

WR Surveillance module Instructions



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Short description of WR surveillance module

WR surveillance module is used for uploading photos and PDF files that are related to DRINKADRIA project regarding all working packages. Photos can also be from newspapers or reports – in that case, please, cite author.

Main targeted work packages are:

1.) **WP4**: photos and documents that relate to drinking water sources, ground water system (aquifer), areas that relate to strict protection of the water protection regime, water quality monitoring and all other documents that are important for WP4.

2.) **WP5 & WP6**: photos and documents that relate to:

- (1) current state and problems on existing CB / CR WSS and in pilot areas,
- (2) photos and paper documentation on construction works that were/will be done on pilots and
- (3) maintenance of water supply systems and all other documents that are important for WP5 & WP6.



Short instructions for upload to WR surveillance module

Short instructions for WR Surveillance module are prepared. If you have any further questions, please, contact mohor.gartner@fgg.uni-lj.si.

WR surveillance is available on web page <http://drinkadria.fgg.uni-lj.si/>, under tab **WR surveillance**. Sign in with your unique e-mail address and password.

1. Upload of photos/PDFs

Following file formats can be uploaded:

- a.) Images/photos (JPEG, PNG, GIF, TIF format) and
- b.) PDF files – files with *.doc or *.docx ending, must be first converted into PDF file before upload.

Images and PDFs are uploaded in few steps:

- 1.) First click on button  **Send new photo** (Figure 1).

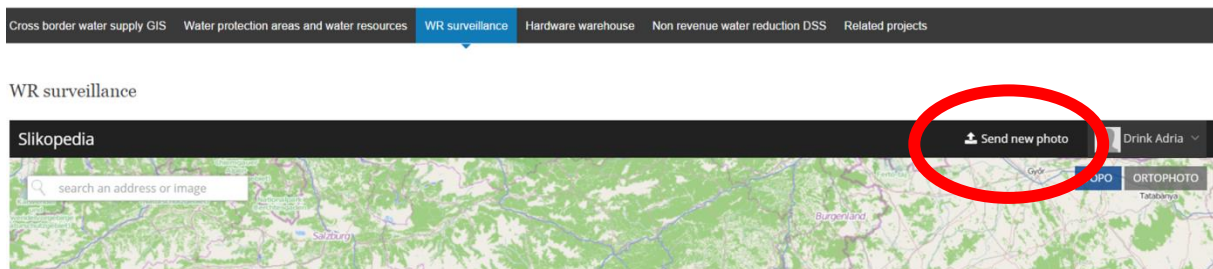


Figure 1: Click on button **Send new photo**.

- 2.) Pop-up Window for uploading will appear. Click on button  **Browse** (Figure 2):

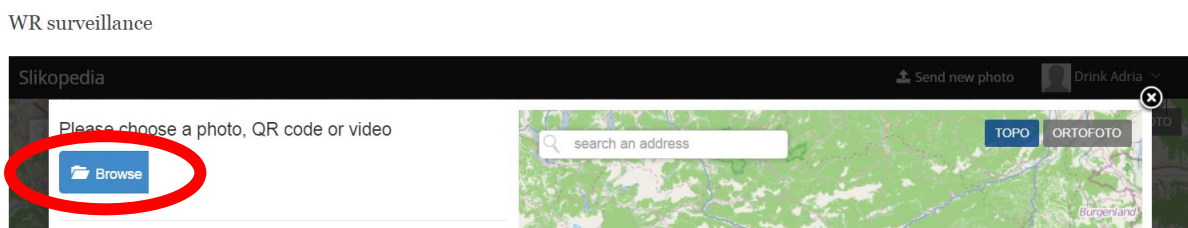


Figure 2: Click on button **Browse**

- 3.) Select all photos that you wish to upload. You can select multiple photos.
- 4.) All selected photos will be showed on the left side of the window (Figure 3).

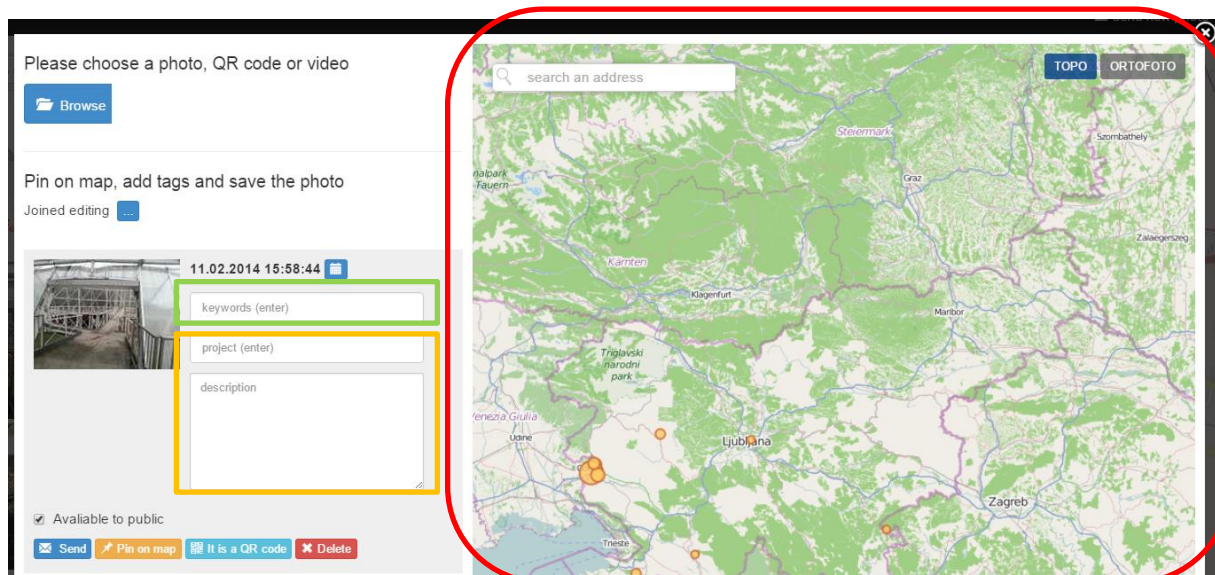











Figure 3: Uploading of selected photos/PDFs.

Map window

- 5.) Now you must define input field **keywords** (Figure 3, green square); and you can optionally define input fields **project** and **description** (Figure 3, orange square).

Keywords field must be filled out with at least one **obligatory keyword!** **Descriptive keywords** are used to even better describe photo/PDF. You can find suggested **keywords** in APPENDIX (Table 1). A dropdown menu will appear after you start inserting keyword. Keyword can be selected and confirmed with mouse click or it can be written manually (press Enter key  after every inserted keyword). It is advised to put information in field **description** for more detailed information: at least place and country.

- 6.) Now you must position photo/PDF. There are two possibilities:
- photo has automatic GPS data (phone or camera that uses GPS tracking): photo will be positioned automatically. Assigned position can be viewed with button  (Figure 5, in green ellipse). It is possible to correct the position that was automatically defined. You can proceed to step 9.);
 - photo does not have automatic geocoding – proceed to step 7.).
- 7.) Move with your mouse pointer  over map (see Figure 3, red square). Mouse pointer  should change to **Pin icon** . Then navigate to location where photo was taken (hold left mouse button  + move mouse  or zoom in/out with mouse scroll ). Click with left mouse button  on the location to position photo.



- 8.) When photo/PDF was positioned, its location is stored with click on button **Finish pining** (Figure 4, in red ellipse).

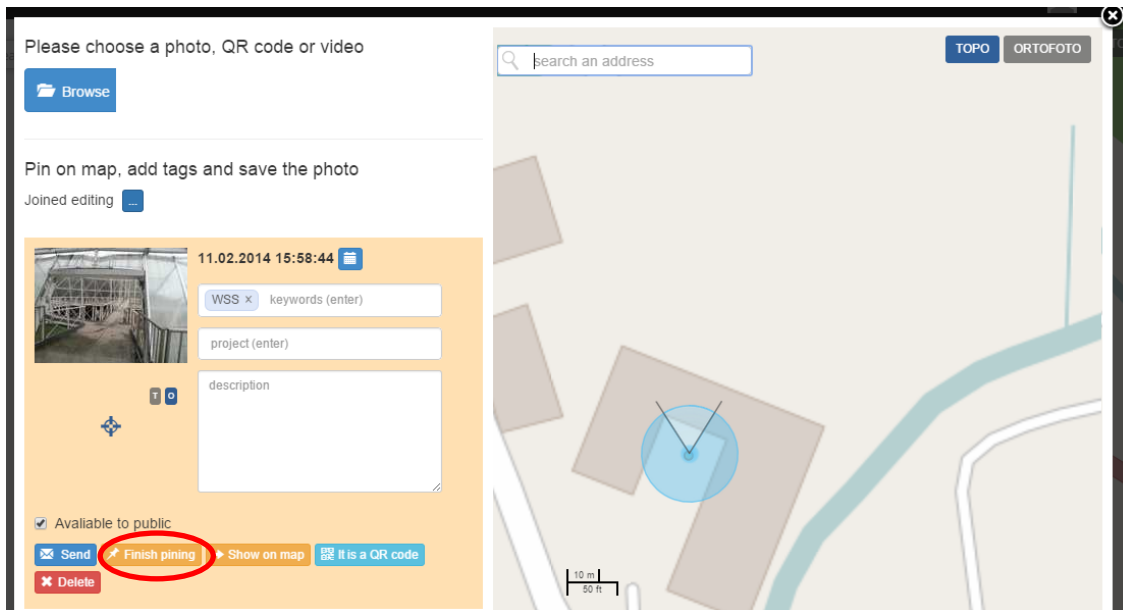


Figure 4: Position of photo is set.

- 9.) Click on button **Send** and after the window closes, the photo/PDF will be uploaded (Figure 5, in red ellipse).

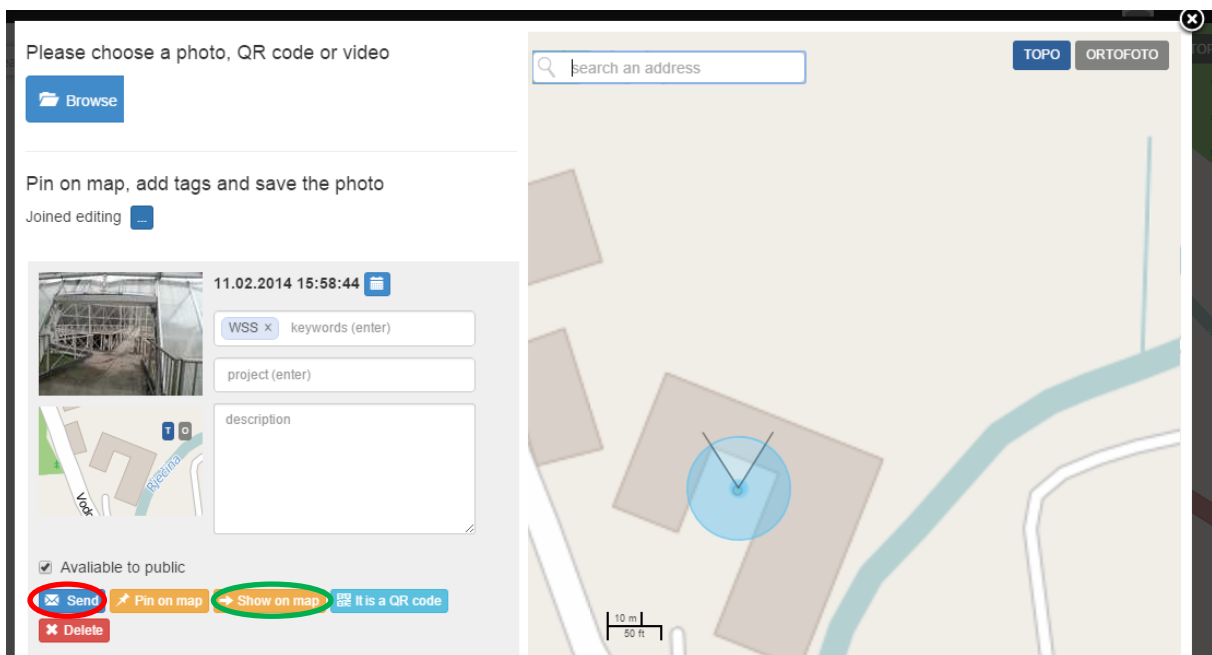



Figure 5: Photo will be uploaded when you press button Send.

After photo/PDF has been successfully uploaded, a yellow circle  appears on the location where it was positioned (Figure 6).

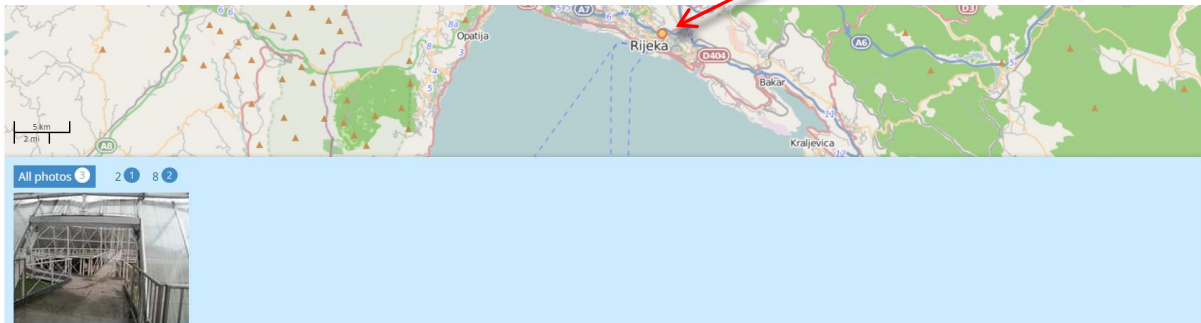




Figure 6: Photo has been successfully uploaded.

2. Editing

Uploaded photos/PDFs can also be edited. Photos and PDFs are both edited in the same way.

- 1.) Place mouse cursor  over chosen photo/PDF (Figure 7, in green circle).
When **pencil icon**  appears, click on it (Figure 7, in red circle).

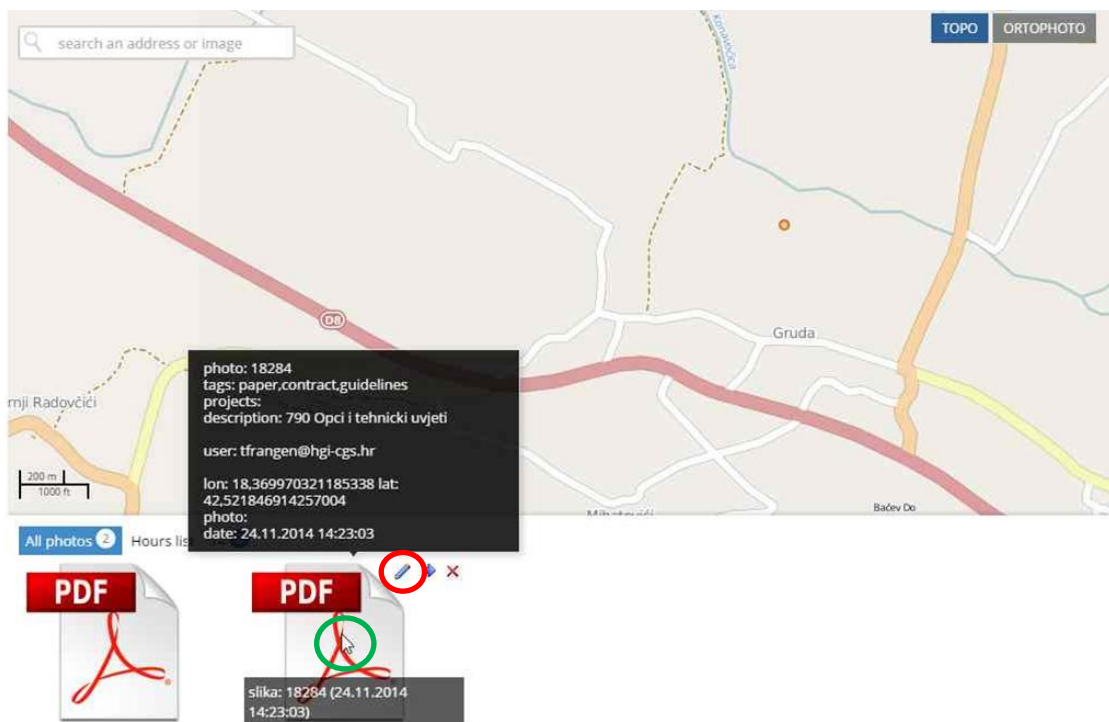



Figure 7: Edit of uploaded photos/PDFs.

- 2.) After you are done with editing fields or/and positioning of the photo, click on button  **Save**.



APPENDIX: Keywords (tags) for photos and PDFs

Keywords (tags) are used for easier search among all photos that are uploaded into WR surveillance by all partners. You enter keyword into box *Search an address or image* (Figure 8).

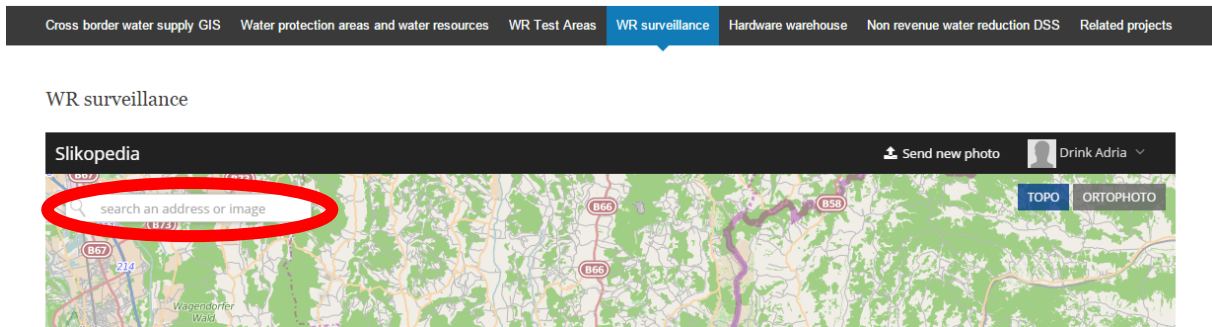


Figure 8: Keywords are entered into box: *Search an address or image*.

When keyword is being written, a dropdown menu appears and one of existing keywords can be selected. On Figure 9 is example for keyword WSS, which is one of the obligatory keywords.

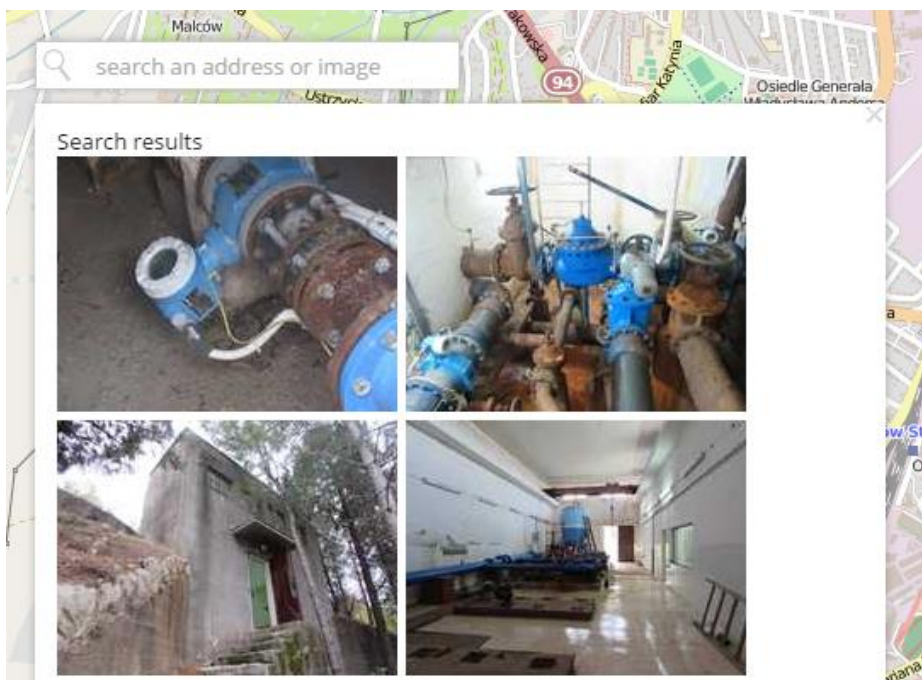


Figure 9: Search with obligatory keyword: WSS

Keywords (tags) are divided into two categories – **OBLIGATORY** and **DESCRIPTIVE**.

When uploading photos/PDFs:

from **obligatory keywords (tags)** at least one tag must be selected and inserted into keyword box (Figure 3, in green ellipse). **Descriptive keywords (tags)** are used to describe photo/PDF in greater detail. You can select either none or one or two or more (recommended at least one).

In Table 1, obligatory keywords (tags) are written in red font. Descriptive keywords (tags) are additional keywords for every obligatory word and are written in blue font.

Description of obligatory keywords:

- **WSS**: water supply system - a water supply system is a system for the collection, transmission, treatment, storage and distribution of water from source to consumers, e. g. to homes, commercial establishments, industry, irrigation facilities and public agencies for water (related activities fire – fighting, street flushing, etc.);
- **WATER INFRASTRUCTURE**: other water infrastructure than WSS;
- **HHF**: hydrographical and hydrological features - features in hydrography and hydrology e.g.: rivers, lakes, seas, etc.; and water sources of the land areas of the Earth;
- **MEASUREMENT**: all measurements that are made (regular or occasional; on measurement site, sampling point; measurements of pressure, quality, etc.);
- **PAPER**: all articles and research papers that are related to topic of water;
- **MAP**: map, plan - presentation of spatial data.

Suggested keywords (tags) for WR Surveillance are in Table 1. New keywords can also be added and defined.



Table 1: Suggested keywords (tags).

Obligatory Tags		
	Descriptive tags	Detailed Description
WSS	CB WSS	Water supply system, which is crossing country border.
	CR WSS	Water supply system, which is crossing regions.
	intake/capture	Point of drinking water intake: captured spring, surface water, accumulation, abstraction well, etc.
	borehole	A hole drilled in the earth, as for the purpose of extracting a core, releasing gas, oil, water, etc.
	GW ABS well	Groundwater abstraction well - is a water well that is used for the abstraction of groundwater from a groundwater body.
	pumping station	Facility with equipment to pump water.
	pump	Device to move water.
	hydrophore	Pump with function of raising pressure in the water supply network. A hydrophore system is used also in tall buildings to pump, store and supply drinking water or grey water. It is used also in private houses with rain water harvesting. Such a system consists of a pump, an expansion tank, valves, pressure sensors and pipework.
	reservoir	Body of water, either natural or artificial, used for storage, regulation and control of water resources.
	storage tank	Also: storage reservoir, surge tank, standpipe. Artificial place to store water, stabilize pressure, absorb water hammering (sudden rises in pressure) and balances oscillation of consumption.
	break pressure tank	Artificial place to store water with reduced capacity for reducing pressure in pipelines.
	WTP	Drinking water treatment plant for removing existing water contaminants to provide a safe source of water supply (e.g. solids separation using physical processes such as settling and filtration, and chemical processes such as disinfection and coagulation).
	chemical injection valve	Device which adds to water in pipeline chemicals (e. g.: chlorine, ozone).
	pipeline	Longer section. Pipe or tube from different material that carry pressurized water.
	pipe	A short section. Pipe or tube from different material that carry pressurized water.
	pipe bridge	Part of pipeline which goes above obstacle (e. g.: above river). Bridge which purpose is to carry water supply pipe/s.
	pipe burst	A failure of a pipe leading to leakage. This term is interchangeable with leak, although it typically refers to large/high pressure leaks.
	pipe coating	Pipe protection against corrosion.
	pipe material	E.g. PVC, PEHD, ductile iron, steel, cast iron, copper, lead, concrete, asbestos-cement, etc.
	overflow pipe	For establishment of desired maximum water level in storage tank.
	drainage pipe	For draining water.

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	suction pipe	For pumping water.
	manhole	Also: utility hole, maintenance hole, inspection chamber, access chamber. A shaft with removable cover. Inside it has fittings, water meter, valves, etc.
	manhole cover	Removable cover over the opening of manhole.
	filtration	The process of separating suspended solid matter or bacteria etc. from a liquid, by causing the latter to pass through the pores of some substance, called a filter.
	hydrant	Component, which serves for abstraction of water from water supply in case of fire.
	connection	E. g.: domestic/service connection.
	crossing	Crossing with other installations (sewer, electricity, gas, etc.).
	valve	Closure component on pipeline.
	control valve	Used to control conditions such as flow, pressure, temperature, by fully or partially opening or closing.
	PRV	Pressure reduction valve.
	strainer	A type of perforated sieve used to strain or filter out particles in the water system.
	air relief valve	For draining air from pipeline.
	blow-off valve	For draining water when flushing or emptying water supply system. Should be installed at low points of the water main installation, depending on flow rate and pipe profile, where sediment may accumulate.
	renovation	Act of renewing or restoring something.
	repair	Repairs of pipe bursts, leakages, etc.
	ALC	Active leakage control - search and rehabilitation.
	construction site	Location of building or constructing (new) structure, facility, parts of WSS etc.
	anodic protection	Technique to control the corrosion of a metal surface.
WATER INFRASTRUCTURE	hydropower plant	The power plant, which exploits the power of the water drop to generate electricity.
	barrage	Barrier across a stream provided with a series of gates or other control mechanisms to control the water-surface level upstream, to regulate the flow or to divert water supplies into a canal.
	dam	Barrier constructed across a valley for impounding water or creating a reservoir.
	canal	Man-made open channel, usually of regular cross- sectional shape.
	weir	Overflow structure which may be used for controlling upstream water level or for measuring discharge or for both.
	bank	Rising land bordering a river margin of a channel at the left-hand (right-hand) side when facing downstream.
	gate	Water control gates for use in hydropower plant, flood protection etc.

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HHF	recharge area	Also: replenishment area - area which contributes water to an aquifer, either by direct infiltration or by runoff and subsequent infiltration.
	seepage	Water emerging from a rock or the ground along a line or surface.
	spring	Place where water flows naturally from a rock or soil onto land or into a body of surface water.
	standing water	Water in some part of a river, lake, pool or groundwater not moving or flowing.
	lake	Inland body of water of considerable size, usually but not necessarily fresh water, from which the sea is excluded.
	stream	Body of water, generally flowing in a natural surface channel.
	wetland	Also: pond, marsh, swamp. Areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres (definition after Ramsar convention).
	ponor (Slavic)	Also: swallow hole (Brit.), sinkhole (Am.). Hole or opening in the bottom or side of a depression where a surface stream or lake flows either partially or completely underground into a karst groundwater system.
	ford	Shallow place where a stream may be crossed by traffic or by wading.
	land-water boundary	The line where there is boundary between land mass and body of water.
	flood plain	Also: bottom land, overbank flow channel. Nearly level land along a stream flooded only when the streamflow exceeds the water carrying capacity of the channel.
	flood	Rise, usually brief, in the water level in a stream to a peak from which the water level recedes at a slower rate.
	DWS	Drinking water source - such as surface water, aquifer, reservoir, etc.
	PDWPA	Pressures in drinking water protection area - e.g.: illegal dumps in DWPA, cesspits, etc.
	earth material	Various earth material e. g.: rocks, minerals, soil, etc.
MEASUREMENT	sampling point - SURFACE	Sampling point for monitoring of surface water quality.
	sampling point - GW	Sampling point for monitoring of groundwater quality.
	sampling point - WSS	Sampling point for monitoring of water quality in water supply system.
	measurement point - SURFACE	Measurement point for monitoring of surface water flow - flow, level.
	measurement point - GW	Measurement point for monitoring of groundwater - level, pressure.
	measurement point - WSS	Measurement point for water supply system - flow, pressure, etc.
	meteorological station	Facility with instruments and equipment for measuring atmospheric conditions.

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PAPER	CB WSS	Cross-border WSS - everything that is relevant to cross-border water supply systems.
	CR WSS	Cross-regional WSS - everything that is relevant to cross-regional water supply systems.
	conflict resolution	Description of conflict over CB WSS/CR WSS/river(s), CB DWPA.
	standards	PDF(s) of different standards, everything that is relevant to WSS and DWS.
	contract	PDF(s) of different contracts, everything that is relevant to WSS and DWS.
	guidelines	PDF(s) of different guidelines, everything that is relevant WSS and DWS.
	WQS	Water quality standard - recommended or enforceable maximum contaminant levels of chemicals or substances in water. These levels are established for water used by municipalities, industries, agriculture, and recreation. Standards may also be narrative.
	monitoring results	All monitoring results and reports that are provided in PDF version, everything that is relevant to WSS and DWS.
MAP	DWPA	Drinking water protection area.
	land use	Spatial aspects of all human activities on the land and with the way in which the land surface is adapted, or could be adapted, to serve human needs.
	geological map	Map which shows geological features.
	hydrogeological map	Basic geological information together with data on the hydraulic and hydrochemical characteristics of the rocks and their usefulness for groundwater supply. It shows area and depth of groundwater and water sources.
	cross-section	Cross-section: geological, hydrogeological, etc.

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Let's grow up together



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