Appendix C
Overview of MABS Master Database

General Database Overview

All data within the Master Database is stored in tables. A table is a Microsoft Access object that stores data in rows (records) and columns (fields).

When editing a table, use the Tab or Enter key to move to the next field (or to the next record when the last field is active). Use Shift+Tab to move to the previous field. The PageUp key moves to the next record (or next page of records if browsing multiple records) and the PageDown key moves to the previous record (or previous page of records if browsing multiple records). Alternatively, the mouse can be used to select fields or move between records.

One aspect of the Access database program is that everything is automatically saved. All changes made to a record in a table are written to the database file as soon as you leave the record. The Undo command on the Edit menu allows you to undo changes only to the last saved record. To prevent changes to or loss of the data, always keep an archived set of the data to another directory. Do this before attempting any database functions. If you inadvertently change data, you can retrieve and copy of the original data set from the archives.

The MABS Master Database uses the Main Form access to all options including data management, reporting, and graphing. The toolbar consists of a series of buttons or icons that provide the user with special features.

Main Form

In the Main Form there is only one field that can be edited: User Template Directory Path. This field indicates the directory where user templates are stored. Buttons that either open a data editing form or generate reports and graphs comprise the remainder of the form. Note that all push buttons are shown on the Main Form as chiseled boxes, and grouped together by group boxes. (User Template Data, Normalized Factors, Graphs, Normalized Reports, and Level Reports.)
Elements of the Main Form

- **User Template Data** – This group box contains three buttons that allow the user to load user templates, which had previously been saved from the CCD, or to browse through the previously loaded data. The user can browse data using a Form or Datasheet View.

- **Normalized Factors** – This group box contains two buttons that allow the user to create/edit codes and factors that are used to normalize the data. The Codes button is used for configuration purposes, and allows the user to define normalization codes. For example, a code may be defined for “Total Flow Receiving Primary Treatment.” Each normalization factor is given a Code ID, Description, and the units used for the normalization factor. The List button allows the user to enter normalization values for a particular year, normalization code, and client.

- **Graphs** – This group box contains two buttons. One that allows the user to define graphs and another to plot graphs using Excel.
• **Normalized Reports** – This group box allows the user to define normalized datasets and report the normalized data in several formats.

• **Level Reports** – This group box allows the user to generate raw data level reports.

• **Stop Button** – This button ends the MABS Master Database session.

**SECTION 3 – LOADING USER TEMPLATES**

User templates are a subset of line items from the master template. All participating agencies have created user templates from the same master template, thus guaranteeing that data (i.e., user templates) can be compared on a common basis. Agencies may define multiple user templates, such as one user template for each plant or laboratory. Each user template typically stores data for one specific fiscal year.

The MABS Master Database allows the user a way to load/edit these previously defined user templates.

**Load User Template**

To load a user template, select the following button from the Main Menu, which brings up the Load User Template Form:

![User Template Data]

This button brings up the Load User Template form.
Figure 2 – Load User Template Form
Elements of the Load User Template Form

- **List of available user templates** – Lists all the user template files (excluding the MDB extension) located in the project directory. To select, click on a user template name (selected templates appear highlighted). To select multiple user templates, hold down the CTRL key and click on each additional template. The data from the multiple user templates will be summed into one file.

- **Client & Year** – These two text fields are initialized using the selected user template name. The Client field consists of the first five characters of the user template name (e.g., CLABS), while the Year field consists of the remaining (e.g., 1996-97). If multiple user templates are selected, these fields are initialized using the first selected user template. The user may choose to change the Client and/or Year fields to better describe the selected user template(s). *Note: These fields do not change the user template file names.*

- **Arrow Button** – Loads the selected user template(s) into the MABS Master Database. If multiple templates are selected, the data is first combined into a single template, and is then loaded as such. A loaded user template is identified by the client and year name as specified in the Client and Year text fields. After being loaded, the template’s name is shown on the “List of loaded templates” list box.

- **List of loaded templates** – Lists all of the user templates that have been loaded into the MABS Master Database. The example below shows three loaded templates. The second loaded template combines data from three user templates.

<table>
<thead>
<tr>
<th>List of loaded templates:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCSD 1996-97</td>
</tr>
<tr>
<td>CLABS 1996-97</td>
</tr>
<tr>
<td>CLABS 1996-97</td>
</tr>
<tr>
<td>CPRES 1996-97</td>
</tr>
<tr>
<td>CCSD 1995-97</td>
</tr>
<tr>
<td>CLABS 1995-97</td>
</tr>
<tr>
<td>CPRES 1995-97</td>
</tr>
</tbody>
</table>

- **Clear Loaded Data** – Allows the user to remove all loaded user templates from the Master Database. *Note: This option only removes the loaded data and does not delete the user template files.*