



**ARTWEI 5th PROJECT MEETING, Frombork 16-18 May 2012**

# **WebGIS –Vistula Lagoon**

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**National Marine Fisheries Research Institute, Gdynia, Poland**



Part-financed by the European Union  
(European Regional Development Fund)





WWW










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(European Regional Development Fund)



**About & Status**

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-  GeoServer Logs
-  Contact Information
-  About GeoServer

**Data**

-  Layer Preview
-  Workspaces
-  Stores
-  Layers
-  Layer Groups
-  Cached Layers
-  Styles

**Services**

-  WCS
-  WFS
-  WMS

**Settings**

-  Global
-  GeoWebCache
-  JAI
-  Coverage Access

**Security**

-  Users
-  Data security
-  Service security
-  Catalog security


**Demos**




















## Layers

Manage the layers being published by GeoServer

 Add a new resource Remove selected resources

&lt;&lt; &lt; 1 2 3 &gt; &gt;&gt; Results 51 to 69 (out of 69 items)

 Search

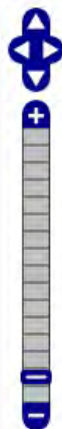
| <input type="checkbox"/> | Type  | Workspace | Store         | Layer Name                | Enabled? | Native SRS |
|--------------------------|---|-----------|---------------|---------------------------|----------|------------|
| <input type="checkbox"/> |    | topp      | taz_shapes    | tasmania_cities           | ✓        | EPSG:4326  |
| <input type="checkbox"/> |    | topp      | taz_shapes    | tasmania_roads            | ✓        | EPSG:4326  |
| <input type="checkbox"/> |    | topp      | taz_shapes    | tasmania_state_boundaries | ✓        | EPSG:4326  |
| <input type="checkbox"/> |    | topp      | taz_shapes    | tasmania_water_bodies     | ✓        | EPSG:4326  |
| <input type="checkbox"/> |    | zalew     | PostGIS_Zalew | cities                    | ✓        | EPSG:32634 |
| <input type="checkbox"/> |    | zalew     | PostGIS_Zalew | drenaige_basin_1          | ✓        | EPSG:32634 |
| <input type="checkbox"/> |    | zalew     | PostGIS_Zalew | drenaige_basin_3          | ✓        | EPSG:32634 |
| <input type="checkbox"/> |    | zalew     | PostGIS_Zalew | drenaige_basin_2          | ✓        | EPSG:32634 |
| <input type="checkbox"/> |    | zalew     | PostGIS_Zalew | drenaige_basin_area       | ✓        | EPSG:32634 |
| <input type="checkbox"/> |    | zalew     | PostGIS_Zalew | floodbank                 | ✓        | EPSG:32634 |
| <input type="checkbox"/> |    | zalew     | PostGIS_Zalew | forest                    | ✓        | EPSG:32634 |
| <input type="checkbox"/> |    | zalew     | PostGIS_Zalew | hydropoint                | ✓        | EPSG:32634 |
| <input type="checkbox"/> |    | zalew     | PostGIS_Zalew | lakes                     | ✓        | EPSG:32634 |
| <input type="checkbox"/> |    | zalew     | PostGIS_Zalew | railroads                 | ✓        | EPSG:32634 |
| <input type="checkbox"/> |   | zalew     | PostGIS_Zalew | rivers                    | ✓        | EPSG:32634 |
| <input type="checkbox"/> |  | zalew     | PostGIS_Zalew | roads                     | ✓        | EPSG:32634 |
| <input type="checkbox"/> |  | zalew     | PostGIS_Zalew | vl_water                  | ✓        | EPSG:32634 |
| <input type="checkbox"/> |  | zalew     | PostGIS_Zalew | vl_land_wg_esri_geoportal | ✓        | EPSG:32634 |
| <input type="checkbox"/> |  | zalew     | DTM           | DTM                       | ✓        | EPSG:32634 |

&lt;&lt; &lt; 1 2 3 &gt; &gt;&gt; Results 51 to 69 (out of 69 items)

Map

Layers

- Base layers
  - Kraje
- Overlays layers
  - ☒ Drenaige Basin Area
  - ☒ DTM
  - ☒ Forest
  - ☒ Drenaige Basin 1
  - ☒ Drenaige Basin 2
  - ☒ Drenaige Basin 3
  - ☒ Lakes
  - ☒ Rivers
  - ☒ Cities
  - ☒ Railroads
  - ☒ Floodbank
  - ☒ Roads
  - ☒ HydroPoint
  - ☒ Vistula Lagoon



100 km  
100 mi



Legend

Scale: 1 : 8235778 Longitude: 2.784 Latitude: 59.169 Measure: No results





NATIONAL  
MARINE  
FISHERIES  
RESEARCH  
INSTITUTE

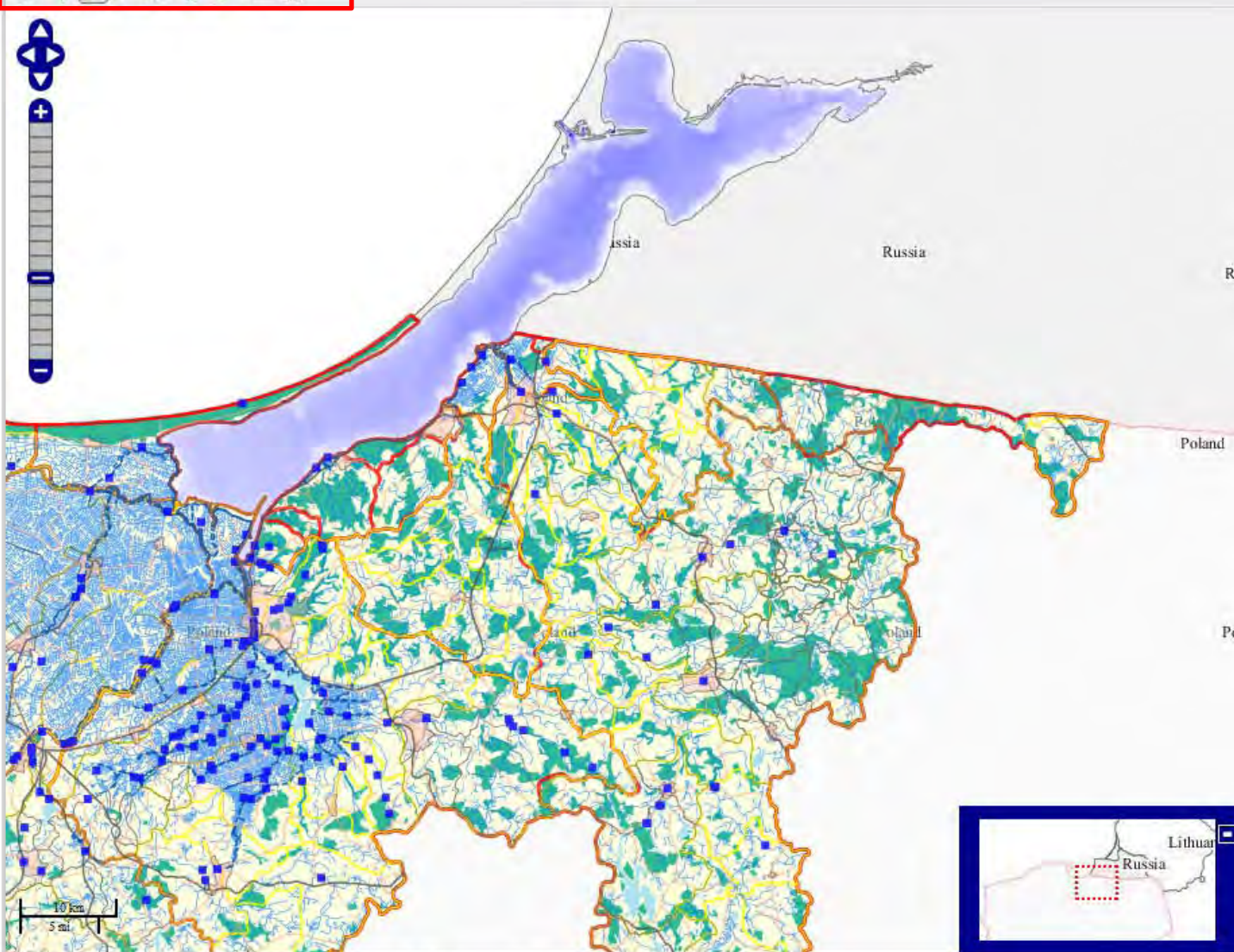
## Action for the Reinforcement of the Transitional Waters' Environmental Integrity - Vistula Lagoon

Map



Layers

- Base layers
  - ☒ Kraje
- Overlays layers
  - ☒ Drenaige Basin Area
  - ☒ DTM
  - ☒ Forest
  - ☒ Drenaige Basin 1
  - ☒ Drenaige Basin 2
  - ☒ Drenaige Basin 3
  - ☒ Lakes
  - ☒ Rivers
  - ☒ Cities
  - ☒ Railroads
  - ☒ Floodbank
  - ☒ Roads
  - ☒ HydroPoint
  - ☒ Vistula Lagoon



Legend



Scale: 1 : 514736

Longitude: 13.162

Latitude: 54.748

Measure: No results

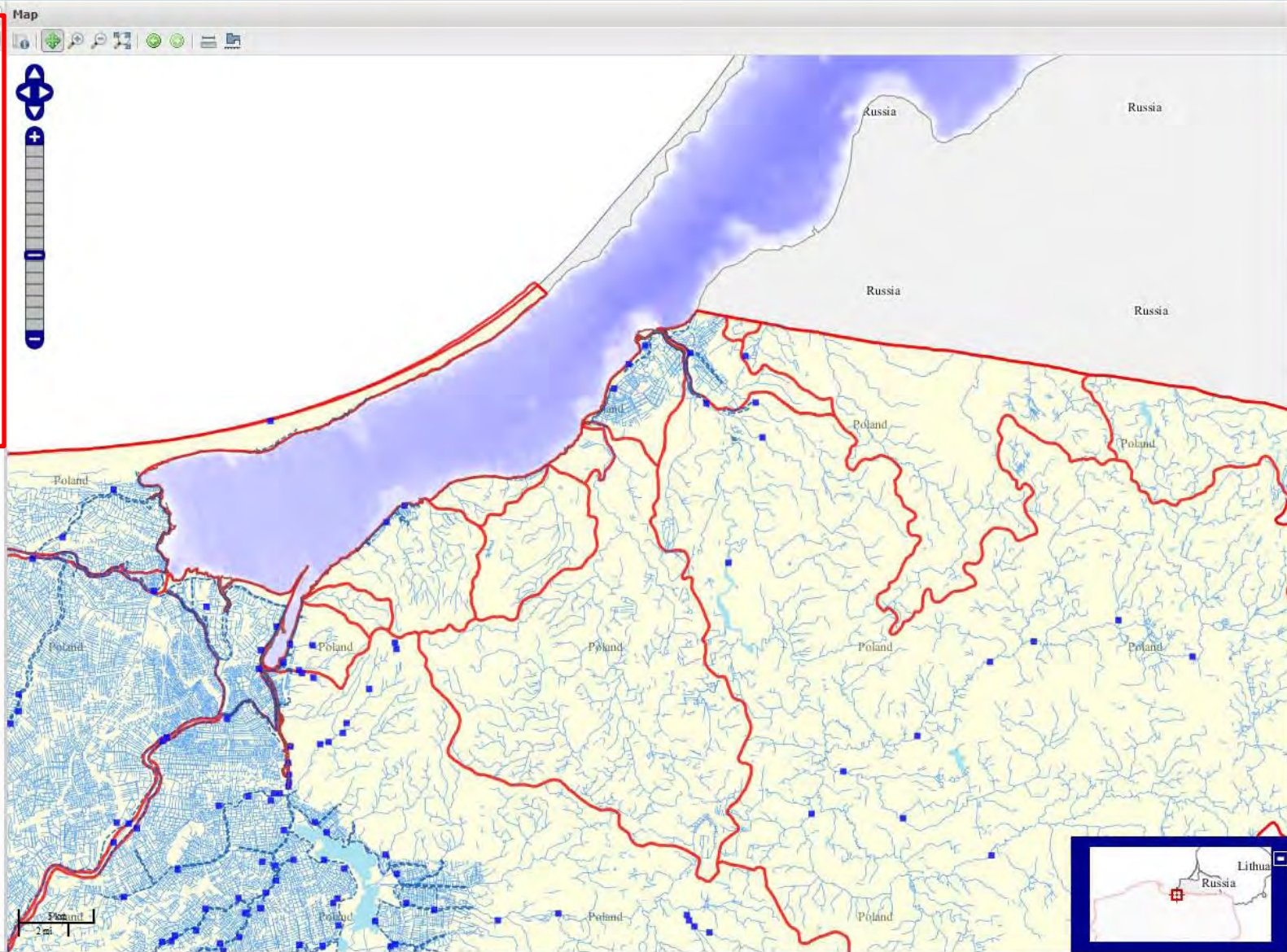






# Action for the Reinforcement of the Transitional Waters' Environmental Integrity - Vistula Lagoon

- Layers
- Base layers
    - Kraje
  - Overlays layers
    - ☒ Drenaige Basin Area
    - ☒ DTM
    - ☒ Forest
    - ☒ Drenaige Basin 1
    - ☒ Drenaige Basin 2
    - ☒ Drenaige Basin 3
    - ☒ Lakes
    - ☒ Rivers
    - ☒ Cities
    - ☒ Railroads
    - ☒ Floodbank
    - ☒ Roads
    - ☒ HydroPoint
    - ☒ Vistula Lagoon







Map

Layers

Legend

Vistula Lagoon



HydroPoint



Roads



Floodbank



Railroads



Cities



Rivers



Lakes



Drenaige Basin 3



Drenaige Basin 2



Drenaige Basin 1



Forest



DTM



-12.0 > x



-11.0 = x



0.0 = x



1.0 = x

Drenaige Basin Area



Land



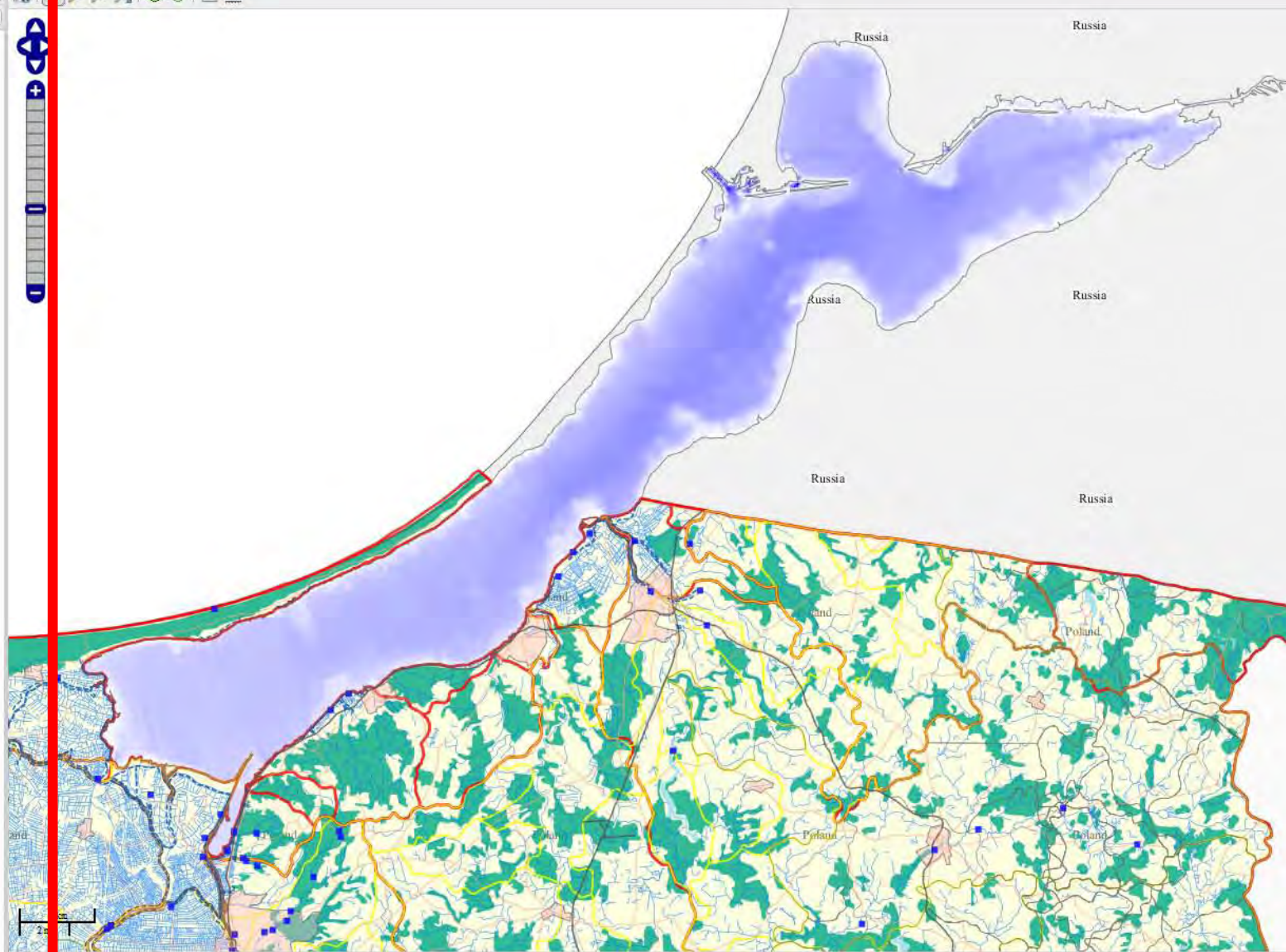
Poland



Russia



Lithuania



257368

Longitude: 14.756

Latitude: 54.636

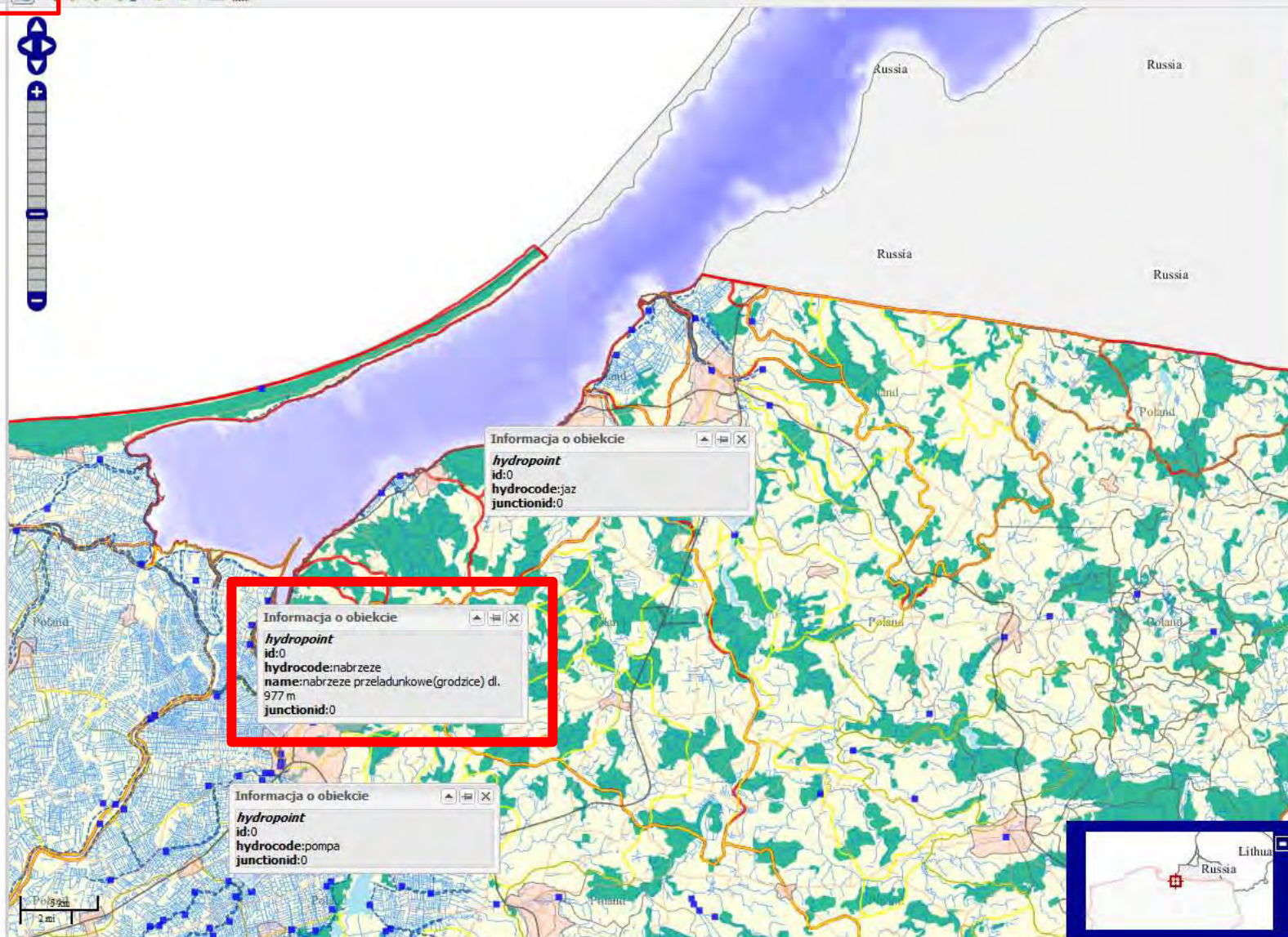
Measure: No results



Map

Layers

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  - ☒ Drenaige Basin Area
  - ☒ DTM
  - ☒ Forest
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  - ☒ Floodbank
  - ☒ Roads
  - ☒ HydroPoint
  - ☒ Vistula Lagoon







# WMS



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Add WMS Server

URL:

Examples: <http://www.myserver.com/arcgis/services/mymap/MapServer/WMServer?>  
<http://www.example.com/servlet/com.esri.wms.Esrimap?ServiceName=Name&>

Version:

Server Layers

Get Layers

- [-] GeoServer Web Map Service
  - [-] GeoServer Web Map Service
    - pol\_ezz
    - pg\_szprot\_ikra\_5
    - pg\_stacje\_2010\_08\_plan
    - pg\_eez\_polski\_sformatowane
    - pg\_dorsz\_larwa\_8
    - pg\_dorsz\_larwa\_5
    - pg\_dorsz\_ikra\_8
    - pg\_dorsz\_ikra\_5
    - pg\_baltyk\_obrys
    - natura2000\_soo
    - natura2000\_oso
    - eez\_polski
    - eez\_polska\_strefa\_sporna
    - eez\_polska
    - batymPMA2
    - haltyk\_nhrvs

Name: WMS

Version: 1.3.0

Abstract:

Account (Optional)

User:

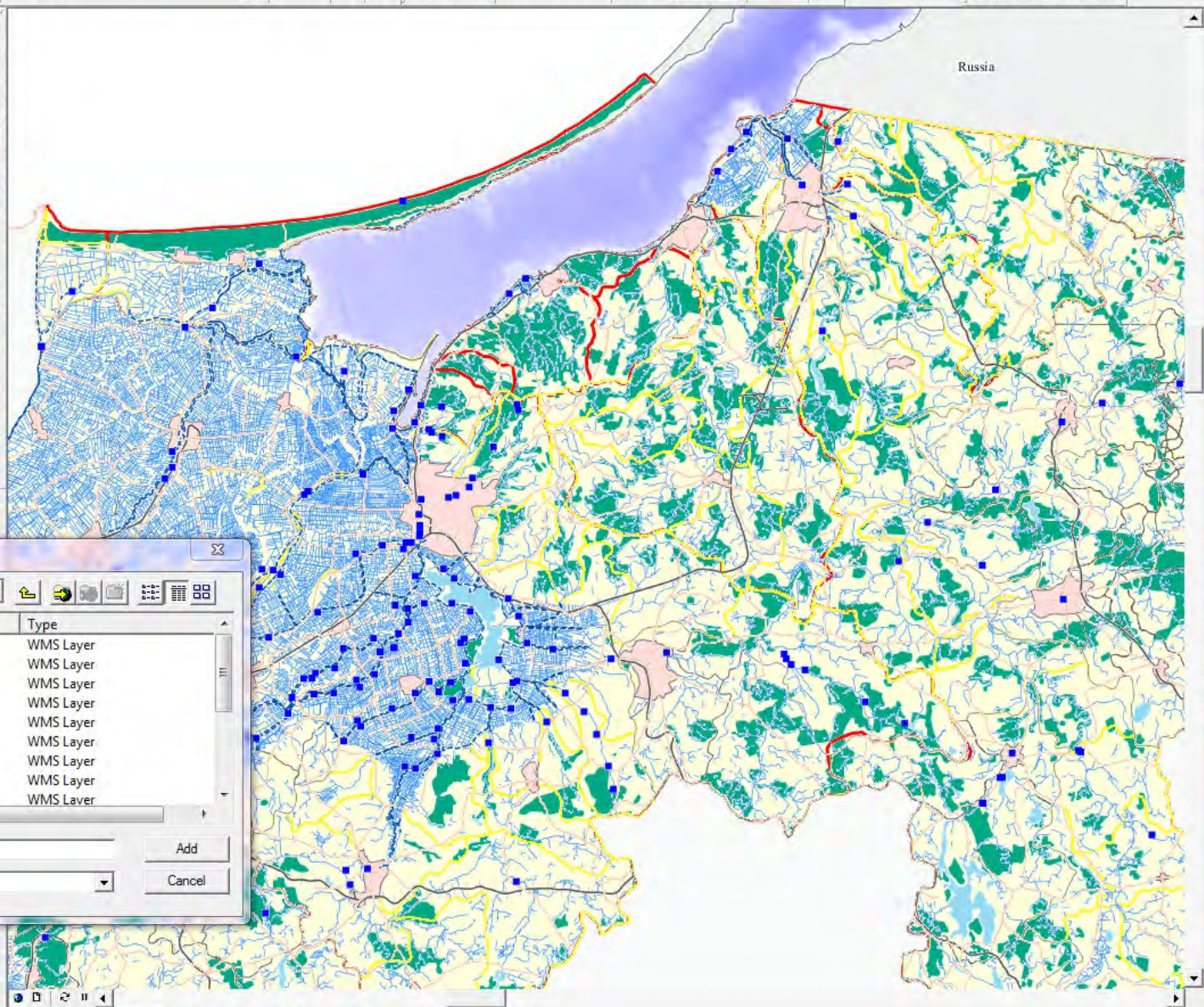
Password:  ☒ Save Password

OK Cancel





- Layers**
- ☒ GeoServer Web Map Service
    - ☒ hydropoint
  - ☒ GeoServer Web Map Service
    - ☒ roads
  - ☒ GeoServer Web Map Service
    - ☒ floodbank
  - ☒ GeoServer Web Map Service
    - ☒ railroads
  - ☒ GeoServer Web Map Service
    - ☒ cities
  - ☒ GeoServer Web Map Service
    - ☒ rivers
  - ☒ GeoServer Web Map Service
    - ☒ lakes
  - ☒ GeoServer Web Map Service
    - ☒ vl\_water
  - ☒ GeoServer Web Map Service
    - ☒ drenaige\_basin\_3
  - ☒ GeoServer Web Map Service
    - ☒ drenaige\_basin\_2
  - ☒ GeoServer Web Map Service
    - ☒ drenaige\_basin\_1
  - ☒ GeoServer Web Map Service
    - ☒ forest



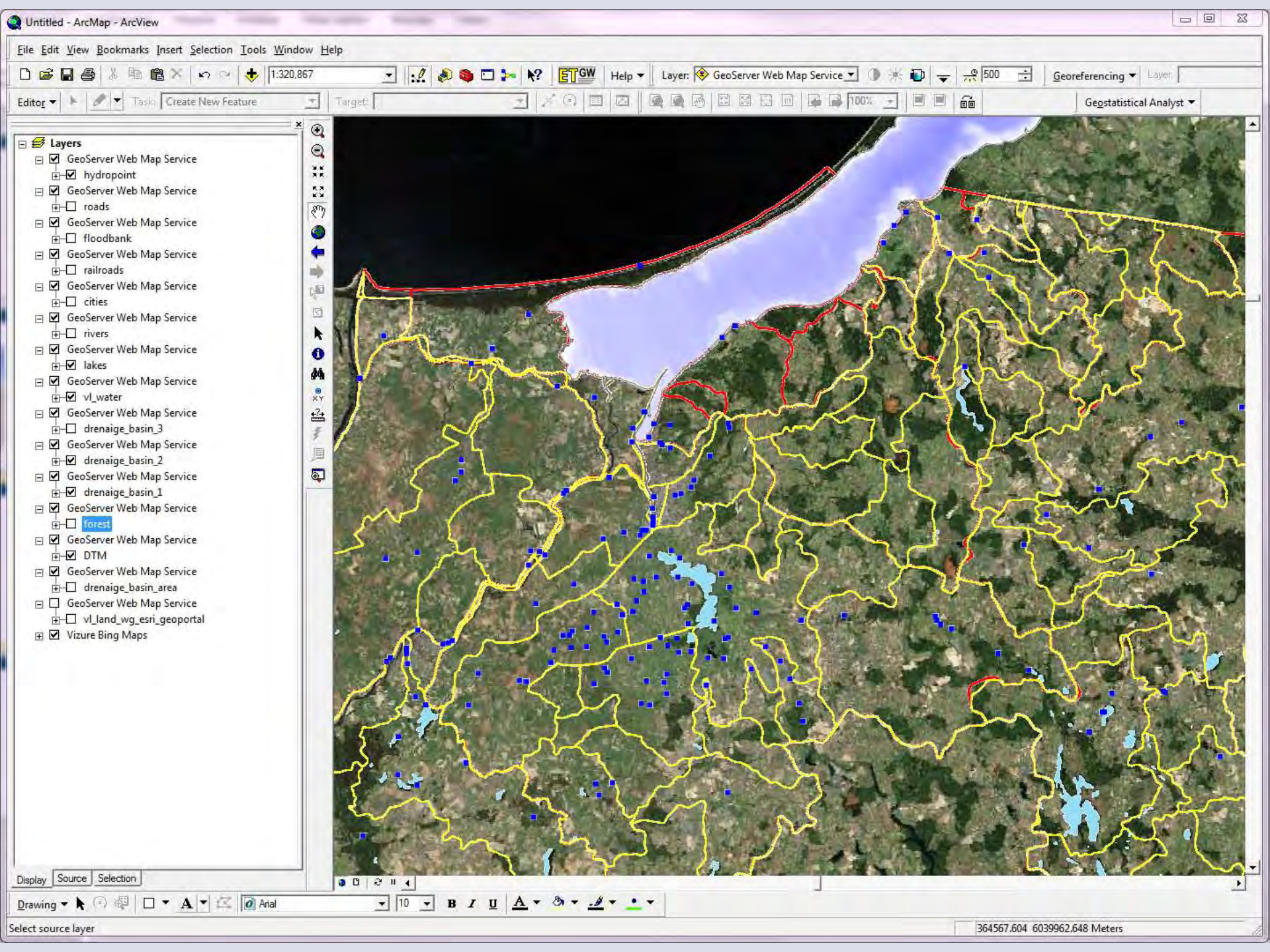
Look in: GeoServer Web Map Service

| Name                | Type      |
|---------------------|-----------|
| cities              | WMS Layer |
| drenaige_basin_1    | WMS Layer |
| drenaige_basin_2    | WMS Layer |
| drenaige_basin_3    | WMS Layer |
| drenaige_basin_area | WMS Layer |
| DTM                 | WMS Layer |
| floodbank           | WMS Layer |
| forest              | WMS Layer |
| hydropoint          | WMS Layer |

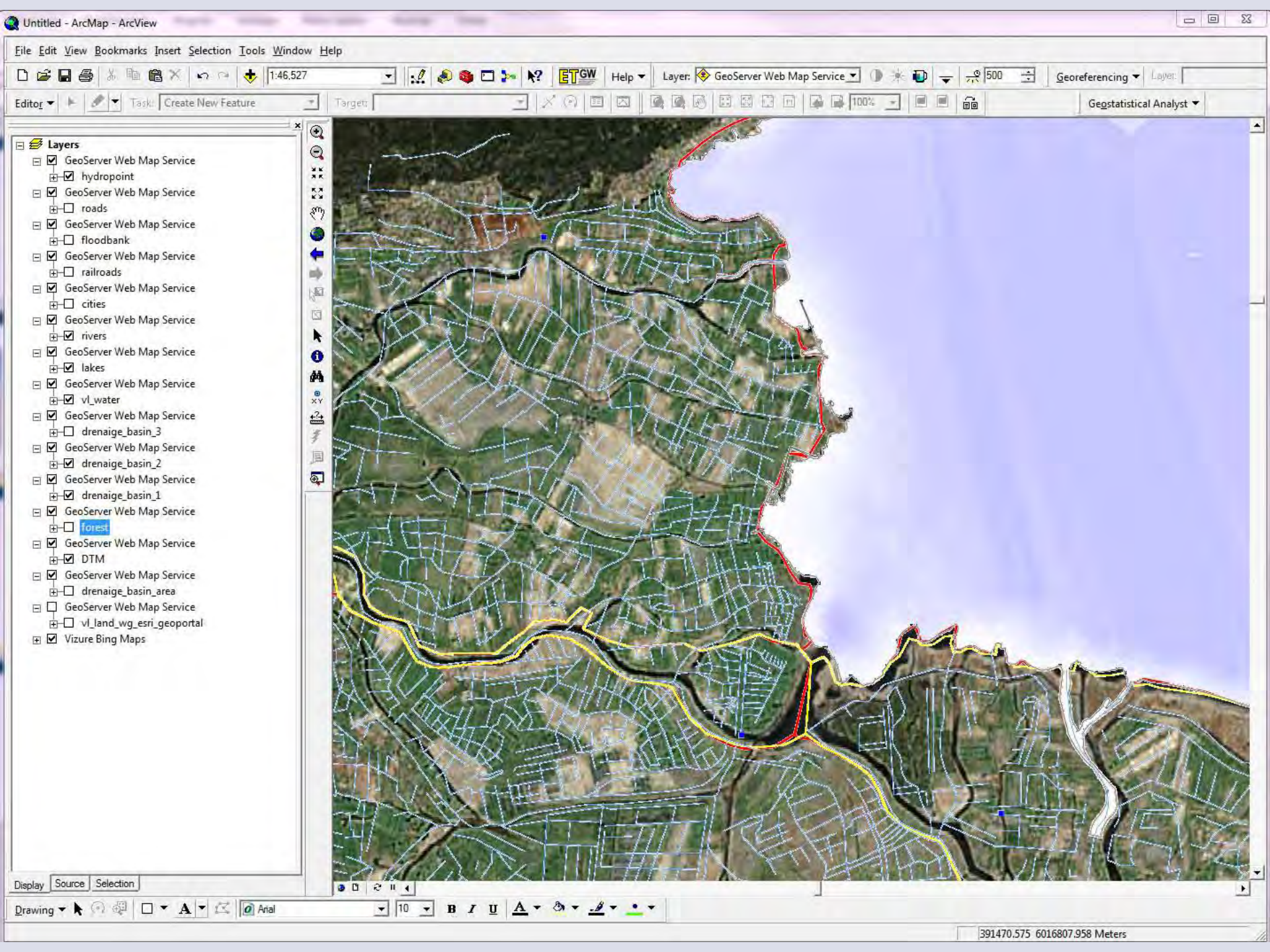
Name:  Add

Show of type: Datasets and Layers (\*.lyr) Cancel

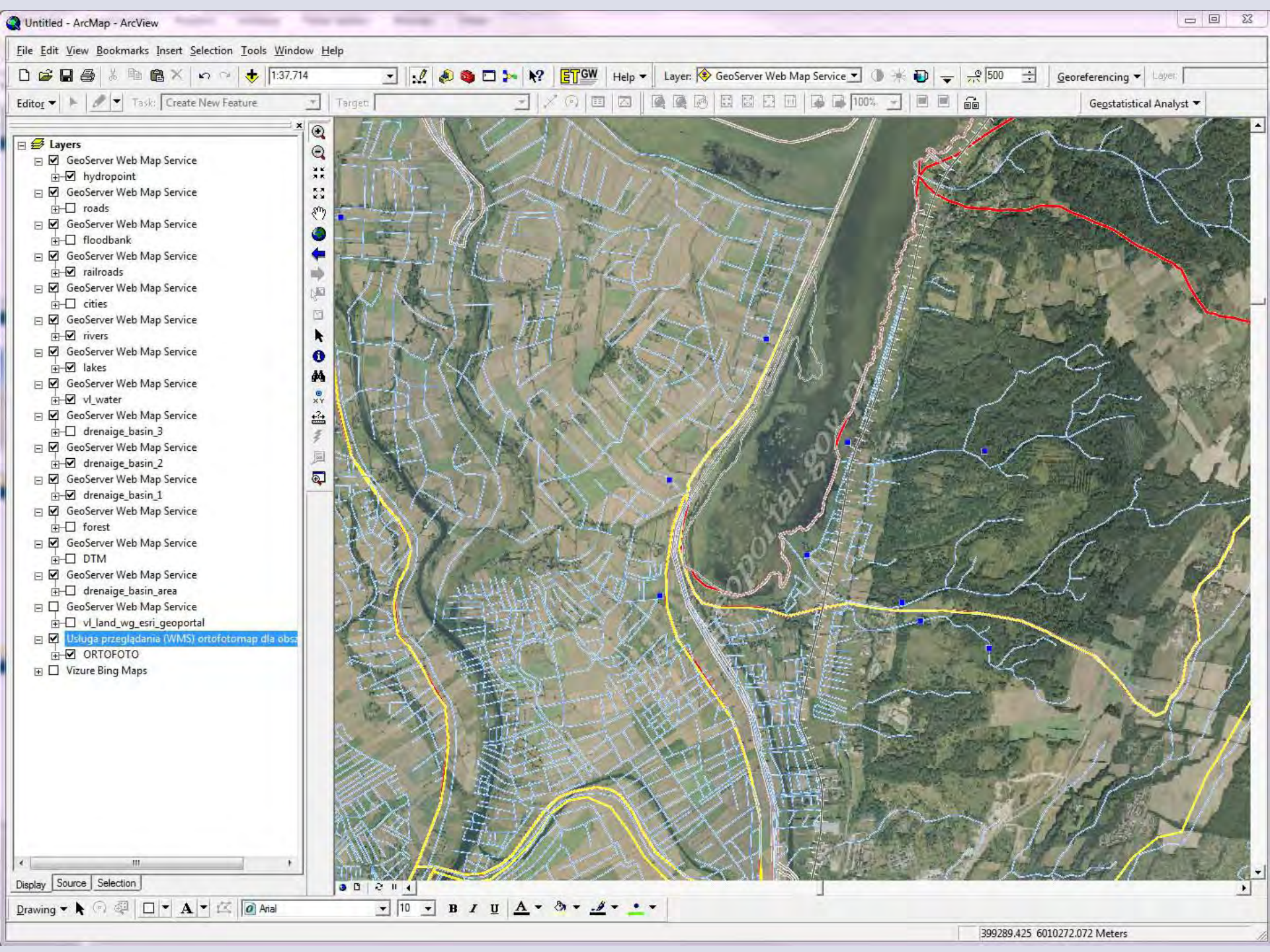












- Layers
  - ☒ GeoServer Web Map Service
    - ☒ hydropoint
  - ☒ GeoServer Web Map Service
    - ☐ roads
  - ☒ GeoServer Web Map Service
    - ☐ floodbank
  - ☒ GeoServer Web Map Service
    - ☒ railroads
  - ☒ GeoServer Web Map Service
    - ☐ cities
  - ☒ GeoServer Web Map Service
    - ☒ rivers
  - ☒ GeoServer Web Map Service
    - ☒ lakes
  - ☒ GeoServer Web Map Service
    - ☒ vl\_water
  - ☒ GeoServer Web Map Service
    - ☐ dreznage\_basin\_3
  - ☒ GeoServer Web Map Service
    - ☒ dreznage\_basin\_2
  - ☒ GeoServer Web Map Service
    - ☒ dreznage\_basin\_1
  - ☒ GeoServer Web Map Service
    - ☐ forest
  - ☒ GeoServer Web Map Service
    - ☐ DTM
  - ☒ GeoServer Web Map Service
    - ☐ dreznage\_basin\_area
  - ☐ GeoServer Web Map Service
    - ☐ vl\_land\_wg\_esri\_geoportal
  - ☒ Usługa przeglądania (WMS) ortofotomap dla obs
    - ☒ ORTOFOTO
  - ☐ Vizure Bing Maps





## Coverage:

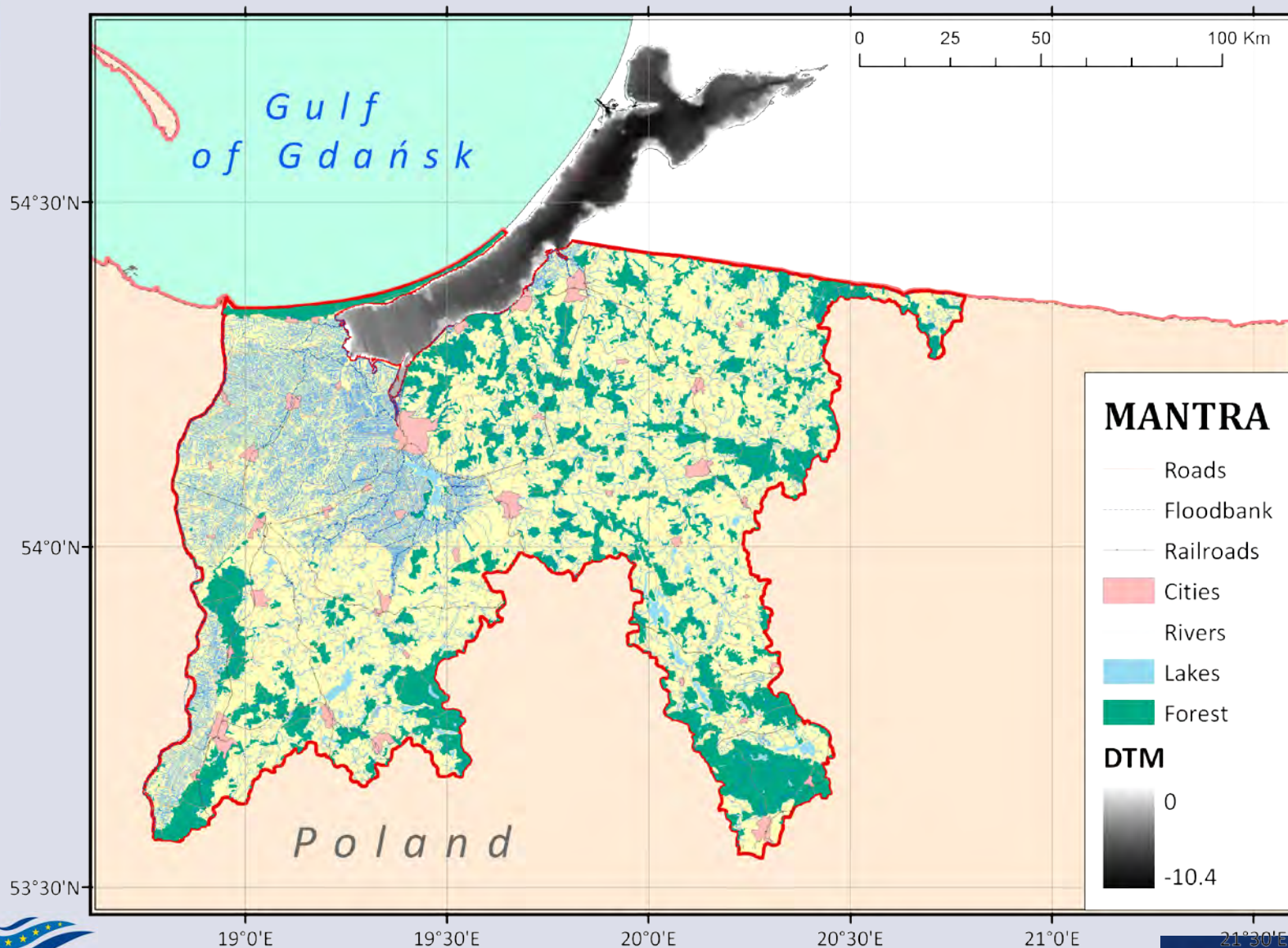
- **Vistula Lagoon** and adjacent area

## Data we have:

- **MANTRA EAST** Project /**LAND**, SEA
- Hydrographic Office of the Polish Navy (**BHMW**) data/**LAND**, SEA
- **Natura2000** - ecological network of protected areas /**LAND**, SEA
- Data for interpolation /SEA:
  - CTD
  - .....

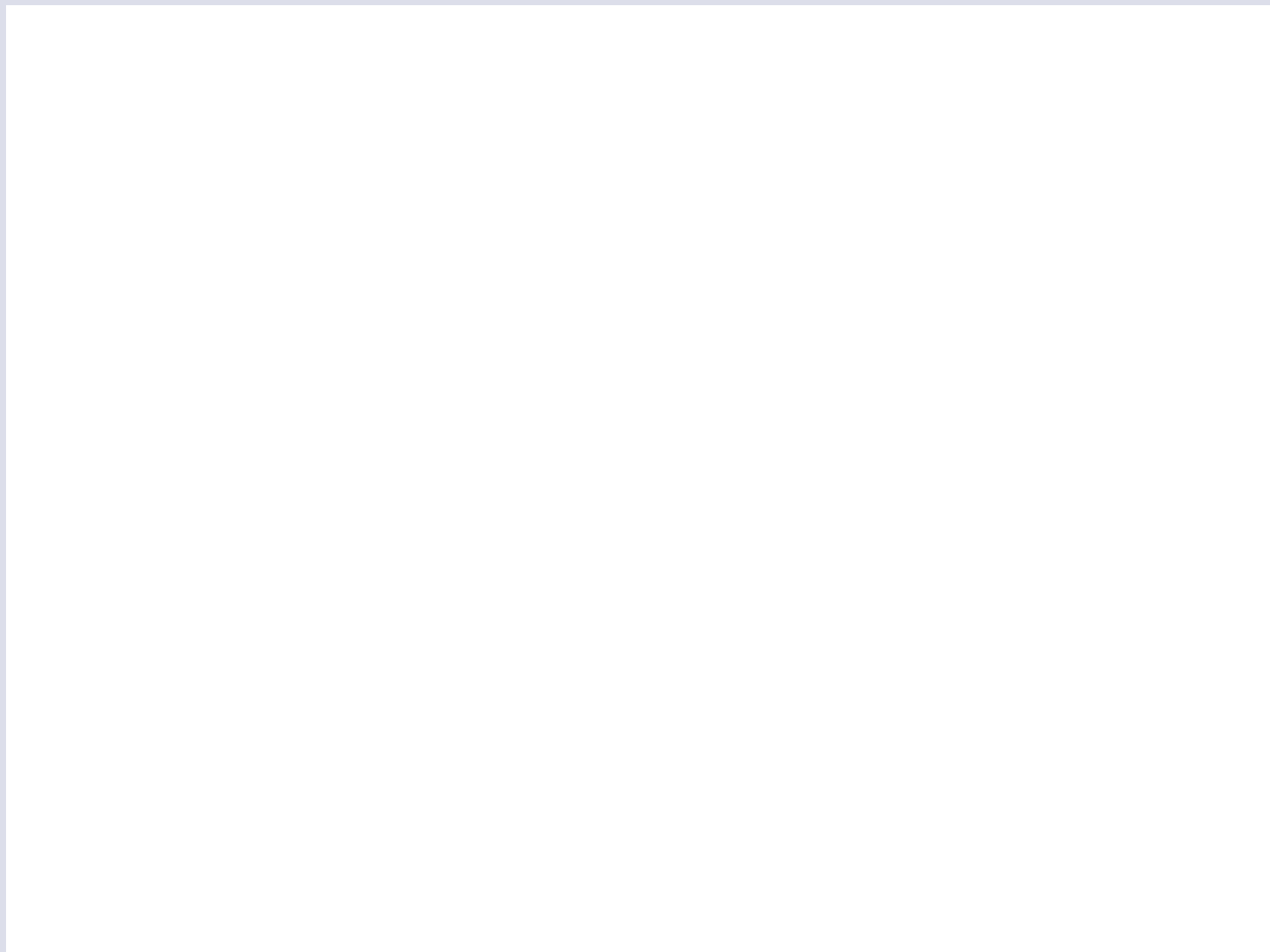


MANTRA





MANTRA



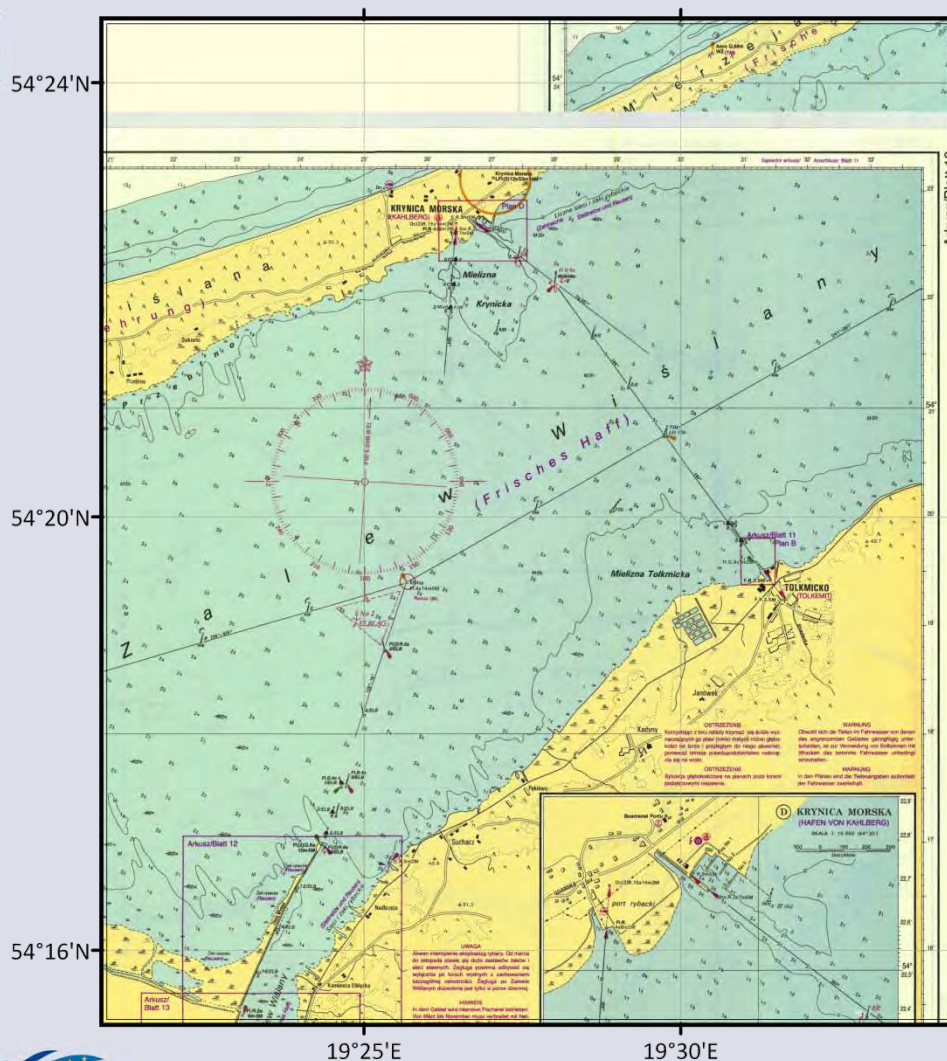
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ARTWEI

BHMW



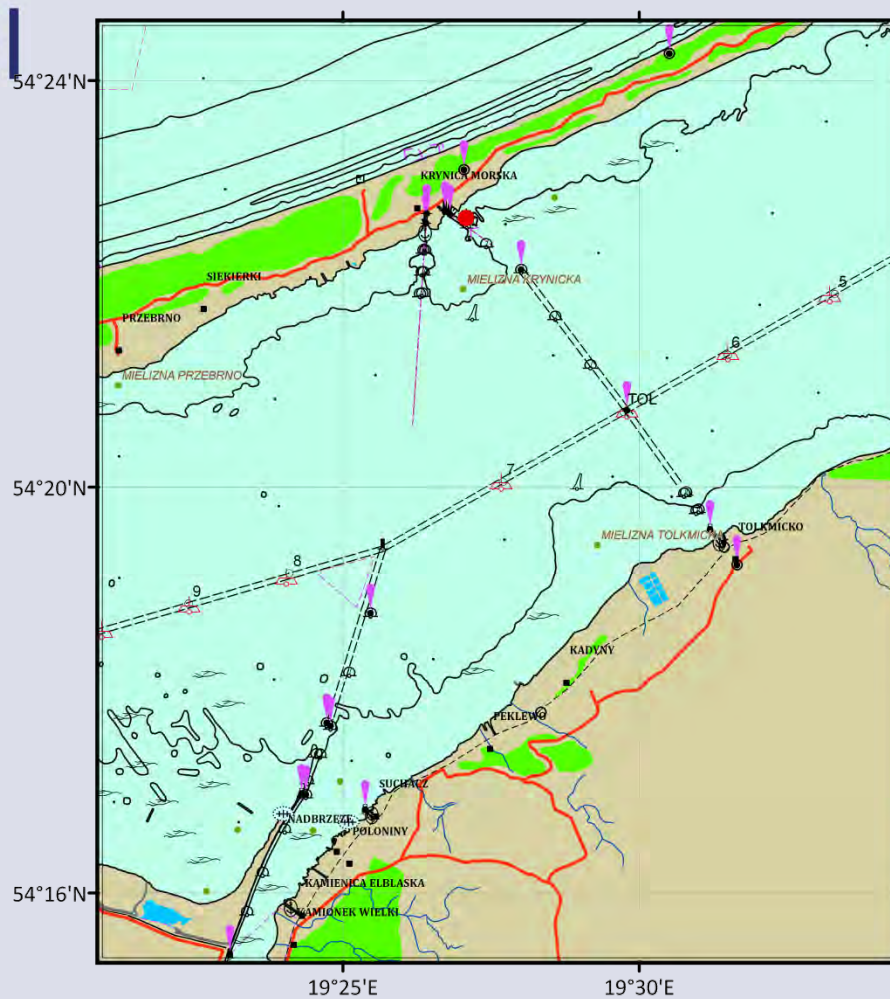
Contents Preview Metadata

|                |                 |
|----------------|-----------------|
| ACHARE_Polygon | MORFAC_Point    |
| ADMARE         | NAVLNE          |
| BCNLAT         | OBSTRN_Point    |
| BCNSPP         | OBSTRN_Polygon  |
| BOYCAR         | RAILWY          |
| BOYLAT         | RCRTCL          |
| BOYSAW         | RDOCAL_Line     |
| BOYSPP         | RECTRC_Line     |
| BRIDGE_Polygon | RESARE          |
| BUAARE_Point   | RIVERS_Line     |
| BUISGL_Point   | RIVERS_Polygon  |
| C_AGGR         | ROADWY_Line     |
| CANALS_Polygon | RSCSTA          |
| COALNE         | SBDARE_Point    |
| CTNARE_Point   | SEAAARE_Point   |
| DEPARE_Polygon | SEAAARE_Polygon |
| DEPCNT         | SLCONS_Line     |
| DMPGRD_Polygon | SLCONS_Polygon  |
| DSID           | SLOTOP          |
| FOGSIG         | slownik         |
| HRBFAC_Point   | SOUNDG          |
| LAKARE         | STSLNE          |
| LIGHTS         | TESARE          |
| LNDARE_Polygon | TOPMAR          |
| LNDMRK_Point   | TSEZNE          |
| LNDRGN_Point   | TSSBND          |
| LNDRGN_Polygon | TSSLPT          |
| M_COVR         | VEGATN_Polygon  |
| M_NSYS         | WEDKLP_Point    |
| M_QUAL         | WRECKS_Point    |
| MAGVAR_Point   |                 |



ARTWEI

BHMW



- Weed/Kelp
- Wreck
- Sea area / named water area
- Sounding
- Top mark
- Rescue station
- Seabed area
- Magnetic variation
- Mooring/warping facility
- Obstruction
- Built-up area
- Building, single
- Aggregation
- Caution area
- Fog signal
- Harbour facility
- Light
- Landmark
- Land region
- Beacon, lateral
- Beacon, special purpose/general
- Buoy, cardinal
- Buoy, lateral
- Buoy, safe water
- Buoy, special purpose/general
- Shoreline Construction
- Slope topline
- Straight territorial sea baseline
- Recommended route centerline
- Radio calling-in point
- Recommended track
- River
- Road
- Navigation line
- Railway
- Coastline
- Depth contour
- Traffic Separation Zone
- Traffic Separation Scheme Lane part
- Vegetation
- Shoreline Construction
- Territorial sea area
- River
- Restricted area
- Navigational system of marks
- Obstruction
- Canal
- Depth area
- Dumping ground
- Lake
- Land area
- Land region
- Anchorage area
- Administration area (Named)
- Bridge
- Sea area / named water area





**NATURA 2000**



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# Data we might have



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## Data we might have /ask for:

- CORINE Land Cover /LAND
- Statistic data (GUS)
  - Sociology
  - Demography
  - Economy
  - etc.
- Satellite data: Landsat, MODIS/LAND, SEA
- Topographic data & DEM /LAND  
(*Voivodship Geodetic and Cartographic Documentation Centres*)
- Geological Map of Poland/LAND
- Maritime Office in Gdynia data
  - EUNIS classification/SEA
  - Geological map /SEA
  - Vegetation /SEA
- Hydrographic Map of Poland



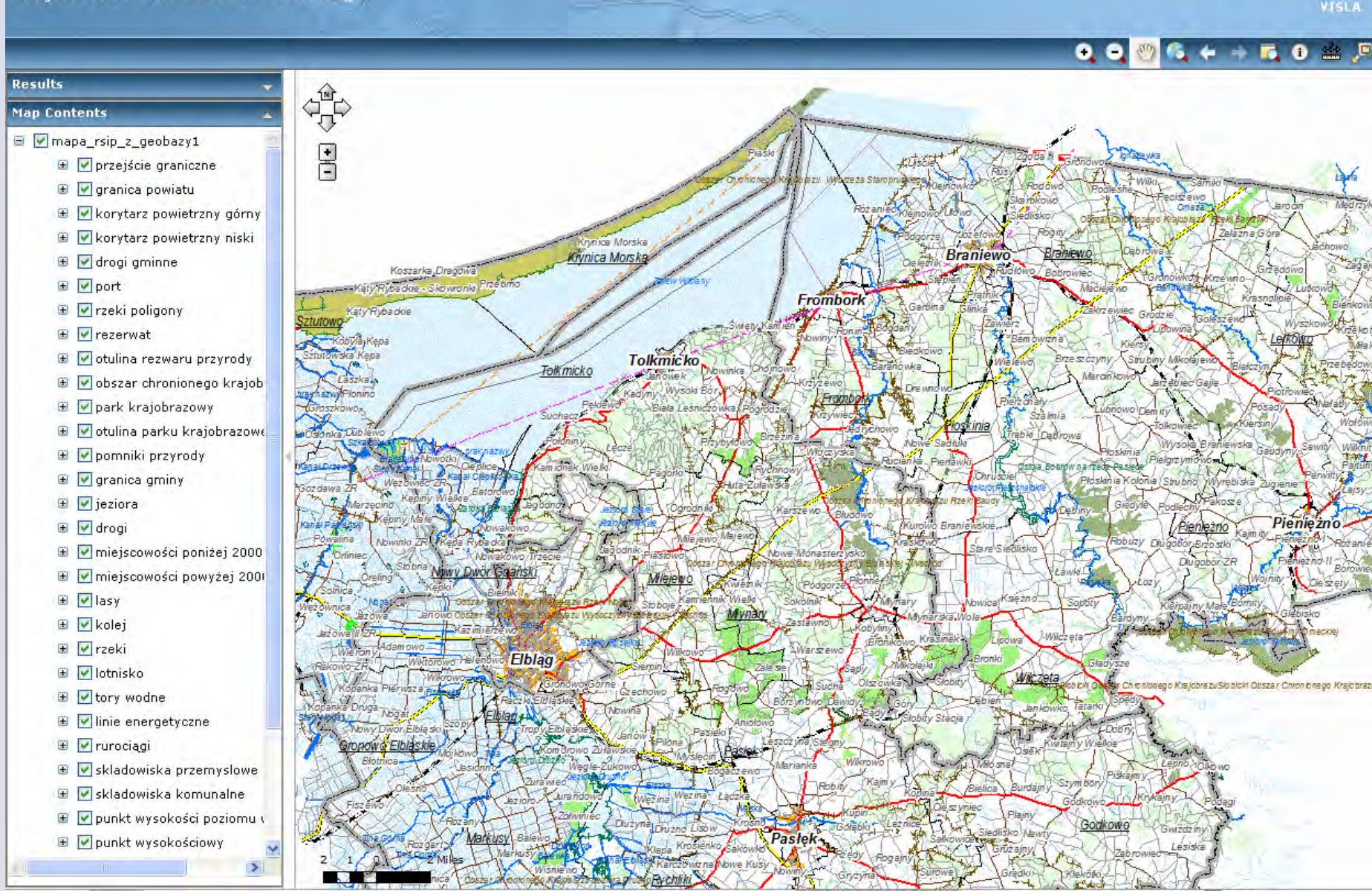




# Topographic data

# VISLA Project

Projekt VISLA SIP Zalewu Wiślanego



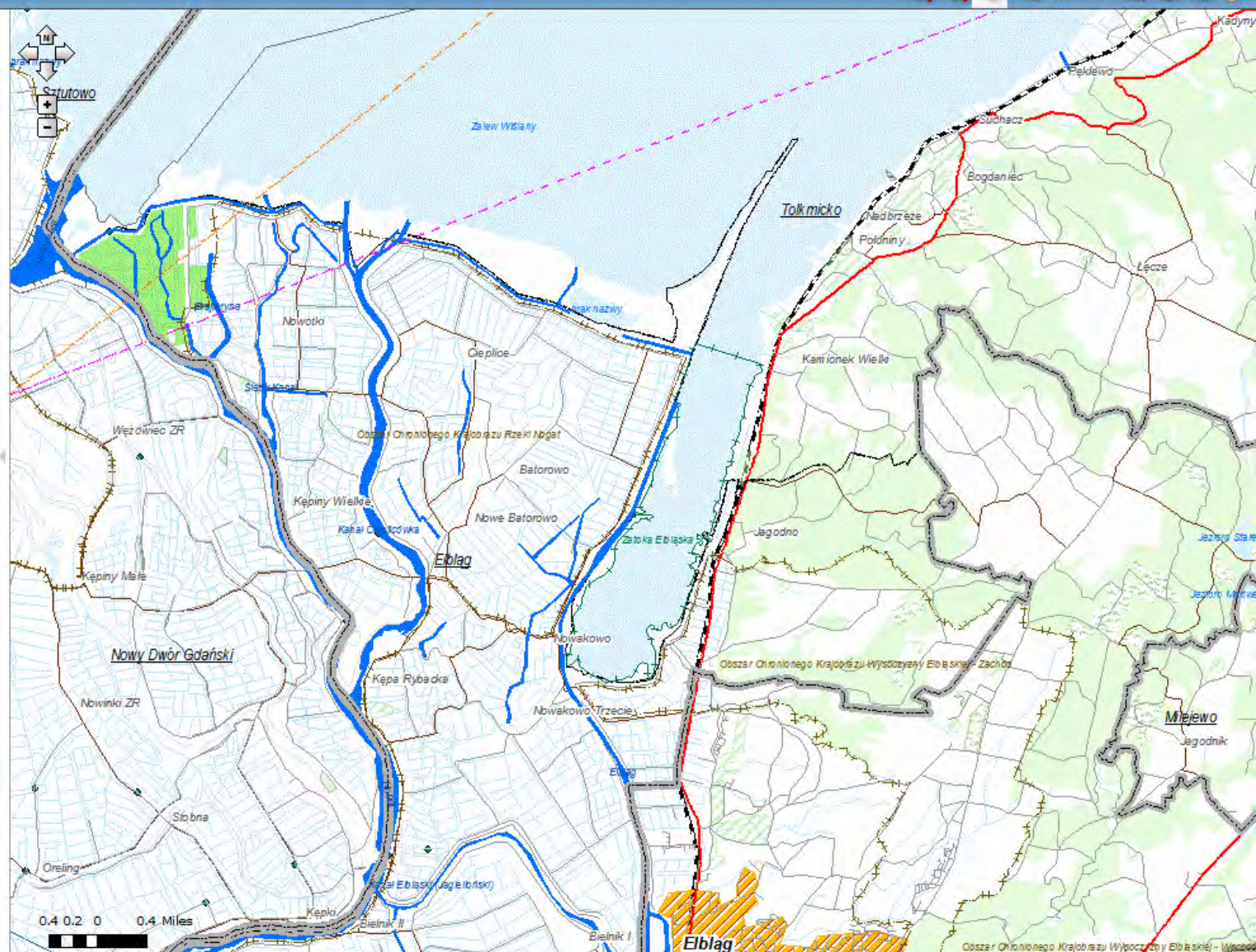




Results

Map Contents

- ☒ mapa\_rsip\_z\_geobazy1
  - ☒ przejście graniczne
  - ☒ granica powiatu
  - ☒ korytarz powietrzny górny
  - ☒ korytarz powietrzny niski
  - ☒ drogi gminne
  - ☒ port
  - ☒ rzeki poligony
  - ☒ rezerwat
  - ☒ otulina rezerwatu przyrody
  - ☒ obszar chronionego krajobrazu
  - ☒ park krajobrazowy
  - ☒ otulina parku krajobrazowego
  - ☒ pomniki przyrody
  - ☒ granica gminy
  - ☒ jeziora
  - ☒ drogi
  - ☒ miejscowości poniżej 2000
  - ☒ miejscowości powyżej 2000
  - ☒ lasy
  - ☒ kolej
  - ☒ rzeki
  - ☒ lotnisko
  - ☒ tory wodne
  - ☒ linie energetyczne
  - ☒ rurociągi
  - ☒ składowiska przemysłowe
  - ☒ składowiska komunalne
  - ☒ punkt wysokościowy
  - ☒ punkt wysokościowy



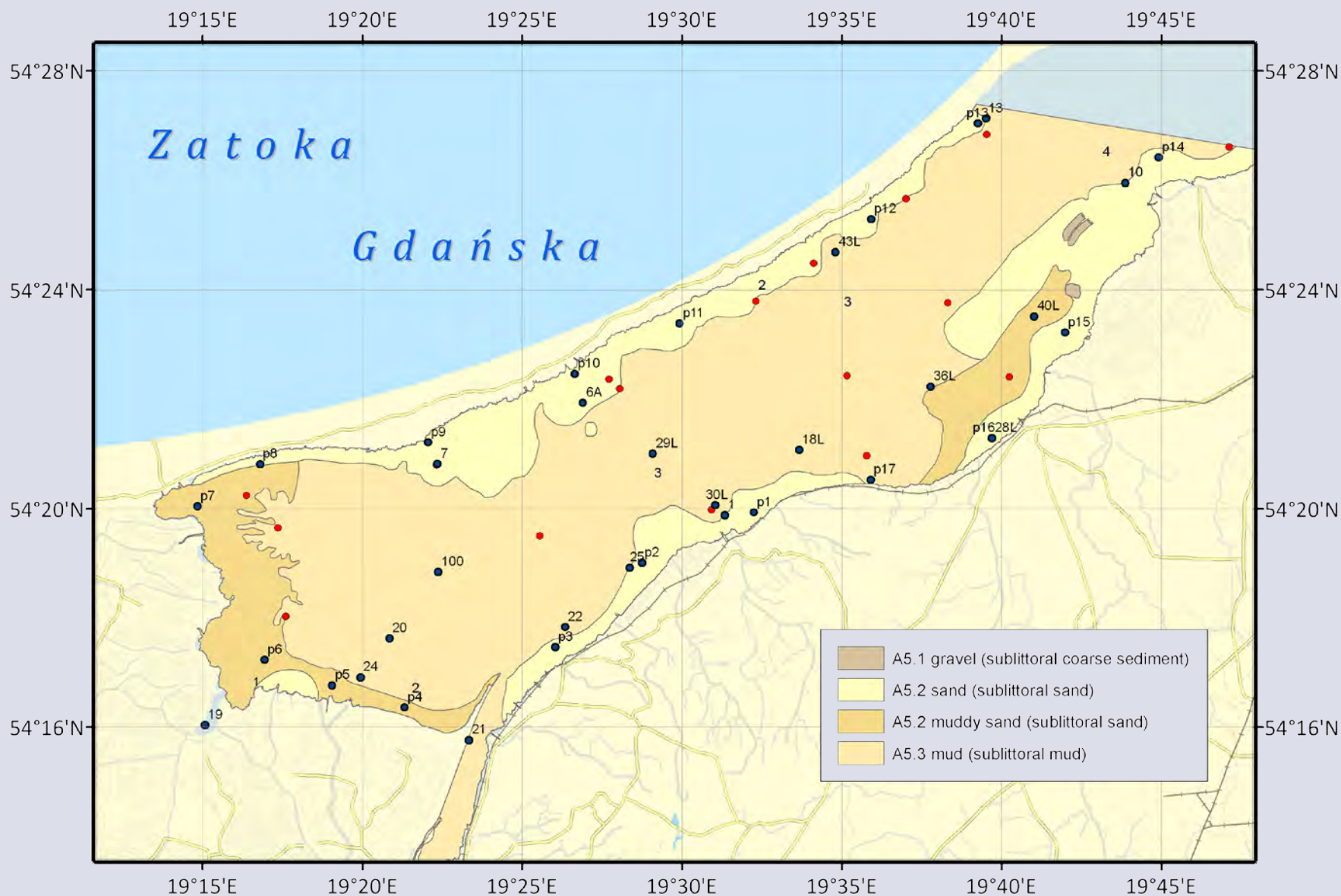


AR1

Maritime Office in Gdynia data



Part-fi  
(Euro)



## Other data

- Web Mapping Services
  - Google Maps
  - Bing Maps
  - WMS/WFS/WCS services





# Google Maps





