT Kociewie, L. Schneider, Piotr Salecki, Tomasz Kubacki, Daniel Domagalski, Krzysztof Charliński, Janusz Światkowski, Jerzy Złoty, Urząd Gminy Subkowy, Urząd Gminy w Suchym Dębie, Urząd Miasta Malborka, Urząd Miasta Tczewa, Archiwum Klubu Nowodworskiego, A. Krankiewicz, D. Nowak, S. Lewandowski, P. Pasieczny, Urząd Gminy Pruszcz Gdański

Graphic design and editing:

www.wolosz.pl, Adam Wołosz

Maps, waterway schemes and harbour plans:

 $land brand, Grzegorz\,Laszczyk-based\,on\,he\,materials\,of\,the\,Marshal's\,Office\,of\,the\,Pomorskie\,Voivodeship.\,www.wolosz.pl,\,Adam\,Wołosz$

Fifth edition developed by:

Amistad Sp. z o.o. pl. Na Groblach 8/2, 31-101 Kraków phone:/faks: 12 422 99 22 e-mail: zapytania@amistad.pl www.amistad.pl

Gdańsk 2019 ISBN 978-83-7560-387-3

Updated Fifth Edition

Included in the publication maps and schemes are of only indicative nature.

Contents



Photo M. Opitz



Photo M. Opitz



Photo H. Gonera



Photo Fotografia-dronem.

- 4 What is the Żuławy Loop?
 5 How to Use the Guidehook
- 6 Part I. Discovering the Żuławy Loop
- 7 The Regions of the Żuławy Loop
- 9 Tales from the Żuławy Loop a brief outline of the history of the region
- 11 Harmony: The Key to Reading the Landscapes of Żuławy
- 12 Architecture: The Land of Arcaded Houses and Hydrotechnical Monuments
- 14 Part Two. The Sailing Routes of the Żuławy Loop: Sailing and Sightseeing
- 16 The Vistula
- 26 The Martwa Wisła, the Śmiała Wisła, the Motława Gdańska
- 34 The Szkarpawa
- 38 The Wisła Królewiecka
- 42 The Elblag River and the Jagielloński Canal
- 46 The Nogat
- 56 The Wielka Święta Tuga
- 60 The Vistula Lagoon
- 68 The Pasłęka River and the Canal of Pasłęka
- 70 The Kaliningrad Lagoon
- 74 Part III. The ABC of Sailing: Before you Sail on the Żuławy Loop
- 75 Proposed Trip Routes
- 81 Information
- 83 Captain's Tips
- 86 Part IV. Navigation marks
- 90 Part V. Nautical Base of the Żuławy Loop Ports and marinas
- 90 The Vistula
- 93 The Martwa Wisła, the Śmiała Wisła, the Motława
- 103 The Szkarpawa
- 106 The Wisła Królewiecka
- 108 The Elblag
- 110 The Nogat
- 112 The Vistula Lagoon
- 118 The Pasłęka
- 120 Operational hydroengineering structures in the Żuławy Loop
- 121 Water nodes of the Zuławy Loop
- 122 Gdańsk water tram
- 124 Map legend

What is the Żuławy Loop?



The Żuławy Loop is a touristically and environmentally attractive waterway connecting the water trails of the Vistula, the Martwa Wisła, the Szkarpawa, the Wisła Królewiecka, the Nogat, the Śmiała Wisła, the Wielka Święta — Tuga, the Motława, the Jagielloński Canal, the Elbląg, the Pasłęka and the waters of the Vistula Lagoon. It is 303 km of unforgettable adventure for a kayaking, yachting, motor boat or houseboat trip. It is worth noting that the Żuławy Loop also forms a part of E70 Waterway, running

from Rotterdam, through Berlin inland waterway hub and northern Poland, to Kaliningrad, and further along the Neman (down the Pregolya and the Deyma) as far as Klaipeda. Finally, the Żuławy Loop is a network of top — quality ports, marinas, and piers, built as part of "The Żuławy Loop Project — Water Tourism Development. Stage I," which has been recognised as one of the key tourist undertakings of supra — regional importance in the Innovative Economy Operational Programme 2007—2013, Measure 6.4 "Investments in tourism products of supra — regional importance." The project is being implemented by local government partners from the Pomorskie and Warmińsko-Mazurskie Voivodeship.

Apart from the water routes of the Vistula Delta and water tourism infrastructure, the Żuławy Loop comprises numerous attractions connected with the cultural heritage of the Vistula Żuławy. This region abounds in world — unique historic buildings: Gothic castles or arcaded houses, as well as hydrotechnical monuments: drawbridges or locks. The Żuławy Loop area is undeniably a place for relaxation and active recreation, with extraordinary landscapes and fascinating nature.

See you on the water!

How to Use the Guidebook



The guidebook in your hands is meant to facilitate safe navigation on the watercourses of the Żuławy Loop and encourage independent exploration of tourist attractions in the Vistula Delta. It has been divided into five transparent parts: Discover the Żuławy Loop, Żuławy Loop sailing routes, ABC of sailing, navigation marks and signs, and the Żuławy Loop sailing infrastructure.

The first of these will bring to you the magic landscapes of the Żuławy Loop as well as the history of this land and its people. You will learn why Żuławy used to be referred to as the Polish Netherlands and explore the nooks of arcaded houses and Gothic castles.

The second part is a practical guide to the rivers and water bodies of the Żuławy Loop, thanks to which you will safely navigate the water trails of this area.

The rivers in the guidebook are described in the direction in which most pleasure sailing proceeds. And so, the description takes us down the Vistula River, from Korzeniewo to the Przekop Wisły Canal — but it takes us up the Nogat, from its mouth at the Vistula Lagoon, as far as its connection with the Vistula through the lock in Biała Góra. Marking of the North on the map sections in the guide will facilitate navigation.

Each watercourse and water body of the Żuławy Loop is described in a separate chapter, comprising a brief outline of navigational and tourist information followed by a precise navigational description of the route. The introductory part features a clear waterway scheme, with river kilometres as well as main navigational obstacles and tourist attractions marked on it. Just next to each scheme, key information is provided about the character of the river or water body and sailing tips are given. Clear boxes present tourist and hydrotechnical highlights, encouraging the reader to learn more about the area. Further pages describe the route, pointing out its dangers. Where possible, the river kilometre corresponding to a given piece of information is provided. The descriptions of waterway stretches are worth reading before setting out on a boating trip. This will prepare you better for sailing and prevent you from overlooking the most interesting attractions. The third and the fourth part of the guidebook is a kind of captain's lecture. Written in accessible language, it contains a number of tips on basic safety rules and on how to behave on the water, prepare for a boating trip, or equip a boat. The information given here is worth learning: it will prove invaluable in moments of despair on the water.

Part five are the sheets of marinas containing photos, schemes along with bathymetry, and the list of services provided at and in the vicinity of each marina.

Part I. Discovering the Żuławy Loop The Żuławy Loop

The Regions of the Żuławy Loop

The Żuławy Loop comprises mostly the area of the Vistula Żuławy; beyond that, it extends over the Vistula Spit, the Vistula Lagoon subregion along with the Elbląg High Plain (Tolkmicko, Frombork, Suchacz, Elbląg) and the Old Prussian Coast (Nowa Pasłęka, Braniewo), as well as the Kociewie (Tczew, Gniew, Pelplin), the Kwidzyn Valley, and the Powiśle along with Sztum and Kwidzyn.



The Vistula Żuławy. The waterway junction in Rybina. Photo M. Opitz

The Vistula Żuławy (the Vistula Fenland), encompassing the Vistula River Delta, has the shape of an inverted triangle, with the top where the Vistula forks into the Leniwka and the Nogat and with the Vistula Spit as its base.



Gdańsk Bay, the Vistula Spit. Photo M. Opitz

The Vistula Spit, stretching from Gdańsk to Baltiysk, Russia, separates the Vistula Lagoon from the open waters of Gdańsk Bay, closing off the mouth of the Vistula. It is a large sandy dune, built by the waves of the sea and over 30 m (330 ft) high in places. The fishing villages that it used to be strewn with have turned into holiday resorts. The major cities and towns of the Vistula Spit are Gdańsk, Stegna, Sztutowo, and Krynica Morska.



Vistula Lagoon, a vantage point in Suchacz. Photo A. Wołosz

The Vistula Lagoon is a bay cut offfrom the Baltic Sea by the Vistula Spit. The border between Poland and the Russian Federation runs across this body of maritime internal waters. Of all the area of the Lagoon, 382 sq km (147.5 sq mi) belong to Poland.

The Elblag Upland is a moraine mound in the Littoral Gdańsk Region, with steep ridges descending towards the Vistula Żuławy, the Vistula Lagoon, and the Warmia Plain. The highest point of the Upland is Srebrna Góra (the Silver Mount), rising to 198.5 m (651 ft). The major towns of this area are: Elblag, Frombork, Tolkmicko, Kadyny, and Suchacz.

The Old Prussian Coast is a plain stretching along the Vistula Lagoon, from Frombork to the mouth of the Pregolya. 100 sq km of the region lies within the borders of Poland. Its major places are Nowa Pasłęka and Braniewo.



The Old Prussian Coast region. The Pasłęka River. Photo M. Opitz

The Kociewie is an ethnic

and cultural region on the left bank of the Vistula, in the basin of the Wierzyca and the Wda. The region has its own anthem, and on February 10th the World Day of Kociewie is celebrated here. The major towns of the area are Starogard Gdański — the capital of Kociewie, Tczew — its largest town, Pelplin, Świecie and Gniew.



The Kociewie region. Photo M. Opitz

The Kwidzyn Valley and the Powiśle lie in the northern part of the Lower Vistula Valley. The Kwidzyn Valley is about 40 km long and has an area of 401 sq km. It constitutes a kind of gorge where the Vistula cuts through the belt of moraines of the East Pomeranian Lakeland. The major towns in this area: Gniew in the west, Kwidzyn in the east, and Sztum.



The Kwidzyn Valley and the Powiśle. Gniew Castle. Photo Fotografia-dronem.pl



The Vistula River near Palczewo — the spring rising of the waters. Photo M. Opitz



The intermediate pumping station in Cedry Wielkie Commune, Photo M. Opitz



The vicinity of Mikoszewo. M. Opitz

The fishing harbour in Kąty Rybackie. Photo M. Opitz



All Thanks to Rivers

Żuławy formed about 6.000 years ago, when what used to be a sea bay began fill with warp deposited by the queen of Polish rivers — the Vistula — and by smaller rivers. It is hypothesised that the name "Żuławy" (fenland, alluvial delta) derives from the noun żuł, meaning warp, river sediment. It is thanks to the sediments that the soils of the Vistula Delta rank among the most fertile in Poland.

The main watercourse of the Vistula Żuławy is the Vistula, which, together with the Nogat, divides it into three parts: the Gdańsk Żuławy, the Great Żuławy, and the Elbląg Żuławy.

The Gdańsk Żuławy lies west of the Vistula, in the basin of the Martwa Wisła, and occupy the west part of the delta plain between the Kashubian Lakeland and the Vistula. To the east, there is the Great Żuławy, lying in the basin of the Szkarpawa and other rivers, and the Elbląg Żuławy — east of the Nogat. Today, Żuławy is divided between two provinces (voivodeships). East of the Nogat, the area to the Warmińsko-Mazurskie Voivodeship, and west of the Nogat — to the Pomorskie Voivodeship.

Below Sea Level

The picturesque landscape of Żuławy is plains criss-crossed by watercourses, stretching to the horizon. It is also Poland's only area partly situated below sea level. It is here, in Żuławy, in the village of Raczki Elbląskie, that the lowest point in Poland lies, 1.8 m (6 ft) bsl. What is more, nearly 30% of the Vistula Żuławy is depressions. The largest of them are found around Lake Druzno $-181\ {\rm sq}\ {\rm km}$ of area - and in the vicinity of Nowy Dwór Gdański, $152\ {\rm sq}\ {\rm km}$. It should be mentioned here that the highest point of Żuławy, in Grabiny-Zameczek, lies only $14.6\ {\rm m}$ (48 ft) asl.

Żuławy and Man

Traces of settlement in the Vistula Żuławy date back to 2500 BC, which finds confirmation in archaeological finds. Initially, human settlements had a temporary character and were mostly connected with fishery, sealing, as well as amber fishing and processing. With time, they were replaced by rural and rural-urban settlements, which formed a dense network during the Middle Ages. Yet, the constant danger of flood, resulting from the situation of $\dot{Z}u$ ławy, was not conducive to the development of that network. The beginnings of an efficient land improvement system in Żuławy date back to the 13th century and the State of the Teutonic Order. But the revolutionary stage in Żuławy's population increase begins in the mid-16th century, when this territory came under the Polish rule following the Second Peace of Toruń (1466). The legendary religious tolerance of the First Polish Republic resulted in the reception of settlers persecuted for religious views in their own country. At that time, the so called Hauländers (Olędrzy) arrived in Żuławy from the Netherlands and Northern Germany. The new inhabitants considerably improved the land melioration and embankment system. With them, modern agricultural and technical thought arrived in Żuławy, facilitating the land's economic development.

By Boat to the Market and to Church

Until the 19th century, the basic means of transport in Żuławy used to be boats and ferries. You used a boat to get to the field, to the market, to the tavern, or to church. A dense network of drainage canals provided better communication than poor roads, impassable after every rain. Some villages in Żuławy were originally set up along water arteries, and every farm had its own harbour and boat which kept it in touch with the world. Such sights are still to be seen today, though motorisation and road communication has supplanted water transport.

Tales from the Żuławy Loop - a brief outline of the history of the region

Medieval Atmosphere

It was the Middle Ages that left the most conspicuous traces in the cultural landscape of Żuławy. Most contemporary towns and villages, the communication routes linking them, as well as the beginnings of the flood prevention system and the network of parishes date back to the period from the mid-13th to the mid-15th century. Settlement was governed by officials of the Teutonic Order, residing in castles-monasteries. The most impressive example of this kind of building is Malbork Castle on the Nogat — the capital of the Teutonic Order's state and the residence of Grand Masters — the Europe's largest medieval brick castle. There were also many smaller seats of the Teutonic Knights' local administration, the best-preserved of which is Gniew Castle, the largest Teutonic Order fortress on the left bank of the Vistula, the seat of a commander and between ten and twenty knights of the Order, making up the so called convent. Another castle of the Teutonic Knights survives in Sztum, and ruins of their stronghold may be seen in Elblag. Parallel to "civil" administration in the territories of the conquered Prussian tribes, the Teutonic Knights established four dioceses there, two of which - Pomesanian and Warmian - extended to areas on the Lower Vistula. The seat of the Pomesanian chapter and the cathedral of Pomesanian bishops residing in the castle in Prabuty was the castle complex in Kwidzyn. The bishops of Warmia lived in Lidzbark Warmiński Castle, and Warmian canons looked after the episcopal cathedral in Frombork. One of them was the great scholar Nicolaus Copernicus, who died in 1543 and was buried at his altar in this church.

Gdańsk Pomerania had been part of the Kuyavian Diocese from the times of Prince Boleslaus the Wrymouth. In the Middle Ages, still before the Teutonic Order subdued those territories, a few rural monasteries were established there, generously equipped by local dukes. One of them was the **the Cistercian Abbey in Pelplin**, which Prussian authorities dissolved at the beginning of the 19th century and whose buildings became the seat of the expanded Diocese of Culm (Chełmno). The former abbey church, now serving as the cathedral of Pelplin bishops, is one of the finest examples of Vistula Gothic. In the diocese museum we may see **the only original specimen of the Gutenberg Bible in Poland**.

It should be mentioned that it was in Żuławy that the Blessed **Dorothy of Montau (Mątowy Wielkie)** lived in the Middle Ages – she died in 1394 as a **recluse**, having voluntarily spent the final years of her life inside the walled-in chapel of Kwidzyn Cathedral. Today, she is worshipped as the patron saint of the Elblag Diocese.



www.zamkigotyckie.org



Cathedral in Brani

Gothic Castles Trail

This is one of the main cultural routes in the Pomeranian Province, comprising Europe's best-preserved Gothic fortifications. Some of the buildings making up the trail lie in Żuławy and are definitely worth seeing when visiting the area.

Items on the trail:

Gothic castles: Bytów, Gniew, Kwidzyn, Malbork, Sztum Ruins of Gothic castles: Czarne, Człuchów, Dzierzgoń, Gdańsk, Grabiny, Lębork, Osiek, Prabuty, Przezmark, Puck, Skarszewy, Sobowidz, Zamek

The operator of the trail is the Association of Communes "Polish Gothic Castles"

The Teutonic Knights' castle in Malbork. Photo H. Gonera



The Mennonites — Dutch exiles

In the 16th century, when Europe was the scene of the Reformation and religious wars. Poland appeared to be an oasis of tolerance. This was appreciated by Dutch Mennonites.



Menno Simons from Friesland. Archive of Klub Nowodworski

Mennonitism drew on the tradition of early Christian communities, rejecting most rites and institutions of the Church and placing particular emphasis on living a modest life of hard work. These qualities were particularly useful in developing Żuławy, which is why these settlers were received here with open arms, despite their "odd" beliefs.

The Mennonites settled in areas particularly difficult to farm, the depressions in the north of the Vistula Delta and around Lake Druzno, most of which were a wasteland at that time. In exchange for a high rent, they were exempt e.g. from working for the landowner, which made them free men. Their skills in draining and reclaiming fertile but marshy areas were highly regarded, and the effects of their hard work were useful to generations of Żuławy settlers.

After the first partition of Poland in 1772, when Żuławy came under Prussian rule, the times of Polish tolerance ended. The Mennonites were forced to do military service, which ran contrary to their pacifism. As a result, from late 18th century many orthodox Mennonites emigrated to Russia, from which they were later driven out to the United States by Stalinist repression. Those who stayed in Żuławy were gradually Germanised and shared the fate of the displaced after 1945.



The Mennonites Trail — information board. Photo H. Gonera

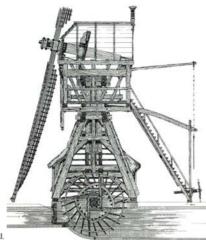
On The Mennonites Trail

This hiking and cycling route links places connected with the history of settlement in Żuławy, including Mennonite settlement.

Route: Gdańsk – Krępiec – Mokry Dwór – Wiślina – Ledowo – Wróblewo - Wocławy - Miłocin - Trutnowy - Cedry Wielkie - Leszkowy - Kiezmark - Drewnica - Mikoszewo - Jantar - Rybina - Tujsk - Żelichowo - Nowy Dwór Gdański – Lubieszewo – Ostaszewo – Gniazdowo – Nowa Cerkiew - Palczewo - Boręty - Lichnowy - Nowy Staw - Tralewo - Stogi - Malbork – Stare Pole – Kławki – Szaleniec – Rozgard – Różany – Zwierzno - Markusy - Jezioro - Tropy Elbląskie - Raczki Elbląskie - Elbląg.

Monuments connected with the Mennonites:

- the former Mennonite church in Gdańsk:
- the former Mennonite church in lezioro:
- a wooden gate-belfry from 1792 in Wiślina:
- numerous formerly Mennonite or multi-denominational cemeteries.



Monuments unconnected with the Mennonites:

- Gothic churches and their ruins;
- arcaded houses typical examples of the residential architecture of Żuławy;
- hydrotechnical monuments: the Przekop Wisły Canal, intermediate steam pumping station in
- drawbridges in Rybina, Nowy Dwór Gdański, and
- the Żuławy Museum in Nowy Dwór Gdański and its branch in Żelichowo:
- water linear villages in Tujsk and Tropy Elblaskie — examples of a unique village layout;
- cities and towns: Gdańsk, Nowy Dwór Gdański, Nowy Staw, Malbork, Elblag.



Mennonite dress. Photo M. Opitz

The Żuławy Museum, Photo M. Onitz



Harmony: The Key to Reading the Landscapes of Żuławy

The idyllic Vistula Żuławy is one of those corners of Poland where nature and the work of human hands harmonize. The scenic landscapes full of willows and colourful fields would not exist but for the meticulously designed network of canals and embankments. Together they make up a varied and diverse scenery, appreciated by painters, photographers, writers, and nature lovers. The senses sharpen here. A person slows down and begins to rest. Due to the dense network of canals and rivers and the natural character of landscape, Żuławy is often called "Wild Holland."

Żuławy: A Gift of Rivers



Yet, the history of Żuławy is an eternal struggle with the elements. This area may well be called the land brought by rivers. Initially, it was deposited in the form of marshes and forests. With time, through diligent work, the inhabitants of Żuławy reclaimed the land for farming. They safeguarded it from water with a dense network of drainage canals, painstakingly developed over generations. Today, excess water is transported to intermediate pumping stations and further to the Vistula Lagoon and the Baltic Sea, but for many years the inhabitants of Żuławy had to obey an unwritten pact with treacherous water. The chronicle of floods records what happened here when nature showed its menacing face. The information available goes back to 1328, and the full inventory contains 173 events. The chronicle ends with the "Great Storm Flood" in the Elblag Żuławy on January 19–20, 1983, and with the small flood of October 14, 2009. Rivers, among them the Vistula, the Nogat, the Szkarpawa, the Wielka Święta-Tuga - one river with two names - and others are the main heroines of Żuławy landscape. Today, even though the element has been put under control by means of locks and floodgates, they retained their natural character. A kayaking, yachting, or houseboat trip on the Żuławy Loop – that is, on the waterways running through the Vistula Żuławy- will convince you that the rivers live to their own rhythm.

The largest river of the Vistula Żuławy and of the Żuławy Loop is the Vistula - the Queen of Polish rivers, also called the Polish Amazon River. Ranking among the largest unregulated rivers in Europe, it has been included in the Natura 2000 programme in recognition of its natural qualities, e.g. as a river of the European Avifauna Trail. The Vistula differs in size and character from other rivers making up the Żuławy Loop. The Nogat, the Szkarpawa, the Mart-

wa Wisła, and even the Jagielloński Canal put you in a relaxed holiday mood and let you feel part of nature. The Vistula teaches vigilance and humility.

The Four Seasons on the Żuławy Loop

Spring is the most picturesque period in the life of rivers. It is then that the Vistula and the Nogat show their true character - that of living, natural rivers. Hospitable broads attract water birds, creating perfect breeding conditions. In summer, rivers make an exemplary image of symbiosis between man and nature. Hundreds of cows and horses grazing on flood-land meadows may be admired from the river as well as from roads. road or railway bridges, or cycling lanes and routes. Autumn rivers are not merely a nostalgic picture of birds flying away or colourful scenes of golden leaves floating with the current. Autumn on rivers also means the most vivid light, the palette of warm colours that makes this particular



season enchanting to artists, photographers, and painters. In winter, rivers close their gates to boating enthusiasts, showing enormous power and the still dangerous side of their life.



The Jagielloński Canal and the Nogat. Photo M. Opitz

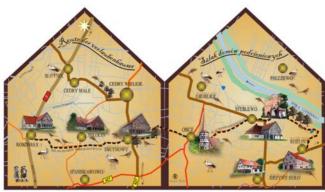


The Tczew Bridges. Photo H. Gonera

Architecture: The Land of Arcaded Houses and Hydrotechnical Monuments







A man of the Arcaded Houses Trail Photo D. Kufel



The Orlowa, Phota M. Onitz



The Koszwały. Photo M. Opitz



The Żuławki — a room in an arcaded house. Photo M. Opitz



Arcaded Houses Trail Operator

Impressive buildings with frame construction with a floor protruding at the front and supported by wooden pillars (arcade) undoubtedly constitute the main architectural feature of the Vistula Żuławy. Such arcaded houses, initially modest, with time evolved into impressive residences of wealthy farmers that could well compete with the manor houses of moderately rich gentry. This is particularly the case with 19th century houses, which have an exceptionally elaborate gable frames filled with decoratively laid small bricks — the so called Dutch bricks — as well as moulded cornices and carved columns in the arcades. It is worth noting that the arcade originally served as a granary. It had a special lid in the floor, enabling to pass sacks of grain directly from carts. Such a chamber ensured air circulation, which is crucial in Żuławy due to high humidity in spring and autumn. The arcade was used as a utility room: a weaving mill, a drying room, and sometimes as a summer room for seasonal workers.

Interesting and at the same time characteristic of \dot{Z} uławy are also the so called Dutch homesteads — houses of Dutch settlers who arrived here in the 16th century. This kind of house typically stood on an artificial earth hill (called terp) that protected it against flood, with a cowshed and a barn adjoining its gable. Taught by experience, the inhabitants of \dot{Z} uławy built special platforms allowing to drive the cattle to the attic during floods.

Sadly, history was not kind to arcaded houses. Only few survive to be admired on Arcaded Houses Trail. Unbelievable as it may now seem, the Vistula Żuławy used to be called *The Land of a Thousand Windmills*. Unfortunately, 19th century modernisation and 20th century war cataclysms left only two such facilities surviving: a Dutch windmill in Palczewo and a wooden windmill in Drewnica.

Arcaded Houses Trail

Arcaded Houses Trail is a hiking and cycling route that will acquaint you with Żuławy's characteristic type of architecture. The route runs through: Koszwały — Miłocin — Trutnowy — Osice — Stablewo — Krzywe Koło — Koźliny. The operator of the trail is the Gdańsk Żuławy Association.



The Trutnowy. Photo D. Kufel

Hydrotechnical Monuments

A complex land improvement system and kilometres of floodbanks and canals, combined with an enormous amount of work, made functioning in Żuławy easier. The foundations of the system were created by the Teutonic Knights, who ruled Gdańsk Pomerania from 1308. It was then that the earliest flood prevention system emerged, which was later modernised and remains serviceable to this day. It was also then that "Flood-Bank Associations" were established, which functioned until World War II. They looked after the whole system protecting, draining, and irrigating Żuławy.

For seven centuries, the polders of Żuławy — areas surrounded by embankments, lying below the level of the adjacent water bodies and requiring regular drainage — were drained by hundreds of picturesque windmills, which gave the land its name of Little Holland. In the 19th century, windmills began to be gradually supplanted by steam pumps, and later by electric ones; today, the remains of the last draining windmill may be seen only in the Żuławy Museum in Nowy Dwór Gdański.

Towards the end of the 19th century, the last great reconstruction of Vistula's embankments took place. A canal was built that now constitutes



The drawbridge in Rybina. Photo Fotografia-dronem.pl

Hydrotechnical machinery in the Gdańska Głowa Lock

the main mouth of the Vistula — the so-called $Przekop\ Wisty$ (meaning "the Vistula Dig-through") — as well as locks cutting off the river's other arms (Biała Góra, Gdańska Głowa, Przegalina). That ensured the safety of the local people for the next hundred years.

Hydrotechnical Heritage Trail

Many hydrotechnical devices and facilities are elements of a Pomeranian tourist trail — *Hydrotechnical Heritage Trail*. These trail's facilities include the Gdańska Głowa Lock, the intermediate pumping station in Chłodniewo (Rybina), the aqueduct in Grabiny-Zameczek, historic drawbridges and swing bridges, the Biała Góra lock, the locks on the Nogat: Szonowo, Rakowiec and Michałowo, the Tczew Bridges, Jurand's Canal (also known as the Malborska Młynówka), Jurkowickie Sklepienie aqueduct, Prabuty (historic 18th century waterworks), and the Elbląg Canal.

The Michałowo Lock Photo A Wołos



Archive of Klub Nowodworski.

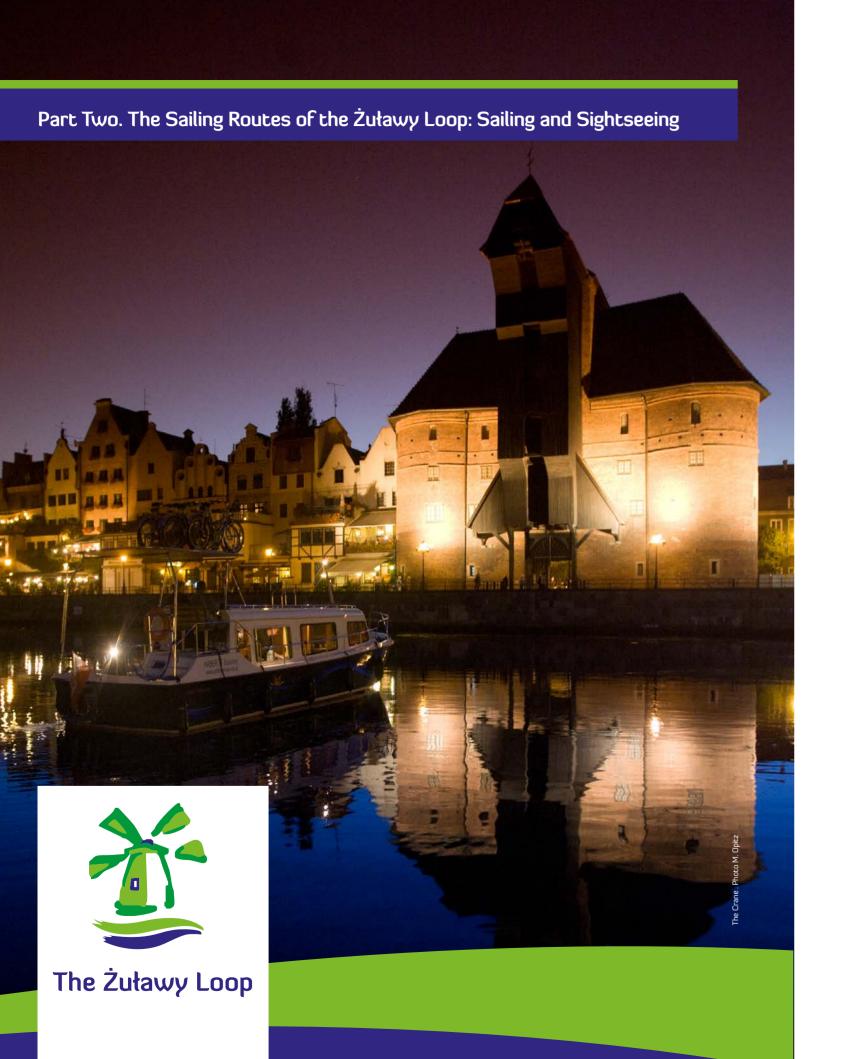


The Riała Góra Lock Photo A Wołos



The drawbridge in Nowa Pasłęka (out of order). Photo A. Wołosz

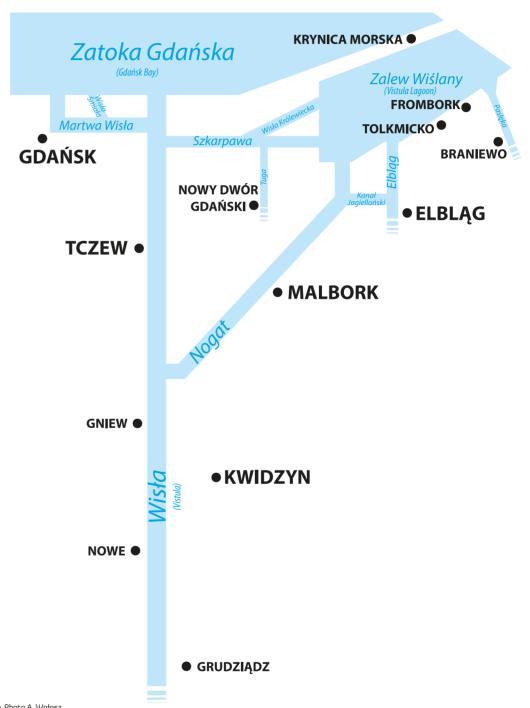






The Błotnik. Photo Fotografia-dronem.pl

Scheme of the Żuławy Loop waterways







The Vistula

Profile

People call it the Queen of Polish rivers and Europe's last wild river. It is the habitat of many species of birds and a sanctuary of beautiful nature. On the stretch of interest to us — from Korzeniewo (867.7 km) to Tczew (910 km) – the river is a class II waterway with a guaranteed transit depth of 1.4 m (4.6 ft). From that point to the very mouth (941.3 km), it has navigability class III and a guaranteed depth of 1.6 m (5.25 ft).

Navigational Information

[How to navigate

Navigate the Lower Vistula like a regulated river, from one bank to the opposite one, then along the bank (from a few hundred metres to a few kilometres, depending on the sharpness of the bend), to further signs and the next crossing.

Caution! When navigating along the river bank, keep a safe distance from it (from several dozen metres to 200 m) so as to avoid dangerous wing dams. "Read the water" carefully and analyse its distortions, as hitting rocks may be very dangerous when sailing

On the lower stretch of the Vistula, bank signs have to be obeyed. The "Captain's Tips" chapter (p. 83) will help you learn them. At low water, obeying the signs is absolutely necessary! Bank signs end at 928 km — before the bridge in Kiezmark. From that point on, navigating the entire breadth of the river is allowed — with due caution, naturally. Kilometre signs on white boards irregularly appear on banks.

Since the banks of the Vistula are reinforced with stones, our advice is not to moor to them except in emergency situations. Try to find sandy coves between wing dams to stop at, watching out for fishing nets.

Current

The rapid current of the Vistula (c. 3 km/h) makes quick manoeuvring difficult. Information on how to gain time to find your bearings on the river or to find signs is given in the "Captain's Tips" chapter (p. 83).

Power lines

All power lines hang above 14 m (46 ft), and the vertical clearance of the lowest bridge, even at high water, is nearly 7 m (23 ft).

What may turn out to be a threat to boaters is wind. During a strong north wind – blowing from Gdańsk Bay – waves up to 1 m high form on the water. When it blows from the south, the engine has to be in high gear in order to overcome the current and the waves. A low-power motor may not do.

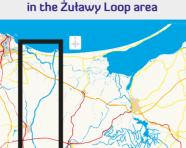
High river stages and floods are a problem when navigating the Vistula. When they occur, the locks in Biała Góra, Gdańska Głowa, and Przegalina are closed, which cuts the Vistula off from the branches of its delta, resulting in all its waters flowing into the Bay through the Przekop Wisły Canal.

Caution! Entering Gdańsk Bay through the Przekop is a route for experienced sailors. Waves, rocky banks, no professional marking, varying depths at the mouth, and numerous fishing nets require increased caution.

The exit to the Gdańsk Bay has been made easier by building the approach guide walls — eastern with 600 m length, and western with 550 m length. Also, lights have been installed.







The location of the river



The Vistula in the vicinity of Gniew. Photo Fotografia-dronem.pl



The Przekop Wisły Canal, Photo M. Opitz



The church in Koźliny Photo Commune Office of Suchy Dąb



The mouth of the Vistula to the Baltic Sea. Photo D. Paciore



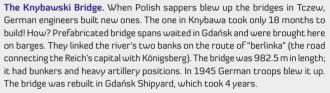
The Vistula River. A view of the Tczew bridges. Photo H. Gonera

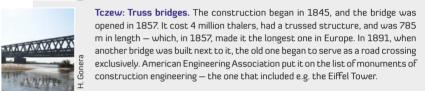


The Vistula River. The vicinity of the Biała Góra Lock. Photo M. Opitz



Hydrotechnical Highlights







The Przekop Wisły Canal. Flood damage and the fear of recurring floods resulted in a decision to regulate the Vistula and give it a new mouth. The new river channel was dug in 1890—1895 from Przegalina to Gdańsk Bay. Day by day, a thousand people and 40 steam machines worked at it. The canal, 7 km long and between 250 and 400 m wide, was flanked with 10-metre (33 ft) high embankments. On March 31, 1895, upon the Emperor's signal given by telephone, the president of West Prussia opened the way for the Vistula's waters. The Przekop shortened the Vistula by 10 km.

Tourist Highlights



Hearts from hell. They are baked out of marzipan and potatoes in the village of Piekło (the name means "hell" in Polish) by Barbara Wichrowska. The hearts are small, cream-white, and topped with chocolate or jelly. The recipe is protected and has been entered on the list of traditional products. Whoever falls in love with this sweet may also taste Ms Wichrowska's sourdough bread or Piekło sausage with black (devilish) mustard.



The outbreak of World War II. The residents of Tczew say that it was in their town that World War II actually started. It was 4:34 am, September 1, 1939. Bombers and fighters commenced attack 11 minutes earlier than at Westerplatte. They bombed the area in front of the bridge so as to break the cable connecting it with the explosive charge planted by Polish sappers and prevent the blowing up of the bridge. Without success.



The Kociewie: A peaceful land. The peaceful land of Kociewie has many assets. It is worthwhile visiting Gniew and seeing the castle of the Teutonic Knights, and then moving on to Pelplin. The town is famous for one of the largest former Cistercian cathedrals and many antique books. This is where the only specimen of the Gutenberg Bible in Poland is kept. An absolute must-see is the fara (old parish church) in Tczew, in which Grzegorz Ciechowski used to sing.







The Vistula, Korzeniewo, Photo M. Onitz



Dębowy Las

866.9 km - RB - Korzeniewo

On the right bank, lies the entrance to the harbour basin belonging to the Regional Water Management Board (Water Authority in Korzeniewo). Stopping is allowed with the management's consent. Mooring is also possible at the concrete quay on the right bank, just before the ferry. However, that is neither safe nor convenient for tourist vessels. From the mooring point, the historic river gauge building is well visible. It is green and stands on the embankment surrounding the port. Prussians built it in the 1840s. They placed the water gauge mechanisms on the turret, which is still there to be seen. Crews of vessels could read the water level from a distance. The water gauge ceased to function before World War II. Few people are aware of its original purpose, and some take it for a shrine. You can also visit the charming and peaceful village of Korzeniewo (with shops in it), just behind the embankment; following the same road, you will reach Kwidzyn 5 km (3 mi) further.

869.5 km - a road bridge

Bridge connecting national road no 91 (former national road no. 1) and national road no. 55, making it easier for the citizens of Kwidzyn to reach Motorway A1. Before the bridge was opened, the nearest crossings had been located near Tczew and in Grudziądz, both around 40 km away from Kwidzyn, making this section of the Vistula the longest without a bridge crossing.

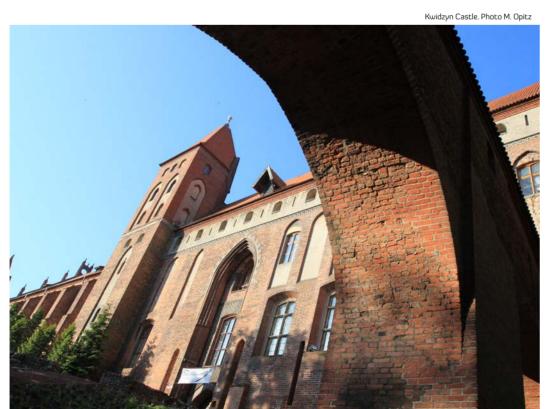
870 km – Jaźwiska, a shifting sandbar obstructing navigation

874-875 km - wing dams

Not visible except at low water — there is a danger of hitting them and damaging the vessel.

876.9 km - LB - the Wierzyca River mouth

Water trail, navigable only by kayaks





876.9 km - LB - Gniew.

The first mention about the Gniew dates back to the year of 1229, "terram Gymeu", which referred to the land between the Vistula and the Wierzyca rivers. In 1282, the land was taken over by the Teutonic Knights, who began construction of the castle and the fortified settlement to which the Knights granted urban charter in 1297. In 1464, the town again belonged to Poland and the castle became the seat of the elders, such as, among others, Albrecht St. Radziwiłł and Jan III Sobieski. Following the First Partition of Poland, Gniew was incorporated into Prussia and the castle itself was converted first into a granary and then into a prison. Several years later, the roof and three wings of the castle burned down in a mysterious fire, and remained a ruin until the early 1990s. After many years of rebuilding, it became a tourist attraction of Kociewie. Today, the fortress is famous for chivalry tournaments, fierce battles and wonderful performances, during which the knights crush their lances, and Hussars clash with Swedish musketeers. The most interesting events include Vivat Vasa - the Battle of Gniew, 1626 year, the King John III Tournament and the Gospel Music Festival. Unforgettable experience during a stay in Gniew give also walks along the medieval streets of the town, gondola cruises on the Vistula or horsedrawn carriage rides through charming nooks of the municipality. In Gniew we can stay "in the wild", at the LB behind the inoperative ferry crossing. However, when water level is low, you can only moor on the right side, directly to the sandbank. During the season, this place has a marina for gondolas, accessible through a canal under the castle leading from the abandoned ferry bridgehead.

879 km - Ciepłe, a shifting sandbar obstructing navigation

884 km - a wing dam, broken away on the land side

With unfavourable position of the current relative to the sandbar, the land, and the part of the wing dam broken away as well as in result of strong stream currents in this area, vessels are in danger of being pushed against the undamaged part of the wing dam, located 70 m (230 ft) from the bank at present.







♦ 885 ►

THE VISTULA

886.6 km - RB - the Biała Góra Lock. (See scheme on p. 121)

The entrance into the Biała Góra Lock and to the Nogat, on the way to Malbork and the Vistula Lagoon. Just before the turn towards the lock there is the place where dredgers work and barges anchor on which the sand is loaded. Loaded, they set off for the Nogat, passing empty barges. Remember that commercial shipping always has the right of way before pleasure vessels! You need to be particularly cautious and observe the buoys placed on water, showing the right direction of passage. Just before the lock, stopping is possible in a cove on the right side, just behind a stone wing dam. The cove is a good angling spot. You can also lock and stop on the other side of the facility — for detailed information, see description of the Nogat River.

Note: When you approach the lock from the Vistula sailing from Tczew, make for the right bank immediately.

888 km - LB - Wielkie Walichnowy and Małe Walichnowy

Remains of Mennonite cemeteries from the mid-19th c. may be seen here. In the village of Wielkie Walichnowy there is a beautiful Gothic church, surrounded with a timber-frame wall. Burnt by the Swedes, it was rebuilt. A 15th c. stoup from before the fire survives to this day.

888.5-889.4 km - a stone reef in the village of Piekło

Erratic boulders lie on the river bottom, causing a risk of damage to the hull, esp. at low water stages.

888.95 km - RB - Piekło

The school in Piekło made history as a symbol of struggle for Polishness. In 1936–37, Jan Hintz from Tczew opened the "Polish Home" here, in which there was a private school, a nursery school, flats for teachers, and a chapel. This was a stronghold in the struggle against Germanisation. Hinz was murdered in 1939, and the inhabitants of Piekło were persecuted by German storm-troopers. Today, where the Polish Home used to stand, there is a primary school, and the people of Piekło proudly say: The school was not destroyed by Hitler, Goebbels, or Stalin. It will forever remain a symbol of struggle for Polish identity, not only in the Powiśle.

890-892 km - The Matawa Forest Reserve of the Nogat River

A clearly visible forest edge on the right bank. For description, see the chapter about the Nogat (p. 54).

891.7 km – LB – Międzyłęż

An old Evangelical cemetery may be seen in the village. Old brick fence posts survive here, as well as grave steles with visible inscriptions and reliefs (angels, hands folded in prayer, a skull). Thanks to the efforts of commune authorities, the cemetery was tidied up.

A view of the Vistula River and the Matawa Forest, Photo M. Onitz





The church in Gorzędziej. Photo UG Subkowy

St Adalbert's reliquar in Gorzędziej Photo UG Subkowy



896.5 km - LB - Rvbaki

In Rybaki, there is the lock of Miedzyłeż from 1896 – one of the elements of the Walichnowy Lowland drainage system. Its gates close by themselves, under the pressure of high water from the Vistula. There is also a drainage pumping station in the village.

896.8 km - Estuary of the Granicznik Canal

No entry for vessels.

897 km - Rybaki, a shifting sandbar obstructing navigation

897 km - LB - Wielka Słońca

This village with an interesting name is one of the oldest in Pomerania. It is first mentioned in early 13th c., in a description of Duke Świetopełk's castle and in documents concerning the privileges granted to the Cistercian monastery in Pelplin. Today, the village has a ditch that drains off water to the pumping station in Rybaki.

897.2 km - RB - Matowy Małe

The village has double embankments, only one of which performs its protective function: the one closer to the Vistula. The other one is what remains from Prussian times. Osier plantations stretch between the embankments.

898 km - RB - Matowy Wielkie

The birthplace of the Blessed Dorothy of Montau (Matowy), the only female stigmatic in Polish hagiography. It is worthwhile reading the penitent's life history and visiting the Gothic church with a soaring tower, very well visible from the river.

902 km — Gorzędziej, a shifting sandbar obstructing navigation

902 km – LB – Gorzedziei

An old 13th century town. On a hill stands an early 14th century church with a characteristic high steeple visible from a distance. The relics of St Adalbert are deposited in it. A legend says that during his Prussian mission (997) St Adalbert said an open-air mass in this town. Over the southern entrance, a figure of the saint has been placed, wielding a paddle in his hand.

902.1 km - RB - Bystrze

An arcaded house, poorly preserved.

903.9 km - the Knybawski Bridge

Navigable span width: 60 m (196.8 ft); vertical clearance: 9.78 m (32 ft) at medium water and 15.52 m (50.9 ft) at

The first bridge in this place, built by the Germans at the very beginning of the war, linked the river's two banks on the route of "berlinka" - the road connecting the Reich's capital with Königsberg. It was a fortified bridge with bunkers, 982.5 m in length. In 1945, the retreating German troops blew the bridge up. It was rebuilt in Gdańsk Shipyard, based on original German plans. First drivers crossed the new Knybawski Bridge in 1950.

The Knybawski Bridge. Photo H. Gonera



905

Bałdowo



THE VISTULA

22

Tczew. Photo Fotografia-dronem.pl



No entry for vessels.

908 km - LB - Tczew

A town with 62 thousand residents. An important railway junction since the late 19th c. The places worth visiting include the old 13th c. fara (parish church), the 14th c. former Dominican church, and Poland's first Museum of the Vistula River, which makes up a complex together with the Lower Vistula Regional Exhibition Centre. There is a tourist information point here, run by the Local Tourist Organisation "Kociewie."

908 km – LB – mooring piers (See scheme on p. 91)

The mooring piers were built as part of "The Żuławy Loop Project — Water Tourism Development. Stage I."

908 km – LB – a passenger and sailing harbour (See scheme on p. 91)

A convenient jetty made with floating concrete sections, which are additionally supported on piles from the bank side. The jetty provides a safe mooring place for vessels with low freeboard, regardless of the water level. Water and electricity outlets available. The harbour has a toilet and showrs, a restaurant and a cafe. The old town is just a few steps away. Approach the harbour against the current. Phone no. to the harbour master's office: 58 531 46 26.

908.57-908.6 km - the Tczew Bridges. Railway and road bridges.

Navigable span width: 60 m (19.8 ft); clearance: 7.16 m (23.5 ft) at high water, 11.58 m (38 ft) at medium water. The first bridge was built in 1851–1857. Its piers were topped with neo-Gothic towers for decoration, and its abutments had richly ornamented entrance gates set in. Between the bridges there is a power line, with a clearance of $11\ m$ (36 ft). The other bridge – with a lattice structure – was built in 1888–1890 and serves the Warsaw-Gdańsk railway line to this day. The diversity of technical and engineering solutions makes both bridges a true open-air museum of late 19th century engineering.

908,8 km - LB - The mouth of Młyński Canal

908,9 km - RB - Lisewo

The place is worth visiting for its 14th century church. On its southern steeple, between two grooves, the letter "K" is carved. Historians relate this initial to Kumische Rute, which means Chełmno rod. From the 13th to the 18th century it was the simplest measure of length in use in Gdańsk Pomerania, equal to $4.3\,\mathrm{m}$ ($14.1\,\mathrm{ft}$). Every disbeliever could check if he had not been cheated by the steward surveying his field.

909 km - LB - harbour and shipyard entrance

A concrete basin; slipways of the former river shipyard and repair workshop. A crane with a high lifting capacity is also available.

910 km - Tczew, a shifting sandbar obstructing navigation

915.3 km - LB - Koźliny

6,5/11,9 Lisewo Malborskie

A village, with a characteristic half-timbered tower of the 14th century church of Our Lady of the Rosary. The tower itself was added in late 18th c. Wicker plantations are sprawling between the flood control dike and the Vistula river





The Dutch windmill in Palczewo. Photo H. Gonera



Ruins of the church in Steblewo. Photo UG w Suchym Dębie



Mooring pier in Tczew. Photo P. Brozdowsł



Promenade at the Vistula River in Tczew Photo Municipal Office of Tczew.



enade at the Vistula River in Tczew. Photo: iczarter.pl.

918 km - RB - Palczewo

This village is a must-see. It has the only wooden church in Żuławy, built during the Swedish wars. Covered with a shingled roof and topped with a steeple, the church stands in a village with less than 300 inhabitants. It was built 300 years ago, and its interior is worth seeing. The walls, the organ front, and the doors are covered with colourful polychromes. In this way, an anonymous artist told the story of life and death, sin and God's glory. The Biblia pauperum is to be found even on the wooden pews. Inside the church, there is a baroque organ and a flying angel figure: the ruddy-faced young man is holding a wreath in his hand and guarding the faithful. In Palczewo, you will also see the 19th c. Dutch windmill, a rival of the wooden windmill (koźlak) popular in Poland. Visible from a distance, it has five floors and a revolving dome enabling it to turn in the direction of the wind. It has lower parts made of brick, upper parts made of wood, and a shingled roof. The windmill no longer grinds grain into flour but is a tourist attraction now. The new owner is trying to restore it to its former splendour.

918 km - LB - Steblewo

In Steblewo, considered to be the capital of the wicker industry in Żuławy, you can see historic arcaded houses and ruins of a Gothic church, burnt by the Red Army in 1945.

921-923 km - RB - Nowa Cerkiew

The village has a neo-Gothic church and a historic 19th century arcaded house. Another house of this kind may be seen in Gniazdowo.

922 km - a power line at the height of 14.13 m (46.4 ft)

926.2 km - RB - Ostaszewo

The place to visit in the village is the 14th century church, with a soaring steeple and historic polychromes. It used to serve as an Evangelical church. In the centre of the village there are ruins of a Gothic church. In order to hasten the evacuation of the village, the retreating German troops set fire to the church. During that operation, a soldier was shot for refusing to carry out the order; his grave is situated beside the ruins.



Ostaszewo

Leszkowy

925

DID YOU KNOW THAT...

Tczew is the birthplace of Citizen G.C.

It is here that the heart of Republika band started beating — reads the plaque on the building at 1 Nowy Rynek St. It is in this house near the railway station that Grzegorz Ciechowski was born as a son of the District Dairy Cooperative director. In Tozew he finished primary school and general secondary school, sang in a choir, and learnt to play the flute and the piano. Every year in August, a concert dedicated to this great departed Polish musician is organised in the municipal amphitheatre.

Mewia Łacha

I. Mikoszew

11.91 / 3.28 / 3.28





The Przegalina Lock.,Przekop Wisły and the old river bed of the Vistula.
Photo D. Paciorek



928.2 km – LB – Leszkowy

Drewnica

Groblica

925

Piaskowiec

Ostaszewo

A little brick 14th century church dedicated to Saint Brother Albert Chmielowski stands here — rebuilt after numerous fires in the 1980s. What you must see when visiting the place is the four tombstones in the floor of the chancel and 17th century inscriptions in the bricks of the eastern wall. The village has a thriving Country Housewives' Club. Its members organise the Flood-Bank Holiday in September. The women bake bread and make fruit liqueurs. On the embankment there is a functioning Flood-Bank Watchtower.

928.5 km - the last navigational signs on the Vistula banks

From this place onward, depths on both sides of the river are sufficient for safe navigation.

c. 929 km - concrete bridge abutments on both banks

929.9 km - the road bridge in Kiezmark

Navigable span width: 75 m (246 ft); vertical clearance: 10.55 m (34.6 ft) at medium water and 6.79 m (22.27 ft) at high water.

The bridge was built in the late 1970s in place of pontoon ferry crossing. Just after the bridge, on the right, is the place where the Germans blew up embankments in 1945. By the bridge (LB) there is a concrete quay. It is not fit for mooring due to the metal elements of concrete reinforcement.

930,1 km - Two road bridges in Kiezmark - Expressway S7

Navigable span width: $75 \,\mathrm{m}$ (246 ft), vertical clearance (right/central/left span) at medium water: $11.21/12.22/12.69 \,\mathrm{m}$, at high water: $8.02/9.03/9.50 \,\mathrm{m}$.

c. 930.2-930.8 - two power lines at the height of 16 m (52.5 ft)

$930.25\,km-LB-the\,village\,of\,Kiezmark$

There is a wooden Flood-Bank Watchtower in the village. It was built in the late 19th c. on the Vistula's new embankment. A flood-bank guard lives in it. The previous watchtower was pulled down in 1890—1894, along with the embankment running closer to the river. Not far from here there is a granite post, sunk into the ground in the flood land, with the high water stage marked on it, recorded on June 27, 1884. Worth visiting in Kiezmark is Our Lady of Częstochowa Church, baroque in style, with a characteristic half-timbered structure. On the steeple of the church you will see the metal face of a 19th century mechanical clock, as well as that of the previous one, a sundial.

931 km - RB - the Gdańska Głowa Lock (See scheme on p. 121)

Entrance to the Szkarpawa. A swing bridge and a flood-gate. Formerly a famous fortress existed here, perpetually fought over, since whoever controlled this place controlled commercial traffic from Poland to Gdańsk and Elbląg.

933 km - the beginning of the Przekop Wisły Canal



Our Lady of Częstochowa hurch in Kiezmark. Photo M. Opitz



The bridges in Kiezmark. Photo R. Was



The Gdańska Głowa Lock.



świbno-Mikoszewo ferry crossing, Photo A. Wołosz.

The Gdańska Głowa Lock, Photo Fotografia-dronem.o

936 km - LB - the entrance to the Przegalina Lock and to the Martwa Wisła (See p. 121)

The canal, that leads to the lock, borders with port basin, belonging to RZGW

Gdańsk and serving as a mooring for ice-breakers, excavators and other machines of RZGW.

North Lock (inoperative) is a monument of hydro-technical art. From 1895 it was used for the purpose of raft drifting, today it occasionally serves as a mooring and vantage point. In addition to the classic two pairs of gates, it also has additional one from the side of the Vistula River, which previously served to prevent flooding. The lock — after being rended inoperative in 1992 — was isolated from the direction of Vistula River by a flood embankment, leaving all hydrotechnical devices intact. The long, rectangular outer port is a good place for an occasional bed or a short stay (especially the southern bank). There are a few mooring piers and dolphins (structures). Be careful of the high voltage line by the sluice gate.

South Lock (working) this is a modern, automated lock chamber with a width of 11.91 m, depth of 3.28 m and length of 188.37 m that serves the purpose of professional navigation. It was built in the eighties of the 20th century. The eastern gate is large enough, so it acts as a flood gate at the same time. The lock enables exit from Gdansk into the Vistula River: up the river to the Vistula Lagoon, while down the river, to the Gdańsk Bay. Watch out for the overhead power lines at the lock gate.

Drawbridge - You can find detailed information about it in the description of the Martwa Wisła (See p. 26).

937.5 km – Świbno – Mikoszewo ferry crossing

The modern ferry, built in 2006, takes 21 cars and 100 passengers on board; its carrying capacity is 90 tons. The crossing takes less than 5 minutes. The tradition of the Świbno-Mikoszewo crossing dates back to 1895, when the river's mouth was being dug through. The present ferry crossing has functioned since 1945. The Świbno is a cable ferry, guided by a cable fastened on both sides of the river. It is driven by a tug-boat sailing beside it. Watch out for the cable and do not pass when it is taut. Slightly further upstream (RB) you can see the ferry quay of the narrow-gauge railway, which used to run this way until the 1950s, connecting the Great Żuławy with Gdańsk. Beside the ferry point there is a stone commemorating the centenary of the Przekop Wisły Canal, and on the opposite bank there is an obelisk commemorating the death march of Stutthof Concentration Camp inmates. Next to the crossing (RB) lies the fishing harbour in Mikoszewo.

938.9 km – LB – the harbour basin in Świbno

A base of fish cutters and ice-breakers as well as a maritime search and rescue station. A possible stopping place, but with no infrastructure.

939.5 km - RB - a building formerly serving as a post of Border Defence Troops (WOP)

Currently used by fishermen.

 $940.3 \, \text{km} - \text{the Vistula Mouth (Ujście Wisły) river gauge depth c. 6 m (19.5 ft)}$

941.3 km - the outlet of the Vistula into the Baltic Sea

Nature reserve Mewia Lacha (Seagull Sandbank). Slender short-legged terns, gulls, ducks, and beavers may be seen here. The 19 ha of the reserve is home to many species of great interest to ornithologists and nature lovers. Adjoining the sea on one side and the river on the other, the place is also a kingdom of the protected sea holly and the rusty-red marsh helleborine. The reserve on the left bank has an educational route marked out, with visual boards and observation decks. The reserve also has sandbanks and sandy islands, where seals may be seen increasingly often.

Caution! Entering Gdańsk Bay through the Przekop Wisły Canal may be dangerous due to numerous nets, varying depth, and high waves. Navigation through the canal became easier when the so-called approach walls were completed. The eastern approach wall is 600 m long and the western one is 550 m long. New, permanent navigation lights were installed on breakwater heads – the green beacon was placed on the western breakwater, and the red beacon on the eastern one.

Mewia Łacha Reserve. Photo Fotografia-dronem.pl



The Vistula River outlet into the Baltic Sea. Photo Fotografia-dronem.pl



The Martwa Wisła, the Śmiała Wisła, the Motława Gdańska

River Profile

The Martwa Wisła is a former mouth branch of the Vistula. It became "dead" after the Przekop Wisły Canal was built in Świbno and the main river mouth cut off by means of locks in Przegalina and Pleniewo. The latter was dismantled after the war. The Martwa Wisła constitutes an important watercourse and enables reaching Gdańsk from the side of the Vistula, bypassing Gdańsk Bay.

The Wisła Śmiała emerged in the winter of 1840, when waters blocked by ice broke through the strip of seaside dunes. Until the digging of the Przekop Wisły Canal in 1895, this was the main mouth of the Vistula. It is also called the *Śmiała Wisła Gorge* or the Śmiała Wisła Broads.

The Motława is a river flowing through Żuławy Gdańskie and emptying into the Martwa Wisła at Polski Hak. The Żuławy Loop includes only the terminal section of the Motława in Gdańsk. The section betwen Polski Hak and Most Zielony are internal maritime waters, while on section from Most Zielony to Żabi Kruk harbour, the river is considered a navigation route according to the new Regulation of the Council of Ministers of 26 June 2019 on inland waterways. The remaining section of the Motława is a major navigation route for canoeing tourism.

Navigational Information

The only lock on the route, Przegalina is 11.91 m wide and 188.37 long. The lock is automated.

Ship traffic

Watch out for ships and vessels along the entire route, including marine ships, tugboats, towboats with barges, and other commercial vessels. Due to the intersection of inland and marine waterways, the most navigation marks and signs along the route are marine signs.

Bridges

The Martwa Wisła route starts at Przegalina lock. Since 2012, the bridge at the lock is a drawbridge. Along the route, you will also cross under a drawbridge in Sobieszewo, and further down the river behind Stogi, a cable-stayed bridge, a railway bridge and Siennicki Bridge.

The Martwa Wisła is a class Vb inland waterway covering 11.5 km from the Vistula river in Przegalina to Górki Zachodnie (the Wisła Śmiała). From Górki Zachodnie to the mouth of the river (Gdańsk-Westeplatte), the section is classified as internal sea waters. The length of the entire Martwa Wisła is 27 km. The river is connected to Gdańsk Bay with two branches - the Wisła Śmiała and the harbour canal in the Gdańsk district of Nowy Port. The Martwa Wisła has navigation marks and fairawy. Shallows outside the fairway can be found on the section from Przegalina lock to the bridge in Sobieszewo. Behind Górki Wschodnie, the river bed along ca. 333 m is being widened to 51 m (on the site of the former Pleniewo lock). Tacking may be difficult on this section, but further down the river, the bed widens and remains so until the cable-stayed bridge.

Making port

There is a number of harbours and marinas along the route. In 2012. Błotnik harbour was opened near Przegalina. Around 1 km from the lock, you can make port in Wiślinka, in the harbours near Sobieszewo, in Górki Zachodnie, Stogi, Rudniki and around the Old Town. The harbours offer boat building services, as well as boat engine repairs and sailmaking. There are also slipways and boat cranes.



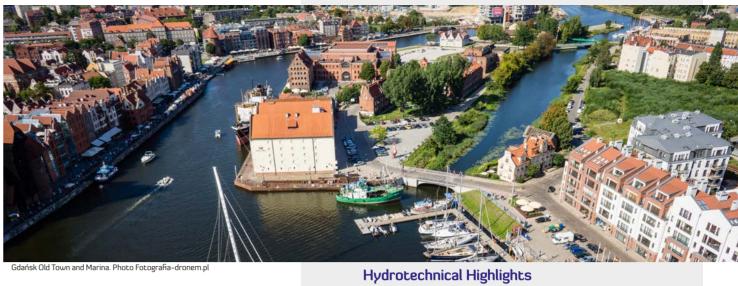
The location of the river in the Żuławy Loop area

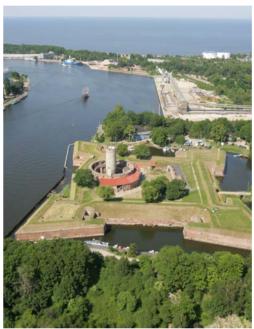
The mouth of the Wisła Śmiała - Górki Zachodnie, Photo Fotografia-dronem of



The yacht harbour in Górki Zachodnie. Photo Fotografia-dronem.pl







Wisłoujście Fortress. Photo M. Opitz



century Gdańsk fortifications, situated on the Motława (in line with Kamienna Grobla and Na Szańcach Streets). In place of the former lock, a flood-gate now functions. It closes and opens automatically when the water level in the Motława rises. It is possible that after passing through the gate and on returning from a trip along the Motława we will find the gate closed. The Regional Water Management Board opens it for the period when there is no danger of flood.

The Stone Sluice (Stopień Kamienna Grodza). A fragment of 16th and 17th



The water bus network in Gdańsk. The "Revitalization of Waterways in Gdansk" program, implemented in the years of 2007–2012, included the construction of the Marina Żabi Kruk, for small vessels, Marina Sienna Grobla II, Marina Tamka, as well as water tram stops on Westerplatte, by the National Centre of Sailing, on Wiosny Ludów street, by the Green Bridge, by the Fortress Wisłoujście - on the Barge Wharf, by the Fish Market, and Stogi. The purpose of the implementation of the project was the economic revitalization and improvement of the town and the region in terms of tourist attraction. Recreational revitalization of waterways raised interest of people, who want to participate in sport and recreation activities on the inland waterways.



Yacht and motorboat harbour Marina Gdańsk. Built in 1997, when Gdańsk was celebrating its millenary. The 290-metre harbour lies along Szafarnia Quay, opposite the Gdańsk Crane. It has electricity, light, water, and washing facilities. The new facilities of the marina have been located in Stara Pakownia Granary. In a high-rise and the granary there are two sailing shops. The marina is closed by the Stagiewny Bridge and the Stagiewna Tower. Opposite the marina is the Brovarnia Restaurant (in Hotel Gdańsk), where they brew excellent beer.



A view of Gdańsk from the Motława. Photo A. Wołosz



Saint Dominic's Fair in Gdańsk. The Fair has a 760-year tradition. It was originally meant to encourage the faithful to attend the indulgence mass. Year by year, the event grew in scale and importance. World War II disrupted the tradition. Revived in 1972, the fair lasted two weeks, and since 2004 it lasts three weeks. It is a commercial event nowadays, with handicraftsmen, collectors, and artists participating.



where galleries and amber shops are situated.



Wisłoujście Fortress. It is an unusual fortification structure, situated on an island. Its history goes back to the 15th century. Until 1758 the fortress served as a lighthouse, in the 19th century it used to be a prison, and in the interwar period it housed a sailing club. Since 1947 the fortress houses a branch of the City of Gdańsk Historical Museum. It is one of the largest wintering places of bats in the province.

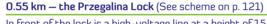


Tourist Highlights

Trzcinisko



Przegalina Lock. The Vistula and the Martwa Wisła. Photo D. Paciorek



In front of the lock is a high-voltage line at a height of 15 m and a drawbridge.

Drawbridge. In 2012 the drawbridge located above the southern lock in Przegalina was put into operation, in the place of the old regular bridge, it is one of the key investments of the "Żuławy Loop Project — Water Tourism Development. Stage I". The current solution allows yachts to navigate from Gdansk to Vistula Lagoon, by-pass Przekop Wisły with raised mast up to the height of 8 meters.

The need to have the drawbridge opened should be reported to the lock operator (phone no. 58 323 93 76). It takes about 2 minutes to open the span. During the maneuvers, sailors should be careful not to let their cordage be caught by bridgeheads, protruding from below the water surface from the south. The load capacity of the bridge alone is 50 tons.

0.7 km - LB - marina in Błotnik (See on p. 87)

The marina is located in the oxbow of the Vistula, close to Przegalina lock, and can be accessed by 3 km branch off the main waterway (the Błotnik basin). As you enter the Błotnik basin, make sure to steer clear of the reed. At the beginning of the branch, you will see a rusty dolphin which you will have to navigate around from the west, but keeping relatively close (around 10) to it. The average depth on the approach to the Błotnik basin is ca. 2.5 m, but there is a shallow further down the waterway. At the end of the branch, you will find one of the larger marinas in the region, offering 80 Y-booms for vessels with up to 2.5 m draft. Floating jetties are fittled with electricity and water outlets. There is a convenient harbour master's office building with sanitary facilities, as well as shore storage places. The marina offers boat launching and recovery services, and has a self-propelled boat crane for vessels up to 15 tons in weight.

3 km - RB - a mooring place

A convenient place for mooring. Sandy, with individual stones.

4.4 km - a power line at the height of 15 m (49.2 ft)

5.7 km - LB - Wiślinka

A₁a

935

Formerly a harbour for handling phosphogypsum production waste. Today, a technical harbour of Polish Maritime Club. The size of the dump is impressive. In its immediate vicinity lies the base of Galeon Shipyard.

8.5 km - LB - harbours "Brama Sobieszewska" and "Tęcza"

Two harbours on the south bank. The former is attached to a hotel, whose infrastructure is available. The latter is a berthing place for yachts and motor boats. You can hire a kayak or other water equipment here.

9 km - the drawbridge in Sobieszewo

The clearance of the closed bridge in high navigable water is 4 m, and the clearance of the navigable span including the lead-in piers is 50 m. The service building is located on the right bank. Please let the bridge staff know you are

Marina in Błotnik. Photo fotografia-dronem.ol





The mouth of the Wisła Śmiała into Gdańsk Bay. Photo: fotografia-dronem.pl.

waiting for the bridge to open at least a few minutes before the opening hour, using a horn or by phone. See "Guidebook" (pp. 82-83).

9.2 km - RB - the Martwa Wisła Broads and Sobieszewo Quay

It stretches from the pontoon bridge to the Pleniewo Narrows, making up a navigable water body with the Śmiała Wisła Broads. A concrete quay on the right, with mooring prohibited were indicated. Caution! On the right bank, there are stone breakwaters extending 100 metres out into the water. That is Sobieszewo Quay, with berthing places. Worth recommending is the one with an L-shaped breakwater. The water bus from Gdańsk moors to its western stretch. At the end of the south bank there is a sandy beach.

10 km - LB - Wiślinka harbour (See on p. 88)

Located in a small cove, the harbour offers comprehensive services for water tourists, including tourists with disabilities. There are 40 berthing places, toilets, a boat hangar and a slipway. In 2018, the harbour was expanded, adding an approach canal, a scarped embankment and a pier with 32 berthing points.

10.3 km – RB – Górki Wschodnie

A mooring place for fish cutters, with small slipways.

11.5 km - RB - Górki Zachodnie and the Śmiała Wisła Gorge

On the right, the Śmiała Wisła Broads with entrance to Gdańsk Bay. Yacht harbours make up the largest centre for sea yachts in Poland here. Górki Zachodnie is called the maritime capital of Poland. You can moor your yacht here, have it slipped or repaired, and refuel. Several harbours are available to sailors, e.g. National Sailing Centre, Górki Zachodnie yacht harbour, Neptun, Morski yacht club or Marina Przełom.

11.5 km - a power line at the height of 19 m (62.3 ft)

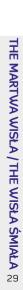
12 km - the Pleniewo Narrows and Vistula Shipyard (RB)

A narrows after the Śmiała Wisła Broads. A lock and a flood-gate used to be here, protecting Gdańsk from flooding. They lost importance after the digging of the Przekop Wisły Canal and the building of the lock in Przegalina in 1895. Pulled down in the 1970s. In 2014, the isthmus was broadened and deepened to 6.7 m. After the narrows, on the right, there are wet docks of Vistula Shipyard.

Wiślinka vacht harbour, Fot, UG Pruszcz Gdańsk









Yacht Klub Północny. Photo R. Wasil

14 km - LB - LOTOS Refinery

A large wharf - not for mooring, except in emergencies.

14.32 km - Overhead power lines; high navigable water - 55 m

16-17 km - marinas in Stogi and Rudniki (See on p. 92-94)

On the left bank, right on the Martwa Wisła, lies Stewa, the marina of Gdańsk Motorboat Training Centre. Slightly before it, in the Rozwójki Canal, lie Bliza and Pałac Młodzieży (Youth Palace) marinas. On the right bank lie the harbours of Gdańsk Maritime Club and, further, of Northern Yacht Club. After it there is the repair harbour belonging to Gdańsk Shipping Company, a fishing shippard, and the Conrad Shippard before the cable-stayed bridge. The south bank before the bridge is not fit for mooring.

17.93 km - Cable-stayed bridge; high navigable water - 7.4 m

17.9 km - 20 km - From cable-stayed bridge to Polski Hak

Behind the bridge, you can see a cove to the left. Further down the left bank, there are underwater obstructions marked with a cardinal mark. In the distance, you can see Siennicki bridge. At the bridge, on the southern bank, the ruined Retman Quay can be seen, while the northern bank is the Skippers' Quay. Before the bridge, to the left, you can see the mouth of the Opływ Motławy with a rowing dock and a yacht harbour. Behind the bridge you will see more quays: to the right, there is the Krakow Quay with characteristic yellow and green vessels. On the opposite bank, there is the Raftsmen Quay occupied by Lotos Petrobaltic's bright orange vessels. The Martwa Wisła narrows visibly at this point.

18 km - Railway bridge; high navigable water - 8 m

19 km - Siennicki bridge; high navigable water - 6.4 m

A quay in Gdańsk at the mouth of the Motława into the Martwa Wisła, and an intersection of waterways. As you sail from Górki Zachodnie to the right, head towards Gdańsk Bay (initially taking Kaszubski Canal). The river branches left into the narrow bed of the Motława. The left bank is a foreland called Polski Hak. Ahead, you can see the waters of the Martwa Wisła which are closed for navigation.

20-23 km - LB - No entry for vessels

Shipyard premises, Emperor's harbour and Ostrów island.

Wisłouiście Fortress Photo R. Wasil



20 km - Kaszubski Canal

From Polski Hak, the 2-km long Kaszubski Canal (a branch of the Martwa Wisła) will take you to the river mouth. The canal's route is longitudinal. It is located within the Gdańsk marine port, between Ostrów island (to the west) and Przeróbka island (to the east). There are quays along the canal banks. Midway through the canal, there are overhead power lines at 65 m above the water, and the railway ferry which however hardly ever departs.

23.5 km - Turning basin

To the left, you can see the waters of the Martwa Wisła with floating bridges, harbour basins and floating dry docks of the repair shipyard.

23.6 km - Tunnel below the Martwa Wisła river

Road tunnel under the river bed of the Martwa Wisła in Gdańsk, named after Archbishop Tadeusz Gocłowski

24.5 km - RB - Górniczy Basin

24.7 - overhead power lines at 65.8 m above the water

25.2 km – decomissioned Wisłoujście Ferry crossing

25.2 km - RB - Barge Quay

A yacht berthing place located on the inner canal flowing around Wisłoujście Fortress. The guay is concrete, with mooring poles. The initial section of the quay is rather high. There is a section reserved for the water tram, with sufficient place for 5-7 yachts to moor parallel to the shore. The area is not fenced-off or monitored. There are no amenities such as toilets or showers, but the place is a safe harbour, protecting your vessel from waves. The final section of the quay is lowered. Caution: at the end of the quay, there is a low-hanging, unmarked overhead power line.

25.5 km - RB - Wisłoujście Fortress

Before 1758, this unique fortified structure was a lighthouse. In the 19th century, it was repurposed as a prison, and in the interwar period the fortress served a local yacht club. Today, it is a branch of the Gdańsk History Museum. The fortress is surrounded by two canals - the inner canal and the outer canal. On the inner canal, there is a harbour of Polski Klub Morski (Polish Maritime Club). The entry into the harbour is extremely narrow, with not enough space for

two yachts to pass each other. The entry width is additionally limited by concrete sea walls which protect the fortress against waves. The maximum depth inside the harbour does not exceed 2 m. Berthing points can be found to the left. There are also mooring buoys available to the right. Inside the basin, after a 90-degree bend, there is also a small harbour of the Gdańsk University of Technology, consisting of two piers and a hangar used by a local ship building company. On the opposite site of the Fortress, there is a water police harbour ont he inner canal, with similarly narrow entry. You can enter the police harbour only if absolutely necessary. Report to the officer on duty immediately after landing. The entry canal is shallow.

26-26.5 km - Five Whistles Bend

The bend is named after the sound signals made by ship whistles, i.e. horns, tyfons, etc. of the vessels passing through the bend. To the left, you can see the Żegluga Gdańska harbour at Westerplatte peninsula, and the passenger and cargo terminal at Nabrzeże Obrońców Westerplatte; to the right, you can see the Nowy Port district and the loading docks.

27 km - RB - Westerplatte Peninsula

Westerplatte is a peninsula in Gdańsk which between 1926 and 1939 served as the Polish Military Transit Depot (WST). The heroic defense of the Depot by Polish troops in September 1939 eventually became one of the most prominent symbols of Poland's resistance to Nazi invasion. The Westerplatte Monument on the right bank dominates the local landscape.

27.5 km - LB - Nowy Port Lighthouse

The historic Nowy Port Lighthouse has long been decommissioned, but it is open for visitors. There is a "time orb" in the lighthouse which is dropped daily at noon (and every hour in the summer season). At the lighthouse, there is a berthing place for water trams and passenger vessels.

27.6 km - LB - Port of Gdańsk Harbour Master's Office

The yellow building houses the Harbour Master's Office. Next to the office, there is a Customs Office where vessels arriving from abroad can perform customs clearance.

27.7 km - RB - Westerplatte Defenders' Basin

The historical name of the basin is the Munitions Basin. Currently serves as the base for Border Guards' vessels.

27.7. km - LB - Wladyslaw IV Basin - Duty Free Zone

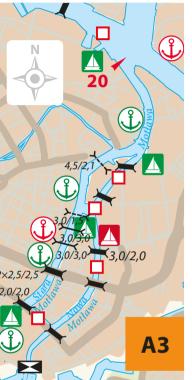
28 km - Port of Gdańsk Head

The main entry into the Port of Gdańsk. The western breakwater is an 80-m long promenade with a lighthouse at the end. There are benches installed along the breakwater to sit down and enjoy the view. It is perfect for a walk and spotting ships entering the port. At the end of the breakwater head, there is a green beacon. The eastern breakwatr is a state-of-the-art, 754-m long structure with wave-absorbing structures, a new service quay and new navigation markings, including the characteristic red beacon on the breakwater head.





Drawbridge walkway over the Motława. Photo: P. Brozdowski.



The Motława (Polski Hak – Żabi Kruk)

0 km – Polski Hak

From this point, watch out for the manouvering passenger vessels, kayaks, sailboats or rowing boats. Navigate gently to the right until you see the Old Town of Gdańsk.

 $0.4 \, \text{km} - \text{RB} - \text{water tram stop}$

Floating platform located at Wiosny Ludów street.

0.7 km - LB - Sienna Grobla II harbour, fuel station

Sienna Grobla II harbour (also known as Na Stępce) is located at the mouth of Na Stępce canal which flows around Ołowianka island. There is no navigational route there. At the entry to the harbour you can find a floating fuel station.

0.7-0.8 km - RB - Quay at Brabank

A temporary berthing point for vessels waiting for the drawbridge walkway over the Motława to open.

0.9 km - RB - Mouth of Radunia Canal

Non-navigable route with a low-hanging bridge in Wapiennicza street. Immediately behind the bridge, you can spot the characteristic outline of the Museum of the Second World War.

0.95 km - LB - MRKS harbour

The harbour of MRKS (Marine Workers' Athletic Club) — kayaks, dragon boats.

1 km - Drawbridge walkway over the Motława

The entire walkway, including the abutments, is 70 m long. Its main component is the ca. 40-m long steel drawbridge span, weighing around 90 tonnes, which when open, makes it possible to navigate this section of the Motława. The walkway opens every hour on the hour for 30 minutes (between 1 April and 30 October). When the span is closed, the clearance between the walkway and the water table is 2.1 m. When the walkway is open, the vertical clearance

above the fairway is 25 m. More: https://gzdiz.gda.pl/drogi/.

1-1.1 km - RB - Wartka Quay

Berthing wharf for passenger vessels and water trams.

$1.15\,km-Mot \\ law a\,Bend-Swan\,Tower,\,Rybackie\,Pobrze\dot{z}e\,street\,and\,turning\,basin\,for\,passenger\,catamarans$

The long section of the Motława ends with a 90-degree bend to the left. Behind the bend, you will see Rybackie Pobrzeże which serves as the berthing quay for tourist vessels stylised as old galleons, and catamarans. Large passenger catamarans use the wide waters around the bend as a turning basin. Be careful when sailing there. The nearby Swan Tower is a local landmark which used to dominate in the landscape until a massive hotel was built in the vicinity.

1.2 km — LB — Stage at the water and the Polish Baltic Frédéric Chopin Philharmonic, and the characteristic "Gdańsk" letter sign

The Philharmonic is located in a 19th-century building of an old power station. In the summer season, the open air stage hosts musical concerts and performances.

1.3 km - LB - National Maritime Museum; SS "Soldek"

Ołowianka island, where you can find the National Maritime Museum, is also the berthing site of SS "Sołdek" – the first commercial vessel built in Poland after World War II. In 1981, "Sołdek" was retired and turned into a museum ship.

1.3 km - RB - The Crane, the National Maritime Museum

The wooden port crane from the 15th century is one of the most recognisable symbols of Gdańsk. It is located just off the National Maritime Museum and the Maritime Culture Centre.

1.35 km — "Motława" ferry

The ferry shuttles between the Crane and the Granaries on Ołowianka island (Monday – Sunday) departs every 15 minutes (with the exception of the 12.45 PM trip). The first trip is at 10.00 AM and the last one at 6.00 PM.

1.35 km - The two branches of the Motława

Behind SS "Sołdek" and the Crane, Motława branches into two. The branch leading ahead is the Stara Motława which will take you to Żabi Kruk harbour. The route has navigation marks – red and green buoys marking the fairway, and clear markings of the bridges. There is also a turning basin for ships.

0-0.2 km - Marina Gdańsk on the Nowa Motława

The marina has electrical sockets on piers, and access to potable water. The harbour master's office with a toilet and showers is located in the renovated granary opposite the harbour. The piers have lighting, surveillance cameras and a human waste disposal point. The marina basin ends with Stągiewny bridge and the twin towers located behind it, known as Stągwie Mleczne (Milk Vat Towers). The clearance under the bridge is 2 m.

1.4 km - Walkway to Wyspa Spichrzów (Granary Island)

The walkway connecting the Main Town with Wyspa Spichrzów can be found at Świętego Ducha street. It is 57 m long and 4.5 m wide.

1.37–1.45 km – LB (Stara Motława) – Wyspa Spichrzów (Granary Island)

A renovated quarter of the Old Town with historic buildings converted into luxury condos, a hotel, and office buildings.

1.3-1.45~km-RB~(Stara~Motława)-Długie~Pobrzeże~(Long~Wharf)

A wharf with the berthing places of Żegluga Gdańska passenger vessels and tourist galleons.

1.45 km — (Stara Motława) — Most Zielony (Green Bridge)

A closed drawbridge with the clearance of 3 m from the water table.

1.5 km - RB (Stara Motława) - water tram stop

A floating pier located at the Green Bridge.

1.55 km (Stara Motława) – Most Krowi (Cow Bridge)

 $The \ bridge \ connects \ Ogarna \ street \ through \ the \ western \ abutment \ of \ Brama \ Krowia \ (Cow \ Gate) \ with \ Wyspa \ Spichrzów; \ the \ clearance \ under \ the \ bridge \ is \ 3 \ m.$

1.6 km (Stara Motława) – Podwale Przedmiejskie Bridge

The Crane seen from the river. Photo: P. Brozdowski

2 road bridges; clearance below the spans is 2.5 m.

1.6–1.8 km (Stara Motława) – quays, former Granaries

The intriguing buildings of Stare Przedmieście (Old Faubourg) are spread on both river banks. The neighbourhood is gradually changing, but you can see the striking contrast between the renovated historic buildings and the decrepit, abandoned houses, squeezed between pre-World War II and contemporary buildings.

1.85 km (Stara Motława) – Popielny Bridge

The bridge leads Toruńska street over the Stara Motława. The clearance below the bridge is 2.5 m.

2 km (Stara Motława) – RB – Żabi Kruk harbour

Located at the very end of Stara Motława, the Żabi Kruk harbour has recently undergone comprehensive renovation, upgrading the wharf and adding new facilities and all necessary amenities. To reach the dock, you will have to fold your mast before the Green Bridge. Next to the harbour, there is a kayak harbour of the same name, and a water tram stop.

The Kamienna Grodza along the banks of the Motława. Photo: P. Dmochewicz.



DID YOU KNOW?

Wyspa Spichrzów (Granary Island) in Gdańsk is the only place in the world which used to house more than 300 granaries. The granaries were large, spacious, multi-storey warehouses built with timber, brick, clay and stones. The granaries located at the river banks used to have wooden piers for loading and unloading cargo. Instead of a number, each granary had a name. The island was created in 1576 after digging the canal of the Nowa Motława.

The Szkarpawa

River Profile

The Szkarpawa beautifully meanders among the plains of $\dot{Z}u$ -lawy. It has low banks, overgrown with rushes, and a large part of the area to the south is a depression.

This eastern, shorter branch of the Vistula Delta begins from the Gdańska Głowa Lock (at river kilometre 932.2 of the Vistula) and flows into the Vistula Lagoon after 25.4 km near the village of Osłonka. Halfway through its course (after 15.3 km), the Szkarpawa shares its waters with the Wisła Królewiecka, which flows into the Vistula Lagoon slightly further to the north.

Navigational Information

Depth and width

The navigable waterway of the Szkarpawa is recognised as class II, with a guaranteed depth of 1.6 m (5.2 ft). Mainstream depth is up to 3.4 m (11.2 ft) and rarely below 2 m (6.6 ft). The current is barely perceptible. The river's width is up to 100 m (328 ft), and its fairway, marked with beacons, is 30 m (98.4 ft) wide.

Bridges

The Szkarpawa is convenient for navigation. All its bridges are drawbridges or swing bridges, opened at specified hours and at boaters' request. In order for your vessel to pass under a closed bridge, you need to take the changing water level into account. It fluctuates by up to 1 m (3.3. ft) over short periods of time due to the so called backwater current from the Vistula Lagoon and the Baltic Sea.

Power line

The lowest power line hangs at the height of 14 m.

Lock

The Gdańska Głowa lock, the only one on the waterway, is 12.5 m wide and 61 m long.

Caution! During high water stages on the Vistula, the Gdańska Głowa Lock may be closed. In 2010 it was closed for two months. This is worth checking before a planned trip.

Vegetation

As far as possible, navigate along the middle of the river. This reduces the risk of the propeller getting entangled in plants and nets near the banks. Water vegetation is an impediment on the broads in Rybina and near the river's outlet to the Vistula Lagoon.

Salvinia — floating water fern, forming thick green carpets — propagates less intensively here that it does on the Nogat.

Stopping places

There is a number of ports on the waterway, among them in Drewnica, Żuławki, Izbiska, Chorążówka, Rybina and Osłonka. You can find convenient stopping places in the numerous coves, and there is also a number of designated berthing places on the river.

Ships and barges

During the summer season, there is heavy commercial and passenger traffic on the Szkarpawa. Remember that such vessels always have the right of way.



The location of the river in the Żuławy Loop area





The drawbridge in Rybina. Photo P. Pasieczny

The drawbridge in Drewnica. Photo A. Wołosz





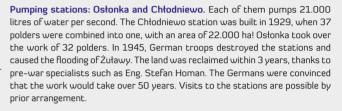


Kayak and yacht harbuor in Rybina. Fot. iczarter.pl

The Szkarpawa near Rybina. Photo H. Gonera



Hydrotechnical Highlights





Drawbridges. Characteristic of Żuławy, like arcaded houses and depressions. The most interesting ones may be seen in Rybina. There are three functioning movable bridges there: two drawbridges — on the way from the Vistula Spit to Nowy Dwór Gdański — and a swing bridge with narrow-gauge railway running across it. They are all historic, but continue to serve the local community and tourists. A new drawbridge connects Drewnica with Żuławki.



The Żuławy depression. The Żuławy region has a unique landscape, unparalleled anywhere in Poland. A well-known depression is located here. Poland's lowest point below sea level is Raczki Elbląskie (1.8 m / 5.9 ft bsl), where a depression sign was placed. A few years ago, Gronowo Elbląskie Commune claimed the title of the lowest-lying depression. Studies have confiromed that in Wikrowo, the elevation is 2.6 m below sea level; however, this depression is not a natural landform but a result of peat excavation.

Tourist Highlights



The Gdańska Głowa Fortress. Built on the promontory between the Gdańsk Vistula and the Szkarpawa, it had the strategic function of a post defending Gdańsk. The fortress existed in the 16th and 17th centuries. It was pulled down in the late 17th century (after the Treaty of Oliwa), and its remains completely disappeared during the construction of the Przekop Wisły Canal. The land where it stood is now under cultivation. A reminder of the stronghold is the picturesque lock bearing its name.



Arcaded houses. Beside Gothic churches, they rank as the most characteristic monuments of Żuławy. They were built by rich peasants. An average house measured 10 by 20 m (33 by 66 ft). Such buildings typically had a wooden frame structure filled with the so called Dutch bricks. The number of pillars per arcade varied, and the arcade itself usually served as a granary. At the turn of the 18th and 19th centuries they were so popular that other existing houses were converted to arcaded houses. Those were the times of the famous builder Peter Loewen, whose works may be admired in Orłowo or Marynowy.



The last windmills in Żuławy. At the beginning of the 19th century, there were several hundred of them here, draining polders. Today, the region no longer resembles the *Land of a Hundred Windmills*. Its inhabitants gradually replaced them with steam pumps. Only a few historic specimens survive, e.g. in Drewnica and Palczewo. The former is a wooden windmill (koźlak), representing the older type of structure; the latter is a 19th century Dutch windmill.



0 km - the beginning of the Szkarpawa

Grochowo

Pierwsze

Głobica

Chorażówka •

Bronowo

2,9/3,7

Żuławki Ksiażęce

Popowo

c. 0.25 km - the Gdańska Głowa Lock (scheme on p. 121)

The lock was built in 1895, taking its name after the fortress that had been an important point in Gdańsk's fortifications and played an important role during Polish-Swedish wars. Closed down in 1660 due to the sanding up of its entrance by the Vistula. The new structure reopened the Szkarpawa for navigation. Apart from the closing gate, the Gdańska Głowa also has a flood-gate. The length of the lock: 61 m (200 ft), width: 12.5 m (41 ft). A swing bridge, opened on request. Closed bridge vertical clearance at medium water: 9.58 m (31.4 ft), at high water: 7.08 m (23.2 ft). Recently, manual controls have been replaced by an electrical system.

2.85 km - the drawbridge in Drewnica

The vertical clearance of the closed bridge is c. 2.7 m (8.9 ft) at high water. It is possible to stop at the piers before and after the bridge. They were built as part of "The Żuławy Loop Project – Water Tourism Development. Stage I." The pier on the left bank will take us to the hut of the bridge staff. There is a kayak harbour nearby.

(LB) Drewnica — a village probably set up in the 2nd half of the 14th c. It played an important role on the trail to Gdańsk. Already in 1400, two mills and two windmills stood here, which testified to the wealth of the village. Today, the greatest attraction is the wooden windmill from 1718. On the way to it, there is a grocery.

(RB) Żuławki — this village is a unique open-air museum of German settlers. Hauländers. Mennonites. and Prussians. We may learn much of their life by watching arcaded houses. The village has a grocery.

c. 3.5 km - LB - the village of Przemysław

Its roots go back to early Middle Ages, when a settlement existed here, and later a border town between the territories of the Teutonic Knights and those of Duke Świetopełk. The village owes its character to Dutch settlers. A few wooden buildings survive, including arcaded houses.

c. 3.55 km - RB - private harbour Szwedowo

Berthing by arrangement with the owner. Access to electricity, water, and toilet. A professional slipway.

6.36 km – LB – Żabi Brzeg harbour in Izbiska (as above)

ok. 11 km – LB – Chorażówka harbour

14.5 km — a power line at the height of 18.2 m (59.7 ft)

14.98 km - the narrow-gauge railway bridge in Rybina

The bridge is operated manually, by means of gears and transmissions. The narrow-gauge railway runs across it in the holiday season, from Nowy Dwór Gdański to Stegna and further to the Vistula Spit. The bridge is closed to navigation when a train is crossing it. The vertical clearance of the closed bridge is c. 2.7 m (8.8 ft) and depends on the water level in



Inside the Gdańska Głowa Lock.



The drawbridge in Drewnica. Photo iczarter.pl



15-15.45 km - LB - Rvbina (See scheme on p. 121)

Waterways node with two historic drawbridges. On Szkarpawa you can moor at the new marina behind a rotary bridge (LB) and to bridges before and after the yellow bridge. On the Wisła Królewiecka - you can berth before and after the blue bridge to piers (RB) and on a private area in front of the bridge (with prior consent of the owner). There is a possibility of having access to power mains or drinking water. Nearby, grocery stores. There is a kayak harbour nearby with sheds, tables, a jetty and a slipway. The village has a health centre, a restaurant and a cultural centre.



Chłodniewo pumping station. Photo Fotografia-dronem.pl

15.3 km - LB - The new yacht harbour in Rybina (See on p. 105)

Built within the framework of the "Żuławy Loop Project — Water Tourism Development. Stage I".

15.3 km - RB - Chłodniewo pumping station in Rybina

The station connected small polders that drained depression areas. It closes the outlet of the Linawa into the Szkarpawa. The facility has two electricity-driven sets and a spare one with a combustion engine.

15.45 km - the drawbridge in Rybina on road no. 502 (Nowy Dwór Gdański-Stegna)

A yellow bridge on wooden stilts. Originally, the bridge's spans were raised manually; today this is done by means of electric engines. The vertical clearance of the closed bridge is c. 2.58 m (8.46 ft) and depends on the water level. On the Vistula Lagoon side, there is a pier where you can wait for the bridge to open.

16.79 km - the mouth of the Tuga, a water police station

A bridge over the river's mouth at the Szkarpawa is in sight. Non-navigable water trail.

17.79 km - two power lines at the height of 14 m (45.9 ft)

20.5 km - RB - Chełmek-Osada pier

22 km - a grove on the left bank

A good stopping, camping, and fishing place (opposite the board marking 22 km)

22.5 km - The beginning of the Płonino branch

Blind channel. Non-navigable water trail. No entry for vessels.

c. 23.5 km - a power line at the height of 14 m (45.9 ft)

23.5 km - RB - "Osłonka" yacht harbour (See on p. 106)

There can be problems with approach for vessels of submersion depth below 1 m. Before the pier (approx. 5 m) in the central part of the harbour there is a shallowing. Right by the pier the water is deeper. Built as part of "The Żuławy Loop Project – Water Tourism Development. Stage I."



"Osłonka" pumping station. Photo M. Onitz



Local Narrow-Gauge Railway. Photo M. Opitz

c. 23.5 km - LB - the Marzecino Depression

Chorażówka

Graniczna

Groszkowo

Grochowo Pierwsz

Chełmek - Osada

20 4

Considered to be the youngest patch of land of Poland. Created by the Germans in 1942 through draining a bay of the Vistula Lagoon. Flooded after the retreating Wehrmacht blew up the embankments. Reclaimed in 1949. The polder takes up an area of c. 22.000 hectares.

23.9 km – LB – The beginning of Dublewo branch

Blind channel. Non-navigable water trail. No entry for vessels.

25.3 km — intermediate pumping station "Osłonka"

Berthing prohibited! Before the station, an emergency stop is possible at the angling harbour. Caution: shallow water!

25.4 km - outlet into the Vistula Lagoon

Maritime marking begins here (buoys). Caution! This is already the Vistula Lagoon. Entrance to the Nogat is inconspicuous — turn right between the second and the third buoys.

The Wisła Królewiecka

River Profile

The Wisła Królewiecka is a branch of the Szkarpawa. It is a waterway 11.5 km in length, from the village of Rybina, through Grochowo, Sztutowo, and Kobyla Kepa, to the Vistula Lagoon. Years ago, the main communication route from Gdańsk to Königsberg (present-day Kaliningrad) led this way. Later, the river gradually lost importance. In late 1970s its role was reduced to that of a land improvement canal. In 2006–2008, the waterway underwent thorough restoration. Both drawbridges (in Sztutowo and in Rybina) were made functional, power lines were raised, the river was dredged, the banks and flood embankments were regulated. In 2014, a sailing harbour was opened in Sztutowo. Despite all these changes, the river gives the impression of being wild and inaccessible, which adds to its charm.

Navigational Information

It is accessible for all yachts sailing down the Szkarpawa (draft up to 1.6 m); the shallows at the river mouth into the Vistula Lagoon may be problematic for keel vessels with larger draft.

Power lines

The lowest-hanging overhead power line on the Wisła Królewiecka is suspended at 13.5 m above the water, and the lowest-hanging overhead power line on the Szkarpawa – at 14 m above the water. Aids to navigation

It is an official navigation route according to the Regulation of the Council of Ministers of 26 June 2019 on inland waterways. The river banks have chainage marks.

Current and vegetation

The current is barely perceptible. Despite a relatively broad channel, the Wisła Królewiecka is strongly overgrown, especially between Rybina and the village of Grochowo. According to an order of the Minister of Infrastructure, it has the status of a non-navigable river. Periodically, especially in August, the river is covered with a carpet of water fern — salvinia. Along the river's entire course, however, there is a thicket-free lane at least 2 metres (6.5. ft) wide. Wherever possible, sail in the middle between the banks of the river.

The navigable waterway of the Wisła Królewiecka



The location of the river in the Żuławy Loop area





Berth in Rybina. Photo R. Wasil.

The drawbridge in Sztutowo. Photo A. Wołosz



A view from the bridge in Sztutowo. Photo A. Wołosz





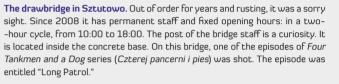
The drawbridge in Rybina, Wisła Królewiecka. Photo Fotografia-dronem.pl



The Wisła Królewiecka near Rybina. Photo H. Gonera



Tourist Highlights





The drawbridge in Rybina. Built in 1936 as a structure of reinforced concrete and wood, with solutions typical for bridges this kind (counterweight). It was closed to water traffic in the 1970s, since major repairs were necessary. That coincided with the degradation of many waterways in the area and the diminishing role of water transport. The bridge remained closed for years to be finally repaired in 2007 as part of the revitalisation of the Wisła Królewiecka route.

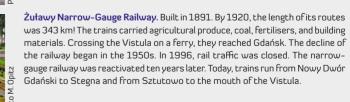


Grochowo Pierwsze pumping station. On the right bank of the Wisła Królewiecka, there is the 6W Grochowo pumping station with the pumping capacity of 5 thousand litres per second. The water is pumped out of the polder into the Wisła Królewiecka, from which it flows down to the Vistula Lagoon. In 1945, the pumping station and the motor pumps suffered significant damage, but were rebuilt immediately after the war. The pumping station is a historic polder hydroengineering facility, with motor pumps from 1927 still in operation.

Tourist Highlights



Sztutowo - Stutthof Museum and Memorial. At the west end of Sztutowo there is the State Stutthof Museum, a former German concentration camp and labour camp. Young children are not allowed to visit the Museum. For young people, visiting it may be an instructive history lesson. The exhibits — silent witnesses of martyrdom, kilometres of barbed wire and barracks — remind of the tragic times of World War II and make a lasting impression.





Rybina waterway junction. This is a unique place where waterways meet and numerous hydrotechnical facilities may be seen. It is the fork of the Szkarpawa, the Wisła Królewiecka, and the Linawa. Somewhat further than that of the Szkarpawa, there is the outlet of the Tuga. Rybina has Europe's only working swing bridge, opened manually. There is also a pumping station there, a drawbridge over the Wisła Królewiecka, and a drawbridge over the Szkarpawa.



39

Sztutowo*

Grochowo Drugie

Grochowo Pierwsze •

16 🕎 🔲



0.14 km - RB - Rybina

Convenient guay for yachts before the yellow drawbridge on the Szkarpawa and the new marina on the left bank. Along with the construction of the new marina, piers before and after the blue bridge were built on the Wisła Królewiecka and after the yellow bridge on the Szkarpawa. Following the opening of the blue bridge we flow into the Wisła Królewiecka water trail.

0.14-2.2 km - Rybina-Grochowo Pierwsze

The stretch has sparse waterside vegetation. Trees and bushes line the banks. After two bends and about 1 kilometre, on the right bank, stands an impressive residence with its own port. Before it, there is the first power line. Another bend and Grochowo I is visible on the right bank.

2.2 km - RB - Grochowo Pierwsze

Grochowo has a grocery, which opens twice a day for a few hours. The second power line is before the village. Behind it, on the right bank, is the outlet of a canal from Grochowo polder. Further inside the canal, a pumping station is visible. Convenient mooring places after the canal.

2.2-5 km - Grochowo Pierwsze - Sztutowo (the brickyard)

The river broadens significantly. The banks are still barely accessible. The third power line runs across the fairway. A road is visible on the left, and on the right — the villages of Grochowo II and III. A low bank and a large meadow on the right. Behind the power line sign, on the right bank, lies a meadow suitable for mooring "in the wild." After passing the power line, a road emerges on the right bank as well. In the distance, the buildings of the closed brickyard are visible on the left bank.

5 km - LB - Sztutowo (the brickyard)

A characteristic building, perpendicular to the river. By the brickyard, there are two meanders strongly overgrown with water vegetation — the remains of the old port. One of the meanders becomes a drainage canal of a polder, with a pumping station. Along the banks there are posts, probably mooring points for barges and the remains of a pier.

5-6 km - Sztutowo (the brickyard) - Sztutowo

The brickyard is the landmark showing that Sztutowo is near. After it, there is a private pier on the right bank, and about half a kilometre further a characteristic Y-shaped broads. This is where the route forks: Turn left: the right branch is a blind canal. This could be an interesting place to spend the night "in the wild." In the distance, on the left bank, the buildings of Sztutowo.



The drawbridge in Rybina. Wisła Królewiecka Photo K Charlińsk







6 km - LB - Sztutowo (See on p. 107)

A town on the left, with a bank, a post office, a health centre, a pharmacy, a petrol station, and the final station of Żuławy Narrow-Gauge Railway. We pass industrial facilities. Next, there is a private angling pier and, just behind it, the harbour of Polish Angling Association (PZW). From here, a view opens over a stretch of the river with a drawbridge at the far end.

The PZW harbour on the left bank is a convenient berthing place. It can be recognised by its black-and-willow-green barrack. The town and a shop are 15 minutes walk away. Further on, two concrete quays are visible, formerly serving the white fleet. Mooring at your own risk! In this area, along the river, bunkers are located which used to be part of the Stutthof camp, constituting an element of an ammunition factory. Before the drawbridge, the fourth power line crosses the river (c. 6.5 km of the route). Before the bridge, to the left, you can see the berthing points of the former marina (today used mainly by kayakers). Right after the bridge, on the left side in a New Town Marina cove. At the harbour there is a slipway and piers, the first of the piers is made of wood, supported with poles, 16 m long, while deeper in the cove there are two floating berths of 80 m cumulative length.

6-11.5 km - Sztutowo - Kobyla Kępa - the outlet into the Vistula Lagoon

From Sztutowo to the Vistula Lagoon the river broadens. Embankments flank it on both sides. At about 7.5 km of the route there is a pumping station on the left bank. A road emerges and the buildings of Kobyla Kepa. In the village, the fifth power line crosses the river. A red and white relay mast on the left bank. The river's banks are reinforced with concrete slabs, though "wild" mooring spots are also there.

The final stretch

The stretch comprises a few sharp bends and the mouth finishing straight after the power line. The characteristic place here is dolphins, remnants of the Wisła Królewiecka entrance beacon. Embankments end. On the left bank, the embankment ends with a fragment of concrete quay (11.5 km of the route). This place is suitable for camping "in the wild." It is precisely here that the flood-bank ends and turns at a right angle to the river. There is a stretch of 3 to 5 metres (10–16 ft) of sandy bank there. From there, you can take a pleasant walk along the embankment to Katy Rybackie – around 40 minutes. The place is a good one to stop at, also to check the current conditions on the Vistula Lagoon.





ZALEW WIŚLANY

Mierzeja

Wislana

Kobyla Kępa

The Elblag River and the Jagielloński Canal

River Profile

The Elbląg River, is colloquially called Elblążka. Its length is about 20 km. Some sources make that 16–17.7 km, and the difference is connected with the river's last stretch: some consider the red and others the green entrance beacon to be its mouth. The river is an important artery, connecting the Elbląg Canal and the Iława Lakeland route with the Vistula Lagoon. Its tributaries are the Tina and the Fiszewka. The Elblążka is connected with the Nogat (and, further, with the Lagoon) by the Jagiellonian Canal, which begins at the boundary of Elbląg.

Navigational Information

Currer

The Elblag has a minimal current, and with the wind blowing from the Vistula Lagoon a backwater current occurs: the river changes direction and flows towards Lake Druzno, flooding Elblag and the nearby villages. The last disastrous flood happened in October 2017.

River trafficDownstream of Elblag, barges with pushboats are encountered.

as well as slightly larger ships sailing from the Baltic Sea through the Baltiysk Strait. Be very careful when passing them. Compared to other nearby routes, the stretch from Elblag to the Vistula Lagoon has very heavy traffic. Yachts and motor boats navigate this way, and so do anglers' boats, ships of the Harbour Master's Office or the border guards, pushboats with barges, and — slightly less often — elblag—max ships, meaning sea vessels heading for Elblag through the Baltiysk Strait and the Vistula Lagoon. The traffic is quite heavy here and calls for increased caution.

Canal Profile

The Jagielloński Canal Dating back to 1438, the Jagielloński Canal is the oldest canal in the country. It measures 5.8 km and connects the Nogat with the Elblażka near the village of Kepki.

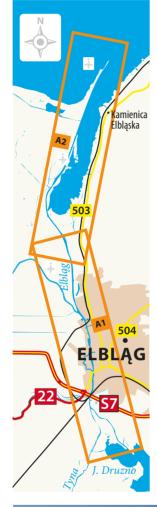
Navigational Information

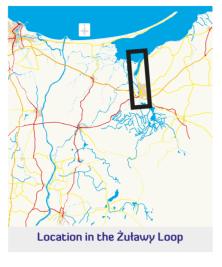
Navigating the canal presents no particular problems. Yachts need to have their masts laid down because of the bridge at the confluence of the Jagielloński Canal and the Nogat (navigable span width: 10 m, vertical clearance at medium navigable water: 6 m). The banks are mostly overgrown with reeds and long stretches of the canal are reinforced with wooden stakes. The surrounding landscape is mostly cultivated land. Quite many anglers are seen along the entire route. Years ago, teo locks functioned in place of the present-day flood-gates in Bielnik: for smaller and larger vessels.

The Jagielloński Canal and the Nogat as an alternative water route from Elblag to the Vistula Lagoon

The main water route from Elblag to the Vistula Lagoon is the Elblag River. However, the pontoon bridge in Nowakowo is not opened during too high or too low water stages. The alternative route from Elblag to the Vistula Lagoon leads through the Jagielloński Canal and the Nogat.

The navigable waterway of the Elbląg







The marinas of Scout Water Centre "Bryza". Photo H. Gonera

The Elbląg River. Photo A. Wołosz





King Sigismund Augustus Promenade, Elbląg. Photo P. Brozdowski



The Jagielloński Canal. Photo A. Wołosz

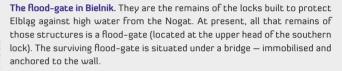


Jachtklub Elbląg. Photo A. Wołosz

Elbląg. Photo A. Wołosz



Hydrotechnical Highlights





Nowakowo pontoon bridge. The bridge lies on four pontoons. It consists of bridge spans, one of which is opened mechanically in the direction of the Vistula Lagoon. One spare pontoon is moored at the bridge to the west bank. The sign that the bridge will soon be opened is the busy activity of men dressed in orange vests. Dull thudding is heard as the staff lift metal elements connecting permanent bridge spans with the one that opens. The bridge will start to open in just a moment.



On the trail of historic drawbridges and swing bridges around Elblag. Bridges that are monuments of hydraulic engineering, not opened at present, may be seen: on the Dzierzgoń River in the village of Dzierzgonka, on the Tina in Jezioro, on the Fiszewka in Szopy Elbląskie, and in Elbląg, at Elbląg Shipyard. The trip may be crowned by a visit to the village of Węgle-Żukowo and hiring a boat at the fishing harbour there. By water or by land, you can get to the observation tower, located where the Dzierzgoń River flows into Lake Druzno. Reaching the tower is a 20-minute walk along the river. Marvellous views over the entire lake.

Tourist Highlights



Elblag. Located in north-eastern Poland in the Warmian-Masurian Voivodeship, this historic town at the Elblag river, which connects Lake Druzno with the Vistula Lagoon, was founded in the 18th century. Local places of interest include the Old Town, the Market Gate (Brama Targowa) from the 16th century, the Gothic church of St Nicholas from the 14th century, and Galeria El Art Centre. Tourists often have their photos taken at the statue of the Baker's Boy, the defender of Elblag during the war with the Teutonic Order.



Cruises on the Elblag River. Cruises on a small ship called *Nurwid* set out from a harbour bearing the same name, at Sigismund Augustus Boulevard. Groups of a few people may choose the route and variant of their trip. It is also possible to hire kayaks and rowing boats here. Similar services are available at other harbours, such as *Fala*.



Lake Druzno. This shallow lake is a fragment of what used to be a sea bay, now a sanctuary of water birds and a nature reserve. Over 200 species of water and marsh birds have been observed on the lake. This ornithological paradise is home to cormorants, grebes, herons, cranes, terns, and black-headed gulls. The depth of the lake varies between 1.25 and 3 metres (4–10 ft).

10 -

Raczki Elblaskie

Druzno

On the west shore of Lake Druzno stands a white rhombus sign, marking the entrance to the lake's fairway. A good landing place on the left shore.

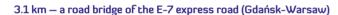
2.5 km - LB - the mouth of the Tina

0 km - the beginning of the route at Lake Druzno

The river can be explored on a yacht with the mast down. The only limitation is the low clearance under bridges. In the village of leziono there is a beautiful, twospan drawbridge.

$3.1 \, \text{km} - \text{LB} - \text{the mouth of the Fiszewka}$

The navigable stretch of the river is relatively short and delimited by a pumping station. After passing the first bridge (caution: low headroom), you will find many



3.5-3.6 km - power lines at the height of 21 m (69 ft) and 19 m (62 ft)

4.1 km – a road bridge, Kardynała Stefana Wyszyńskiego avenue

4.7 km - RB - The Zygmunt August Boulevard. The High Bridge drawbridge.

The berthing place nearest from the city centre is on the right bank, at the harbour of the Ostróda-Elbląg Shipping Company. A quay was converted into a harbour.

4.8 km - RB - Berthing wharf for yachts at King Zygmunt August Boulevard in Elblag. (See on p. 108)

4.9 km - The "Low" Drawbridge

Behind the bridge, on the right, the harbour of the Gdańsk Shipping Company — Elblag passenger terminal.

5.3 km - LB - Fala harbour (See on p. 108)

A suitable place for a longer berthing on the left bank. It has a slipway for small boats. Opposite, there is a harbour basin.

Beacon of the Elbląg River. Photo P. Salecki

5.5 km - RB - the turning basin of the Port of Elblag

A manoeuvering basin for long vessels for which Elblag is the final destination. In the north-western corner of the turning basis, there is a kayak dock with a slipway for small vessels, toilets and showers.

The Port of Elblag is the largest Polish port of the Vistula Lagoon, situated on the bank of the Elblag River, 6 km from its mouth to the Lagoon. It is a regional seaport, the services of which cover the coastal and tourism navigation of the Lagoon and Baltic Sea. Each year associated vessels transport over 30 thousand passengers in Elblag. From the time of its reactivation, and so after Russians unblocked the possibility to sail in 2009, the seaport recovers from marasmus, and year by year its revenue grows more and more. It has a favorable geographical position in the context of potential economic links and cooperation with the Kaliningrad Oblast, the Baltic republics and Scandinavian countries. It has excellent conditions for sailing and water sports.

6 km - a power line at the height of 18 m (59 ft)

6.3 km - the European Union Road Bridge and the railway bridge

Near the bridges, on the southern side, lie the harbour basins of the Maritime Office (left bank) and Elblag Shipyard (right bank). In the canal leading to the shipyard, there is a historic and no longer used railway swing bridge.









achtklub Elblag, Photo P. Pasieczni

6.5 km - marinas: Scout Water Centre (HOW) Bryza (RB) and Yacht Club Elblag (LB) (See on p. 109).

These are professional marinas. You can leave your yacht for a long stay or the winter. Closer to the town would be from the Bryza Harbour, the harbour of the Yachtclub rebuilt within the framework of the "Żuławy Loop Project – Water Tourism Development, Stage I." We can get to the town centre from the both marinas by taxi for about 20-30 PLN. Bryza offers boat building workshops and engine service point.

7 km - LB - the outlet of the Jagielloński Canal

7.1-7.3 km - power lines at the height of 49 m (160.8 ft)

11.7 km - the Nowakowo pontoon bridge

Passing under the bridge is impossible. In theory, the staff regulate water traffic, but in practice the facility works on a first-come-first--served basis. Be careful and let others pass. At night, a white beacon marks the bridge. For bridge opening hours, see Information (p. 83).

14 km - a passing place and Nowe Batorowo pumping station

After passing the pumping station, the river becomes much broader, and a stretch of the left bank is reinforced with a larsen wall. By the embankment lies the village of Nowe Batorowo. Emergency stops possible. The river turns right. The right bank is Cow Island. Lush vegetation, with bushes leaning over the water and a carpet of reeds between you and the bank. An abundance of grey herons and cormorants.

14.5 km - RB - a passage to Jagodna

On the right side, in the strip of reeds, there is a passage leading to the waters of Elblag Bay. By turning there, you can reach lagodna. with the last harbour in Elblag Bay. You can also work your way through the verdure and, steering clear of nets, sail on through the Bay towards the Vistula Lagoon.

16.3 km - Port Entrance Beacon of the Elblag River (LGW, red light)

A permanent navigational structure. Caution! Before LGW, Elblag Bay and the Elblag River meet, but the waters conceal the remains of a stone dyke. You can enter the Bay near the red buoy 16/ELB. Nets — depth: c. 1 m (3 ft). On the left bank, behind the beacon, there is a canal separating Nowakowska Island from Golden Island, the left edge of the route.

16.3-20.9 km - Starboard Entrance Beacon (PGW, green light)

The waters of Elblag Bay are on the right; the Elblag Upland is visible over them. A number of charming harbours and little ports lie on its shore: Kamienica Elblaska, Nadbrzeże, Suchacz. The end of the route is the Starboard Entrance Beacon (Elblag Light), also called Andzia (Angie). The fairway leading to the Vistula Lagoon runs along the river's left bank and the Golden Island, which tapers off to a dyke-like shape. The starboard side of the fairway is marked by red buoys (usual buoy-shaped ones at first): 16/ELB, 14/ELB, 12/ELB, 10/ELB. The last one is a high spar buoy, forming a "gate" together with a green one. Further on, the Vistula Lagoon begins. Elblag Light (Starboard Entrance Beacon) is often confused with Elblag Beacon (also called *Piotrus* – Eng. "Pete").





ŚWIATŁO ELBLAG

ZALEW

()

Zatoka

Elblaska

A2

15

Kepa Rybacka

10

WIŚLANY

10/ELB

12/ELB

14/FLB

16/ELB



The Nogat

River Profile

The Nogat is a typical river of Żuławy, with traces of primeval nature and unique heritage sites on both banks. It is the right branch of the Vistula Delta, starting at river kilometre 886.6 of the Vistula, in Biała Góra, and flowing into the Vistula lagoon after 62 km. The Nogat accounts for only 3 percent of the Vistula's waters reaching the mouth; hence its weak and lazy current, so different from that of the Queen of Polish rivers. The width of the Nogat varies between 80 and 200 m (260-660 ft), and the width of the fairway marked with beacons (buoys) is about 30 m (100 ft). Sailing with the current, we leave green beacons to port and red ones to starboard. On the banks, rather rarely, white boards are placed with river kilometre marking.

Navigational Information

The Nogat is recognised as a class II navigable waterway and divided into two stretches. The first one, canalised, stretches from the lock in Biała Góra, through two other locks in Szonowo and Rakowiec, until the barrage in Michałowo at river kilometre 38. The maximum draught of vessels here is 1.6 m (5.25 ft). On the second stretch, up to the river's outlet to the Vistula Lagoon (62 km), the Nogat is a slowly flowing navigable river — the maximum draught of vessels

Power lines and bridges

The Nogat shouldn't cause navigational difficulties. The lowest power line hangs at the height of 12 m (39.4 ft). The lowest bridge is the one in Kepki (50.8 km), with the vertical clearance of 3.3–3.7 m (10.8–12.1 ft) at the navigable span, depending on water level.

All the locks on the Nogat have similar dimensions: c. 57 m (187 ft) in length and c. 9.5 m (31 ft) in width. Equipped with double gates, with only one usually opened by staff. The real width at the entrance and exit gates is less than 5 m (16 ft). By phoning the lock-keeper half an hour in advance, make sure that you find the gate open and enter the lock without waiting in the outer port. The charge is payable in the lock chamber, at the upper water level.

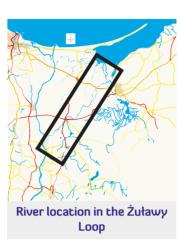
Vegetation

When navigating the Nogat, keep to the middle of the fairway. This reduces the risk of the screw getting entangled in water vegetation - esp. salvinia, the floating fern that grows in the wild on the Nogat. It blooms most intensively in the second half of August and stays afloat until the end of September or even October. Its tight carpets lie in front of lock entrance gates, impeding entry.

After the opening of water power plants at the locks in Szonowo and Michałowo, weak current appeared in the river, almost imperceptible to sailors but beneficial to them: vegetation flows downstream better and doesn't impede passage.

You can choose between the harbour at the dock in Biała Góra, and three harbours in Malborg. The banks of the Nogat are overgrown with reed, with scenic beaches where you can moor and camp.







Mooring in the wild in Kępki. Photo H. Gonera



Inside the Biała Góra Lock. Photo Fotografia-dronem.pl





The Biała Góra Lock. Photo M. Szal



The Nogat. Photo A. Wołosz

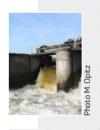


The Nogat. Photo A. Wołosz

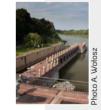


Hydrotechnical Highlights

Gapped flood-banks along the Nogat. While sailing along the Nogat, we may observe flood-banks on its sides. How are they to perform their function with breaches nearly as deep as the water level? Never fear! The flood-banks were built earlier than the locks on the Nogat. They were indispensable to protect the local people when the water level changed frequently. Now, after regulation, the river flows languidly and the water level fluctuates only slightly, without riverside fields getting flooded.



Small water-power plants on the Nogat. Barrages on the Nogat don't have a high damming potential but, as experts say, every centimetre of difference between water levels can be used for the production of "green power." Just before the war, a small power plant was built at the lock in Rakowiec. Then, eventually, time came for more locks, the Nogat's staircase locks: Szonowo and Michałowo. Each of these power plants yields 0.5 MW from its three turbines, supplying "green power."



The Biała Góra Lock. A building complex of hydraulic structures separating the waters of Vistula and Nogat. The history of the locks dates back to the 16th century, when the inhabitants of Gdańsk and Elbląg, by means of excavations, seek adjustment of the mainstreams of both rivers. This caused frequent changes in water level, and even problems with navigability. The lock system consists of the so-called Great Release Lock (regulating water level in Nogat), lock chamber (regulating water flow from the Vistula to the Nogat), a small lock at the mouth of the Liwa to the Nogat (today inoperative) and weirs. The locks are a real attraction with respect to the craftsmanship and precision of their performance.

Tourist Highlights

Siege of Malbork and Magic Malbork. In July and August the two biggest outdoor events in Malbork are held — the Siege of Malbork and Magic Malbork. The first one is a reconstruction of the events dating back more than 600 years to the days, when the Polish-Lithuanian army besieged the castle after winning the battle of Grunwald. Magic Malbork is a fusion of history and modernity. The main performance combines music, dancing, pictures, lights and acrobatics at height.



Kazimierza Jegiellończyka square with a colourful fountain in the middle. Coloured water jets spraying from several dozen nozzles create an unforgettable spectacle, especially after dark. King Kazimierz Jagiellończyk, keeping watch from his postument, is certainly proud of his town which is becoming more and more beautiful each year. The statue of the Polish king whose triumphant entrance into Malbork in 1457 began the 315 years of Polish rule over the town, is a reminder of the Poland's share in the history of Malbork.



Attractions for children. As you look at the miniature castle built with almost a million specially prepared mini-bricks, you can feel like a giant from a folktale. But this is not the only alternative attraction in town. Children will certainly enjoy Dinopark with moving dinosaurs and dragons. The Jumpy Park ropes course is a great place for outdoor fun and exercise.





62 km - the mouth of the Nogat

Sea buoys are visible. Following them (to the left), we enter the Vistula Lagoon and move further to Elbląg, Krynica Morska, or Kaliningrad. If we choose the opposite direction (to the right), we enter the languid waters of the Szkarpawa. In a small cove of the Lagoon, which both the Nogat and the Szkarpawa flow into, there is a good deal vegetation — the screw and the engine's cooling system may need more frequent cleaning. In the estuary there is a six-metre (20-feet) deep water area, valued by anglers — fine-looking perch may be caught there. This entire area lies in the Nogat Estuary Reserve — an ornithological sanctuary preserving water and marsh birds and their habitat.



Entrance to the Jagielloński Canal Photo M. Onit:

58.7 km - LB - the beginning of the Łososiowy Canal

The Canal is closed to navigation. Built by the insurgents of the November Uprising, it now plays a a role in land melioration.

51.6-62 km - LB - Nowakowska Island

This flat island, criss-crossed by ditches and canals, hides many mysteries. It is full of tall grasses and bushes, bridges, and gates. There are two intermediate pumping stations there, too. Nearly all the houses are built on artificial mounds (terps), which are supposed to protect them against high water. Near the old ferry crossing you can see the monument of the prisoners of the concentration camp in Stutthof, which had its "branch" in this area. It was erected to celebrate the prisoners sent to murderous work in construction of flood embankment during World War II.

54 km – LB – entrance to the Cieplicówka River. Caution! Dangerous!

Difficult conditions for navigation, overgrown banks, abandoned nets, low bridges. You are strongly advised against entering, except in a kayak and preferably in spring or autumn.



Nowakowska Island. Photo R. Wa







The flood-gate in Bielnik. Photo A. Wołosz

51.6 km - LB - entrance to the Jagielloński Canal

After a few kilometres of sailing you could be in the centre of Elblag, and sailing further would take you to the Elblag Canal. That is possible thanks to the canal built in 1483, the oldest hydrotechnical facility of this kind in Poland. The canal is 6 km long.

The flood-gate — out of order at present — is visible from the river. Be careful when entering the canal: the place is narrow and the visibility is poor. Give a sound signal. Just before the flood-gate on the Jagielloński Canal, there is a convenient mooring place.

On the right bank, opposite the entrance to the Canal, there is a sandy cove good for mooring and excellent for a bonfire. You can walk from here to Kepki and get food provisions (distance: c. 1 km).

51 km - a power line at the height of 15 m (49.2 ft)

50.8 km - the road bridge in Kepki

Navigable span width 35 m (114.8 ft); vertical clearance: 3.7 m (12.13 ft) at medium water and 3.3 m (10.8 ft) at high water. The lowest bridge over the Nogat! Built relatively recently at in place of a ferry crossing. A serious impediment to navigation! When sailing on high yachts, approach the bridge slowly and check each time if the clearance is sufficient. If not, retreat immediately!

You can berth on the right side, at the metal floating platform – watch out for the sharp edges! Stepping off is difficult – you will have to jump. In the village, you can buy groceries and take a walk. Local attractions include the old inn which has been purchased by a private investor and converted into a residential building.

c. 49 km – RB – the church in Kępki

The modern body of the church is perfectly visible. By the church there is a pier, but lush vegetation makes it inaccessible from the waterway.

47.8 km - a power line at the height of 33 m (108.2 ft)

45.85 km - the road bridge in Jazowa

Navigable span width: 23 m (75.4 ft); clearance: 6 m (19.5 ft) at medium water and 5.2 m (17 ft) at high water. The village of Jazowa (RB). Mooring to the right bank, in the wild, just after the bridge (a small beach is visible) of just before it, to a small pier. It is possible to get food provisions here. Alongside the right bank, downstream of the bridge, there are farms characteristic of this area.



The bridge in Jazowa. Photo H. Gonera



Jazowa



Navigable span width -49 m; vertical clearance in medium water -7.7m, at high water -7 m.

44.5 km - loverhead power lines at 13 m above the water

c. 44 km - RB - the village of Wierciny

The settlement dates back to the mid-14th c. Its inhabitants were farmers and cross-river carriers. In the 16th c., the area began to be settled with arrivals from the Netherlands and North Germany. The village has a grocery.

39.5 km - a power line at the height of 14.8 m (48.55 ft)

38.59 km - the Michałowo Lock

Length: 57.01 m (187 ft); width: 9.54 m (31.3 ft). The fourth lock on the Nogat. You will find peace and quiet here. The barrage in 1912–1915 has preserved its original structure and principles of operation. Since recently, a small water-power plant has been functioning at the Michałowo Lock, with three turbines yielding a combined power of 0.5 MW. The construction of this facility completed the investment project aimed at equipping the system of the Nogat's three barrages with turbines for the production of "green power". Above the lock, a power line at a height of 12 m (39.37 ft).

c. 34 km - LB - the village of Letniki

The village is non-typical due to the facilities of the *Central Waterworks* of Żuławy towering over it — well visible from the river and resembling an abandoned base of Warsaw Pact troops. It is here, in Letniki, that the water intake is located for the Great Żuławy and the Elblag Żuławy. The water comes from a Quaternary basin — the major water layer in Żuławy, specially protected. It is extracted from deep wells, situated along the Nogat. The Central Waterworks of Żuławy is the longest water line in Europe.

c. 33 km - RB - The former "Półmieście" military training ground

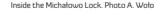
Remains of a military training ground. A forested area at present. It is an interesting area, left to nature. There are no traces of civilisation for a dozen kilometres, though flood-banks unused for a long time may be seen, overgrown with bushes and small trees — and, sadly, pulled down in places.



The gate of the Michałowo Lock. Photo A. Wołosz



The Nogat after the Michałowo Lock









c. 32 km - LB - the village of Stare Pole

The village lies about 4 km from the river. Modern tractors, combine harvesters, and beautiful cows – all this you can admire each year in June during Żuławy Agricultural Fair and the Regional Livestock Exhibition in Stare Pole. These rank among the largest events of this kind in Poland, organised by the Agricultural Counselling Centre. They are a wonderful opportunity for the presentation of latest worldwide achievements in technology, engineering, and genetics. Another event held in Stare Pole is the spring and autumn Gardening and Seed Production Fair. In 2011, for the first time, the Fair was accompanied by the Milk Festival, during which dairy products were presented.

32 km - a power line at the height of 18.5 m (60.7 ft)

c. 28 km - RB - the village of Szawałd

Relatively close to the river there is a charming village. You can see a 19th c. half-timbered historic church here. Around the church, a few gravestones lie hidden in the grass. The village has a grocery.

26,7 km - a power line at the height of 12 m (39.4 ft)

24 km - a power line at the height of 13.8 m (45.2 ft)

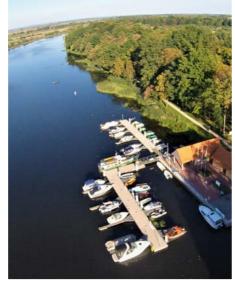
23.95 km - the Rakowiec Lock

Length: 56.64 m; width 9.57 m. Another lock on the Nogat and a water-power plant. The barrage was built in 1914–1916 as part of a project adapting the river for navigation. Still before the war, it was fitted with a hydtowlectric plant, which continues to produce "green power" effectively to this day. Berthing is possible within the lock (on arrangement with the lock-keeper). The nearest petrol station (a shop, access to toilet and shower) is several hundred metres away along a path through the fields.

"Gate" above the lock, with about 10 m (32.81 ft) of clearance.





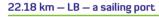


The Northern Park (Park Północny) sailing harbour in Malbork. Photo iczarter.pl



The quay at the Malbork Castle. Photo fotografia-dronem.pl

"U Flisaka" (Rafter's) barge. Photo A. Wołosz



The old quay of Bydgoszcz Shipping Company, with a high elevator building behind it. We don't recommend mooring

c. 21 km - LB - the Northern Park (Park Północny) sailing harbour in Malbork (See on p. 111)

Built as part of "The Żuławy Loop Project — Water Tourism Development. Stage I."

19.6 km – a railway bridge

Navigable span width: 20 m (65.6 ft); clearance: 9 m (29.5 ft) at medium water and 8.2 m (26.9 ft) at high water.

19.3 km - RB - "U Flisaka" (Rafter's) barge

It is possible to moor alongside the barge (by arrangement with the host). The view is fabulous, especially with the night illumination of the stronghold. Access to toilet, water and electricity.

19.2 km - a footbridge

MALBORK

Navigable span width: 20 m (65.6 ft); clearance: 5.2 m (17 ft) at medium water and 4.6 m (15 ft) at high water. Just behind the footbridge, on the left bank, near the castle, there is a quay marked with a "P" sign. An unguarded mooring point!

19.2 km - LB - Castle Harbour in Malbork (See on p. 111)

Implemented under the "Żuławy Loop Project – Water Tourism Development, Stage I".

c. 19 km – RB – the village of Stogi

One of the largest and most beautiful 17th c. Mennonite cemeteries in Europe. It has over 70 gravestones — most of them of the stele type.

c. 19 km - LB - Malbork - the Castle

The construction of the castle began in the 13th c. The most delightful is the west wing of the Middle Castle — with a refectory and private apartments. In the Upper Castle, it is worth visiting the monastery kitchen and treasury. To inquisitive tourists we recommend the toilet tower (the dansker). In front of the castle entrance, the water level is marked that was recorded on March 25, 1888, at $13.27 \, \text{m}$ ($43.54 \, \text{ft}$) asl.

The castle is open to visitors all the year round. In July, a reconstruction of the siege of Malbork takes place and Magic Malbork.

18.21 km – a bridge on the national road no. 22

Navigable span width: 27 m (68.9 ft); clearance: 6.1 m (20 ft) at medium water, 5.7 m (18.7 ft) at high water.





18.05 km - LB - the harbour of the Sports and Leisure Centre (OSIR) (See on p. 110)

Phone number of the harbour: 55 272 24 96. Open only in the holiday season. Please note: This is a bathing beach rather than a quay. Access to water, electricity, toilets, and showers. A post of Volunteer Water Rescue Service (WOPR) and water police.

16,6 km - a power lines at the height of 14 m (46 ft)

14.5 km - the Szonowo Lock

Length: 57.33 m (188 ft), width 9.58 m (31.4 ft). The Szonowo Lock, together with a 0.5 MW water-power plant, is a typical lock of the Nogat's staircase. Opened manually. During the construction of the barrage in the 1930s, fish migration was not forgotten: a fish pass was built at each weir. Above the lock, a power line at a height of 12 m (39.37 ft).







Situated c. 750 m from the river. Oaks and pines more than 150 years old grow in it.

c. 9 km - LB - the village of Parpary

Confraters' Kasseler is a regional dish (salted and smoked pork), prepared from a recipe of the Chancellor of the Great Confraternity of Good Food, Beverage, and Handicraft. It may be obtained at local farms and tasted with mead.

c. 9 km - RB - Pogorzała Wieś

The village has a characteristic building with a wind turbine, a church and a graveyard. There is also a grocery.

4 km - RB - the outlet of the closed Old Nogat Canal

c. 4-6 km - RB - the Matawa Forest Nature Reserve

The reserve protects elm and ash forest as well as willow and poplar riparian forest. There are e.g. old white poplars there, called the Twelve Apostles. There are also birds: white-tailed sea eagles and kites.

† Pogorzała Wieś

Matawski

c. 0.45 km - LB - the Biała Góra Nature Reserve

It features stenothermic thickets, characteristic of steppe, and endangered plants such as lady orchid.

c. 0.45 km - LB - Yacht harbour in Biała Góra (See on p. 110)

Reconstructed as part of "The Żuławy Loop Project – Water Tourism Development. Stage I."

0.41 km - the Biała Góra Lock (scheme on p. 121)

Length: 57 m (187 ft); width: 9.53 m (31.2 ft). The Biała Góra Lock ended the quarrels between the residents of Gdańsk and Elblag, who would steal water from each other, thus arresting the development of their local communities. In the interwar period, the lock was the border between three states: Poland, East Prussia and the Free City of Gdańsk. Today it is worth seeing for its impressive architecture and technical solutions. It is also an observation point affording a view over the Valley of the Vistula.

Convenient mooring is possible (by arrangement with the staff). Before the lock, when sailing from the Nogat, we pass through the lower gate. Sailing towards Tczew, make for the left shore immediately after leaving the lock into the Vistula.

c. 0.4 km - LB - the village of Biała Góra - c. 500 m (165 ft)

A place with charming countryside housing and a grocery (the closest one from the lock).

c. 0.4 km - RB - the village of Piekło

A Polish village with a school that resisted Germanisation. When visiting Piekło (the Polish name means "Hell"), try to find the house of Barbara Wichrowska, who bakes "hearts from hell." The village has a church and a grocery.

0.2 km - a road bridge

Located just after the lock, it connects the villages of Biała Góra and Piekło. Span width: 9.6 m (31.5 ft); clearance: 9.52 m (31.2 ft) at medium water, 6.5 m (21.3 ft) at high water.

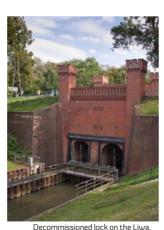
Matowski Forest. Photo A. Wołosz



Castle Harbour in Malbork. Photo Fotografia-dronem.pl









The siege of Malbork. Photo arch. UMWP

MAGIC MALBORK

A street arts festival with performances of theatre groups, alternative music concerts and juggling lessons. The culmination of the festival is the massive spectacle at the castle walls, with acrobats performing against the stunning backdrop of lasers and fireworks display.



Malbork cycling route. Photo arch. UMWP



MALBORK CYCLING ROUTE

PMalbork is located on the Subregional Cycling Route, a section of the planned 1,800-km cycling trail connecting Berlin with Tallin. In the vicinity of Malbork, the route leads through Lichnowy, Nowy Staw and Malbork itself.

The Wielka Święta – Tuga

The Wielka Święta—Tuga River Profile

The river is about 50 km long. It has its source in the Matawa Forest and resembles a ditch until Nowy Staw. From Nowy Staw until the village of Chlebówka, the water has become strongly cloudy, overgrown by arrowhead and hornwort, with an average depth of 1.2 m (4 ft). From Nowy Dwór Gdański until Żelichowo, the average depth is 1.5 m (5 ft). Near the banks, the river is a green meadow of water lily flowers and nenuphars. The river is calm, ideal for enthusiasts of kayaking and family sailing to take their first steps. The amount and variety of riverside verdure and architectural monuments encountered on the way makes it the most attractive water route of the Żuławy Loop.

The Wielka Święta and the Tuga on the section to Nowy Dwór Gdański is an official waterway. The members of Nowy Dwór Club have restored kilometre signs from the river's mouth up to the centre of Nowy Dwór Gdanski.

Navigational Information

The river's current, flowing at 1–2 km/h, emerges when winds become stronger. In spring and autumn, intermediate pumping stations strengthen the current, intensifying the flowing down

Depth

The average depth of the river, at medium water, is c. 1.5 m (4.9 ft). The bed is strongly silted along the entire river. Unfortunately, the route is only accessible to vessels with an air draft of 1.6–1.8 m (2.25–5.9 ft) – depending on water level. Greater depths occur opposite the villages of Chełmek, Tujsk, and Stobiec. Some stretches there are 3-3.5 m (9.8-11.5 ft) deep. Between Nowy Dwór and Nowy Staw, the river has been dredged and its average depth is now 1.5 m (4.9 ft). In Nowy Staw it becomes shallow: less than 1 m (3.3 ft) in depth.

Water vegetation

Floating salvinia — water fern; forms floating islands, esp. between Żelichowo and Nowy Staw. Salvinia floats on the surface and, if it is not clustered by the wind, only the slows vessels down. The greatest problem salvinia causes is the restricted possibility of observing water surface, Branches, plastic bags or strings are difficult to spot. Salvinia's most prolific growth period is the beginning of August.

Water level changes

When navigating the Tuga on a larger yacht, particularly in spring and autumn (if you manage to pass under the non-operational drawbridge in Tujsk), remember that the water level may rise by half a metre or more overnight.

One of the dangers is nets, placed across the river. The floats of the upper line are usually slightly below water level. They may remain unnoticed until the last moment.

The drawbridge in Nowy Dwór Gdański has undergone renovation, restoring it to full operation. The renovation of the bridge in Tujsk is set to start soon as well.







Żuławy Historical Park in Nowy Dwór Gdańs



The Venice of Nowy Dwór Gdański, Photo P. Salecki

An element of a draining windmill. The Żuławy Museum. Photo H. Gonera







noperative drawbridge in Tujsk. Photo A. Wołosz





Hydrotechnical Highlights

The Drawbridges in Tujsk and Nowy Dwór Gdański. The bridges were built in the 1930s. Unusually for that time period, the opening mechanisms are powered by electrical motors. One of the bridges also has an unusual counterweight system. The bridge in Nowy Dwór Gdański underwent renovation in July 2019, while the bridge in Tujsk is still awaiting renovation.



The Venice of Nowy Dwór Gdański. A complex of granaries, piers, and mooring facilities. Located in the centre of Nowy Dwór Gdański, near the drawbridge, it served for the handling of cargo from barges. In the the late 1960s, cargo shipping on the Tuga ended.



The Żuławy Aqueduct. The decommissioned structure was built in the 1950s between Osłonka and Gozdawa polders to supply water from the Tuga to Gozdawa polder, at the same time draining water from Osłonka polder which. incidentally, had been incorporated into Poland a short time before. Today, the local landscape is dominated by farm fields and meadows on the former bottom of the Lagoon, old settlements, hunting platforms, oxbow lakes and Poland's lowest elevation point at 2.07 m below sea level.

Tourist Highlights



The village of Żelichowo. Formerly, there was the village of Petershagen (Żelichowo) on the left bank, and Tiegenhagen on the right bank (known as Cyganek after the war, until the 1970s). There is one village now, Żelichowo, but attachment to the post-war name lingers. This used to be a place of great economic, political, and spiritual significance. Settlers arrived here from Europe — mostly Germans and, in the 16th c., Mennonites from the Netherlands. It was here that the first flood insurance company in Europe was set up. In the village, you can see a church from 1352, which is currently a Greek Catholic temple, a house with arcades known as the Little Dutchman, which houses a regional tavern, and the so-called Cemetery of Eleven Villages. In the Little Dutchman, you can sample the Stobbes Machandel vodka, distilled by the local Mennonite family since 1776.

Nowy Dwór Gdański: the capital of Żuławy. The capital of Żuławy has a few riverside restaurants, 2 churches, supermarkets, a narrow-gauge and broadgauge railway station, and fuel stations, including one located immediately at the water — the only one of its kind in the Żuławy Loop. The town's major attraction is the Żuławy Museum, where Nowy Dwór Club Association has collected over 2.000 exhibits. Workshops are held in the Museum; there is a conference room here as well as an exhibition devoted to the Mennonites, the struggle against flood, and the history of Żuławy (featuring the last draining windmill). There is also a scale model of pre-war Nowy Dwór Gdański. Along the Tuga, there are plenty of convenient mooring places. The cyclic events taking place in the town include European Museums Night (May), Nowy Dwór Gdański Days (June), Żuławy Historic Monuments Open Days (June), and the Settler's Day (September).



Nowy Staw. The oldest town in Żuławy, set up in the early 14th c. It has retained its historic medieval urban layout to the present day. The seat of commune authorities. The place has retained the character of a small town with a charming market square surrounded by historic townhouses, with coffee shops and little restaurants. Places worth seeing include the Żuławy Collegiate Church, the Evangelical church, and the Malt-House.



The outlet of the Tuga into the Szkarpawa. Photo M. Onitz

24 km - the mouth of the Tuga

Entrance to the Tuga River under a high bridge. Just after it, on the left bank, a weed-overgrown little canal — formerly a port of a boatbuilding shop. In the near future, a surge barrier is planned at the mouth of the Tuga to the Szkarpawa. The barrier will have a lock. The planned surge barrier will be a 3-span structure with 2 spans in the form of a 2 x 6.5 m flood gate, and one span with a steel gate valve with a 3-m clearance.

A small marshy island with a beaver lodge. At evenings and nights you can observe an increased activity of these rodents.

23.5 km - Tujsk

The river used to link up here with a canal leading to the village, and today it is only possible to make a stop at an enchanting peninsula. Camping must be arranged with the tenant of the land, who lives behind the embankment. The village with architecture characteristic of Żuławy is 1 km away. Shops, a bus station, narrow-gauge railway, a church. In 2018, a kayak dock was built there with a berthing jetty.

23.2 km - a drawbridge

The drawbridge has an interesting rope-based raising mechanism. The bridge awaits renovation, which will open the river for larger vessels. Behind the bridge, there is a kayak jetty commissioned in 2018.

23 km - LB - Behind the riverbank, there is an oxbow of the Tuga, now a bird sanctuary and an angling spot.

21.2 km

10,6

Cyganka

We pass overflow areas. On the left, a 3-4 m deep cove formed after the embankments were broken. On the right, behind the embankment, there is a wild old river bed, left after waterway straightening in late 19th c. A shed on private property — mooring is permitted. The owner requests that visitors leave the place in order. Bonfires possible by arrangement.

The waterway is half-blocked by a fallen tree. A good spot for perch fishing.

19.9 km - the Timber Canal

Entrance to the Drzewny Canal, once connected with the Vistula Lagoon and now cut off by a gate and further down by the causeway. It is worthwhile taking a walk (1 km) to the no longer functioning aqueduct from the 1950s. It used to irrigate the Lagoon's former bay, drained after the war, the so called Stobno Corner. Around 3 km from the aqueduct, you can see the newly established Poland's lowest elevation point of 2.07 below sea level.

19 km – Żelichowo

The ferry crossing was replaced by a bridge. On the right bank, there is a historic landing stage. Behind the bridge, you can berth at the house with arcades, known as the Little Dutchman. The historic building originates from

the 18th century and has been turned into a tavern serving local cuisine. Beside it, there is a church built by the Teutonic Order in 1352, Greek Catholic at present. There is also so called the Cemetery of Eleven Villages, with a few sandstone gravestones, over 80 fieldstone gravestones — the oldest one from 1692 — and unwanted gravestones from Żuławy.

Embankment, looked after by generations of Teutonic Knights, Mennonites, Prussians, Germans, and Polish and improvement services.



The Tuga River near Tujsk. Photo R. Wasil.



Former railway stop of narrow-gauge railway in Cyganek. Photo H. Gonera



The Żuławy Museum, Photo H. Goner



The Cemetery of Eleven Villages in Żelchowo. Photo M. Opitz



17.1 km - RB - the old Mennonite cemetery

In fear of devastation, gravestones were first moved to the Museum of Zuławy and then to the Cemetery of Eleven

16 km - Nowy Dwór Gdański, narrow-gauge railway bridge

15.7 km - a concrete quay

15 km - shallow overflow area; keep to the left side of the river

14.5 km — the Żuławy Museum

The buildings of the former dairy, owned by a Swiss, Leonard Krieg; at present, the Żuławy Historical Park and the Żuławy Museum.

14.4 km - a bridge; a mooring place

A drawbridge from 1936, still in use. The drawbridge is managed by the Municipal Office of Nowy Dwór Gdański, phone no.: 55 247 24 01. On the right bank, there is a berthing place with a slipway. Nearby, you can see the building of the District Starosty and the Żuławy Culture Centre, which used to be owned by the German Nazi party.

13.7 km

On the right bank there is a granary of the former Stobe factory and a footbridge, called Chinese because of its roof. On the left bank – a fragment of the bridge blown up in 1945. Four metres from the bridge span, c. 20-50 cm (1-2 ft)underwater, a fragment of the bridge pier. Keep as close as possible to the existing span.

13.3 km - a wooden footbridge

13 km - a road bridge

A bridge with the so called slit. It has slits enabling passage to the funnels of steamers and the masts of sailing boats.

12.3 km - a road bridges (road S7), stony banks; shallow water

11.3 km – narrow-gauge railway bridge, the Święta River

On the right bank, entrance to the canal leading to a pumping station. The narrow-gauge railway bridge is the point where the river changes its name to the Świeta.

8.3 km - LB - Marynowy, Tuja

A meadow convenient for mooring and launching, with a road by the bridge. The village of Marynowy is 2 km away and Tuja 3.5 km away. A beautiful panorama from the bridge.

5 km - a pumping station

Beside the pumping station stands a statue commemorating the cooperation of Nowy Staw and Nowy Dwór Gdański municipalities.

2 km - Nowy Staw

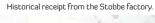
To the right, an arcaded house with a grocery. The river is a few metres wide and has overgrown banks. A place for launching boats, and a kayak harbour.

0.4 km - LB - a harbour for kayaks and boats

0.2 km - a road bridge

A former port. Concrete fragments of reinforcements under the bridge pose danger.

0 km - A concrete water threshold. The river is not navigable any further



Stawiec

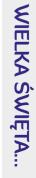
Orłówko

Tuja 针

Mirowo

A2





The Vistula Lagoon



The Main Fairway of the Lagoon

Y-shaped, with the stem pointing east. The northern arm is the approach to the Szkarpawa, the water route to Gdańsk, and the southern arm is the approach to the Elblag River, to Elblag. The fairway runs as follows:

The northern branch: the mouth of the Szkarpawa – Gdańsk Beacon – Elbląg Beacon. Major points of the route: light buoy no. 18 (the mouth of the Szkarpawa), Gdańsk Beacon, and further buoys (unlighted) as far as Elblag Beacon.

The southern branch: the Elblag River — Elblag Light (Starboard Entrance Beacon, called "Andzia" — Eng. "Angie") — Elbląg Beacon (called "Piotruś" — Eng. "Pete").

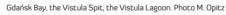
Major points of the route: The Port Entrance Beacon of the Elblag River (LGW, red navigation light), Elbląg Light (Starboard Entrance Beacon, called "Andzia" – PGW, green navigation light — situated on the Golden Island). PGW and LGW are located asymmetrically. Elblag Light and Elblag Beacon are frequently confused. "Andzia" and the 10 ELB light buoy make up the first fairway gate. The next one consists of unlighted buoys. The light buoys that follow are 1 ELB (green) and 6 ELB (red). Further, unlighted buoys show the way as far as Elblag Beacon.

Both branches of the fairway meet at Elblag Beacon, and from there the fairway leads east, as far as the country border separating the Vistula Lagoon from the

The main fairway: Elblag Beacon — TOL buoy — FRO buoy — Polish-Russian border. There are 12 buoys in total, all with navigational lights.

Approach fairways to ports.

The fairways leading from the main fairway to particular ports are marked with buoys and, immediately before ports, usually with gates. These are approach fairways to Piaski, Nowa Pasłęka, Frombork, Krynica Morska, Tolkmicko and Kąty Rybackie.







The Elblag Bay is the southernmost part of the Vistula Lagoon, most resembling the Masurian Lakes or Lake Jeziorak. The shelter provided by Nowakowska Island makes the wind lighter and the waves smaller here than they are on the Lagoon's open waters. The Bay is a very shallow water body. Its average depth is 1-1.5 m (3-5 ft), and the farther south we go, the more shallow it gets. The exception is the Lagoon-Elblag fairway. In Elblag Bay, the guaranteed fairway depth is 2.2 m (7.2 ft), and further — on the Elblag River - 3.5 to 4 m (11.5-13 ft).

The Bay's ports are small, with poorly developed boating infrastructure. The region's largest port is Suchacz, accessible to yachts with a draught up to 1.5 m (4.9 ft). The remaining ports are accessible to yachts with a lower draught: Nadbrzeże (1.2 m / 3.9 ft), Kamienica Elbląska (1.2 m / 3.9 ft), Jagodna (0.8 m / 2.6 ft).



The Vistula Lagoon. Photo A. Wołosz

The Vistula Lagoon and Elblag Bay - Profiles of the **Water Bodies**

The Vistula Lagoon is delimited by the Elblag Upland in the south, by the Vistula Spit in the north, and by the extensive polders of the Vistula Żuławy in the west. The east part of the Lagoon is the marine border with the Russian Federation. Behind that border lie the waters of the Kaliningrad Lagoon and the Strait of Baltiysk (the Pilawa Strait), enabling passage to the Baltic Sea. The Lagoon has an area of 382 sq km (838 sq km together with the Kaliningrad Lagoon). Length: 35.1 km (90.7 km together with the Kaliningrad Lagoon). The width of the Lagoon varies from 6.8 to 13 km, and the average depth is 2.7 m (8.9 ft). The further east, the deeper. The Polish waters of the Lagoon comprise an area two and a half times the size of Lake Śniardwy.

The Lagoon is a water body of internal maritime waters. Maritime buoyage is used here, managed by Maritime Office administration. This is an excellent water body for inland sailors thinking of maritime navigation. Considerable distances, long-tack sailing possibilities, the need to read maps and sailing directions, using the GPS. the maritime marking of ports and fairways; buoys, lights, and beacons. Finally, the trip allows to experience your first, immensely exciting, night entry into port. A significant problem is the small depth of the Lagoon as well as ports and fairways becoming shallow. Navigation is unimpeded for yachts with a draught up to 1 m (3.3 ft). During stormy weather, small depths result in the formation of short, steep waves, which may be dangerous even to seasoned sailors.

The Lagoon also has many attractions and places worth visiting: the Planetarium in Frombork, the Museum of the Vistula Lagoon in Kąty Rybackie, the beautiful sea beaches of the Vistula Spit, or the Żuławy Narrow-Gauge Railway running from Sztutowo. Every port has a different style here. The bustling Krynica Morska neighbours on the quiet old harbour in Kąty Rybackie. The provincial towns of Frombork and Tolkmicko have a completely different character than the typically Masurian harbour in Jagodno. Nowa Pasłęka is an oasis of peace.

Until recently, the Vistula Lagoon could be compared to the Masuria of the 1950s, mainly due to the lack of sailing infrastructure, but also because of the peace and quiet. Thanks to "The Żuławy Loop Project — Water Tourism Development. Stage I," sailing harbours have been built in Braniewo and Nowa Pasłęka, the yachting ports has been extended in Krynica Morska, Kąty Rybackie, and the western guay has been developed in the port of Tolkmicko.



The Port Entrance Beacon of the Elbląg River Photo P. Salecki



A port's leading light. Photo P. Salecki



Elblag Beacon. Photo P. Salecki

Elblag Bay buoyage

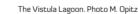
- Across the west part of Elblag Bay runs the fairway leading from the Vistula Lagoon, up the Elblag River, to Elblag. Sailing from the Vistula Lagoon, we first pass the Starboard Entrance Beacon (PGW), situated on top of a green truss tower on a granite base. A group flashing light (2 flashes in a group), green, with a period of 6 seconds. On the map, this will be indicated as FI (2) G 6s.
- The Starboard Entrance Beacon and 10/ELB buoy make up a fairway gate. 10/ELB is a red lighted spar buoy, with a red cylinder marking the port side of the fairway. It flashes just like the Starboard Entrance Beacon, but the light is red: Fl (2) R 6s. Next, the port edge of the fairway is indicated by lateral marks - cylinder-shaped red spar buoys: 12/ELB, 14/ELB and 16/ELB. Please note that, instead of spar buoys, ordinary red can (cylinder) buoys may be used, resembling typical inland marks. Next, we pass the Port Entrance Beacon (LGW) — a red truss tower on a granite base, with a fender bar and mooring gear, enabling emergency mooring. It flashes red light with a period of 2 seconds (Fl R 2s). Sailing further, we enter the Elblag River (the Elblazka), which takes us to Elblag.

The Vistula Lagoon buoyage:

The Vistula Lagoon is maritime internal waters and its buoyage conforms to the IALA system, region A, also used for seas. This gives sailors an opportunity to perfect their navigation skills, useful in offshore sailing.

The navigation marks on the Lagoon include:

- The Lighthouse in Krynica Morska.
- Beacons: fixed structures navigation lights on truss towers placed on a fixed base: on stone
- Lighted fairway buoys: some of the buoys marking the fairway.
- Unlighted fairway buoys: they mark the fairway. Red-and-white buoys with a sphere as topmark indicate the middle of the fairway. Red buoys with a cylinder indicate the port edge of the fairway (when looking towards the port). Green buoys indicate the starboard edge of the fairway (when looking towards the port).
- Cardinal buoys: with a combination of yellow and black and with black cones positioned appropriately to where they restrict navigation. They indicate the outermost points of shoals and sandbanks as well as other dangerous places. The buoy marking the west edge of danger is the so called "francuzka" (French buoy), with two cones point to point as the topmark. The buoy situated at the east edge of a dangerous water area is "rosjanka" (Russian buoy), with two cones pointing up and down. The buoy marking the north edge of danger is "eskimoska" (Eskimo buoy), with two cones pointing up; finally, the so called "murzynka" (Black buoy), with both cones pointing down, marks the south edge of dangerous water area. Sometimes there are no cones, only a pole painted yellow and black. The flashing of such buoys corresponds to clock face.
- Lateral buoys: green and red. They mark the edges of navigation channels and approach fairways. Placed in pairs, they form gates. The direction of the approach fairway is towards the harbour, which means that red buoys (spar or can) stand on the port (left) side of the fairway and green buoys (spar or can) on the starboard (right) side.
- Leading lights: indicate the approach to the port. By day, they are triangles, rectangles, or rhombuses — white or red. By night, leading lights flash. There are often two leading lights: the front and the rear one. Navigate in such a manner as to make them coincide. The front signal is fixed lower.







Pierhead with a beacon. The port of Suchacz, Photo P. Salec



Entry into the nort of Tolkmicko Photo M Onitz



The port of Piaski. Photo A. Wołosz

The sea border

The border is marked with white-and-red as well as green-and-yellow buoys.

Dangerous obstructions to navigation

- The only rocky shoal of the Lagoon, opposite the village of Różaniec, stretching between Frombork and Nowa Pasłeka.
- The wreck lying east of the approach to Krynica Morska. The west edge of the wreck is marked with a cardinal buoy.
- The Krynica Shoal, lying between the passenger and yacht port and the fishing port. Marked with two cardinal buoys. The buoy marking the east edge of the shoal is a lighted one and constitutes the east edge of the approach fairway to Krynica.
- The Tolkmicko Shoal is located west of Tolkmicko and marked with a yellow cardinal buoy.
- The Przebrno Shoal stretches between Kąty Rybackie and Krynica Morska, opposite the villages of Skowronki and Siekierki.
- Frombork. Underwater stone palisades between the west entrance beacon of the port of Frombork and the pier of the former passenger and yacht harbour. They are marked by the yellow buoys of the turning basin for white fleet vessels. The buoy closer to the shore marks the edge of underwater obstacles.
- The vicinity of Gdańsk and Elbląg Beacons. Stones lie underwater and it is shallow. It is recommended not to sail near the beacons.
- Kąty Rybackie. The wreck of a motor yacht between Barkas Harbour an the Old Fishing
- The town of Ujście near Nowa Pasłęka. The flooded eastern breakwater at the entrance to the Port of Ujście in the Pasłęka Canal.





The Marina is hidden among the reeds and the unobstructed lush greenery. It's hard to get here, breaking through "carpets" of water flora. The basin has no owner and is filled with tranquillity and silence. It is a complete wilderness. The last port of the Elblag Bay on the way to Elblag. The Marina is located within an ornithological reserve, the fact of which gives rise to different opinions as to the legality of sailing into to the Jagodna.

Kamienica Elblaska

A small port in Elblag Bay. The harbour is a long rectangular basin that narrows to the south. Initially, the quays are scarps overgrown with reeds, with wooden remains of piers jutting out here and there. Moor to them or directly to the shore. The stretch of quays closing the port is regulated. The quays are concrete and equipped with mooring bollards. The eastern quay has a perpendicular dock in its final stretch, used by fishermen. No facilities for sailors or sanitary infrastructure. A grocery in the port.

Nadbrzeże

On the west side of the harbour basin, there is the marina of Yacht Club Elblag. On the east side there are holiday cottages and the administration building with a buffet and a bar. A sanitary pavilion with a toilet in the corner. It is possible to refill water tanks and, within the opening hours of the buffet, to use the electricity. There is a place for a bonfire, too. Moor to the Western Quay. Most of it is an earth scarp, with fixed piers in places. If mooring buoys are provided, moor stern to the buoy, bow to the guay — or directly to the shore. You can also moor to the Southern Quay. A wooden pier stretches along its entire length.

Approach

The harbour is fit for yachts with a draught up to 1.5 m (4.9 ft). A good landmark is the brickyard chimney, east of the port. The harbour is abeam of 12/ELB fairway buoy. Approach by steering to the middle of the harbour basin. Nets and fykes are present in the area.

Suchacz

The largest port of Elblag Bay. You can turn back here if, on entering the Vistula Lagoon, you we decide that weather conditions make it unsafe to try to make it to Krynica, Kąty Rybackie, or Tolkmicko. The port is located about 10 minutes' walk west of Suchacz.

Approach

Entry is unimpeded for vessels with a draught up to 1.2 m (3.9 ft). Entrance to the port is located almost opposite the Elblag Light ("Andzia," green flashing light with a period of 6 sec., PGW). When you are level with it, you should notice the port's breakwater with the red column of the leading light. Watch out for nets and fykes. Approach from the west. There are underwater stones in the vicinity of the breakwater (on both sides), so do not get too close to it. The way to the port leads through the curved port canal, turning at nearly 90 degrees. Two vessels pass each other with difficulty. Numerous yachts permanently dock at the port, and there may be little space sometimes.

Leading lights

The east pierhead: a red column with a white stripe; red flashing light (QR).

The yacht port

Located at the western quay of the harbour and managed by the Vistula Lagoon Sailing Enthusiasts' Club. It has a place for a bonfire, a toilet, a shower, a club room, electricity, and water to refill your tanks. The club also charters sailing yachts of various sizes — from Omegas to keel boats.

The fishing port

Situated at the far end of the harbour basin. Opposite the yacht port there are several short floating piers with fishing boats moored to them. Fishermen usually let sailors moor there when the yacht port is full.

Kadyny

Mooring is possible during good weather and with calm sea, for yachts with a draught up to 0.8 m (2.6 ft). Just next to the port lies one of the Lagoon's most beautiful beaches. In the season, it is possible to hire water equipment and visit local eating places. It is also worthwhile taking a walk round Kadyny, a place famous for a stud and the former residence of Emperor Wilhelm II, as well as for magnificent oaks.

Approach

When navigating along the coastline, you must expect shallow waters. Keel boats should absolutely keep to the fairway. Approach the harbour following a course perpendicular to the shore. Enter the harbour keeping to the western breakwater and head for the quay. Moor just beside the exit. You can move the yacht along the quay. There are underwater obstacles in the harbour basin.



Nadbrzeże. The quay of the Elbląg Yacht Club harbour. Photo A. Wołosz





The port of Suchacz. Photo A. Wołosz



Kadvnv. Photo A. Wołosz Kadyny. Photo A. Wołosz



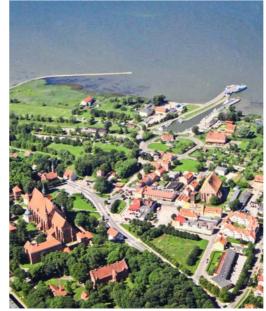


Tolkmicko, Photo A. Wołosz



Tolkmicko, Photo A. Wołosz

Frombork. Photo M. Opitz



A port town with a harbour for fishing and passenger vessels, beautifully located at the Vistula Lagoon. The main tourist attractions include the 14th-century church of St James the Greater, and the so-called Holy Stone - a glacial erratic used as a sacrificial altar by the pagan Prussians. The erratic has 13.8 m in diameter and can be found in the Vistula Lagoon around 4 km from the town.

In recent years, Tolkmicko has gained a proper marina, located in the western part of the harbour. The marina has convenient jetties with berthing places, and offers electricity and potable water outlets. There is a sanitary building with toilets and showers. 200 m from the marina, you can find a fuel station.

The fishing port

Its first part is the entrance canal with breakwaters. Further on, the basin gets wider. The building of the Harbour Authority, SAR lifeguards, and the fishing base is situated here. The Harbour Authority office (phone: +48 55 231 66 14) is open from 7:00 to 15:00, Monday to Friday. A part of the western quay is occupied by "white fleet" vessels.

Approach

Yachts with a draught up to 0.8 m (2.6 ft) don't have to keep to the approach fairway. Tolkmicko may be recognised by the white and blue building of the fish-processing plant - east of the entrance to the port. The town is located abeam of Krynica Morska. When approaching from the east, remember about the Tolkmicko Shoal. From the north, it is marked with a cardinal buoy, the black, yellow and black TOL-N. To the west depths are

Approach fairway

From the main fairway of the Lagoon, approach to Tolkmicko starts at the TOL buoy (a red and white light buoy with a sphere, white light with a period of 10 seconds). Before the very port there are two fairway gates of red and green buoys.

Leading lights

The east pierhead of the port: fixed green light, on a green column with a gallery. Th front light/mark: on the roof of the fish processing plant.

Lifeguards: SAR (Search and Rescue)

This is the only institution of this kind on the Vistula Lagoon. Remember that the mission of SAR is to rescue people. You may pay through the nose for calling them to save a yacht. If human lives are not in danger, contact the Harbour Authority through fishermen.

Frombork

Tolkmicko

It is the largest port town on the southern shore of the Lagoon and the sea border crossing point for yachts sailing to Kaliningrad. Unfortunately for sailors, there is little space here! Frombork's major monument is the Cathedral Hill complex. It consists of a medieval cathedral, episcopal palaces, canonical curias, defence walls, towers, and fortifications. At the Nicolaus Copernicus Museum visitors may see mementoes of the great astronomer, watch a show at the planetarium, or go to the observatory for a night sky show. There is a Foucault pendulum at the planetarium. In the summer season, concerts on the famous Frombork organ are held at the Cathedral. Close to the Cathedral Hill, there are two places of interest: the former Holy Spirit hospital, which now serves as the History of Medicine Department of the Copernicus Museum, the Water Tower and the renovated Copernicus Canal. In the regenerated town square, you can see a majestic bronze statue of Copernicus. Fishing port with the harbour and the space for sailors

It is a long port canal, with a harbour basin at the far end. On the east side of the port canal, the aerial-topped building of the Harbour Authority is visible, open from 7.00 to 15.00. Further on, there is a harbour basin with berths for sailors. Dal Yacht Club has its residential berths. If you want to use them, contact the Club's representative. Electricity is accessible at the quay, from box terminals in the corner of the dock. Toilets are located near from the yacht berths. Toilets and showers can be found in the port and at the playground, 20 m from the port gate. Water refill may easily be arranged with fishermen, on the other side of the canal. You can also ask for it at the bar. On the way from the port into town you will find a square with a dozen bars of various standards around it. The town has a few fairly good restaurants.

Approach fairway:

From the main fairway of the Lagoon, the approach fairway to Frombork begins at the lighted buoy FRO. Next, there are 3 fairway buoys (1/F, 2/F, 3/F), and fairway gates of red and yellow buoys just before the port.

Leading lights:

The front light/mark is a truss tower with a triangle, located at the end of the harbour basin. Fixed red light.

The rear light/mark in the church steeple window. Fixed red light.

On the east pierhead, there is a red column with a gallery, the pierhead is painted in diagonal yellow and black stripes. Red light with a period of 2 sec.

On the west pierhead, there is a green column with a gallery; the pierhead is painted in diagonal yellow and black stripes as well. Green light with a period of 2 sec.

THE CLOSED PASSENGER AND YACHT HARBOUR

The several-hundred-metre long pier is a place not managed by anyone at present. When sailing behind the pier, keep very close to it. That is the only place with sufficient depth. When mooring alongside to the quay, watch out for the metal elements jutting out. Parallel to the pier, wooden stakes are driven into the bottom, some of them hidden underwater. A good place to stop for lunch, fit for yachts with a draught up to 0.8 m (2.6 ft).

Kąty Rybackie

Kąty Rybackie is the nearest port of the Vistula Lagoon for yachts sailing down the Wisła Królewiecka or the Szkarpawa. The sea beach is only 20 minutes walk away across the Spit.

Żeglarze mają tu do dyspozycji różnorodne miejsca do cumowania:

- The Kąty Rybackie Port and Marina. A bustling port of summer tourists, with a dedicated basin for sailors. Within the framework of the "Żuławy Loop Project Water Tourism Development. Stage I", the port was expanded with a new marina (see page 117).
- The Old Fishing Port. A quiet cove with piers and the possibility to moor directly on the bank.

Katy Rybackie Port and Yacht Harbour

The harbour is available for yachts with draft of no deeper than 1.5 m. The eastern basin, cutting into the land, has three wharfs. The western one is intended for yachts. The western basin contains the yacht harbour, is in parallel to the waters of the Lagoon, and also has three wharfs: the northern, intended in part as berth for passenger ship and a slipway, the western one is a wooden bridge while the eastern, a floating pier with y-boms. Under the "Żuławy Loop Project – Water Tourism Development. Stage I" socio-sanitary facilities has been built, a spot for yacht wintering and means of connecting to water, electricity and wastewater collection utilities. Bosman of the Port has his office in the building by the mast of the radio station, opened 7.00 to 15.00, Phone no.: 55 247 87 19. Here we also have access to electricity. The toilet in the marina is free of charge. On the area adjacent to the port there is the Vistula Lagoon Museum, which is worth paying a visit. In 2009, the new range lights were set up, on the eastern head: the green pole (formerly the green lattice turret), whereas on the corner of the eastern wharf: the red pole.

Krynica Morska

The indisputable sailing capital of the Lagoon. Clean sea beaches, a wide range of commercial, gastronomic, and hotel facilities. The attraction is the Lighthouse, offering a panoramic view of the Vistula Lagoon.

The marina in Krynica Morska

Passenger Pier splits marina into two parts: the old (Old Port) and the new (the Leonid Teliga Yacht Marina). As part of "The Żuławy Loop Project — Water Tourism Development. Stage I" the yacht marina was modernized and expanded. Boaters can enjoy the largest on the Vistula Lagoon marina with floating piers and sanitary facilities. The access track of 2.5 m leads to the marina. Parking spaces for yachts are equipped with water supply and sewerage, power connections and lighting.

The Leonid Teliga Yacht Basin

The harbour basin enables convenient manoeuvring under sail. However, watch out for "white fleet" vessels. Depths in the basin are about 1.5 m (4.9 ft), and basin no. 1 is definitely the most shallow. The marina is managed by Krynica Morska Yacht Club. Yacht port in Krynica Morska, phone: +48 55 247 60 76.

The harbour basin, 250 by 160 metres, is divided by three piers into smaller basins. All the quays are concrete and covered with tyres. There is the Eastern Quay, with access to all the three piers; the Northern Quay; finally, from the west, the port is closed by the Western Quay, being part of the Passenger Pier.



The port of Kąty Rybackie. Photo Fotografia-dronem.pl



The port of Kąty Rybackie. Photo A. Wołosz



Vistula Lagoon – surroundings of the Krynica Morska. Photo A. Wołosz



The Marina in Krynica Morska. Photo Fotografia-dronem.pl

The fishing port in Krynica Morska. Photo A. Wołosz





The port in Piaski. Photo A. Wołosz



The port in Piaski. Photo A. Wołosz

Moor stern first or, if the port is crowded, bow first, casting anchor from the stern. Access to electricity. On the east, the port neighbours on a tent site. In the summer season, bustling is heard from the Northern Quay. At the square, just behind the flagpole, there has for many years been a funfair and a disco: concerts are held there, too. Several dozen of eating booths.

Approach fairway

From a distance alerady, the way to Krynica Morska is shown by **the Lighthouse**, located slightly east of the port. From the main fairway of the Lagoon, approach to Krynica Morska begins at the TOL buoy (a red and white light buoy with a sphere, white light with a period of 10 sec.). Next, you are guided by unlighted fairway buoys (red, with a red cylinder as the topmark — marking the port edge of the fairway; leave it to port) 2/E and 4/E. Then there is a lighted buoy 6/E. Light features: white light with a period of 10 sec. It marks the east edge of the Krynica Shoal and the port side of the fairway. The next unlighted fairway buoy 8/E — red, with a red cylinder on top — marks the port side of the fairway. Slightly closer to the harbour, on the east, there is a black and yellow and black cardinal buoy, with topmark cones point to point. Heading for Krynica, we leave it to starboard. Yachts with a draught above 1 m (3.3 ft) should absolutely follow the fairway axis when approaching; other vessels should only pay attention not to damage the centreboard. **The Krynica Shoal**, lying west of the port, constitutes an obstacle for yachts with a draught above 1 m (3.3 ft). It is marked with cardinal buoy KM-S.

Leading lights

Concentrated on the Passenger Pier.

The front light/mark: a red post with a white triangle pointing up. Red isophase light, with a period of 2 sec.

The rear light/mark: red truss tower with a white triangle pointing down. Fixed red light.

Piaski

This is the last village on the Vistula Spit. A small port, with no entertainment and a few shops. Near from the region's most beautiful sea beaches. At first, there was a village and an inn here. They were buried by the sands of shifting dunes. Later, a new inn was built.

Crowds of tourists get only as far as Krynica. Yet, Piaski is more and more popular with those visitors who value peace and quiet. The beautiful vast beaches by the sea are only 10 minutes walk from here.

The authorities of the Kaliningrad Enclave have been making efforts to open a border crossing on the Vistula Spit. It will enable travelling from here to Baltiysk and further, to Kaliningrad.

The port of Piaski

The port consists of two harbour basins separated by a wooden pier. The quay area is concrete, with an underpinning left of the Harbour Authority building at the western quay. At the eastern quay there are fishing buildings and a drinking water intake. The quay has wooden boarding, partly covered with tyres. Watch out when mooring to the pier: the edge of the quay may damage the sides. Holidaymakers stroll along the pier. Moor alongside. The lack of shelter from the waves will be felt during strong wind from the Lagoon. Therefore, check weather forecasts carefully when planning to visit this place. Tie up prudently. It has happened, with strong swell, that cleats were torn out from decks, so it is advisable to attach a spare mooring line to the mast. The weak point of this port and its approach fairway is shoals. The depths given in sailing directions should be treated with reserve.

In 2014, the port was renovated. The berthing jetty and the northern quay were reconstructed, and a slipway with a steel frame was added to enable launching of fishing vessels.

Berthing

Space is scarce. The east harbour basin (with concrete quays) is plagued by an oppressive smell of nets drying. In fact, depending on the direction of the wind, this problem concerns most of the port. The western harbour basin is much more agreeable — there is more vegetation here, and trees give pleasant shade. The local curiosity of Piaski is the fishing boats with 225 hp outboard motors, from the period of "fishery races." The right to fish in a given sector was granted to the winner of a race. The practice was abandoned after it led to a tragic accident.

Infrastructure

A few bars opposite the port. The nearest shop is just behind the port's fencing. A variety of shops, bars, and fast food outlets are also to be found a little farther — go right, along the main street.

Beside the harbour stands a portable toilet. Showers and toilets will be found at the nearby camping sites. Sailors are welcome. You can also use the public showers at Piaski Club holiday centre, which is 10 minutes walk from the port: go right, along the main street.

Approach

The buildings of Piaski are visible from a distance. Numerous nets emerge near the shore, especially if you are sailing from Krynica Morska. In principle, yachts with a small draught (up to $0.5 \, \text{m} / 1.65 \, \text{ft}$) don't need to keep to the approach fairway. Still, you are advised to raise the centreboard or be prepared to do so. Yachts with a greater draught must keep to the approach fairway, but they may get in trouble anyway.

Approach fairway

From the main fairway of the Lagoon the approach fairway to Piaski begins at PIA buoy (lighted). Next, there are 3 fairway buoys: P/1 and P/2. Just before the port, there are fairway gates of red and green buoys. The marking constantly changes. There are plans to place fairway buoys more widely apart, introduce a mid-fairway buoy, and remove fairway gates.

Leading lights

The front light/mark: red column on the central wooden pier of the harbour basin, with a white upward red-rimmed triangle. Red flashing light with a period of 5 sec.

The rear light/mark: on the hill behind the port, a red column with a white downward red-rimmed triangle. Red flashing light with a period of 5 sec. Caution! It has happened several times in recent years that the rear light or both leading lights were out of order.

River profile

The Pasteka river, located in north-eastern Poland in the Warmian-Masurian Voivodeship, flowing through the Masuria Lake District and the Gdańsk Coastal Region, is 211 km long and empties into the Vistul Lagoon. The river is navigable on a 9-km section from the mouth in Nowa Pasłeka to Braniewo. Sailing from the closed drawbridge in Nowa Pasłęka to Braniewo, you will have to fold your mast. The river is embanked along almost the entire navigable section and there are numerous underwater obstacles at the banks - be careful when approaching the river bank. Further down, the river meanders gently. Midway through the navigable section, there is a dead end branch to the left. The width of the Pasłeka varies from 30 m to 15 m. If possible, keep to the middle of the river.

Navigational information

Accessibility

On the section to Nowa Pasłeka, the river is accessible to vachts which normally sail on the Vistula Lagoon (draft up to 1.3 m). Further down, it is navigable for smaller yachts and motorboats (draft up to 0.8 m). There is an obstacle on the route - a closed drawbridge (clearance 2.4 m in medium navigable water). Also, watch out for the shallows at the mouth into the Vistula Lagoon which may be problematic for keel yachts.

Overhead power lines

The only overhead power line on the Pasteka is suspended at 10 m above the water. Furthermore, in the Pasłęka Canal there is an overhead power line with an 8 m vertical clearance.

Navigation marks

The route is not an official waterway. There are no chainage posts on the banks, or navigation buoys or marks.

Nowa Pasłęka is the last "official" marine harbour in the East of the Republic of Poland, located at one of the Pasłęka mouth canals. There are also comfortable harbours with all necessary amenities in Stara Pasłęka and Braniewo.

Approach

Pasłeka Canal

From the main fairway of the Lagoon. The PAS buoy (lit) marks the beginning of the approach-trail. From there we head towards the shore. The entrance to the Nowa Pasłęka is located in a place where the shoreline creates convexity that continues into to the Lagoon. Yachts of draft deeper than 1.2 m may have problems with entry.

Approach-trail

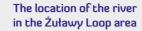
Before the port there are emergency beacons positioned as entry gates. If you sail from the direction of Frombork, mind the stones at the point of passing the village of Różaniec. When advancing along the axis of the approach-trail let's watch out for the stone dike, being an extension of the eastern breakwater.

Front light/sign: on the western breakwater the green lattice tower with a foghorn. In the back behind the tower there is the mast with a wind vane. No rear light or range lights. A peculiarity is the foghorn, which is still active and engaged by the Bosman at the time of haze or bad weather conditions. It transmits the code-letter "N" during 30 seconds time.

Mouth of the Pasłęka River

The mouth was adjusted and deepened in the years 2010–2011. The flooded and devastated eastern breakwater was rebuilt. Of dredged material obtained during the deepening a beach was made. We enter, keeping to the western side of the river mouth.

We pass a beach on the west bank, while on the east bank we see plenty of greenness. On the right side, the island, with one house and ruins.





Pasłęka and the Sanctuary in Braniewo.





The harbour in Stara Pasłęka. Photo A. Wołos



Fistula of Pasłęka. Photo A. Wołosz



0 km - Mouth of the Pasłeka into the Vistula Lagoon

Regulated and dredged river mouth. The current is strong, so remember to use your engine for any

0.3 km - RB - The Pasłęka Canal

At the river mouth, on the canal, there is a self-service drawbridge and next to it, an overhead power line with an 8-m clearance. You will also see the harbour master's office and the harbour of the Maritime Office in Gdynia, located picturesquely in the Pasłęka Canal, 300 m from the mouth of the river into the Lagoon. In 2013, the harbour underwent a renovation of the wharf. There are no amenities available. If you plan to stay there, call the harbour master at +48 55 243 24 00. The distance from the drawbridge to the Nowa Pasłęka harbour head (green) is 550 m.

ca. 1.3 km - LB - "fistula" of the Pasłeka

A several dozen metre long slough, separated from the Vistula Lagoon by a boulder causeway. Nonnavigable.

ca. 1.35 km - LB - Maritme Detachment of Border Guards, formerly the Fisherman's House

ca. 1.6 km - LB - yacht harbour in Stara Pasłeka (see p. 118)

ca 1.7 km - closed drawbridge

The drawbridge is awaiting renovation which will restore traffic of larger vessels. The current clearance of the bridge is ca. 2.4 in medium navigable water.

ca. 2 km RB - fishing harbour in Nowa Pasłęka

The harbour is located on the western bank of the Pasłeka river, behind the decomissioned drawbridge. It has a concrete wharf with mooring poles, a slipway with a gantry, and facilities. It is one of the largest fishing bases on the Vistula Lagoon.

ca. 4.2 km - LB - short, dead-end river branch

ca. 7 km - RB - Sanctuary of the Feast of the Cross

Built by the Jesuits in the years 1722-1747, this Baroque church has the shape of a Greek cross, with a dome above the intersection of the naves.

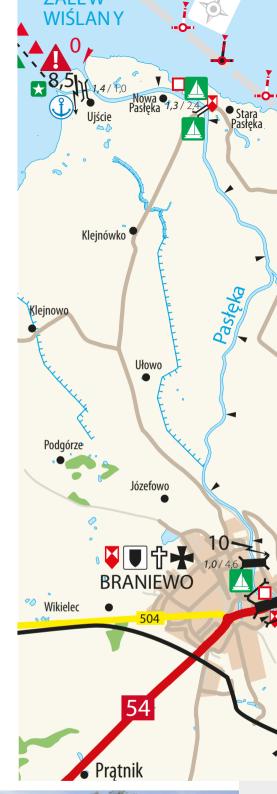
ca. 8.1 km - overhead power lines supended at 10 m above the water

8.78 km - RB - yacht harbour in Braniewo (see p. 119)

The harbour is located in the town centre, right before the walkway. Measuring ca. 25 m in length, it is intended for small vessels and kavaks. Sanitary facilities available.

9.0 km - Braniewo

Spreading on both banks of the Pasłęka, near its mouth into the Vistula Lagoon, Braniewo is the oldest town in the Warmia region. Local places of interest include the basilica of St Catherine originating from the years 1343-1442, and the Sanctuary of the Feast of the Cross. Braniewo also has a zoo which is open for tourists in the summer season.

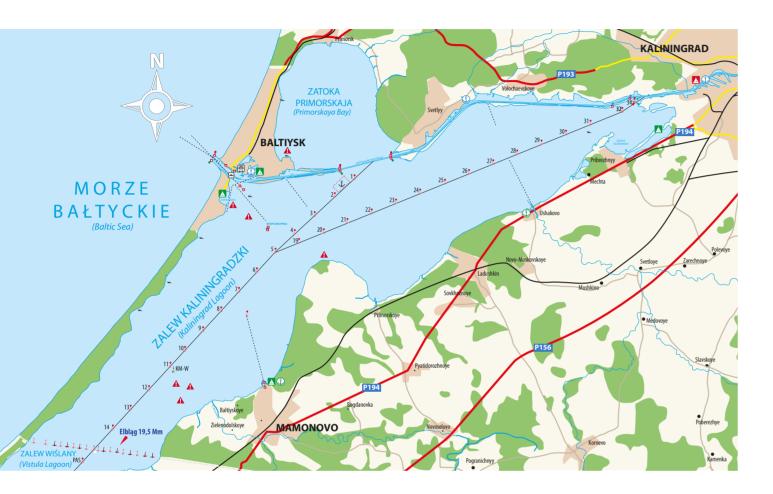


Decommissioned drawbridge in Nowa Pasłęka. Photo A. Wołosz



PASŁĘKA

The Kaliningrad Lagoon



The Kaliningrad Lagoon — characteristics

The Lagoon is located in the depths of the Gdańsk Bay of the Baltic Sea, from which it is separated by sandy embankment — Mierzeja Wiślana (Baltic). The north-eastern part of the Lagoon territorially belongs to Russia and is located in the south-western part of the Kaliningrad Oblast. The total length of the coastline is 270 km, of which 149 km is in Russian territory. Average depth of the water body reaches 2.7 m, the maximum depth is - 5.2 m and its surface is 838 km2 of which 472.5 km2 (56.2 percent) lies within the boundaries of Russia. In the north-western part it creates Primorska Bay of semicircular shape. From the west side the Lagoon is bounded by a part of the Vistula Spit, that near the town of Baltiysk is split by a 400 m long strait, deepened to the level of 9-12 m below the surface, which allows the passage of ships into the Baltic Sea. The aqueous system (regime) of Kaliningrad Lagoon and the whole Vistula Lagoon shows a large dependence on the outflow of rivers, as well as on the exchange of its waters with seawaters. Into the Lagoon, among others, flows Pregolya, Mamonowka and Prochodnaja. The edges of the water body are low and muddy, and only in some places slightly raised. The reservoir is surrounded by sandy shoals with a depth of up to 2 m and a width of 0.8 - 1.6 km. The bottom of the Lagoon consists of mostly loam and muszka. Only in some of its areas it is loamy and sandy.

Fairways of the Kaliningrad Bay

Kaliningrad Sea Canal — leads from the port of Baltiysk to the port of Kaliningrad. The smallest depth in the engaged part of the Canal is 8.5 m. The bottom consists of sand and silt. The smallest width of the sheltered with banks part of the Canal is 40 m, while the width of the unsheltered part is 65 m. Embankments surround the Canal from the South (except for the south-eastern part of the Primorskaja Bay). They create artificial islands numbered 1 to 8, counted from the port of Kaliningrad to the Primorskaja Bay. On the banks grow dense, deciduous forests, which provide protection for ships against southern winds. Between the earthworks there are passages with widths of up to 30 m and depths of 0.5-2.5 m. Their depths change, and there are shallows after the islands. Therefore, exits from the Canal to the Kaliningrad Oblast for yachts with a draft of more than 2 m are only in the open section and at the passage by the island no. 1. Near the northern banks of the Kaliningrad Sea Canal there are shallows with a depth of less than 1 m. Sailing in this area is very dangerous. Kaliningrad Sea Canal is fitted with navigational light signs. Especially many signs are on the areas of frequent ship manoeuvring and at the curves. On the south side of the Canal, every 100 m, there are joints painted on white, with digits indicating the distance measured from Baltiysk's entrance to the Canal.

Main fairway of the Kaliningrad Lagoon - marked with light buoys of red and white colours - leads from the Polish border to the island of Nasypnoj. At the section of passing the Krasnoflotsk, on the right side of the fairway, there are dangerous rocky shoals and sunken wrecks. After the Nasypnoj island, from the main fairway leads an approach-trail to the Kaliningrad Sea Canal. On the southern shore of the Lagoon there is a sheltered port — Uszakowo. At the end of the Kaliningrad Lagoon the fairway connects with the last section of the Sea Canal and port waters. from where the fairway leads to Kaliningrad, or, through an approach-trail, to the Kaliningrad Yacht Club, situated on the southern bank. The fairway is intended for yachts with a draft of up to 2 m.

Port Baltiysk - the Kaliningrad Yacht Club — the fairway is dedicated to yachts with a draft of up to 2 m. The trail leads from the The Baltiyskaya Kosa, through the Kaliningrad Sea Canal to the Primorskaja Bay, and farther on to the Kaliningrad Yacht Club through the Kaliningrad Lagoon. The length of the trail is 34.6 km.

Port Baltiysk - the Kaliningrad Yacht Club — the recommended way for yachts with a draft of up to 1.5 m. The fairway extends from The Baltiyskaya Kosa to the manmade island of Nasypnoj and then through the Kaliningrad Lagoon to the Kaliningrad Yacht Club. The length of the trail is 36.3 km. During navigation, particularly on the trail between Baltiysk and Nasypnoj Island, an extra caution is required and attention to the north-western section of the fairway, near which there are navigation hazards in the form of: protruding from the water metal parts of piers and concrete structures. Underwater are also poles and other unmarked obstacles.



Kaliningrad Sea Canal. Photo T. Kubacki

Hazards:

- rocky shoal Szczukinskaja, which extends 4 kilometers to the north from the shore in the area of Szczukino settlement.
- wreck situated 1.5 miles to the west of the village of Kurgannyi.
- in the Primorskaja Bay and in the southern part of the Lagoon there is a risk of contact with obstacles that are not marked on maps (fishing nets).

Primorskaja Bay is a non-navigational water body, inaccessible to foreigners. This tight reservoir sharply cuts into the Sambijski Peninsula, east of the port of Baltivsk. The northern and eastern shores of the Bay are covered with small bushes. reeds and grasses. On the west bank there is a forest, which gradually expands from the south to the north. In the central part of the Bay the depth is 3.3-3.9 m, which gradually decreases the closer to the banks. In the south-eastern part of the Bay there are shallows of sand and silt. The bottom of the reservoir is also silty, there, common is grey sand and, in some places, silt and shells.

Along the shores of the Bay, especially in the eastern part of the the reservoir, grow lots of seaweeds. Adjacent to the northern shoreline is the Kaliningrad Sea Canal over the length of 32.4 km, connecting Baltiysk with the port of Kaliningrad.

During the navigation season, the weather conditions of the Kaliningrad Lagoon are favourable. They are characterized by features of climate change in the south-eastern Baltic Sea. Good visibility facilitates continuous observation of the banks. although fog may occur during the summer. The wind speeds reaches up to 5-8 m/s — these range usually from south-western through western to northern winds. Storm occurrence is extremely rare. In addition to the breeze, the area is sometimes affected by a local wind, known as the "biern-sztajnwind", which blows from the sea to the shore and gradually subsides from the north-west. Depending on the wind, the Kaliningrad Lagoon experiences changes in water level. With wind ranging from southern to south-western the water level stays the same, however, winds blowing from south-west, west, up to north-west cause the water to raise, whereas the winds of other directions lower it relatively to the average sea level. Moreover, water currents of the Lagoon are directed towards the west. During storms and western winds the current may change its direction to the opposite

Sailing on the Kaliningrad Lagoon is not very difficult. However, sailors need to pay attention to the hydro-meteorological conditions, the water level and other local conditions. Due to the large number of shallows, it is recommended to constantly control own position. This is especially vital for units sailing near the south-eastern bank of the Kaliningrad Lagoon. When navigating, beneficial is orientation according to the lights and signs on the north shore of the Lagoon and the Kaliningrad Sea Canal. The most convenient signs are lights and the lighthouse in Baltivsk, the Isle of Nasypnoj (day only), range lights of Krasnofłtosk, waterside sign (southern) two high chimneys of the town of Svetly, the islands of the Kaliningrad Sea Canal, the church in Uszakowo, and the contours of houses of Pribrezhnyy and of the city of Kaliningrad.

Tourist use of the Kaliningrad Oblast

Passenger traffic on the Kaliningrad Lagoon is marginal and undergoes locally. In the 90s of the 20th century was the initialization of international cruises, mainly on hydrofoil boats, from Svetly, Kaliningrad and Baltiysk to the Polish ports of the Vistula Lagoon, i.e. of Frombork, Krynica Morska and Elblag. In the years 2006-2009 the passenger and yacht navigation activity between Russian and Polish part of the Lagoon was suspended. The signing of the new agreement concerning free sailing has opened a new opportunity for resumption of the tourist navigation on the reservoir. In addition, the agreement also gave units the ability to sail under banners of third countries.

The scope of the activity of yachts and powerboats on the waters of Kaliningrad Lagoon is not relative to its potential. The Russian part the Lagoon consists of 472.5 km2, which represents 56.2% of the surface area of the whole water body. In that part of the Lagoon there is only one operative sailing complex plus 10 ports and marinas, which most often are used for the purposes of fishing, cargo ports operations or administration. In the southern part of the Kaliningrad Lagoon lies: Krasnoflotskoje and Uszakowo ports and the Kaliningrad Yacht Club, in the northern part — ports in Baltiysk, Wzmorie, Primorsk and passenger harbour in Svetly. In addition, sailors and power-boaters also have the option to moor their units in the port of Kaliningrad. Unfortunately, port infrastructure and the facilities in the marinas are heavily decapitalized and in need of modernization. There is also a need to create a network of ports and yacht harbours around the water body.

Wzmorie (Взморье)

The marina is situated by the Kaliningrad Canal. The basin of the marina is located about 800 m north of the Canal's gutter. To the marina leads 10.5° range light, the depth at the approach is 2.5-3 m, by the wharfs: 2-2.5 m. In the axis of the light, on the opposite side there is a passage between embankments of the Canal. The passage, available for units with a draft of up to 1.5 m, leads to the waters of the eastern part of the Lagoon. The settlement, small fishing village, has a suburban bus connections to Kaliningrad.

Krasnofłotskoje (Краснофлотское)

The fishing harbour is located in the south-western part of the Kaliningrad Lagoon, on its south-eastern shore, close to the border city of Mamonowo. It is the only port in this part of the Lagoon which is a good shelter by virtue of its facilities. The approach to the harbour from the approach-buoy undergoes with the course of 166 ° indicated by a range light. The port, protected from the east and west by breakwaters, consists of two basins: the western, deep: 2–3 m, and the southern, shallow, available only for small units. The harbour belongs to the agricultural production cooperative, the Fishing Kołchoz "For the Country." The total area is 2.52 ha. There are mechanical workshops, warehouses, a 35 m-long pier and a mooring line with a length of 20 metres. In addition, the place also has a Rescue Station of the State Small Vessels Inspectorate in Kaliningrad Oblast (PIMJP of the Ministry of Emergency Situations) and the nautical hydro-meteorological station "Krasnofłotskoje".

Uszakowo (Ушаково)

Fishing harbour, which is located at the mouth of the river Prokhladnaya, flowing into the eastern part of the Kaliningrad Lagoon. The harbour does not offer good conditions for stay, but can be treated as a place of refuge in the event of a storm. The approach to the harbour by a narrow deepened canal according to a 143.5° range light. A good landmark is the high tower of the church at the settlement. The harbour is located at the riverbed and the small basin. The depths at the approach and by the partly reinforced shoreline are low, within the limits of 1-1.5 m.

Primorsk (Приморск)

The port lies at the mouth of the river Primorskaja. The entrance to the port is sheltered by two breakwaters. Depths range from 2 to 4 m. It is not used for recreational navigation.

Zatoka Primorska (Приморская бухта)

Between the towns of Baltiysk and Svetly there are 3 private indoor slipways for boats and cutters, however, no berths for units have been envisaged. The reservoir is closed for tourist navigation.

Baltiysk (Балтийск)

The port lies in front of the main control point and is available only with the consent of the border guards or police. Upon obtaining the consent, it is possible to moor by the Customs Office where reporting of own arrival is mandatory. In addition, there is a port with the airport located on The Baltiyskaya Kosa. It has a depth of 2 m to 3.5 m and 0.3 to 0.5 m by the shoreline. From the east, the port is protected with a broken pier made of reinforced concrete. It protects against western and northern winds. With the presence of strong south-eastern winds, up to one meter high waves can be observed at the port. Currently the port is not equipped.

The harbour in Kaliningrad. Photo R. Wasil



On its premises in Baltiysk there is the Youth Sports School dedicated to sailing and rowing. The port waters are federal property (of the Ministry of Defence of the Russian Federation). The shoreline structures (hangars) belong to a private owner.

Kaliningrad

The port lies at the mouth of the Pregolya River. Basins and port areas take up its south-eastern shores. Through the deep-water canal (the Kaliningradskij Morskoj Kanal), which final section is a canalized river, navigate sea-going vessels. Berths:

- **-"Ost-West" Yacht Club** (former sailing section of the 93rd Sports Club of the Baltic Fleet), located in Kaliningrad (no. 1 Peter the Great's Boulevard). It serves as a summer place for stay, while in winter for boat wintering. Capacity 30 units. No devices and equipment (exception access to power mains);
- "Galeon" Yacht Club by the New Pregolya River;
- "Szturman" Yacht Club, which is located on the north shore by a bend of the River, in a place where island of Kosse splits the River's stream, the facility has 10 berths;
- The Sea Commercial Port of Kaliningrad (KMPH). For yachts, intended is the bridge no. 3 in the "Wolnaja" harbour. There is toilet, shower and drinking water.

Marina of the Yacht Club in Kaliningrad

Located in Szossejnoje, on the southern shore of the eastern part of the Kaliningrad Lagoon. The approach to the marina should begin from the buoy no. 15, then with the course of 115° to the axis of the range light, leading to the marina, and continue along the line of the range light (course 143°). The structures of the Club are situated on the cape, protruding off the shoreline on the waters of the Lagoon, the quay is located on its eastern shore. Depth right by the quay is more than 2 m. In the basin of the marina, which is created by a cut-off islet and a shallow with a small bay, it is deeper.

The yacht club has water, 220 V and 380 V electricity and telephone. Available are toilets, shower and sauna, as well as a workshop. The marina offers accommodation services. There is a possibility to refuel, repair sails and equip yachts.

FishBoat

Marina for local owners of motor-yachts, near the Museum of Seas and Oceans. Equipped with y-boms, a crane and a workshop. In addition, there is access to electricity and water.

Svetly (Светлый)

This passenger harbour lies on the north bank of the Kaliningrad Sea Canal, right by the town boulevard. To the centre of the city it is about 0.5 km. From there, good public transport to Kaliningrad. Yachts can stop briefly at the terminal built for the purposes of ships and hydrofoils that arrive from Polish ports. The length of the mooring line $-30\,$ meters, and the depth is up to 2 meters. In the terminal building there is toilet, water and a phone. Due to the traffic in the canal, mooring there is unsafe. Only short stay is possible. By the eastern end of the city lies the base of the rowing club of the town of Svetly. The depth by the wharf is up to 0.5 m.

Pregolya River. Drawbridge in Kaliningrad. Photo R. Wasil



Inner waters

General rules for sailing on the internal water routes of the Russian Federation has been approved by the ordinance of the Ministry of Transport FR (FR-Russian Federation) no. 129 of 14 October 2002. Enforcement of the safety requirements of ships at the internal water routes of Kaliningrad Oblast performs the Kaliningrad Line Division of the State Inspection of Inland Waterway Navigation in the North-Western Basin.

Currently for motor-sailer yachts, the following ports are opened:

- Port Baltiysk border and customs control is exercised at the Commercial Port (the former basin no. 3). The town and the port are closed for foreign yachts. However, it is possible to a get special permission via the Baltic Sea Sailing Association or Kaliningrad Sailing Federation.
- **Port of Kaliningrad** is open to vessels belonging to other countries. The trail leads via the port of Baltiysk and farther on:
- for yachts with a draft of more than 2 m: through the Kaliningrad Sea Canal;
- for yachts with a draft of less than 2 m: either by the "Awos" fairway to the island of Nasypnoj or by the Kaliningrad Sea Canal to the Primorska Bay, and then through the Kaliningrad Lagoon to Kaliningrad. Inside the Kaliningrad Oblast sailing is prohibited for yachts with banners of other countries with exception of the Kaliningrad Lagoon and the Kaliningrad Sea Canal.



The harbour in Kaliningrad. Photo R. Wasil

Kaliningrad. Photo R. Wasi



Border procedures:

The agreement signed with Russia on small border traffic concerns only land crossings, thus all traffic on the water involves consular visas. The visa can be obtained with an invitation, which shall be issued by the Regional Sailing Federation in Kaliningrad. In the Vistula Lagoon and the Gdańsk Bay areas, for years Polish clubs and sailing associations have been signing cooperation agreements with their counterparts in the Kaliningrad Oblast of the Russian Federation. On the basis of those agreements mutual invitations are being issued to participate in organized by associations and clubs sailing events.

Documents necessary to obtain the visa:

- 1. Original of the invitation (via yacht club),
- ${\bf 2.\, Visa\, application}$ (when filling out the application, it is required to specify
- the place of submitting consulate or visa centre),
- 3. Photo (passport format),
- **4. Valid Passport** for at least 180 days longer than the validity of the visa, which is applied for,
- 5. Photocopy of the previous visa visa with stamps, proving its use,
- 6. Proof of membership to a club or photocopy of sailing document,
- 7. Calendar of Polish sailing event (regional and club events),
- 8. Calendar of Russian events (regional and club events).
- 9. Valid insurance for a period of stay in the FR in the case of single-entry and double-entry visas, while for multiple-entry visas it should be valid during the first stay.

Border check:

After entering the Kaliningrad Lagoon it is required to report oneself to Baltiysk Traffic, which can be contacted via channel 74. Next, report to border services and the administration of the port own position and the time needed to get to the port in Baltiysk, which is the only sea crossing in Kaliningrad Oblast. Right before entering the Baltiysk, another report through radio is required to obtain entry permission. Border check takes place in basin no. 3. It should be kept in mind that there is no possibility to reach the Baltiysk itself by water. The town due to its military nature is closed for tourist and sports yachts.

Documents necessary for passing border checks:

Before departure, the photocopies of the documents of yacht and passports of the crew must be made. Preferably three copies of each for entry and another three for exit, since control is done by representatives of three separate border guard organs and each of that organs requires a copy of the documents. Besides, this improves the checking procedure and definitely makes it shorter. If we sail on chartered yacht, it's a good idea to have a power of attorney of the owner (copied the right amount of times), authorizing the use of the yacht.

Transit

In Poland to Poland transit, visas are not required. An intent to cross the border must be reported to the Russian border services two weeks earlier. Thus, the idea of sailing from Frombork to Gdansk without prior completion of these formalities is out of the question.

Detailed information provides:

Elblag and Regional Sailing Association and the Elblag Yacht Club Phone: 55 232 67 20, fax: 55 236 19 60 e-mail: eozz.elblag@onet.pl or biuro@jachtklub.elblag.pl

Part III. The ABC of Sailing: Before You Sail on the Żuławy Loop The Żuławy Loop

Proposed Trip Routes









Malbork castle. Photo Urząd Miasta Malborka

I. The Great Loop of Żuławy

The route, with a suggested division into days:

- 1: Gdańsk Przegalina Gdańska Głowa Rybina;
- 2: Rybina Osłonka Elbląg;
- 3: Elblag Malbork;
- 4: Malbork Biała Góra;
- 5: Biała Góra Tczew:
- 6: Tczew Przegalina Gdańsk.

Rivers: the Motława, the Martwa Wisła, the Vistula, the Szkarpawa, the Nogat, the Jagielloński Canal, the

Elblag River. Note: This is a houseboat route. Without a skipper certificate, you can navigate only on inland waterways. The section from Górki Zachodnie through

Polski Hak to Nowy Port cuts through internal wa-

ters where the certificate is required. Difficulty level: With good weather, this is a route for every boater. When conditions are less favourable, the Vistula becomes wavy and more difficult to navigate. Between Biała Góra and Przegalina, navigation poses no problems as long as we obey the signs on the banks. On the Szkarpawa and the Nogat, vegetation

makes it necessary to clean the screw. **Duration:** 6 days of leisurely sailing, about 24 hours in total. A possible modification: start and end in Rybina. The route then requires 4 days of sailing and is c. 130 km long.

Length: c. 200 km

The number of locks to pass through: 7

The number of drawbridges, swing bridges, and pontoon bridges: 7

The number of ferry crossings: 1

Major attractions: Historic towns worth visiting: Gdańsk, Elbląg, Malbork, Tczew. Locks: Przegalina, Gdańska Głowa, and 4 locks on the Nogat; drawbridges in Drewnica and Rybina, and other hydrotechnical facilities on the route; wild spots and nature reserves. Vessels fit for the route:

Yachts with a draught up to 1.4 m (4.6 ft) (during low water stages on the Vistula, check water level announcements), including sailing boats, provided that their masts can be lowered before some bridges (the lowest clearance is 3.7-3.3 m / 12.1-10.8 ft, depending on water level).

Starting points: Gdańsk. Still, because the route is a loop, it is up to you to choose the starting point.

Water node in Rybina. Photo iczarter.pl



II. The Little Loop of Żuławy

The route, with a suggested division into days:

1: Rybina – Sztutowo – Kąty Rybackie;

2: Kąty Rybackie – Osłonka – Rybina.

Rivers and reservoirs: the Wisła Królewiecka, the Vistula Lagoon, the Szkarpawa

Difficulty level: A route for responsible sailors. Remember that the Vistula Lagoon is classified as internal maritime waters. Proper licences and maritime equipment are obligatory here.

Duration: 2 days of recreational sailing, about 8 hours in total. A possible route modification for houseboats: Rybina — Sztutowo — Rybina. This makes it a one-day trip for about 2.5 hours of sailing (15 km).

Length: c. 45 km

The number of drawbridges, swing bridges, and pontoon bridges: 3 Major attractions:

Drawbridges in Rybina and Sztutowo. Water birds, abounding near the entrance to the Vistula Lagoon. The Museum of the Vistula Lagoon, enchanting beaches, fried fish shops and fish smoke-houses in Kąty Rybackie.

Vessels fit for the route:

The best are centreboard/ballast keel yachts with a draught up to 1.4 m (4.6 ft).

Possible starting points: Rybina, but since the route is a loop you can also start in Sztutowo or Kąty Rybackie.



A view from the bridge in Sztutowo towards Kobyla Kępa. Photo H. Gonera



The brickyard before Sztutowo. Photo H. Gonera











The arcaded house in Żelichowo. Photo M. Opitz



III. To the Capital of the Vistula Żuławy

Route: Rybina – the mouth Tuga – Żelichowo – Nowy Dwór Gdański – Rybina. Rivers: the Szkarpawa, the Tuga.

Difficulty level: A route for most boaters, although problems may occur with cleaning the screw or the cooling system clogged with weeds.

Duration: 1 day, c. 5–6 hours in total.

Length: c. 40 km

The number of drawbridges, swing bridges, and pontoon bridges: 3 Maior attractions:

Drawbridge in Rybina, drawbridges out of order in Tujsk and Nowy Dwór Gdański, and other hydrotechnical facilities abounding along the route, such as Chłodniewo pumping station. The village of Żelichowo (a Żuławy-style arcaded house known as the Little Dutchman, the Cemetery of Eleven Villages, and a Gothic church), Nowy Dwór Gdański (the Żuławy Museum). Beautiful and quiet spots along the route.

Vessels fit for the route:

Yachts with a draught up to 1 m (3.3 ft) and a height up to 2 m (6.6 ft, depending on the Tuga's changeable water level).

Possible starting points: yacht harbour in Rybina.



The drawbridge in Rybina. Photo M. Opitz







Visłoujście fortress in Gdańsk. Photo M. Opit:



Marina Gdańsk. Photo P. Brozdowsk



IV. From Gdańsk to the Vistula Lagoon

The route, with a suggested division into days:

1: Gdańsk – Drewnica:

2: Drewnica — the Vistula Lagoon ports and harbours (Kąty Rybackie, Krynica Morska, Tolkmicko, Frombork)

Rivers and water bodies: the Motława, the Martwa Wisła, the Vistula, the Szkarpawa, the Vistula Lagoon.

Difficulty level: The route from Gdańsk to the Vistula Lagoon can be covered by any boater. The Vistula Lagoon and the Nowy Port - Polski Hak - Górki Zachodnie section are internal waters. Proper licences and maritime vessel equipment are obligatory here.

 $\label{eq:Duration:2} \textbf{Duration: 2 days of sailing, c. 10 hours in total, which makes c. 5 hours a day.} \\ \textbf{Length: c. 60 km}$

The number of locks: 2

The number of drawbridges, swing bridges, and pontoon bridges: 5

Major attractions: the Przegalina Lock, the Gdańska Głowa Lock, drawbridge in Sobieszewo, drawbridges in Drewnica and Rybina, arcaded houses in Żuławki, Osłonka pumping station, wild spots and nature reserves.

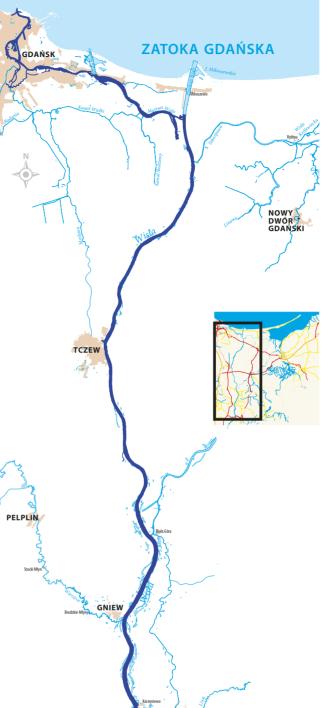
Vessels fit for the route: Yachts with a draught up to 1.4 m (4.6 ft), also sailing yachts, which can pass under the drawbridge in Przegalina thanks to route modernisation.

Possible starting points: Gdańsk.



Przegalina Lock. Photo D. Paciorek





A view of the Vistula and the Mątawa Forest. Photo M. Opitz



V. Down the Vistula to Gdańsk

The route, with a suggested division into days:

1: Korzeniewo – Tczew:

2: Tczew – Gdańsk.

Rivers: the Vistula, the Martwa Wisła, the Motława. The section from Górki Zachodnie through Polski Hak to Nowy Port are internal waters and sailing there requires a skipper certificate.

Difficulty level: From Korzeniewo to Biała Góra — wing dams projecting far into the river, poorly visible at medium or high water. In the summer, the water level may be low. The closer to Tczew and Przegalina, the easier it is to find the current and the greater the transit depth becomes.

Duration: 2 days of leisurely sailing, about 8 hours in total.

Length: c. 80 km

The number of locks: 1

The number of drawbridges, swing bridges, and pontoon bridges: $\ensuremath{\mathbf{2}}$

The number of ferry crossings: 1

Major attractions: Historic towns worth seeing: Gniew, Tczew, Gdańsk, and many villages of tourist interest. The Przegalina Lock, the drawbridge in Sobieszewo, and other hydrotechnical facilities the route abounds in. Wild spots and nature reserves.

Vessels fit for the route:

Yachts with a draught up to 1.4 m (4.6 ft), incl. sailing yachts.

Possible starting points: Korzeniewo.



The windmill in Palczewo. Photo H. Gonera





VI. Around the Vistula Lagoon

The route, with a suggested division into

- 1: Elblag Suchacz;
- 2: Suchacz Tolkmicko Krynica Morska;
- 3: Krynica Morska Piaski;
- 4: Piaski Nowa Pasłęka Braniewo;
- 5: Braniewo Nowa Pasłęka Frombork;
- 6: Frombork Katy Rybackie;
- 7. Kąty Rybackie Elbląg.

A weekend trip:

- 1. Elblag Katy Rybackie (Friday);
- 2. Kąty Rybackie Krynica Morska (Saturday);
- 3. Krynica Morska Elblag (Sunday).

Rivers and water bodies: the Vistula Lagoon,

the Pasłęka and the Elblag Rivers.

Ports and harbours:

Kąty Rybackie – an old fishing harbour, a sailing harhour.

Krynica Morska — a fishing and yacht port;

Piaski — a port (very shallow, the depths given

on maps may be out of date):

Nowa Pasłęka – Ujście (the port of Maritime Office), Stara Pasłęka – Dom Rvbaka:

Stara Pasłęka – a sailing harbour;

Braniewo – a sailing harbour; sail along the Pasłeka with mast down; Frombork – a port;

Tolkmicko — a port and a sailing harbour;

Kadyny – a harbour (very shallow; only in the daytime with calm sea); Suchacz — a harbour of the Vistula Lagoon Sailing Enthusiasts' Club;

Nadbrzeże – a sailing harbour Kamienica Elbląska – a port

Jagodna – a harbour (very shallow);

Elblag - Scout Water Centre (HOW) "Bryza" and Yacht Club Elblag (from the Lagoon you can get there without putting down the mast), after putting down the mast: "Fala" harbour; Sigismund Augustus Boulevard Quay sailing harbour.

Difficulty level: Medium, depending on weather conditions and especially on wave height. With fog or limited visibility, navigation using GPS may be necessary. Most shoals are sandy; the only dangerous place is the stones near the village of Różaniec — between Frombork and Nowa Pasłeka. Large clusters of nets occur on the Lagoon, often inadequately marked or completely unmarked There are fewer and fewer nets year by year.

Duration: 7 days of leisurely sailing.

Maior attractions:

Frombork – a complex of historic buildings on Cathedral Hill (the cathedral, the episcopal palace, a belfry, the Copernicus' Tower); the Nicolaus Copernicus Museum with an astronomical observatory, a planetarium, and the little-known History of Medicine Museum; Katy Rybackie – the Museum of the Vistula Lagoon; Krynica Morska – the lighthouse (beautiful views of the Vistula Spit, the sea, and the Lagoon); Tolkmicko – the station building and the Holy Stone – an erratic boulder (a natural monument); Kadyny – a palace and park complex, the oak alley with a 700-year old oak bearing Jan Bażyński's name; Suchacz castle ruins; Elblag — the renovated Old Town, footbridges converted into drawbridges (since 2013); Pęklewo; Nadbrzeże – old brickworks at the water; Braniewo - basilica minor of St Catherine, Sanctuary of the Feast of the Cross, municipal swimming pool.

Vessels fit for the route:

Yachts with a draught up to 1.4 m (4.6 ft) – still, they will not enter every port and have to keep to the marked fairways. The best are centreboard/ ballast keel yachts with a draught up to 1 m (3.3. ft).

Possible starting points: Recommended starting / ending points: Elblag, Krynica Morska, Nowa Pasłęka.





The Vistula Lagoon. Photo P. Pasieczny



Elblag Beacon, Photo P. Salecki



Information

112

997

58 620 34 22

55 239 33 77

55 644 33 03

55 247 86 92

channel 71 UKF

Emergency telephone numbers

Rescue Coordination Centre

Dolico

| Folice | 337 |
|-----------------------------------------------------------|----------------------------|
| Fire Brigade | 998 |
| Emergency Ambulance Service | 999 |
| Border Guards Górki Zachodnie | 58 524 23 02 |
| Border Guards Elbląg | 55 237 64 00 |
| Maritime Search and Rescue Station SAR Tolkmicko | 55 231 61 55 |
| Maritime Search and Rescue Coordination Centre SAR Gdynia | 58 620 55 51 505 050 971 |
| Maritime Search and Rescue Station SAR Górki Zachodnie | 58 307 31 12 |
| Coastal Search and Rescue Station SAR Sztutowo | 55 247 80 54 505 050 976 |
| | channels 11; 16 VHF |
| Coastal Rescue Station Gdańsk Świbno | 58 308 05 23 505 050 982 |
| Harbour Master's Offices of ports on the Vistula Lagoon | channel 71 UKF |
| Gdańsk Harbour Master's Office | channel 14 UKF |
| Emergency channel (calling for help) | channel 16 UKF |
| Inland Navigation Office in Gdańsk | 58 301 84 14 |
| Regional Water Management Board in Gdańsk | 58 326 18 88 |

Voivodeship Coordination Centre of Maritime Rescue of the Pomeranian Volunteer Water Rescue Service (WOPR) (operating across the

Voivodeship Coordination Centre of Maritime Rescue of the Pomeranian Volunteer Water Rescue Service (WOPR) (operating in towns and communes on the Baltic coast)

Assistance on the navigation route

If you need assistance on the navigation route, please call the relevant water managment station:

| VISTULA 847–904 km – Korzeniewo Water Management Station | 516 177 685 55 275 18 92 |
|--------------------------------------------------------------------------|----------------------------|
| VISTULA 904–942.3 km, MARTWA WISŁA – Przegalina Water Management Station | 506 129 588 58 308 05 17 |
| NOGAT, SZKARPAWA, JAGIELLOŃSKI CANAL – Malbork Water Management Station | 516 060 249 55 272 34 25 |
| SZKARPAWA – "Szkarpawianka" Yacht Service | 570 065 222 |
| | |

Tourist Information Points

Weather forecast from IMGW Gdvnia

7.05 AM. 1.05 PM. 7.05 PM

VISTULA

| Gniew: Tourist Information Point in Gniew, ul. Plac Zamkowy 2 | 58 535 25 37 |
|----------------------------------------------------------------------------|--------------------------|
| Mon-Fri 9.00 AM-5.00 PM | |
| Tczew: Tczew Sports and Tourism Centre, ul. Wojska Polskiego 28A | 58 531 56 02 |
| Mon-Fri 8.00 AM-3.00 PM | |
| MOTŁAWA | |
| Gdańsk: ul. Długi Targ 28/29, Mon-Sat 9.00 AM-5.00 PM, Sun 9.00 AM-4.00 PM | 58 301 43 55 683 54 85 |

NOGAT 58 647 47 47 Malbork: Tourist Information Centre, ul. Kościuszki 54 WISŁA KRÓLEWIECKA

Sztutowo: ul. Gdańska 55, Mon-Fri 9.00 AM-5.00 PM (open in summer season), 55 247 80 88 telephone information available all year round 55 247 80 88

Elblag: ul. Stary Rynek 25 May-September: Mon-Sun 10.00 AM-6.00 PM, Oct-Apr: Mon-Fri 10.00 AM-5.00 PM VISTULA LAGOON

| Frombork: ul. Portowa 4 (open in summer season) | 55 243 70 52 |
|----------------------------------------------------------------------------------|--------------|
| Kąty Rybackie: ul. Rybacka 64, Mon-Fri 9.00 AM-5.00 PM (open in summer season) | 55 247 87 86 |
| Tolkmicko: Municipal Culture Centre, ul. Świętojańska 1, Mon-Fri 8.00 AM-8.00 PM | 55 231 61 82 |
| Krynica Morska: ul. Gdańska 108 | 55 247 63 76 |

Braniewo: ul. Katedralna 7 Mon, Tue, Thu, Fri 9.00 AM-5.00 PM, Wed 9.00 AM-3.00 PM, Sat 8.00 AM-2.00 PM

Stegna: ul. Gdańska 60, 1 | ul-30 Aug: Mon-Sat 8.00 AM-8.00 PM, Sun 10.00 AM-6.00 PM, outside summer season: Mon-Wed 7.00 AM-3.00 PM, Thu, Fri 7.00 AM-4.00 PM

Nowy Dwór Gdański: ul. Wejhera (Chopina square), Jun-Aug: Mon-Fri 10.00 AM-4.00 PM

Recommended museums

| Museum of Żuławy | |
|-----------------------------------------------------------------------------------------------------|-------------------------|
| Nowy Dwór Gdański, ul. Kopernika 17, Tue-Sun 11.00 AM-4.00 PM (May-Sep), 11.00 AM-3.00 PM (Oct-Apr) | 55 247 57 33 |
| Archaeology and History Museum, | |
| Elbląg, ul. Bulwar Zygmunta Augusta 11, Tue-Sun 9.00 AM-5.00 PM | 55 232 72 73 |
| Malbork Castle Museum, ul. Starościńska 1, | |
| 13 Apr-30 Sep: exhibitions 9.00 AM-7.00 PM, castle grounds 9.00 AM-8.00 PM, | |
| 1 Oct-2 Apr: exhibitions 10.00 AM-3.00 PM, castle grounds 3.00 PM-4.00 PM | 55 647 08 00 |
| Museum of the Braniewo Region, Braniewo, ul. Gdańska 19 (in the Vocational Schools Complex) | |
| Museum of the Town of Malbork, ul. Kościuszki 54 | 55 647 47 47 |
| Nicolaus Copernicus Museum, Frombork, ul. Katedralna 8, Tue-Sun 9.00 AM-4.00 PM | 55 244 00 71 |
| Museum of the Vistula River, Tczew, ul. 30 stycznia 4 | 58 530 22 52 wew. 21/23 |
| Arts Factory, Tczew, ul. 30 Stycznia 4, | |
| Mon-Fri 8.00 AM-6.00 PM, Sat, Sun 10.00 AM-6.00 PM, Sat, Sun outside summer season 10.00 AM-4.00 PM | 58 530 44 81 |
| Vistula Lagoon Museum, Kąty Rybackie, ul. Rybacka 64, Mon-Fri 8.00 AM-4.00 PM | 55 247 87 77 |
| National Maritime Museum, Gdańsk, ul. Ołowianka 9–13, Tue-Sun 10.00 AM-4.00 PM | 58 301 86 11 |

Locks

Opened on request at specific hours. Please prepare change to pay for the lock. You can call the lock staff half an hour before planned arrival at the lock - phone numbers are provided below. Information on the opening hours of individual locks are available on the website of the Regional Water Management Board in Gdańsk (www.rzgw.gda.pl) in the tab "Szlaki żeglowne" (Navigation routes) / "Czas pracy śluz i pochylni, mosty" (Operating hours of locks and inclined planes, bridges).

Note! Before setting out, please check the water level messages. When the water level in the Vistual is high, the following locks are closed: Gdańska Głowa, Przegalina and Biała Góra.

LOCK ON THE SZKARPAWA

GDAŃSKA GŁOWA (0.25 km) – SZKARPAWA – VISTULA

Phone no. to lock staff: 55 247 17 07 | 735 094 723

LOCKS ON THE NOGAT

MICHAŁOWO (38.59 km)

Phone no. to lock staff: 55 247 14 17 | 511 603 316

RAKOWIEC (23.95 km)

Phone no. to lock staff: 55 272 83 71 | 515 549 552

SZONOWO (14.50 km)

Phone no. to lock staff: 55 272 20 49 | 509 219 551

BIAŁA GÓRA (0.41 km) – NOGAT – VISTULA

Phone no. to lock staff: 55 277 16 91 | 797 511 541

LOCK ON THE MARTWA WISŁA

PRZEGALINA (0.55 km) – MARTWA WISŁA – VISTULA

Phone no. to lock staff: 58 323 93 76 | 786 876 453

Bridges

Drawbridges are opened at specific hours. Call the staff for the exact timetables of individual drawbridges. Phone numbers are provided below. SZKARPAWA

GDAŃSKA GŁOWA (0.25 km) – swing walkway

The walkway is opened during the operating hours of Gdańska Głowa lock. Detailed information available on the website of the Regional Water Management Board in Gdańsk (www.rzgw.gda.pl) in the tab "Szlaki żeglowne" (Navigation routes) / "Czas pracy śluz i pochylni, mosty" (Operating hours of locks and inclined planes, bridges). Phone no. to staff:

55 247 17 07 | 735 094 723

DREWNICA (2.85 km) - road drawbridge

The bridge opening hours are provided on the website of ZDP (District Roads Authority) in Nowy Dwór Gdański

(www.bip.zdpndg.pl) in the tab: Menu przedmiotowe / Most Drewnica (Drewnica bridge). Phone no. to staff: 55 247 22 35 | 882 065 597

RYBINA (14.98 km) - narrow gauge railroad swing bridge.

In the summer season, the bridge is open from morning till evening, and closed only when train passes through.

Outside the summer season, the bridge is opened on request. The closing hours are provided on the website

of the Żuławy Commuter Railway (www.kolejzulawska.pl) in "Aktualności (News)" tab. Phone no. to staff:

RYBINA (15.45 km) - road drawbridge

The bridge opening hours are provided on the website of ZDW (Voivodeship Roads Authority) in Gdańsk (www.zdw-gdansk.pl) in the tab: Obiekty mostowe (Bridges) / Godziny otwarcia mostów zwodzonych (Drawbridges opening hours). Phone no. to staff: 55 247 86 17 | 509 498 395 WISŁA KRÓLEWIECKA

RYBINA (0.15 km) — road drawbridge

The bridge opening hours are provided on the website of ZDW (Voivodeship Roads Authority) in Gdańsk (www.zdw-gdansk.pl) in the tab: Obiekty mostowe (Bridges) / Godziny otwarcia mostów zwodzonych (Drawbridges opening hours). Phone no. to staff: 55 247 86 17 | 509 498 395

$\textbf{SZTUTOWO} \; (6.50 \; \text{km}) - \text{road drawbridge}$

The bridge opening hours are provided on the website of ZDP (District Roads Authority) in Nowy Dwór Gdański (www.bip.zdpndg.pl) in the tab: Menu przedmiotowe / Most Drewnica (Drewnica bridge). Phone no. to staff: 55 247 22 35 |667463812 | 606321559



The Szonowo Lock Photo H. Gonera

MARTWA WISŁA

PRZEGALINA (0.55 km) - road drawbridge

The bridge is opened during the operating hours of Przegalina lock. Detailed information is available on the website of GZDIZ (Gdańsk Roads and Greenery Authority) (www.gzdiz.gda.pl) in the tab: Drogi (Roads) / Harmonogram Obiektów Zwodzonych (Drawbridges timetable).

Phone no. to lock staff:

514 953 638

SOBIESZEWO — road drawbridge

The opening hours of the bridge are provided on the website of GZDIZ (Gdańsk Roads and Greenery Authority) (www.gzdiz.gda.pl) in the tab: Drogi (Roads) / Harmonogram Obiektów Zwodzonych (Drawbridges timetable). Phone no. to staff:

The drawbridge may not be opened automatically at the specified hour, but only upon a sound signal from the vessel, or a phone call – due to large traffic of yachts which sail in the vicinity of the bridge but do not cross. **Caution!** In the vicinity of the bridge, the bottom does not hold the anchors! **ELBLAG**

NOWAKOWO — pontoon road bridge

The bridge opening hours are provided at www.zdp.bip.powiat.elblag.pl. Phone no. to staff:

55 231 27 27

602 218 346

55 247 24 01

ELBLAG- drawbridges: G'orny (Niski) and Dolny (Wysoki) [Upper (Low) and Lower (High)]

Both bridges are operated from the control site at Dolny bridge. Phone no. to staff:

PASŁĘKA CANAL

Nowa Pasłęka - road drawbridge; self-operated

TUGA

Nowy Dwór Gdański – road drawbridge

The bridge is managed by the Municipal Office in Nowy Dwór Gdański. Website: www.miastonowydwor.pl, phone no.

MOTŁAWA

Gdańsk – Old Town – drawbridge walkway to Ołowianka island

The walkway opening hours are provided on the website of GZDIZ (Gdańsk Roads and Greenery Authority) (www.gzdiz.gda.pl) in the tab: Drogi (Roads) / Harmonogram Obiektów Zwodzonych (Drawbridges timetable). Phone no. to staff:

516 970 048

Gdańsk – Old Town – swing walkway to Wyspa Spichrzów (Granary Island)

Walkway under construction. Planned opening in 2019.

 $\textbf{www.zalewwislany.pl} - \textbf{pilot book of the waterways of the } \dot{\textbf{Z}} \textbf{u} \textbf{lawy Loop}$

The routes of the Żuławy Loop may be divided into river and canal waterways as well as maritime internal waters. Each pose specific threats to boaters and have their characteristic features. This chapter provides you with a compendium on how to navigate these waters safely.

Boater's Decalogue

- Route. Plan the route and decide on berthing places. Inform your loved ones about it.
- **2. Communication**. Have a mobile phone with you, always in a waterproof bag.
- Weather. Check weather forecasts before setting off; observe the sky and the water during the trip.
- 4. Safety. Keep life jackets within easy reach. When wind strength is above 4B (7 m/s, 25 km/h), put on a life jacket regardless of your swimming skills. Children and non-swimmers should wear life jackets during the trip as well as in ports.
- Right of way. All commercial and merchant vessels have the right of way before pleasure vessels.
- Nets. Observe water surface. Most nets are marked. Do not sail into them and do not move them.
- 7. Power lines.

Captain's Tips

A threat to vessels with masts. Before the trip, look up the heights of power lines on your route. **Caution!** The heights given for power lines refer to the figures on the information boards placed on river banks by proper services. The map publisher cannot be held accountable for such information.

- 8. Capsize. In danger of a capsize, the cabin of the vessel should be closed and the crew should be on deck. Sudden manoeuvres should be avoided. In the event of a capsize, the crew should not move away from the capsized yacht until the arrival of a rescue vessel.
- **9. Environment.** Get strong rubbish bags and dispose of them in designated places. Do not pour away washings with chemicals into the water. Do not allow fuel or motor oils to spill.
- 10. Respect nature. Do not pull in to the bank forcing your way through riverside vegetation. Do not destroy water or terrestrial vegetation. Navigate along the middle of the river, where there is no vegetation. Light bonfires in designated places only. Leave places in order.

Caution! The Vistula Lagoon is maritime internal waters, suitable for experienced sailors. Crews without sailing experience will feel safer on the waters of the Żuławy Loop. Common sense and humility before water and wind should be exercised on all waters.

83

What to sail on?

The rivers of the Żuławy Loop

Almost any vessel is fit for navigating them but, owing to weak current, the best are those equipped in motors, e.g. yachts, sailing boats, or houseboats. Due to small depths, check river stages each time, since they fluctuate periodically. Rivers recommended to kayakers are: the Tuga, the Wierzyca, the Liwa, the Pasłęka, and the Motława.

The Vistula Lagoon

A lift keel yacht is definitely the best choice. The older types perform well: Venus, Carina, Nash, Giga, or Chochlik, but there are fewer and fewer yachts of these kinds on water now. Of the newer types, we recommend the larger ones: Solina 800, Tango 30, Antila 26, Tes 32, Janmor 31. Smaller barge yachts will perform worse during high wave, which is frequent on the Lagoon. The draught of the yacht should be 50–80 cm (1.65–2.6 ft). The Vistula Lagoon is a very shallow water body despite the periodic dredging of selected ports. When sailing on a yacht with a greater draught (e.g. Nefryt), you may be unable to enter some ports (e.g. Piaski) or run the risk of scraping the yacht against the bottom.

Where to hire a yacht?

On the trails of the Żuławy Loop and on the entire Vistula Lagoon there are only a few marinas where it is possible to charter a yacht. Shipowners and companies have a total of about 30 sailing yachts available, but the number is growing. The number of people interested in sailing on houseboats (motor barges) is on the increase as well. Houseboats can be chartered in Elblag, Nowa Pasłęka, Rybino, Żuławki and Malbork.

An interesting solution is the charter of a yacht in Itawa Lake District, in Itawa or Ostróda, by two crews. The first crew sets off from Itawa and, after sailing through the Elblag Canal, finishes the trip on the Vistula Lagoon, in a selected harbour on the Żuławy Loop trail or in Gdańsk. The other crew sails the way back. This allows you to avoid covering the same route twice. In Gdańsk you can hire yachts with a draught appropriate for Gdańsk Bay but not necessarily for the Vistula Lagoon.

Crew qualifications

The rivers of the Żuławy Loop

The applicable laws do not require a special license. You can charter sailboats and houseboats on the river of the Loop without a skipper certificate or motorboat helmsman certificate. Sailboats with hulls longer than 7.5 m or motorboats with engine power above 10 kW require relevant certificates issued by the relevant Polish yachting or motorboating associations. Houseboats (i.e. motorboats with engine power up to 75 kW and hull length up to 13 m which, by design, cannot sail faster than 15 km/h), a certificate is not required, but the helmsman should complete a water safety training. The training should be given by the owner of the vessel or a person authorized by the owner. The document confirming the completion of such training should be kept on board by the skipper of the vessel.

The Vistula Lagoon

Since 2007, non-commercial seagoing yachts are exempt from the obligation to have Safety Certificates (KB), Movable Equipment Inventories (WWR), or other documents. In principle, it is allowed to sail on the waters of the Vistula Lagoon on any inland sailboat. However, the person in charge of the vessel must be a licensed yacht skipper.

What equipment should a yacht have

on the Vistula Lagoon?

Recommended essential equipment:

- a storm jib
- maps
- an orange smoke buoyred signal flares
- a VHF radio
- a GPS device
- safety harness
- a life buoy with a heaving line

Other essential items are:

- binoculars
- a foghorn
- a torch with spare batteries

life preservers or automatic life jackets

- a chemical toilet
- a second anchor
- a bilge pump

Useful: spare lines, a second stay, a topping lift.

Caution! It is good to have a well-equipped boatswain's toolbox with you. In the Żuławy Loop, sailors will only find shopping possibilities in Gdańsk, (modest) in Elblag and in Iława.

The technical condition of the yacht

The technical condition of the vessel should be thoroughly examined before every trip: running and standing rigging, sails, as well as fuel and water supply. When planning to enter the Vistula Lagoon, you should also inspect the yacht's ballast. Remember that, on the water, your vessel may be the only one around, with no one to ask for help.

At what times to navigate?

For safety reasons, navigate **the rivers of the Żuławy Loop** from dawn to dusk only. The sailing hours will also depend on lock opening times. Before setting off, check what stretch it will be possible to cover during one day and plan appropriate stops. A motor vessel covers an average of 6 to 8 km per hour. **On the Vistula Lagoon** also sailing by night is allowed. After dark, the yacht must have proper documents and equipment: navigation lights, properly fitted safety equipment (e.g. safety harness with lights attached). **Caution!** When navigating by night, you may easily get entangled in unmarked fishing nets.

How to lock?

On the Żuławy Loop there are 6 locks enabling passage between different levels. Locking requires concentration and good organisation. Optimally, entering a lock should be arranged half an hour in advance with the facility staff. Telephone numbers are given in the Information section (See p. 82).

Approaching a closed lock, moor the vessel in the outer port and wait for the gate to open. The lock staff usually open one gate, which gives you c. 4.5 m (14.7 ft) width for performing the entrance and exit manoeuvres.

Before entering the lock, prepare the mooring lines in order to moor the vessel to bollards, to a mooring ring, or to a ladder inside the lock. Due to the changes in water level, always be ready to slip the moorings while inside the lock. Enter the lock slowly, but maintain sufficient gear to be able to manoeuvre. Two people are enough for locking: one at the helm and the other to handle the mooring. Experienced boaters will manage on their own.

Caution! During high water stages on the Vistula, the locks connecting it with the Nogat (Biała Góra), the Szkarpawa (Gdańska Głowa), and the Martwa Wisła (Przegalina) are closed since the Vistula was regulated. This should be checked before the trip! The Regional Water Management Board (RZGW) in Gdańsk would like to remind you that all vessels passing through locks need to have plastic (e.g. PVC), wicker or wooden fenders, in the number appropriate for the length of the hull of the vessel, to protect the hull against potential damage caused by the walls of the lock chamber. Vessels without fenders or with rubber fenders will not be admitted inside the lock.

How to pass bridges and drawbridges?

Every bridge has a specified span clearance at high water (HWL) and at medium water (MWL). The place for safe passage under the bridge is indicated with a yellow tooth mark on the span.

The drawbridges on the Żuławy Loop are opened at specified hours. Look them up before setting out on a trip at www.petla-zulawska.pl. Do not proceed until the bridge span has been raised.

How to read the aids to navigation on the Vistula's banks?

Green rhombuses and yellow X signs stand on the left bank; red squares and yellow crosses are placed on the right bank. The signs always come in pairs, but in different orders. Sometimes, additionally, green or red beacons are anchored on water, marking the left and right edges of the fairway. River bank marking is particularly important at low water stages. Considerable amounts of sand are then deposited, forming sandbars that obstruct navigation and sometimes block the mainstream; depths below 1 m (3.3 ft) are not unusual. The width of the water surface is c. 500 m, which makes it important to have binoculars with you, enabling you to read the signs placed on the opposite bank clearly. This is often a challenge. It happens that signs are destroyed or covered by vegetation.

How to gain time for reading the river on the Vistula?

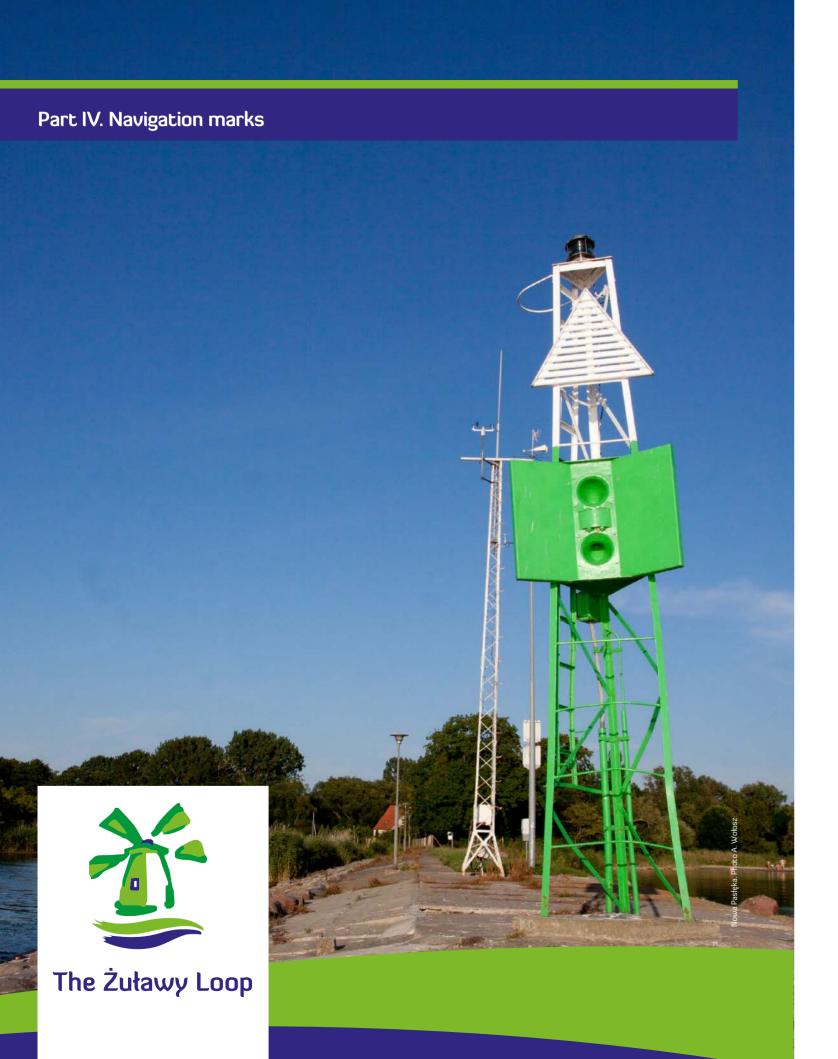
If you wish to gain time for finding the signs or for more precise reading of the river, we advise you to turn the yacht bow against the current and maintain it in proper gear. For this reason, it is worthwhile fitting your yacht with a spare motor or at least with an effective anchor, which will facilitate braking the vessel and prevent dangerous collisions with stone wing dams in the event of propulsion failure.

What surprises inland sailors on the Vistula Lagoon?

- Very quickly changing weather. Sudden emergence of short and high waves, which may cause trouble even to seasoned seamen. Combined with high wind, this makes it necessary to reduce sail and weather. Using outboard motors is often a problem: the screw leaps out of water. Due to a break in the weather, you may be stranded in the port even for 2 or 3 days.
- A change of wind direction while sailing, when the wind turns back. Differences in wave height and wind strength depending on wind direction. This has an important influence on the planning of trip route.
- The necessity of receiving weather forecasts every day. If you have no radio, you can always phone the Harbour Master's Office in Elbląg (Phone: (55) 234 77 11 a 24-hour line), the Harbour Authority in Tolkmicko (Phone: (55) 231 66 14, 7.00–15.00) or in Frombork (Phone: (55) 243 72 19, 7.00–15.00).
- A large number of fishing nets, frequently placed just beside the fairway. They are improperly marked or not marked at all.
- No possibilities of spending the night "in the wild" near the bank, as between you and the bank there is a broad strip of shoals and reeds. Spending a night at anchor may be hazardous when the wind suddenly becomes stronger or changes direction. There are exceptions to this rule. You can safely spend the night "in the wild" in the estuaries of rivers (the Szkarpawa, the Nogat, the Wisła Królewiecka, or the Pasłęka) and in Elbląg Bay.
- The necessity of keeping to approach fairways when sailing into ports, due to shoals. There are exceptions to this rule as well, mainly in the case of lift keel yachts.
- Entering and leaving ports with the motor running. Krynica Morska and Kąty Rybackie are the only harbours you can enter safely and easily under sail.
- Numerous navigational marks (daytime and night-time) beacons, buoys, lights, and even a lighthouse which help you keep track of your position.
- The possibility of being controlled by Border Guards, especially near Piaski or Nowa Pasłęka.

Have a safe holiday on the waters of the Żuławy Loop!

85



Signs Regulating Traffic on Inland Waterways

A. Prohibitory Signs

- 1. No entry
- 2. No overtaking
- 3. No overtaking of convoys by convoys
- 4. No passing or overtaking of other vessels
- 5. No berthing (no anchoring or making fast) on the side of the waterway on which the sign stands
- 6. No anchoring or trailing of anchors, chains or cables on the side of the waterway on which the sign stands
- 7. No mooring on the side of the waterway on which the sign stands
- 9. Do not create wake or wash (suction effect)
- 10. No passing outside the area marked with boards or green lights
- 11. No passing outside the area marked with boards
- 12. Entry prohibited but prepare to get under way
- 13. Motorised vessels prohibited
- 14. Sports or pleasure craft prohibited
- 15. Water skiing prohibited
- 16. Sailing vessels prohibited
- 17. Rowing boats prohibited
- 18. Use of sailboards prohibited
- 19. End of zone of high-speed navigation of small sports or pleasure craft
- 20. No launching or beaching of vessels
- 21. Water scooters prohibited

























B. Mandatory Signs

- 22. Proceed in the direction shown by the arrow
- 23. Move to the side of the fairway on your port side
- 24. Move to the side of the fairway on your starboard side
- 25. Keep to the side of the fairway on your port side
- 26. Keep to the side of the fairway on your starboard side
- 27. Cross fairway to port
- 28. Cross fairway to starboard
- 29. Stop as prescribed in the regulations
- 30. Do not exceed the speed indicated (in km/h)
- 31. Give a sound signal
- 32. Keep a particularly sharp lookout
- 33. Keep a particularly sharp lookout when entering the main waterway
- 34. Keep a particularly sharp lookout when crossing the main waterway 35. Vessels proceeding on the main waterway must, if necessary, change
- course or speed to allow vessels to leave tributary waterways
- 36. Obligation to enter into a radiotelephone link 37. Obligation to enter into a radiotelephone link on the channel indicated

















C. Restrictive Signs

- 38. Depth of water limited (in metres)
- 39. Headroom above water level limited (in metres)
- 40. Width of passage or fairway limited
- 41. There are restrictions on navigation: make enquiries
- 42. The fairway lies at the distance indicated from the right (left) bank (in





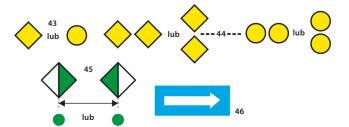






D. Recommendatory Signs

- 43. Passage in both directions
- 44. Passage only in the direction indicated (passage in the opposite direction
- 45. You are recommended to keep within the area indicated
- 46. You are recommended to proceed in the direction shown by the arrow



E. Informative Signs

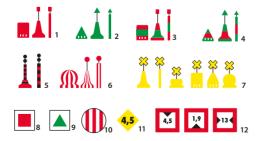
- 47. Entry permitted
- 48. Overhead power line crossing (height above the highest navigable water level)
- 49. Weir close ahead
- 50. Cable ferry
- 51. Ferry boat moving independently
- 52. Berthing permitted
- 53. Berthing permitted on the stretch of water of the breadth measured from and shown on the board in metres
- 54. Berthing permitted on the stretch of water bounded by two distances measured from and shown on the board in metres
- 55. Maximum number of vessels permitted to berth abreast
- 56. Berthing area reserved for pushing-navigation vessels that push but do not carry hazardous materials
- 57.Berthing area reserved for pushing-navigation vessels that are required to carry one blue light or one blue cone
- 58. Berthing area reserved for pushing-navigation vessels that are required to carry two blue lights or two blue cones
- 59. Berthing area reserved for pushing-navigation vessels that are required to carry three blue lights or three blue cones
- 60. Berthing area reserved for vessels other than pushing-navigation vessels that are not required to carry marking
 61. Berthing area reserved for vessels other than pushing-navigation vessels
- that are required to carry one blue light or one blue cone
 62. Berthing area reserved for vessels other than pushing-navigation vessels
- that are required to carry two blue lights or two blue cones

 63. Berthing area reserved for vessels other than pushing-navigation vessels
- that are required to carry three blue lights or three blue cones
 64. Berthing area reserved for all vessels that are not required to carry
- marking
 65. Berthing area reserved for all vessels that are required to carry one blue
- light or one blue cone

 66 Berthing area reserved for all vessels that are required to carry two blue
- 66. Berthing area reserved for all vessels that are required to carry two blue lights or two blue cones
- 67. Berthing area reserved for all vessels that are required to carry three blue lights or three blue cones
- 68. Anchoring or training of anchors, chains or cables permitted
- 69. Making fast to the bank permitted
- 70. Berthing area reserved for loading and unloading vehicles
- 71. Turning area
- 72. Crossing with secondary waterway ahead
- 73. Junction with secondary waterway ahead
- 74. Crossing with main waterway ahead
- 75. Junction with main waterway ahead
- 76. End of a prohibition, obligation, or restriction applies to traffic in one direction only
- 77. One or two fixed white lights before an obstacle stop if the regulations so require
- 78. One or two flashing white lights before an obstacle you may proceed
- 79. Drinking water supply
- 80. Telephone
- 81. Motorised vessels permitted
- 82. Sports or pleasure craft permitted
- 83. Water skiing permitted
- 84. Sailing vessels permitted
- 85. Rowing boats permitted
- 86. Use of sailboards permitted
- 87. High-speed navigation of small sports and pleasure craft permitted
- 88. Launching or beaching of vessels permitted
- 89. Possibility of obtaining nautical information on the radiotelephone channel indicated
- 90. Water scooters permitted

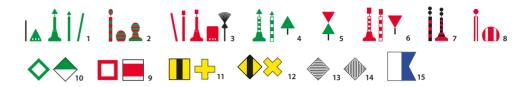
Marks Indicating Fairway Limits on Maritime Waters

- 1. The port side of the fairway
- 2. The starboard side of the fairway
- 3. Starboard bifurcation (main fairway on the right)
- 4. Port bifurcation (main fairway on the left)
- 5. Isolated danger marks
- 6. Safe water marks
- 7. Special marks
- 8. Navigable passage under fixed bridges port side
- 9. Navigable passage under fixed bridges starboard side
- 10. Navigable passage under fixed bridges best passage point
- 11. Vertical clearance under bridge span at medium water level
- 12. Limited headroom, depth, or width of passage



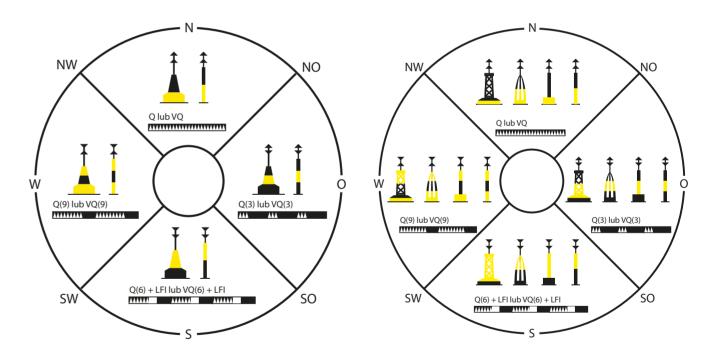
Marks Indicating Fairway Limits on Inland Waterways

- 1. The left side of the fairway
- 2. Fairway bifurcation
- 3. The right side of the fairway
- 4. Dangerous place near the left edge of the fairway
- 5. Dangerous place in mid-fairway
- 6. Dangerous place near the right edge of the fairway
- 7. Isolated danger mark
- 8. Safe water mark
- 9. Fairway near the left bank
- 10. Fairway near the right bank
- 11. Fairway cross-over from right to left bank
- 12. Fairway cross-over from left to left right bank
- 13. Mark placed on the left side of exit from lake or broad waterway
- 14. Mark placed on the right side of exit from lake or broad waterway
- 15. The "A" (Alpha) flag. Caution! Diver down.



Cardinal marks on maritime waters

Cardinal marks on inland waterways

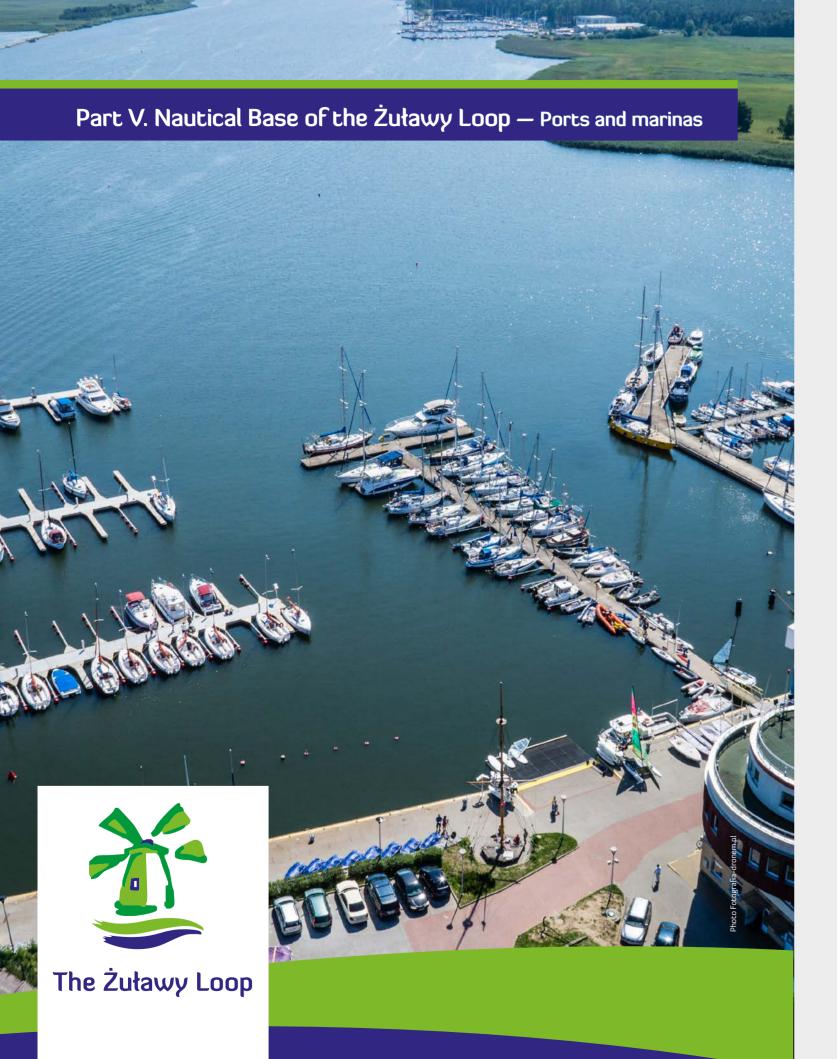


CAUTION!

Inland waterways (with the river current)
Red colour — the right (starboard) side of the fairway
Green colour — the left (port) side of the fairway

Maritime waters

Red colour — the left (port) side of the fairway Green colour — the right (starboard) side of the fairway

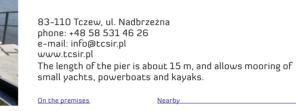




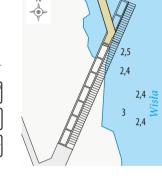












Mooring Platforms in Tczew GPS: N 54°04'57" E 18°48'23"





Platforms built as part of the Żuławy Loop Project — Water Tourism Deve-

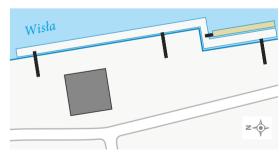








phone: +48 58 531 46 26 e-mail: info@tcsir.pl www.tcsir.pl





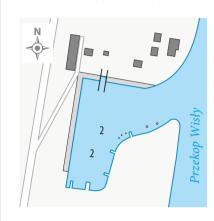
The harbour for passenger ships has mooring line with a length of 102 meters and 4 berths. In addition, the place has 10 berths for motor boats and yachts.



THE VISTULA

The fishing port in Świbno

GPS: N 54°20'08" E 18°56'08"



80-690 Gdańsk-Świbno, ul. Świbnieńska 9 Harbour Master's Office of the Port of Gdansk phone: +48 58 343 05 10









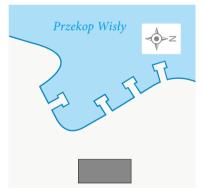






Concrete wharfs are lined with tires and have mooring bollards. Slipway for fishing boats is located on the western wharf, at the end of which yachts normally moor.

The fishing harbour in Mikoszewo GPS: N 54°20'00" E 18°56'36"



82-103 Mikoszewo, ul. Gdańska 104









Harbour in Mikoszewo is devoid of any infrastructure that would be available for boaters. After mooring, it's best to obtain consent of users of the harbour as quickly as possible.







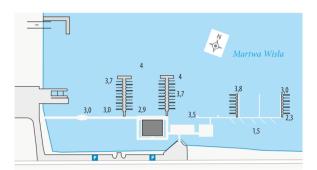














A modern marina with complete facilities for sailors and motorboaters. 75 berthing places, with 3 for larger vessels (hull length up to 12 m). The marina has a boat gantry and a slipway (width: 5 m, grade: 24 cm/m, depth at the end of the slipway: 1.5 m).

The marina has been built within the framework of the "Żuławy Loop Project — Water Tourism Development. Stage I".

Harbour Tecza in Wiślinka GPS: N 54° 20' 12" E 18°49'29"

GPS: N 54°17'18" E 18°55'20"

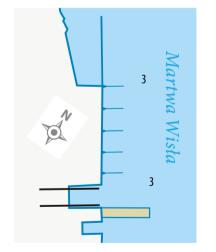
83-011 Wiślinka, ul. Piaskowa 7 phone: +48 501 953 536 e-mail: bartekzyho@wp.pl







Marina located just off the pontoon bridge connecting the mainland with the island of Sobieszewo. We moor





Riverside hostel in Wiślinka

GPS: N 54°34'12" E 18°80'08"



83-011 Wiślinka, ul. Brzegowa 3 phone: +48 728 415 567 e-mail: stanica@pruszczgdanski.pl

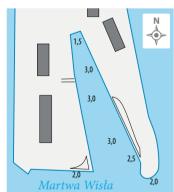




Located in a small inland cove, the complex provides comprehensive services to water tourists, including tourists with disabilities. There is a harbour with mooring places, toilets and showers, a hangar and a slipway. In 2018, the harbour underwent a major expansion, adding an access canal, a scarped embankment and a jetty with mooring places for 32 vessels and the necessary facilities.

Maritime Yacht Club "Neptun" - Górki Zachodnie

GPS: N 54°21'00" E 18°47'02"



The marina has 80 berths with y-boms, distributed on both sides of the basin.

80-643 Gdańsk, ul. Przełom 10 phone: +48 58 307 09 27 www.jkm-neptun.com.pl e-mail: info@jkm-neptun.com.pl

























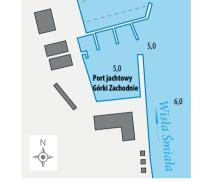




80-643 Gdańsk, ul. Przełom 9 phone: +48 517 806 529 www.sportgdansk.pl/obiekty e-mail: marek.lenard@sportgdansk.pl



Górki Zachodnie marina GPS: N 54°21'29" E 18°46'49"



The northern part of the basin is intended for larger yachts, while the southern – for the smaller. In the southern part, the port basin is divided by a few wooden piers. Most of the berths is equipped with robust dolphins. We moor with stern or bow towards the quay.

Marina Przełom – Górki Zachodnie

GPS: N 54°21'25" E 18°46'53"

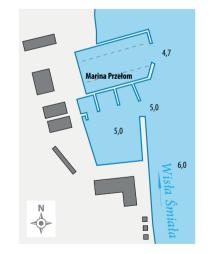
THE MARTWA WISŁA, THE ŚMIAŁA WISŁA, THE MOTŁAWA

80-643 Gdańsk, ul. Przełom 24 phone: +48 668 868 228 www.marinaprzelom.pl e-mail: marina@marinaprzelom.pl





The marina is located 15 km from the city centre of Gdańsk and covers nearly 12 thousand m2. The 140-m long pier can accommodate 25 sailboats or motorboats. Vessels are moored on buoys. The depth across the marina is 3 m.





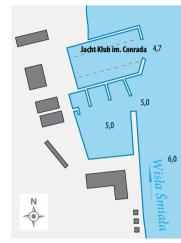
Joseph Conrad Yacht Club

THE MOTLAWA

THE ŚMIAŁA WISŁA,

THE MARTWA WISŁA,

GPS: N 54°21'25" E 18°46'53"



80-643 Gdańsk, ul. Przełom 26 phone: +48 58 307 39 12, 603 662 177 www.jkic.pl e-mail: kontakt@jkic.pl





We moor to a wooden pier: from the south dolphins, from the north - buoys. Long side by the head of the pier.

Academic Maritime Club in Gdańsk

GPS: N 54°22'00" E 18°46'36"



80-642 Górki Zachodnie, ul. Stogi 18 phone: +48 698 44 22 18 www.akm.gda.pl e-mail: akm@akm.gda.pl









The marina in addition to the wharf available for seagoing yachts also has berths tucked away in a secluded and very well wave-protected canal, perpendicularly inland and enclosing the harbour from the west.























AZS Cosa - Academic Sports Association in Gdańsk - Górki Zachodnie

GPS: N 54°22'02" E 18°46'37"

80-642 Gdańsk, ul. Stogi 20 phone: +48 58 324 81 00, 501 36 53 90 www.hotelgalion.pl e-mail: marina@hotelgalion.pl







The port is capable of accommodating 90 units. Long side mooring outside the concrete pier, with help of buoys. Within the basin, smaller units moor to floating platforms (with y-boms) and concrete wharf (with y-boms and

The National Sailing Centre of the University School of Physical Education and Sport

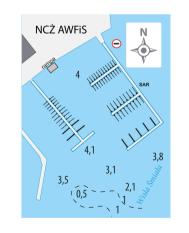
GPS: N 54°22'04" E 18°46'42"

80-642 Gdańsk, ul. Stogi 20a phone: +48 58 322 26 01 www.ncz.awf.gda.pl e-mail:ncz@awf.gda.pl





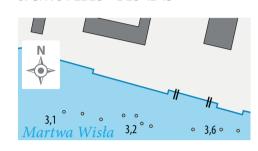
After the expansion, the marina has 111 berths. The main pier with the length of 115 m, in addition to the NCZ, is in use by the following organs: SAR, rescue, customs, maritime administration and the





Gdańsk Maritime Club Yachting Harbour

GPS: N 54°21'25" E 18°42'49"



80-627 Gdańsk-Stogi, ul. Tamka 19A phone: +48 58 305 04 50, 519 196 856, 696 329 911 www.gkm.gda.pl e-mail: klub@gkm.gda.pl

We moor to the wharf situated in parallel to the shore (with stern towards a buoy). There is also a few short, perpendicular to the shore floating piers. There is no protection against surges generated by other units on the river.





















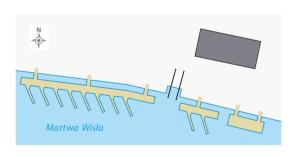






Marina on Tamka Street

GPS: N 54°21'25" E 18°42'49"



80-627 Gdansk-Stogi, ul. Tamka 17 phone: +48 506 056 097 e-mail: tamka@sportgdansk.pl

The marina and the whole premises (including the entrance to the platforms) is adapted for the disabled on wheelchairs. The marina building also houses the office of seaside beaches











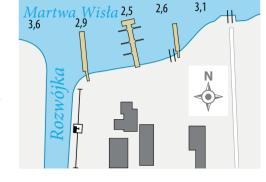


80-718 Gdańsk,

ul. Tarcice 15 phone: +48 58 307 09 03, 518 458 791 www.stewa.pl

e-mail: jan.marzec@wp.pl

It's best to moor to the pier situated perpendicularly to the shore, along slipway. The boatswain of the marina will provide further instructions



















Marina — Hotel Kaper GPS: N 54°35'36" E 18°71'41"

THE MARTWA WISŁA, THE ŚMIAŁA WISŁA, THE MOTŁAWA

GPS: N 54°21'18" E 18°42'31"



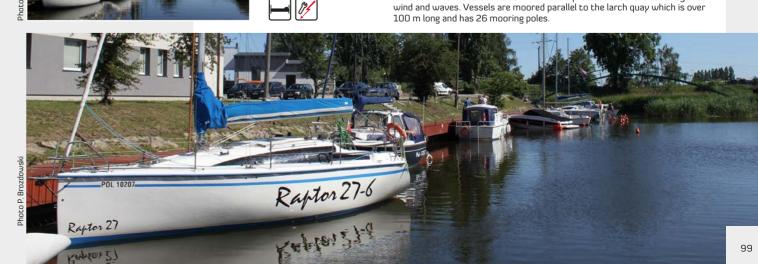


www.hotel-kaper.pl/marina/ e-mail: kapergdansk@gmail.com





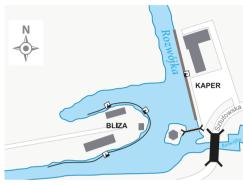
The marina is located in Rozwójka Canal (Czarna Łacha), a branch of the Martwa Wisła, opposite GKM LOK yacht club and Marina Tamka, in the vicinity of Bliza sail- and motorboat club. The marina provides excellent cover against





Bliza Sail- and Motorboat Club

GPS: N 54°28'67" E 19°05'29"



80-980 Gdańsk, ul. Tarcice 20 phone: +48 781 189 754









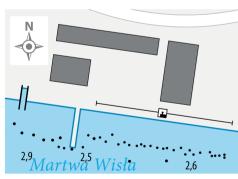




The harbour is located in Rozwójka Canal (Czarna Łacha), a branch of the Martwa Wisła, opposite the Hotel Kaper Marina and next to the Youth Palace (Pałac Młodzieży) marina. The marina provides cover from wind and waves. Vessels are moored with bow to the quay and aft to the mooring buoy.



GPS: N 54°21'27" E 18°42'25"













Vessels are moored with bow to the quay and aft to the mooring buoy. If there is enough space, also parallel mooring is possible.





































80-719 Gdańsk, ul. Litewska 2 www.pomorskie.wopr.pl

GPS: N 54°21'07" E 18°40'35"

We moor to the y-boms on the entire length of the wooden wharf.

Marina Gdańsk 80-755 Gdańsk, ul. Szafarnia phone:/faks: 58 301 33 78 e-mail: marina.gdansk@sportgdansk.pl GPS: N 54°21'00" E 18°39'34"





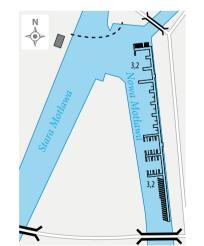








The 290-m long marina is located along Nabrzeże Szafarnia quay on the New Motława, opposite the famous Crane. Sailors arriving in Gdańsk will enjoy the modern harbour master's office and comofortable sanitary facilities. Power outlets and water supply are available on the quay.

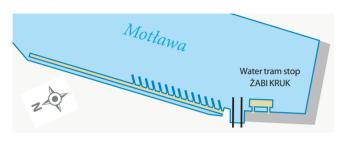






Kayak and Motorboat Harbour "Żabi Kruk"

GPS: N 54°20'32" E 18°38'55"



80-822 Gdańsk, ul. Żabi Kruk 15, phone: +48 501 710 010 www. zabikruk.pl, e-mail: biuro@zabikruk.pl

Harbour Żabi Kruk 80-822 Gdańsk, ul. Żabi Kruk 15A, phone: +48 506 056 073 www.spotgdansk.pl, e-mail: zabi.kruk@sportgdansk.pl

The marina and the whole area (including the entrance to the piers) is adapted for the disabled on wheelchairs. Access to wireless internet on the quay and water equipment rental services.





On the premises

Ů ▲ i WC T

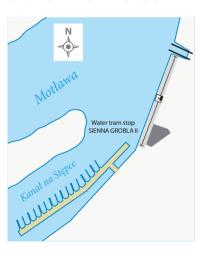
[230V] (W) 🔙







GPS: N 54°21'13" E 18°39'54"



80-752 Gdańsk, ul. Na Stępce 6 phone: +48 506 056 264 e-mail: sienna.grobla@sportgdansk.pl





The marina and the whole area (including the entrance to the piers) is adapted for disabled people moving on wheelchairs. Access to wireless internet on the quay.









80-561 Gdańsk, 8U-561 Gdansk, ul. Stara Twierdza 9/12 Klub – phone: +48 602 249 490 Bosman – phone: +48 789 029 730 www.pkm.gda.pl





Berths are located on the left side. Far protrude the mooring bollards. Yachts moor also to buoys on the





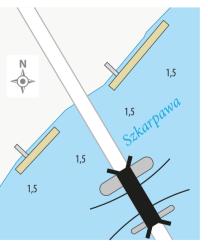
82-103 Stegna, Drewnica



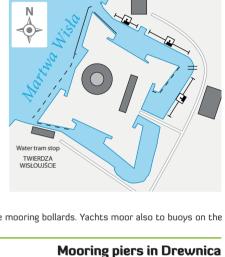




Piers built as part of the Żuławy Loop Project – Water Tourism Development. Stage I.



GPS: N 54°17'13" E 18°57'59"



GPS: N 54°23'46" E 18°40'49"

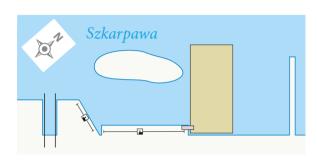
Polish Maritime Club Harbour (Wisłoujście)



THE SZKARPAWA

THE MARTWA WISŁA

GPS: N 54°17'10" E 18°58'35"



Private harbour, about 700 m away from the drawbridge connecting Żuławki and Drewnica. From the mainstream of the Szkarpawa River it is separated by a clump of bushes. We moor in any way consistent with good practices of sailing. At the harbour: campfire, smokehouse, bread furnace for own baking, fishing pond, as well as welding and 82-103 Stegna, Żuławki phone: +48 601 617 069











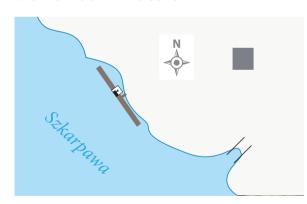






Chorażówka

GPS: N 54°28'67" E 19°05'29"



82-13 Stegna, Choroążówka 7 phone: +48 793 985 189







A private harbour, located on the 11th km of the Szkarpawa river. Vessels are moored to piers. The harbour has a bonfire site and an angling pond, toilets and showers, and a slipway (width 6 m, grade 24 cm/m, depth at the end of the slipway 1.2 m).















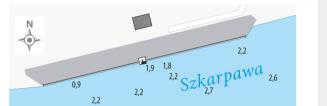








Yacht harbour in Rybina GPS: N 54°21'25" E 18°46'53"



The marina consists of a wharf with length of 100 m for ships of the White Fleet and three mooring piers by the drawbridges on the Szkarpawa and



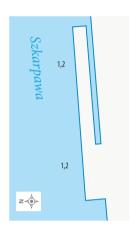
Harbour built as part of the Żuławy Loop Project – Water Tourism Development. Stage I.





Yacht harbour in Osłonka

GPS: N 54°16'23" E 19°13'29"



82-100 Nowy Dwór Gdański, Osłonka phone: +48 667 866 178 lub 605 206 835 e-mail: barbara.zloty@wp.pl

















 $\label{thm:local_problem} \mbox{Harbour built as part of the $\dot{\rm Z}$ulawy Loop Project} - \mbox{Water Tourism Development. Stage I.}$

Mooring piers in Rybina

GPS: N 54°21'25" E 18°46'53"



82-103 Stegna, Rybina phone: +48 500 831 365 e-mail: jacek_zielinski1@o2.pl









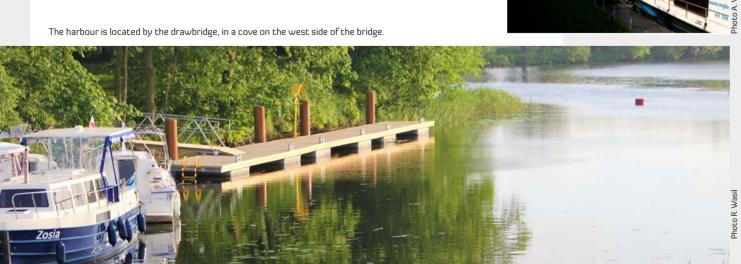


















82-110 Sztutowo phone: +48 55 247 81 51

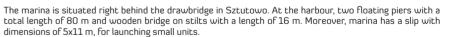
On the premises





GPS: N 54°32'36" E 19°18'22"



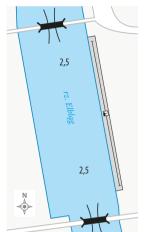






Yacht Wharf by the Zygmunt August Boulevard in Elblag

GPS: N 54°09'31" E 19°23'32"



82-300 Elbląg, ul. Bulwar Zygmunta Augusta





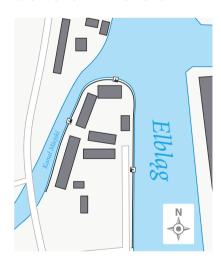
The wharf adapted to service yachts and large passenger vessels, with length of 100 m and depth of 2,5 m.



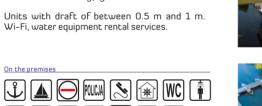
Yacht harbour "Fala"

ELBLĄG

GPS: N 54°9'47" E 19°23'25"



82-300 Elbląg, ul. Wybrzeże Gdańskie 1 phone: +48 55 232 41 83 www.oswfala.pl e-mail: oswfalaelblag@gmail.com





















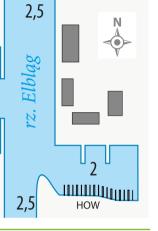


82-300 Elbląg, ul. Portowa 2 e-mail: a.sledzinska@elblag.zhp.pl phone: +48 794 382 827





Mooring is done to the floating platforms with y-boms and a wharf which allows mooring broadside — it has a higher section for larger units, and a lower section — for the lesser.



The marina of Scout Water Centre "Bryza"

GPS: N 54°10'32" E 19°23'19"

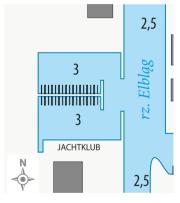
Yacht Club Elblag GPS: N 54°10'32" E 19°23'03"

82-300 Elbląg, ul. Radomska 29 phone: +48 55 232 67 20, 55 625 63 40 e-mail: jachtklub@jachtklub.elblag.pl





We moor to the floating pier with y--boms on the centre of the basin, on the wharfs: northern and southern with buoys, and long side on the western wharf.



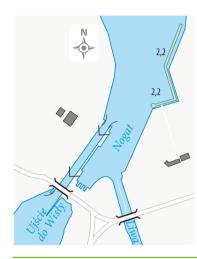
The port has been expanded within the framework of the " $\dot{2}$ uławy Loop Project — Water Tourism Development. Stage I".





Yacht harbour in Biała Góra

GPS: N 53°54'53" E 18°53'08"



82-400 Sztum, Biała Góra, phone: Harbour master's office – 735 390 301 e-mail: krzysztof.burczyk55obb@gmail.com













There are 17 berths available at the marina and one spot for a passenger ship. Maximum length for a yacht is 15 metres. The harbour has a slipway (width 5 m, grade 20 cm/m, depth at the end of the slipway 1 m).

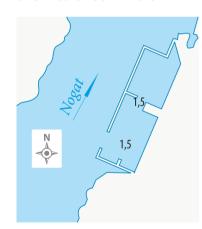
Harbour built as part of the Żuławy Loop Project – Water Tourism Development. Stage I.



The harbour of the Sports and Leisure Centre in Malbork

GPS: N 53°02'00" E 19°01'17"

THE NOGAT



82-200 Malbork, ul. Wileńska 1 phone: +48 55 272 24 96 www.osir.malbork.pl























Open only during the holiday season. Note! It is more of a river swimming area rather than a quay. Access to water, electricity, toilets, showers. WOPR station and water police station.











82-200 Malbork, ul. Starościńska phone: +48 55 247 63 49 www.caw.malbork.pl















Castle Harbour in Malbork

GPS: N 54°04'11" E 19°02'73"

Mooring quay with a length of 17 m, suitable for disabled people.



Harbour built as part of the Żuławy Loop Pro-ject – Water Tourism Development. Stage I.

"Park Północny" harbour in Malbork

GPS: N 54°02'51" E 19°02'15"

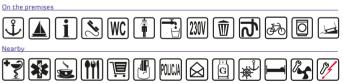
82-200 Malbork, ul. Parkowa 3 phone: +48 55 272 24 13 phone: do bosmanatu: 55 247 63 49 e-mail: info@caw.malbork.pl www.caw.malbork.pl

24 berths by the piers for small yachts, motor boats and kayaks. The harbour has a slipway (width 5 m, grade 36 cm/m, depth at the end of the slipway 1.2 m).









. Harbour built as part of the Żuławy Loop Project — Water Tourism Development. Stage I.



The harbour in Kamienica Elbląska

GPS: N 54°15'48" E 19°24'12"



82-340 Tolkmicko, Kamienica Elbląska phone: +48 55 231 66 14, 509 520 258





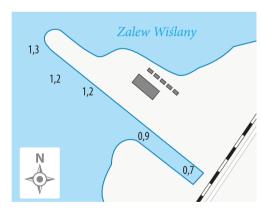
We can find a mooring among the greenness to the left or moor to the quay at the very end of the harbour.



Harbour in Nadbrzeże

THE VISTULA LAGOON

GPS: N 54°16'27" E 19°24'44"



82-300 Elbląg, Nadbrzeże phone: +48 55 232 67 20, 519 865 607 www.jachtklub.elblag.pl stanicanadbrzeze@gmail.com









We moor at the western wharf. It is predominantly made of soil. We can also moor at the southern wharf, which encloses the port basin. There, a solid wooden bridge extends over the entire length of the wharf.









82-340 Tolkmicko Suchacz, ul. Portowa 7c phone: +48 605 685 071









The yacht harbour located on the western wharf. We moor to the floating and wooden piers. In the depths of port to the concrete wharfs moor fishing boats.



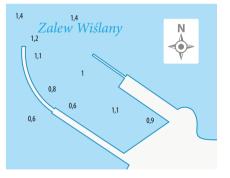
82-340 Tolkmicko, Kadyny phone: +48 55 231 66 14











Mooring possible, in good weather and provided there are no surges, for yachts with a draft of up to 0.8 m. We don't enter far into the basin, we moor right by the exit.



GPS: N 54°16'46" E 19°25'26"

The harbour in Suchacz



The harbour in Tolkmicko

GPS: N 54°19'26" E 19°31'20"



82-340 Tolkmicko, ul. Parkowa 1 phone: +48 510 191 935, e-mail: ryszarddoda@op.pl



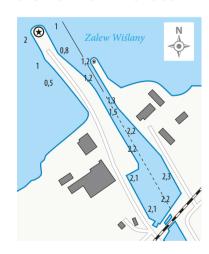


Some berths on the western wharf are reserved for the ships of the White Fleet. The southern wharf is completely adapted for yachts, it has 15 mooring spots with y-boms. The harbour has a slipway (width 5.4 m, grade 11 cm/m, depth at the end of the slipway 0.95 m).



The port in Frombork

GPS: N 54°21'34" E 19°40'38"



14-530 Frombork, ul. Portowa 2 phone: Harbour master's office – 55 243 72 19, phone: Dal Yacht Club – 55 243 72 45





Port with fishing harbour and a place for sailors. Number of berths for guests: 6 long side or 15 with the bow to-















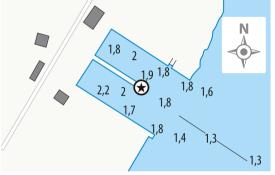




82-120 Krynica Morska, Piaski







We moor long side to each of the wharfs and piers. The port has a refurbished waterfront and a pier in the

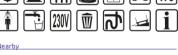
The yacht port in Krynica Morska GPS: N 54°22'42" E 19°26'50"

82-120 Krynica Morska, ul. Bojerowców 4 phone: +48 55 247 61 12, 885 882 772 e-mail: pwikkrynicam@gmail.com





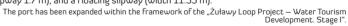








In the section intended for yachts we moor to the floating piers with y-boms or broadside to the wharf. Passenger pier with length of 100 m is occupied by the ships of the White Fleet. The harbour has a slipway (width 4.95 m, grade 18 cm/m, depth at the end of the slipway 1.7 m), and a floating slipway (width 11.55 m).









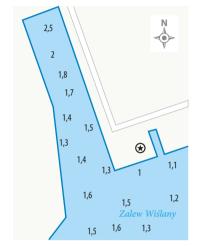




THE VISTULA LAGOON

The fishing port in Krynica Morska

GPS: N 54°22'36" E 19°26'21"



82-120 Krynica Morska, ul. Bosmańska



The port lacks facilities for boaters. We moor broadside at the western wharf. Eastern wharf is occupied by cutters.









82-110 Sztutowo, Kąty Rybackie, ul. Rybacka 66 phone: +48 55 247 87 19





Kąty Rybackie is the closest port of the Vistula Lagoon for yachts sailing along the Wisła Królewiecka or the











82-110 Sztutowo, Kąty Rybackie, ul. Rybacka 66 phone: +48 601 777 848 e-mail: kapitan@gsj.com.pl







Yacht harbour in Kąty Rybackie GPS: N 54°20'27" E 19°14'16"





The harbour is located in the western basin of the port in Kąty Rybackie. It has socio-sanitary facilities, as well as electrical, waste and sewage disposal installations available by the quay. The harbour has a slipway (width 5.1 m, grade 17 cm/m, depth at the end of the slipway 1.3 m).

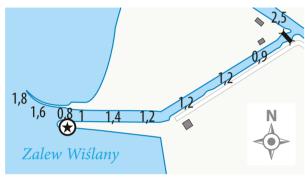
 $\label{thm:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma:lemma$





The port of Nowa Pasłęka

GPS: N 54°25'33" E 19°44'47"



14-500 Nowa Pasłeka, Ujście 2





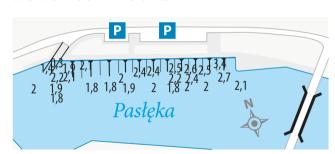
On the premises



Port of Maritime Authority, no infrastructure for sailors.

Stara Pasłęka harbour

GPS: N 54°25'54" E 19°04'49"



Sailors are provided with 22 berths for mooring to Y-boms and for larger units near the drawbridge (up to 15m). The harbour has a slipway (width 3.7 m, grade 12 cm/m, depth at the end of the slipway 1.1 m).

Harbour built as part of the Żuławy Loop Project — Water Tourism Development. Stage I.





















14-500 Braniewo, ul. Portowa phone: +48 511 311 131 e-mail: przystanbraniewo@interia.pl

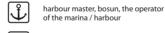
Pier with a length of approx. 25 m for small craft and kayaks.



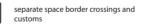


Harbour built as part of the Żuławy Loop Project – Water Tourism Development. Stage I.

Explanation of the symbols of services available on harbours and their surroundings (1.5 km).

























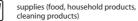


























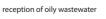














sewage disposal











repair of electrical and electronic

Yacht harbour in Braniewo

GPS: N 54°23'00" E 19°49'21"



















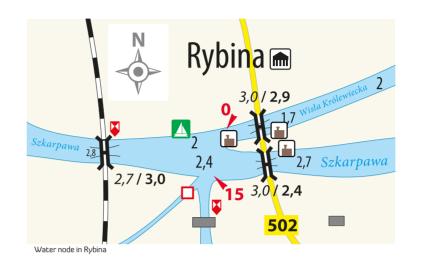




Operational hydroengineering structures in the Żuławy Loop

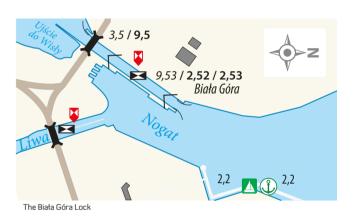


Water nodes of the Żuławy Loop











The approach to the harbour in Old Paslęka. Suggested route to the marina in Stara Pasłęka leads through the Paslęka mouth.

Gdańsk water tram



he Motława River — Water tram. Photo A. Wołosz





"Fish Market" Water tram stop. Photo A. Woło

Water tram lines:

Line F5 Żabi Kruk – Brzeźno

Stops: Żabi Kruk – Zielony Most – Targ Rybny – Wiosny Ludów – Nabrzeże Zbożowe – Twierdza Wisłoujście – Westerplatte – Latarnia Morska – Brzeźno

Line F6 Targ Rybny - Sobieszewo

Stops: Targ Rybny – Narodowe Centrum Żeglarstwa – Sobieszewo



Water tram stop — Green Bridge. Photo A. Wołos The Wisła Śmiała. Water tram. Photo A. Wołosz

The project entitled "Revitalization of the Waterways in Gdańsk" was implemented in 2007-2012 and included the creation of two water tram lines, F5 and F6, with stops at interesting places of Gdańsk from the Green Bridge towards the Sobieszewska Island and the Wisłoujście Fortress.

F5 and F6 lines engage two passenger ships of the Gdańsk Sailing: SONICA and SONICA I, which specifications are determined by the navigation conditions on the Stara Motława River's section between the Green Bridge of Stągiewna street and Pod Zrębem street / Żabi Kruk especially the clearances above water surface, below the bridges.

The ships are able to take 40 passengers and 5 bicycles on a single trip. All passengers are guaranteed seats in a living room, which is enclosed and has windows for protection against cold and rain.

Water trams cruise between 1 of May and 30 of September.



Water tram stop — Sienna Grobla II. Photo A. Wołos



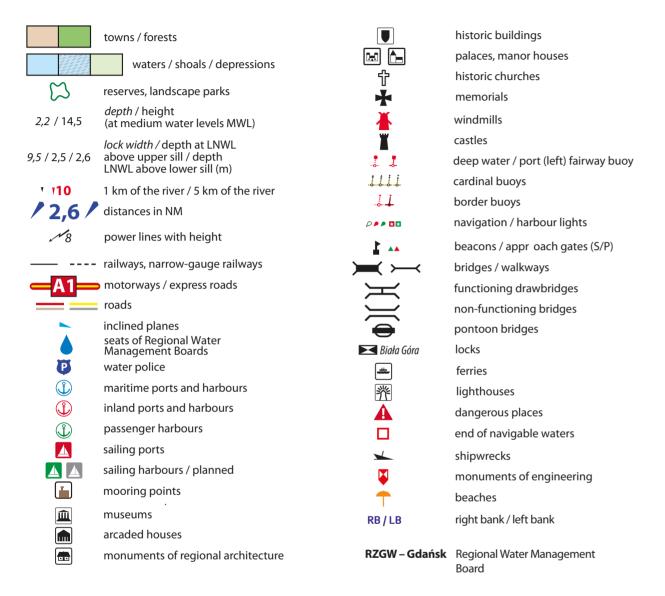
Water tram stop — Żabi Kruk. Photo A. Wołosz



124

Notes

Map legend







FREE COPY

