Basins Data-Loading Application

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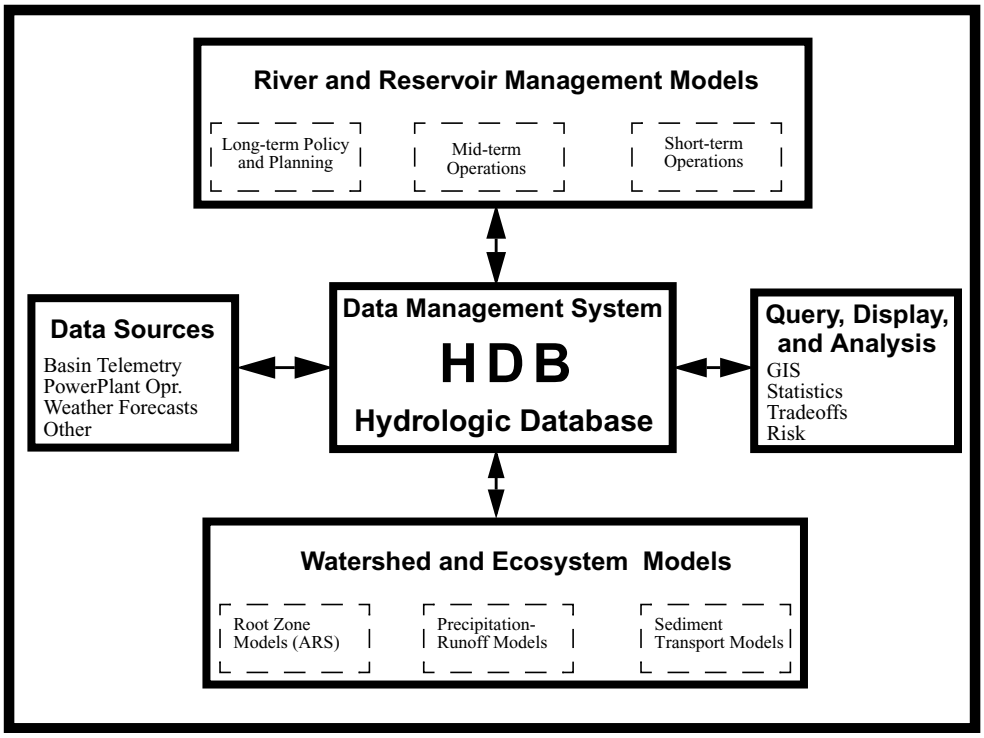

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Section 1 Intended Audience

This document is intended for end users of the Basins Data Loading application, or anyone needing to set up or maintain this application.

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Section 2 Application Overview

A major source of snow pillow and river basin precipitation and snow water equivalence data is the National Resource Conservation Service. This data is crucial to daily water operations in the Upper Colorado River Basin, and hence, must be accessible from HDB, the Hydrologic Database. The basins application processes this data from a data file generated by the NRCS computer, and then loads it into HDB. (The file is generated by a separate cron job that runs a query against the NRCS computer.)

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The purpose of the Basins application is to load basin and snow pillow snow water equivalence and precipitation data into HDB. This data is then used operationally to assess basin hydrology, and, occasionally, as model input.

Section 3 Permissions No

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Section 4 Invoking the Application

The basins application is intended to be run under the standard app_user HDB user login. The application is typically invoked by a cron job that queries the NCRS database, retrieves the results of the query in a file, copies the file to the HDB machine, and processes the file.

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Section 5 Inputs

Command Line

basins <userName> <password> <logfile>

where

<userName> = database logon name (normally app_user)

<password> = logon name password (normally the name of the database)

<logfile> = name of the file containing the Snotel report.

Typing "basins" will give a usage command showing the above parameters.

Typing "basins -v" will give the version number of the application. The original version of basins will report "version 1.0." The second version will report "HDB2 version 1.2."

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Files

The input file is the Snotel report produced by Natural Resources Conservation Service.

Dialog Boxes

There are no dialogue boxes.

Database Driver Tables

There are no database driver tables for the basins application itself. Of course, the metadata associated with the sites and datatypes for the Snotel report must be set up in HDB in order for it to process the file. The site names are assumed to be stored in HDB. The datatypes associated with the Snotel data are embedded in the header files for the basins application as #define's.

Section 6 Outputs

Data Files

There are no data files produced by the basins application.

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Log and Error Files

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All error messages are printed to the screen

Database

The HDB2 version of the Hydrologic Database must be used with the second version of the basins application.

Section 7 Using Application Functionality

There is no further funtionality to basins than the input or updating of records into the r_base table in HDB.

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Section 8 Examples

A typical command line for basins would be:

```
basins app_user hdb2 snotel.dat
```

which would result in normal messages of something like:

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```
NUM cur snow SqlUpdates: 153
NUM cur precip updates: 153
NUM avg snow updates: 153
NUM avg precip updates: 164
NUM basin pct snow updates: 30
NUM basin pct precip updates: 30
```

Section 9 Special

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Section 10 FAQ (Frequently Asked Questions)

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