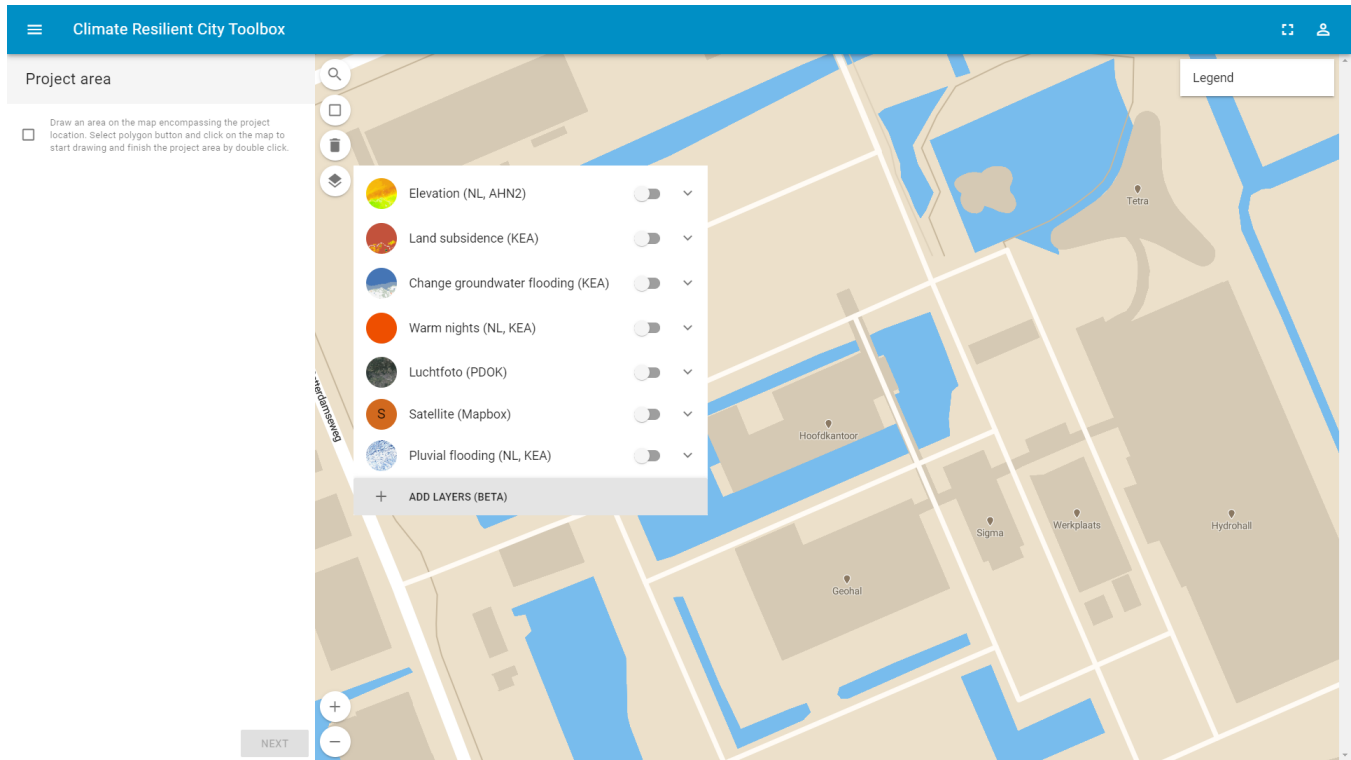# Adding map layers

Users can add map layers to the CRCTool map window. These maps should be available on map servers that can be accessed via internet.

Many different configurations of GIS-servers exist. This will often cause data layers not be added to the map. The error handling is still very basic. This functionality is therefore still a Beta version.
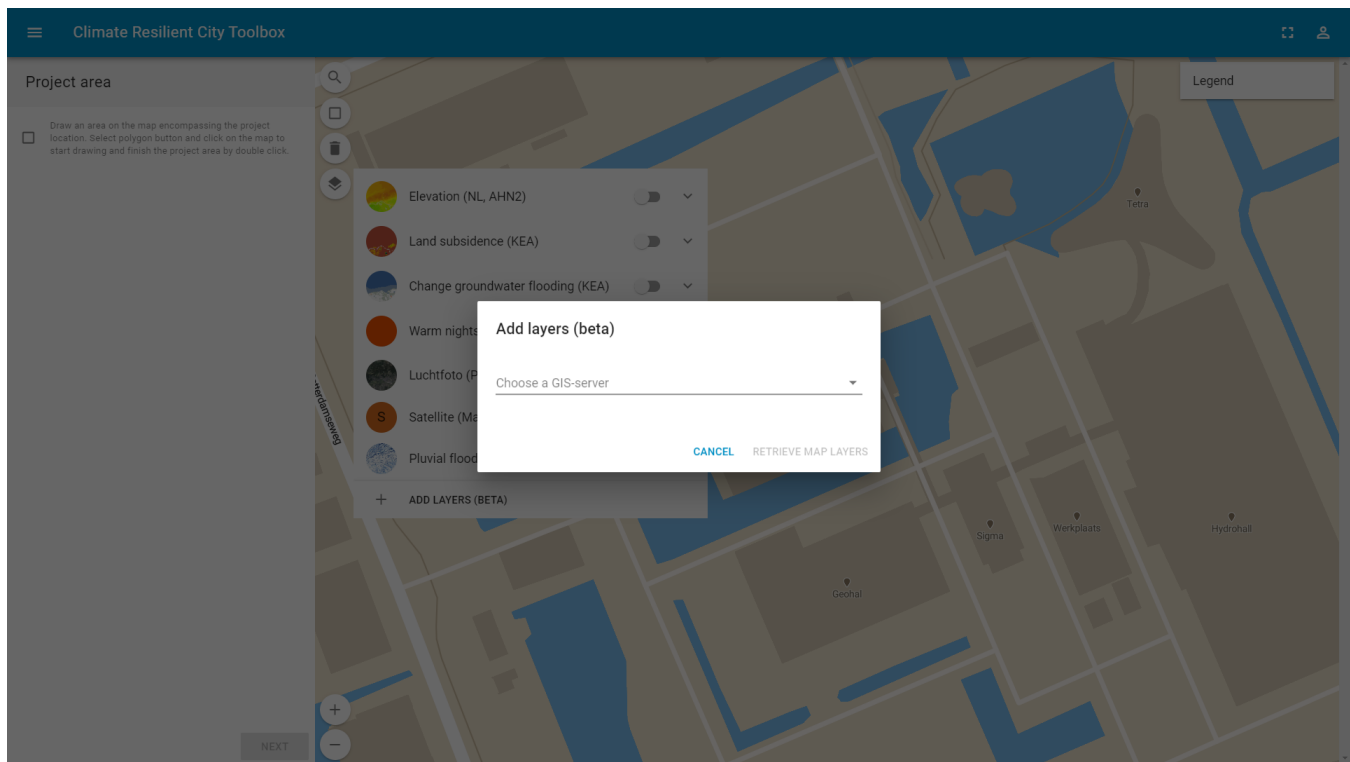
The following important boundary conditions apply for layers to be added:

- Geographic projection of map should at least be in: EPSG:3857 (Webmercator)
- Server should allow secure connection (https instead of http)

To add a layer click the "ADD LAYERS (BETA)"button:

Next select the appropriate server type at: "Choose GIS-server"

Three server types can be chosen that are described in more detail below.

WMS

Select WMS at "Choose GIS-server"

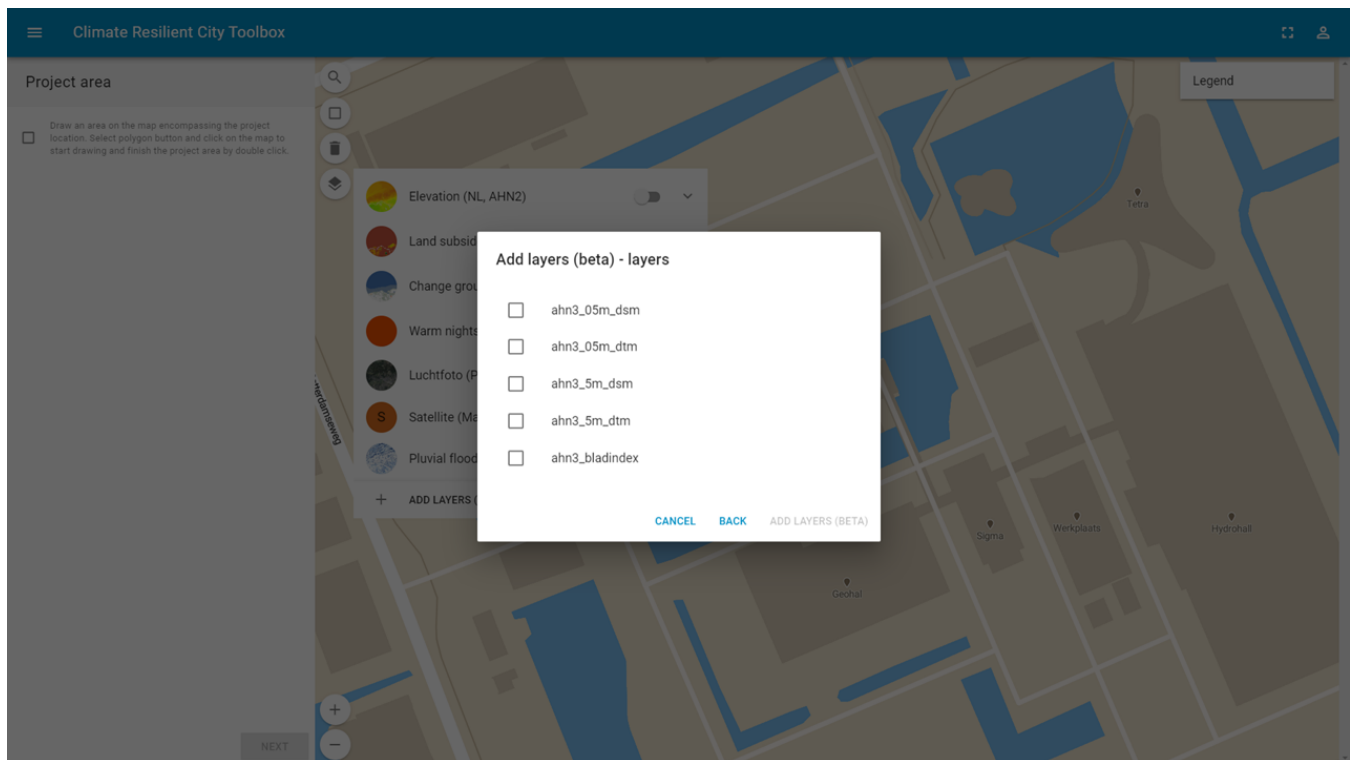Type or paste the location of the WMS-server in the field "server URL".

The url that should be entered should include the url up to where the request and parameters start, which is indicated by "?".

Examples are:

https://geodata.nationaalgeoregister.nl/ahn3/wms?

Then click "Retrieve map layers".

When layers with a EPSG:3857 projection are available these will be listed. These can be selected and added to the map.

For The Netherlands, please not that maps of klimaateffectatlas.nl can not be added as they do not provide a secure https connection.

WMTS

Select WMTS at "Choose GIS-server"

The WMTS server URL generally ends with 'WMTS'.

When layers with a EPSG:3857 projection are available these will be listed. These can be selected and added to the map.

For example:

https://server.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/WMTS/

Arcrest

Select Arcrest at "Choose GIS-server"

The Arcrest server URL contains a string like 'arcgis' or 'arcrest'. The URL that needs to be added generally ends with 'MapServer'.

When layers with a EPSG:3857 projection are available these will be listed. These can be selected and added to the map.

For example:

https://services.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer/