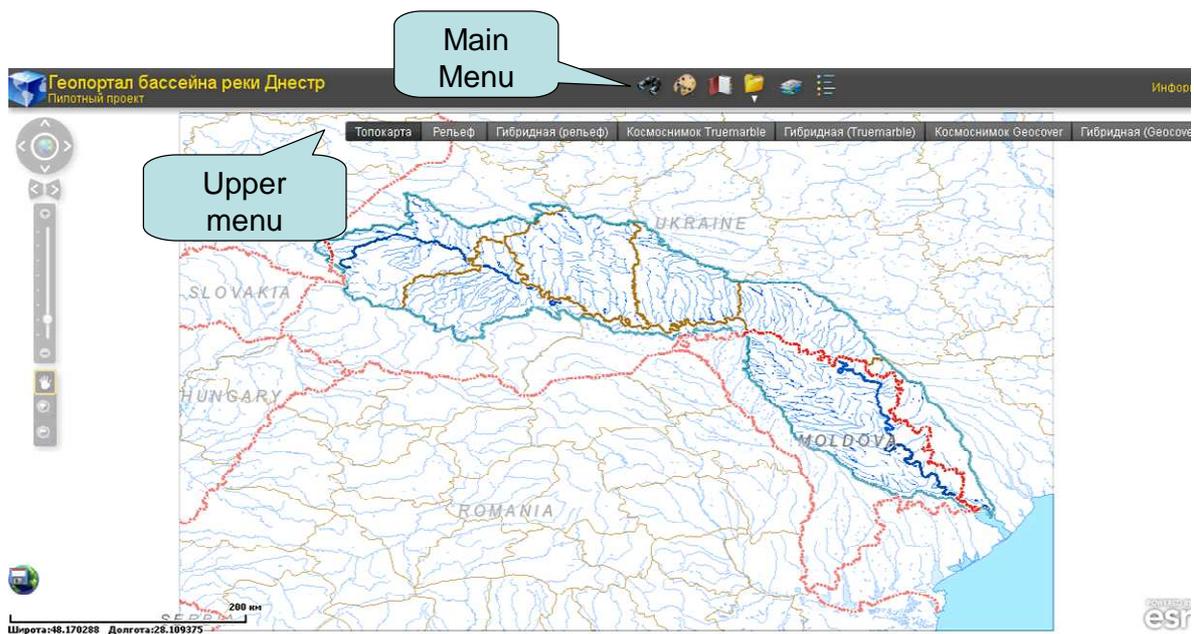


Instructions on how to use the interactive map of the Pilot Dniester GIS Portal

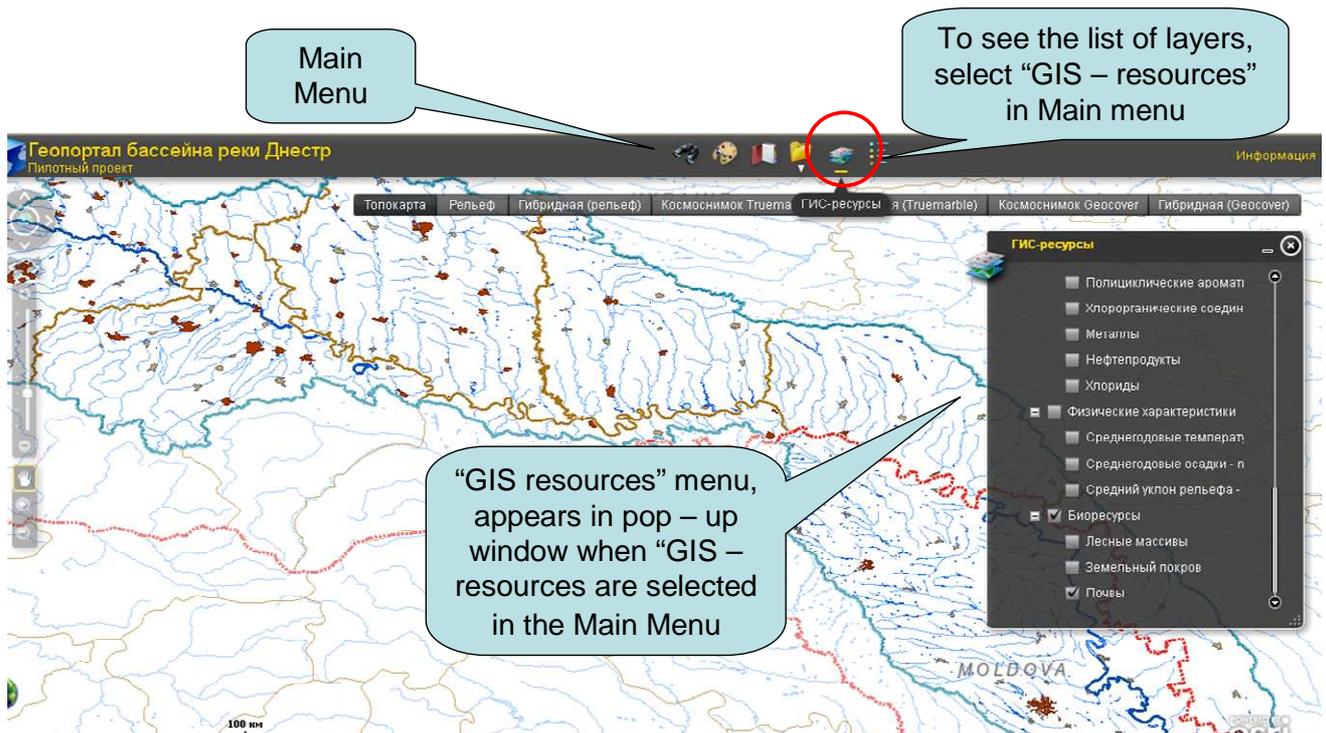
The interactive map service available on the Dniester GIS Portal allows users to manipulate the layers and the map view to create their own customer-defined maps. This instruction can also be downloaded in text–file format in Russian.

In the upper menu the user can select layers that serve as the base of the map. The following options are available: “basemap”, “relief”, combination of “relief” and “basemap”, “trumarble image”, “geocover” and combination of “geocover” and “basemap”.



1. Interactive map with Upper Menu and Main menu.

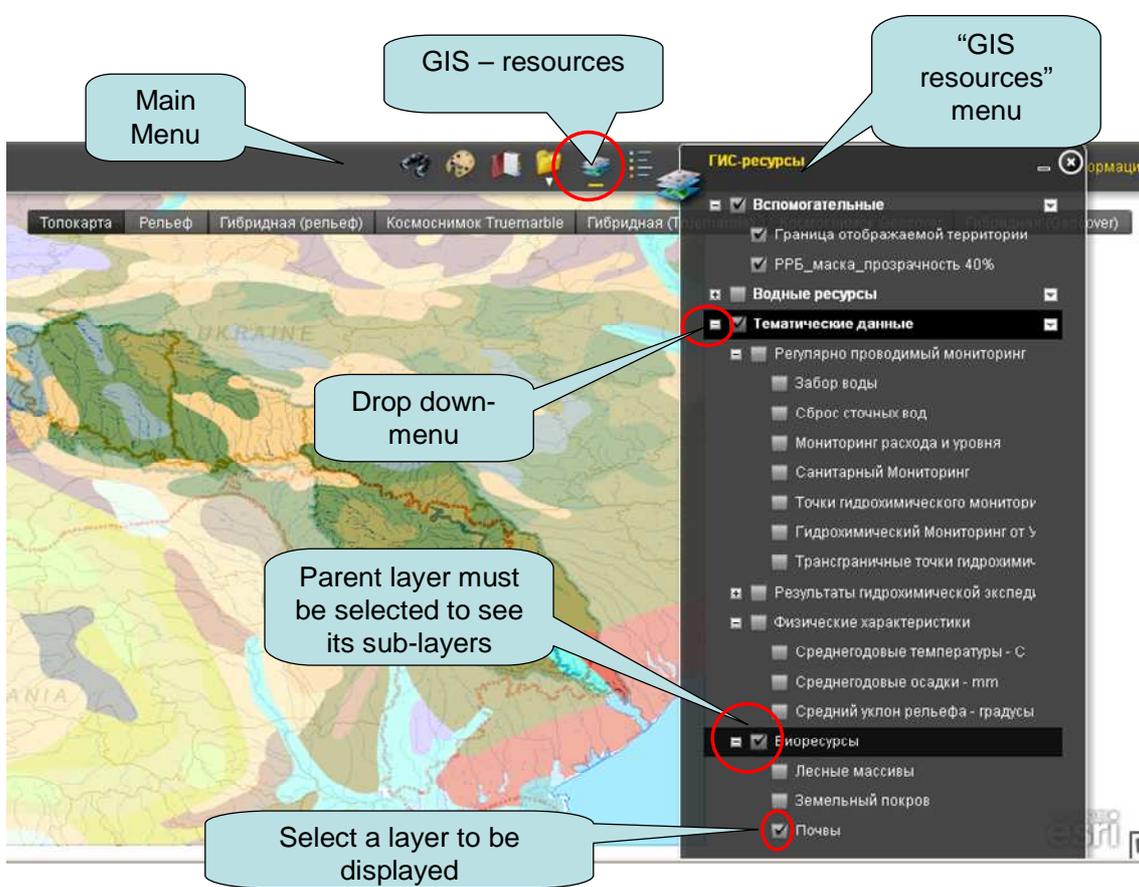
Basemap in this case is a layer with the river network of the Dniester basin. Other layers can be shown or hidden in the “GIS resources” menu that appears as a pop-up window, when selecting “GIS resources” in the Main menu on the top above the map.



2. Opening the GIS-Resources Menu.

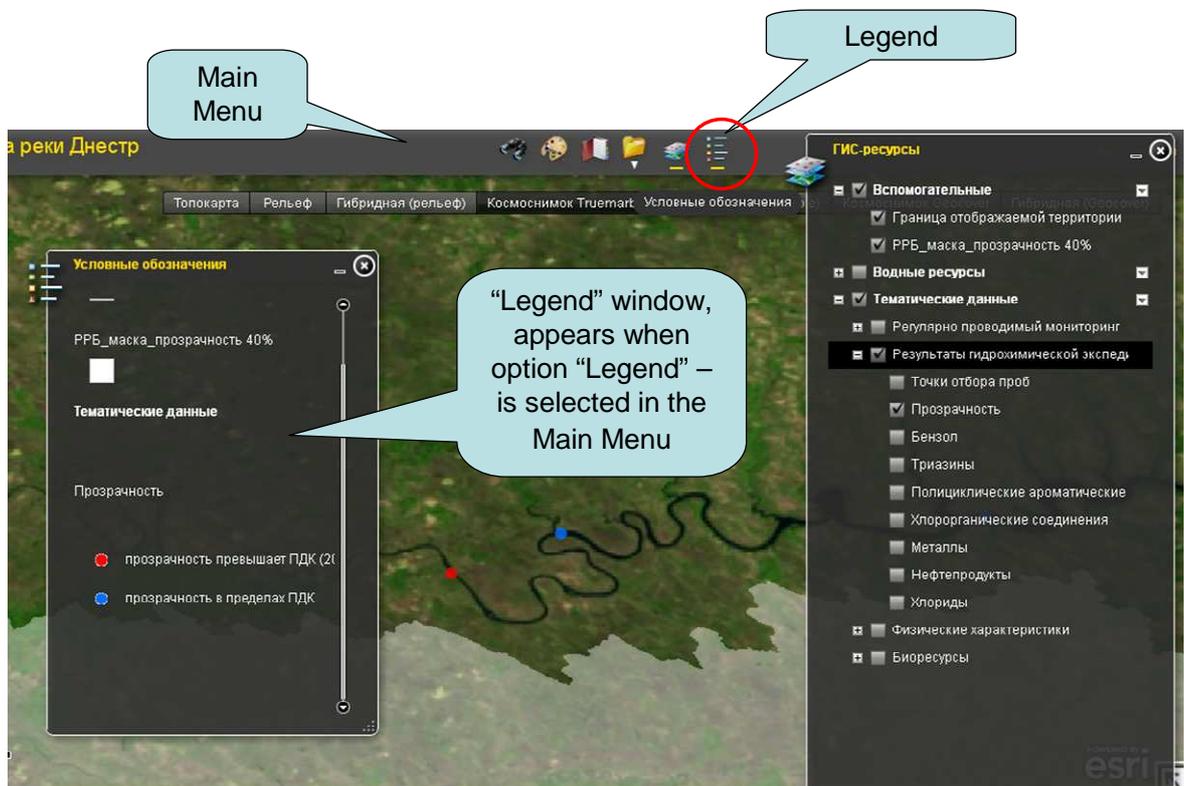
The layers are organized by themes, each layer containing a number of sub-layers. They appear in the drop-down menu of a corresponding parent layer.

In order to have a sub-layer displayed on the map, the parent layer should also be selected. For example, if one wants to see “soils” on the interactive map, one has to select the layer “bioresources” and its sub-layer in the “soils” drop-down menu.



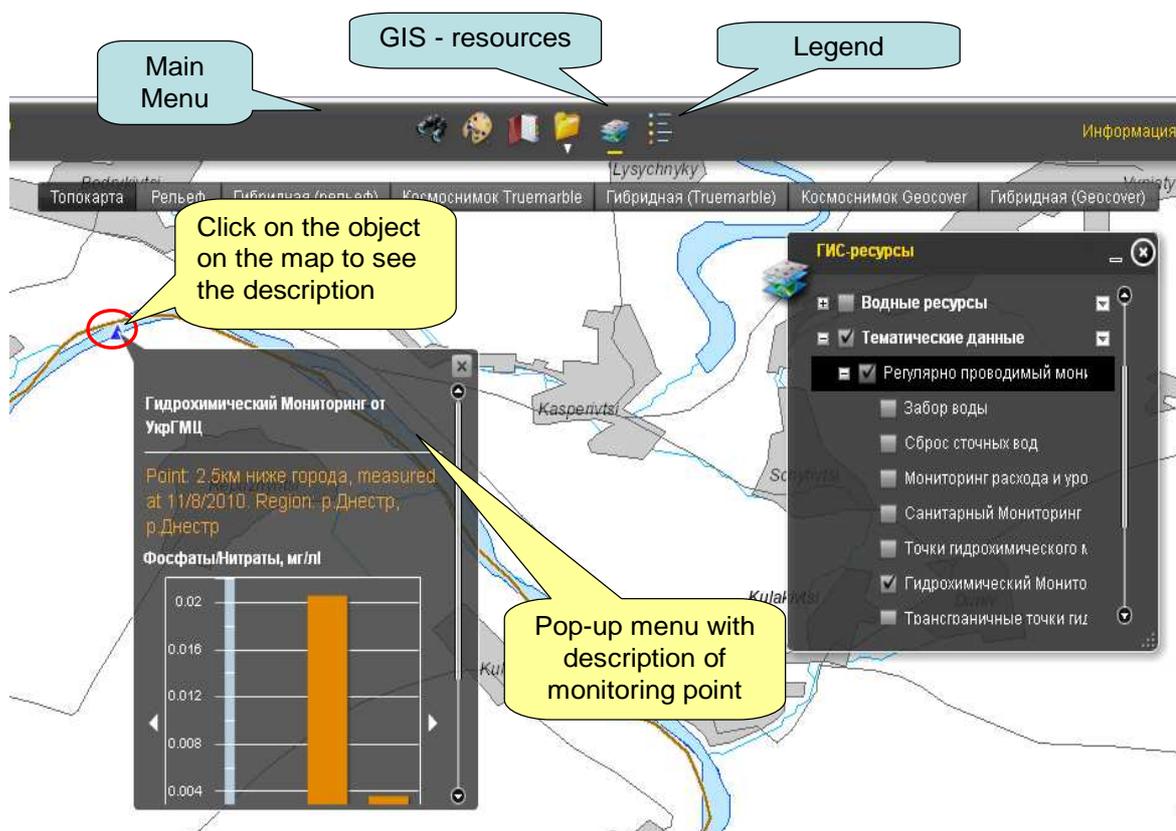
3. Selecting layers to display

To see the legend for the selected layers, please choose the “legend” in the top menu.



4. Displaying the legend

The system also allows users to explore and browse the database. To see the description of the object on the map, simply click on it. The interactive map will display a pop-up window with information about the object you have selected. This refers also to the monitoring points. When clicking a point on the map, you will get information about the parameter being monitored at that point, exact location and conditions of sampling, and the results of the monitoring.



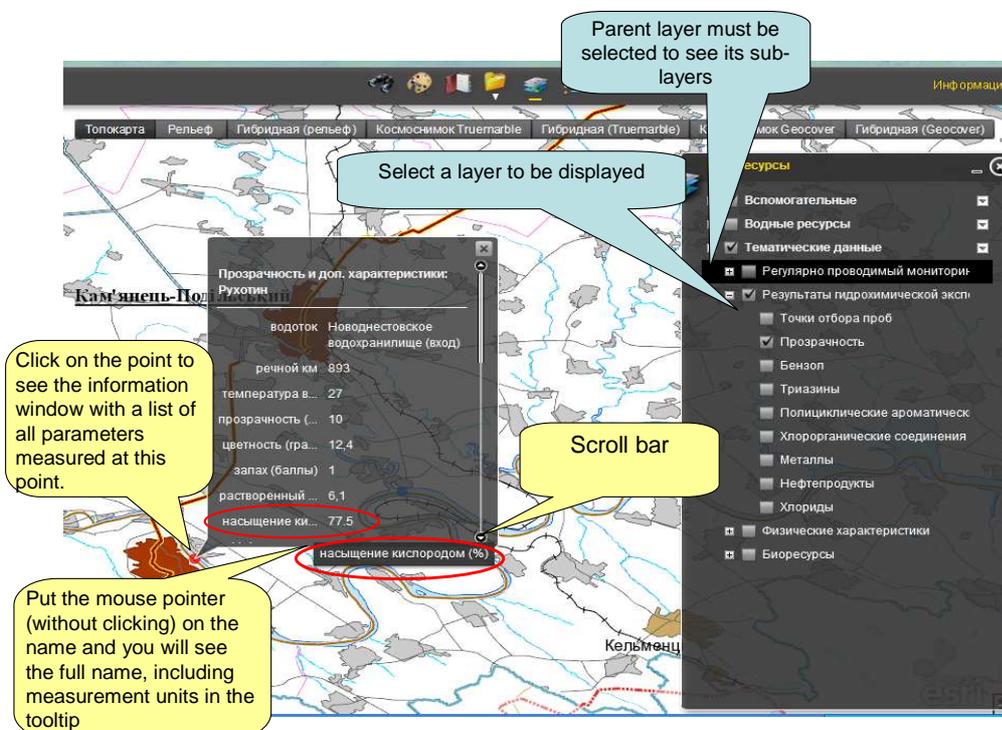
5. Displaying the information about the object on the map

Please note that sampling for several parameters can be done at the same point, and the points will overlap on the map. In such a case it might be helpful to hide layers, other than those you are interested in.

The monitoring data covers a wide range of parameter of water quality and quantity. Not every parameter, however, could be shown in the separate layer of the map in the pilot version of the Geoportal. Never the less, each monitored parameter measured at the monitoring point can be seen.

To do so, please, select the layer containing this parameter in the GIS resources menu and then select the point on the map. In the information window of this point, you could see all parameters measured at this point.

Below are the layers, not shown in separate layers on the interactive map. Layer Turbidity and other characteristics in the group of layers Hydrochemical expedition results, 2010 contains data on measured parameter turbidity, which is shown on the map and on a number of parameters, not shown on the interactive map in the separate layers. These are: temperature, turbidity, sample points, turbidity, benzol, triazin, polyaromatic hydrocarbons, organochlorine pesticides, metals content, oil content and chlorides, temperature, turbidity, water color, odor, dissolved oxygen, oxygen saturation, pH, alkalinity of water, acidity of water, electrical conductivity, total hardness, biological oxygen demand (BOD5), biological oxygen demand (BOD total), chemical oxygen demand with permanganate as the oxidant, surfactants, hydrogen carbonate, potassium, calcium, magnesium, cobalt, aluminium, chrome, sodium, iron content, manganese. Layer Chlorides and other characteristics in the group of layers Hydrochemical expedition results, 2010 contains data on measured parameter chloride, which is shown on the interactive map as a separate layer and on a number of parameters, not shown on the interactive map in the separate layers. These are: particulate matter, chlorides, sulphates, total dry matter, nitrate nitrogen, nitrite nitrogen, ammonium nitrogen, phosphates, total phosphorous content, chemical oxygen demand.



6. Displaying the information on additional parameters.

For example, you are looking for data about the “dissolved oxygen” in the

monitoring point Ruhotyn. First in the menu GIS-resources select the layer “Turbidity and additional parameters”. Then select the point on the map you are interested in. The information window for the selected point will pop out. In the information window you will find a list of all parameters measured at this point. If you do not see the parameter you are interested in, you might have to scroll down, if the list of the monitored parameters is too long. If the name of the parameter is too long, like in given example, please put the mouse pointer (without clicking) on the name and you will see the full name, including measurement units in the tooltip.

The interactive map allows users, for example, to make observations regarding the relationships between different physical and environmental qualities of the river. By selecting different combinations of layers and sub-layers one can visualize these dependencies relationships on the map. The interactive map, of course, offers many more possibilities, and the number of layer combinations is unrestricted.