

Frequently Asked Questions (FAQ)

Users are recommended to review these questions and answers prior to using the GEMI Local Water ToolTM (LWT). The questions and answers were developed during the creation and testing of the tool. Additional questions and answers will be added and this document will be refreshed after the tool is launched in the public domain. The questions are organized by LWT Module.

- 0. General
- 1. Module 1 Site Data
- 2. Module 2 Local External Conditions
- 3. Module 3 External Impact Assessment
- 4. Module 4 Risk Assessment
- 5. Module 5 Management Plan
- 6. Module 6 Reporting
- 7. Local Data Sources
- 8. Droplists and Definitions
- 9. Local Water Tool for Oil and Gas

For additional information or to make suggestions, please contact <u>info@gemi.org</u>.

0. General

0.1 Is Excel 2007 required to use the LWT?

Yes, Excel 2007 (or newer Excel versions) is required to use the GEMI LWTTM. The GEMI LWTTM includes pivoting and other programming that are not functional in earlier Excel versions.

0.2 Which sites are candidates for the LWT?

The LWT is valuable for an operation or planned project that has one or more of the following traits:

- Relies on water input(s) for operation
- Requires effluent discharge for operation
- Has a significant number of staff in one location

Top priority can be given to sites in water stressed or environmentally sensitive areas (may be identified through the Global Water Tool or other data source).

0.3 How is "local" defined in the LWT?

"Local" has a flexible definition in the LWT depending on the specific site, water source or receiving waterbody/entity in the assessment. Local refers to the geospatial area that may be measurably impacted by or may cause measurable risk to a particular site. For many freshwater sources, "local" refers to the general watershed area. Further guidance is provided in each of the definitions of External Stress Severity Issues in Module 2.

0.4 Is my company data kept confidential?

GEMI has no access to your data. The Excel file is used after it is downloaded to your computer.

0.5 Could the outcomes of LWT be used to communicate with external stakeholders?

Yes, a company or a group of companies may share outcomes with external parties.

0.6 Is the assessment logic in the tool proprietary?

No, the definitions and embedded assessment methodology in the LWT are in the public domain and may be viewed by downloading the tool and reading the worksheets.

0.7 Can I modify the tool by adding or deleting columns or rows? Can I add worksheets?

Adding or deleting existing columns in the existing worksheets will corrupt the tool. However, you can add columns after the existing columns in the dark grey area on any worksheet. Worksheets can be added to the workbook. Rows cannot be added to worksheets.

0.8 Can I print out all of the instructions, droplists and definitions at once?

A compilation document (in pdf) of instructions, droplists and definitions has been created for the general LWT and also for the LWT for Oil and Gas. These documents are posted on the GEMI website. The documents may be downloaded and printed for reference when using the tool.

0.9 Can I embed external documents in the LWT?

Embedding documents in the LWT is not recommended due to programming complexities and file size. It is recommended that the User include links to separate documents, if desired.

0.10 Which data are required and which data are optional?

A color scheme is used to show which data are required and which are optional:

- Light red: required text and data
- Light blue: optional text and data

0.11 How much time does it take to complete the tool for a site?

Feedback received from companies that have used the tool:

- Simple site with one influent and one effluent: 8 staff hours
- Complex site with multiple influents and multiple effluents in a remote location: up to 40 staff hours

Creation of management plans could require additional effort.

0.12 From which version of the WBCSD's Global Water Tool can I input data?

The general, multi-sector GEMI LWTTM is designed to extract data from the 2011 version of the general, multi-sector WBCSD Global Water Tool (available at www.wbcsd.org). To successfully extract data, the site name has to be exactly the same in both tools.

The GEMI LWTTM for Oil and Gas is designed to extract data from the 2011 IPIECA Global Water Tool for Oil and Gas (available at www.ipieca.org).

The user should review imported data for consistency of number formats between U.S. and other formats (e.g. 1,000 vs. 1.000).

0.13 Can data be automatically transferred from the general GWT to the LWT for Oil and Gas?

No, the GEMI LWTTM for Oil and Gas requires the produced water categories included in the IPIECA Global Water Tool for Oil and Gas.

0.14 Excel Workbook Tips

Users should remember the following tips for working with an Excel workbook:

- Enable Macros click to enable macros whenever the file is opened.
- When saving the file, make sure that you select the *.xlsm file type to ensure that the macros remain functional.
- "Ctrl+F" is the find function in Excel. It can be used on each worksheet to find a number or word.

1. Module 1 – Site Data

1.1 How many times should recycled water be counted in water use?

Because water is extracted from its original source only once, recycled water should be counted only once. The user may refer to the graphic on the Definitions worksheet in the LWT.

1.2 Is there an intensity calculation and can I customize it?

Yes, you can enter the units for intensity calculations on the Influent Data worksheet. The intensity calculation outputs are shown in Module 6.

1.3 Do I have to complete Module 1 before going on to the other Modules?

Yes, you must complete the required information in Module 1 in order to "Run Module Setup" and set up the matrices in the other Modules. The basic required information in Module 1 is the name of each Influent Water Source and Receiving Waterbody/Entity and the volumes for each. A placeholder value for volume (such as 1 m³/yr) may be entered and revised later without causing rework or errors.

1.4 When the units are changed on the Module 1 Influent worksheet, is the existing data converted?

No, this is just an option for the User to select which units they would like to use in the tool.

1.5 Can more than one surface water source be entered?

Yes, up to two sources or discharge points can be entered for each category of influent sources and receiving waterbodies/entities. If more than two influent sources or discharge points for each category are used at a site, then we suggest a workaround solution of employing a different unused category in the correct area (Freshwater or Non-Freshwater). For example, if three separate rivers are water sources and there are no groundwater sources, we suggest using the groundwater column for the third river water source. This will not have an effect on metrics calculations.

1.6 Should rainfall that is not captured and used be counted?

No, rainfall that is not used by the facility should not be included in the water inventory.

1.7 Should multiple wells from the same aquifer be considered individual sources?

The aquifer itself should be considered the water source – the local hydrological unit. If multiple wells draw from the same source aquifer, then the aquifer name would be the influent source name.

2. Module 2 – Local External Conditions

2.1 Our influent from the municipality is actually piped from a cross-basin transfer of water from several hundred miles away from our site. Should we consider the external risks at the origin of the water supply?

Yes, when the source of the influent water is at a distance removed from the site, it is important to consider the External Stress Severity Levels (see Definitions worksheet) at both the origin of the water supply as well as in the local site area.

2.2 Our effluent is discharged to an external wastewater treatment plant which discharges to the ocean. Should we also consider the ocean as the receiving waterbody/entity?

Yes, when discharging to an external wastewater treatment plant, it is important to consider the ultimate destination of effluent when selecting the External Stress Severity Levels for that discharge stream.

2.3 What is the difference between a "Local Ecosystem" and "Watershed Ecosystem"?

Please refer to the Module 2 Droplist Definition worksheet for these and other External Stress Severity Issue definitions.

2.4 Should all of the data sources be from the public domain?

Data sources may be public or private. Public data is recommended if the User if planning to share outcomes with external stakeholders.

2.5 What should be entered into the Data and Data Source columns?

The Data column is intended to be the space to enter values and information. The Data Source column is intended to be the space to document the name of the reference from which the data came. Links may be included in either column.

2.6 What are data recommendations?

The credibility of a data sources is the User's discretion. It is recommended that data sources are traceable, recent, specific to the local area and comparable between sites.

3. Module 3 – External Impact Assessment

3.1 My site's water use is in the top quartile in an area does this mean that I'm having a high impact?

No – a site which is a top water user in a local area does not necessarily have a high impact on a water source. As described in the "How-to-Use-It" presentation, a site's impact is defined by the External Stress Severity Level and the Magnitude of Company Contribution. If the influent source has high availability (same as low stress), then a water user would not have a high impact.

4. Module 4 – Risk Assessment

4.1 My site's water use has low impact, why do I have a high risk?

As described in the "How-to-Use-It" presentation, a site that is dependent a relatively small amount of water from a highly stressed source may have low impact on the source but a high risk to its operations from the potential to lose access.

5. Module 5 – Management Plan

5.1 Why is the management plan section blank? What is expected here?

The sufficiency of existing Management Plans and the need for new plans or actions may be documented. Links to existing documents may be included.

5.2 What is an example of an Opportunity?

Opportunity is defined in the LWT as a potential top line business enhancement created by voluntary sustainable water management actions. An example would be the creation of a wetland for polishing effluent treatment. The wetland could provide new species habitat and become a valuable community education facility. Note that the reduction of risks and the reduction of impacts are not considered a top line Opportunity in the LWT.

6. Module 6 - Reporting

6.1 Can LWT results from multiple sites be aggregated for company-level reporting?

Yes, the results from individual GEMI LWTTM Excel files can be combined by the User for aggregated reporting and comparison of sites. Employing a new Excel Workbook, Users can link to individual GEMI LWTTM Excel files and create combined metrics and comparisons of risk rankings.

6.2 How were the reporting metrics selected?

The water metrics in the GEMI LWTTM are from the most commonly used questionnaires: Global Reporting Initiative (GRI), Dow Jones Sustainability Index (DJSI), CDP Water and Bloomberg Sustainability Index. The GEMI LWTTM for Oil and Gas also includes IPIECA water reporting metrics.

7. Local Data Sources

7.1 Are there links to local data sources?

Local datasets must be identified by the user. A global-level Data Source List is included in the LWT and a Suggested Data Source List at the country and regional level is posted on GEMI's LWT webpage as initial guidance.

8. Droplists and Definitions

8.1 May I customize the text in the Droplists and Definitions?

Yes, the text may be changed. However, the text has been created by a large number of companies and has been reviewed by external stakeholders. The validity, value and consistency of the tool could be affected by changing existing text. The User may find value in adding text relevant to their company's operations or industry.

8.2 What is the definition of "freshwater" within the tool?

Complete definitions for the terms employed in the tool are given on the Definitions worksheet. The definition of "freshwater" depends on local regulations.

8.3 One (or several) definition(s) do not strictly apply to my company. Can I still use the tool for accurate reporting?

The tool is not aimed at benchmarking between companies. As long as you are consistent in defining terms within your entity, the tool will provide accurate reporting for internal purposes. To report in accordance with GRI Indicators, the terms as defined in the tool must be followed.

8.4 Are the definitions used in this tool the same as GRI and WBCSD Global Water Tool?

The GEMI LWTTM enables calculation of Global Reporting Initiative (GRI) Indicators on total water withdrawals (EN8), water recycled/reused (EN10), and total water discharge (EN21) on a site basis. The definitions employed by the GEMI LWTTM are equivalent to the WBCSD Global Water Tool and are in accordance with GRI definitions.

9. Local Water Tool for Oil and Gas

9.1 A Production field is very large with many water influent sources and discharge points. Should I divide this field into multiple LWT assessments?

The physical boundary of a company's operations and management control should be followed, if possible. The LWT for Oil and Gas can handle numerous Influent Sources and Discharge Points:

- 9 Freshwater Influent Sources (use of all Freshwater columns see question 1.5)
- 8 Non-Freshwater Influent Sources
- 8 Freshwater Discharge Points

• 8 Non-Freshwater Discharge Points

In some cases, a company may wish to divide large sites into multiple LWT assessments in a variety of situations (e.g. field development phasing, reporting).

9.2 Can the LWT for Oil and Gas be used together by multiple companies that are operating in the same area?

Yes, an option is for multiple companies to work together to identify External Stress Severity Issues and Levels in their area (Module 2). While Influents and Effluents (Module 1), Impacts (Module 3) and Risks (Module 4) will be unique to each company, companies could have discussions on collaborative Management Plans (Module 5).

9.3 How is the IPIECA GWT for Oil and Gas data imported into the LWT for Oil and Gas?

The User may import the data for a particular site from their IPIECA GWT for Oil and Gas Excel file by clicking the Import Data button on the GWT Input page. The data is imported into this page and is not automatically transferred to the Module 1 Influent and Effluent worksheets. Note that there are two different stream categories (Influent Source -Mine Dewatering and Discharge – Beneficial/Other User)) that aren't in the LWT for Oil and Gas. The User must review these categories of production and manually enter Influent and Effluent data.

9.4 On the Site Map page, why isn't there a Hydraulic Fracturing Operation in the dropdown list?

The Production Operations in the LWT for Oil and Gas are the same as those in the GWT for Oil and Gas. Hydraulic fracturing is considered a Production Operation.