**Database Structure**

**Stock**

(stockid/assessid)

Stock Metadata

(stock, assessment)

Stock Parameters

(bioparams, bioparams\_...\_views)

Stock Time Series

(timeseries.1, timeseries.2, timeseries\_...\_views)

Parameter Types

(biometrics)

Time Series Types

(tsmetrics)

Metadata Types

(area, assessmethod, assessor, management, taxonomy)

The above diagram shows the general structure of the RAM Legacy Stock Assessment Database. Names of data tables are contained in parentheses, separated by commas. Descriptions of these tables are listed below. Also see “Database Quick Guide\_\_\_.docx” for further descriptions.

**Tables**

Note: “bioparams\_...\_views” and “timeseries\_...\_views” tables show a subset of the most common parameter fields and time series fields, respectively, in a more convenient format.

|  |  |
| --- | --- |
| **Table** | **Description** |
| area | Areas, where each area is defined by the stock assessment |
| assessment | Assessment listing with general assessment/submission information |
| assessmethod | Assessment method(s) used in stock assessment |
| assessor | Assessors (generally the agency performing the assessment) |
| biometrics | List of parameter value types, with definitions |
| bioparams | Parameter values (these are generally not time-varying, in contrast to ‘timeseries’ data below) |
| bioparams\_assessments\_views | Assessments corresponding to bioparams\_values\_views |
| bioparams\_ids\_views | Parameter IDs corresponding to bioparams\_values\_views |
| bioparams\_notes\_views | Notes corresponding to bioparams\_values\_views |
| bioparams\_sources\_views | Sources of bioparams\_values\_views |
| bioparams\_units\_views | Units corresponding to bioparams\_values\_views |
| bioparams\_values\_views | Parameter values by stock of the most common parameter fields |
| management | Management authorities |
| stock | Stock listing with general stock information |
| taxonomy | Taxonomic data |
| timeseries.1 (**\***) | Stock catch, landings, and total biomass time series (see **\*** below) |
| timeseries.2 (**\***) | Stock fishing mortality, recruit, spawning stock biomass, and other time series (see **\*** below) |
| timeseries\_assessments\_views | Assessments corresponding to timeseries\_values\_views |
| timeseries\_ids\_views | Time series IDs corresponding to timeseries\_values\_views |
| timeseries\_notes\_views | Notes corresponding to timeseries\_values\_views |
| timeseries\_sources\_views | Sources of timeseries\_values\_views |
| timeseries\_units\_views | Units corresponding to timeseries\_values\_views |
| timeseries\_values\_views | Time series values by stock and year of the most common time series fields |
| timeseries\_years\_views | Year ranges corresponding to timeseries\_values\_views |
| tsmetrics | List of time series types, with definitions |

**\*** In the Excel format, the timeseries table is separated into timeseries.1 and timeseries.2 to fit within row limits. In the R format, the timeseries table is not separated.

**Table Linkages**

|  |  |  |  |
| --- | --- | --- | --- |
| **Table 1** | **Field 1** | **Table 2** | **Field 2** |
| area | areatype | management | mgmt |
| assessment | assessmethod | assessmethod | methodshort |
| assessment | assessorid | assessor | assessorid |
| assessment | assessid | bioparams | assessid |
| assessment | stockid | stock | stockid |
| assessment | assessid | timeseries.1 | assessid |
| assessment | assessid | timeseries.2 | assessid |
| assessor | mgmt | management | mgmt |
| biometrics | biounique | bioparams | bioid |
| stock | areaid | area | areaid |
| stock | stockid | bioparams | stockid |
| stock | stockid | bioparams\_assessments\_views | stockid |
| stock | stockid | bioparams\_ids\_views | stockid |
| stock | stockid | bioparams\_notes\_view | stockid |
| stock | stockid | bioparams\_sources\_views | stockid |
| stock | stockid | bioparams\_units\_views | stockid |
| stock | stockid | bioparams\_values\_views | stockid |
| stock | tsn | taxonomy | tsn |
| stock | stockid | timeseries.1 | stockid |
| stock | stockid | timeseries.2 | stockid |
| stock | stockid | timeseries\_assessments\_views | stockid |
| stock | stockid | timeseries\_ids\_views | stockid |
| stock | stockid | timeseries\_notes\_views | stockid |
| stock | stockid | timeseries\_sources\_views | stockid |
| stock | stockid | timeseries\_units\_views | stockid |
| stock | stockid | timeseries\_values\_views | stockid |
| stock | stockid | timeseries\_years\_views | stockid |
| tsmetrics | tsunique | timeseries.1 | tsid |
| tsmetrics | tsunique | timeseries.2 | tsid |

**Data Tables vs. Views Tables**

|  |  |
| --- | --- |
| **Data Tables**  **(bioparams, timeseries, timeseries.1, timeseries.2)** | **Views Tables**  **(bioparams\_...\_views, timeseries\_...\_views)** |
| All data types are present | Most commonly used data types present |
| All assessments are present | Each data field draws from the most recent assessment for that stock that has that data type available |
|  | Each data field only uses data from one assessment |
|  | Each data field can come from different assessments, depending upon which data source is more recent. |