Description of available QUANTITATIVE information for each Case Study river Basin (CSRB)

| QUANTITATIVE data on the CURRENT situation |
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| **WATER FLOW**: do you have information on stream flow data? Is the RB a gauged basin? Do you have historical/current data of stream flow? |
| Description of available data | Number of gauging stations and location | Spatial resolution | Time frame/scale | Format of the data | Reference/source of information |
| Discharge data  | One for sure and seems there is two more | ? | (daily and may be short time step data) | Text file and access | Water resources department |
| **HYDROLOGY:** do you have information on the hydrology of the river basin? Is there available information on the hydrological structure of the basin and its water balances?  |
| Description of available data | Spatial resolution | Time frame/scale | Format of the data | Reference/source of information |
| Rainfall data (daily series for 50 stations: 25 stations > 30 years, 25 stations < 30 years) | Scattered | daily | Txt/ excel files | Water resources department |
| **GROUNDWATER:** is there any data available on groundwater? Do you have historical/current data of groundwater levels and/or groundwater springs ? |
| Description of available data | Spatial resolution | Time frame/scale | Format of the data | Reference/source of information |
| *Groundwater is 8,3 Mm3 and being exploited through 900 wells. Part of this water is for drinking water and the other part for irrigation. The salinity of the groundwater is from 2 to 5 g / l.* | ? |  | ? | Water resources department |
| **WATER QUALITY:** is there any data available on the water quality? Do you have historical/current data of water quality? |
| Description of available data | Spatial resolution | Time frame/scale | Format of the data | Reference/source of information |
| Water quality at the dam |  |  |  | Water resources department |
| **CLIMATE DATA:** Do you have historical/current climate data? |
| Description of available data | Spatial resolution | Time frame/scale | Format of the data | Reference/source of information |
| Temperature and evaporation (need to be purchased) | Single station | daily | txt | Meteorological institute |
| **EXTREME EVENTS**: Do you have information on historical extreme events that have taken place in the RB (e.g. droughts, flooding) and associated damages?  |
| Description of available data | Spatial resolution | Time frame/scale | Format of the data | Reference/source of information |
| Data series can display exceptional events |  | Daily or shorter |  | Water resources department |
| **LAND COVER /LAND USE**: Are there land cover maps available?  |
| Description of available data | Spatial resolution | Time frame/scale | Format of the data | Reference/source of information |
| Yes (cereals, market crops, olive trees, fruit trees, forests, scrubland, bare soil) | 1/50000 | 2005 | shp | IRESA |
| **ELEVATION DATA:** Are there any digital elevation models of the RB available?  |
| Description of available data | Spatial resolution | Format of the data | Reference/source of information |
| yes | 1/50000 | shp | IRESA |
| **DIGITAL ORTHOPHOTOS/SATELLITE IMAGES:** Are there any digital orthophotos/ satellite images of the RB available?  |
| Description of available data | Spatial resolution | Format of the data | Reference/source of information |
| Need to be purchased |  |  | CNT |
| **SOILS**: are there soil maps of the RB available? |
| Description of available data | Spatial resolution | Format of the data | Reference/source of information |
| Yes  | 1/50000 | shp | IRESA |
| **GEOLOGY**: are there geological maps of the RB available? |
| Description of available data | Spatial resolution | Format of the data | Reference/source of information |
| Yes | 1/50000 | JPEG | Archives |
| **USES-AGRICULTURE**: what type of information exists on the agricultural uses of the basin?What is the water consumption of the agrarian uses? What are the main crops grown and where are these located (land use maps)? What is the contribution of the industries to the economy of the basin (e.g. benefits/year, number of employments generated)? |
| Description of available data | Spatial resolution | Format of the data | Reference/source of information |
| Land use map | 1/50000 | shp | IRESA |
| **USES-URBAN**: What type of information exists on the urban areas in the basin? Are there fluctuations in the people living in the basin along the year ? What is the water consumption share of the urban areas? What is the contribution of the tertiary sector to the economy of the basin (e.g. benefits/year, number of employments generated)?  |
| Description of available data | Spatial resolution | Format of the data | Reference/source of information |
| Data being gathered |  |  |  |
| **USES-FORESTRY**: Where are the main forest areas in the basin? What are the features of these forests (species, management)? Are there intensive plantations? Is there any study on how these forests affect water flows in the CSRB? What is the contribution of forestry to the economy of the basin (e.g. benefits/year, number of employments generated)? |
| Description of available data | Spatial resolution | Format of the data | Reference/source of information |
| The forest is made of three main types: tetraclinis articulate, Olea europea- pistacia lentiscus and Pinus halepensis .The rest of the data are being gathered! | 1/50000 | shp | IRESA |
| **USES-INDUSTRY:** Where are the main industries located in the water basin? Is there any estimation of their share of water consumption? What is the contribution of industries to the economy of the basin (e.g. benefits/year, number of employments generated)? |
| Description of available data | Spatial resolution | Format of the data | Reference/source of information |
| Data being gathered!In Tunisia river basin are not the reference but mostly the governorate and the administrative limits are considered |  |  |  |
| **OTHER RELEVANT USES**: are there other uses that are relevant in relation with water that have not being mentioned before in these sectors? (e.g. bottling plants) What is their contribution to the economy of the basin (e.g. benefits/year, number of employments generated)? |
| Description of available data | Spatial resolution | Format of the data | Reference/source of information |
| Mineral water/ thermal station/*Wadi Rmal can provide about 30Mm3 yearly. The catchment is mainly drained by 6 tributaries and the downstream dam mobilizes about 23 Mm3 of runoff waters. 100% of surface water within the catchment is used for Irrigation.*  |  |  | Municipality and Ministry of Agriculture |
| **WATER RELATED INFRASTRUCTURES:** what are the main infrastructures related with water in the basin? (e.g.: divertion dams, dikes, etc…) |
| List of relevant infrastructures | Description of available data, including spatial data availability | Format of the data | Reference/source of information |
| Different size of reservoirs (dam, hill lakes), water and soil conservation techniques , irrigation perimeter | Water related maps (drainage network, reservoirs) | shp | IRESA |
| **OTHER INFRASTRUCTURES RELEVANT IN THE RIVER BASIN:** What are the main infrastructures that you consider have an impact on the water uses in the river basin? (e.g. roads or highways) |
| List of relevant infrastructures | Description of available data, including spatial data availability | Format of the data | Reference/source of information |
| Data being gathered |  |  |  |