Appendix D – Database Table Dictionary

Table Name	Category	Description
adjustfactor	Meta-Data	Stores factors for adjusting raw SHEF value at posting time.
agency	Reference	Look-up table relating an agency code to more detailed information about the agency.
aliasid	Reference	Look-up table to relate the NWS location identifier to another agency's identifier.
area	NWSRFS	Stores the areas defined for each segment.
areasens	NWSRFS	Stores the sensors for each segment area.
avg	Meta-Data	Stores pre-calculated central tendency characteristics of monthly data sets.
cgroup	NWSRFS	Stores the carryover groups defined in the NWSRFS model.
commentvalue	SHEF Data Value	Stores observed or forecast value level SHEF-encoded comments. Currently not used.
counties	Reference	Stores information about United States counties, parishes, and boroughs.
country	Reference	Look-up table that for country FIPS codes that may be in/near a RFC's area.
crest	Meta-Data	Stores information about significant historical river crest events at each station.
datalimits	Quality Control	Stores data limits (i.e., quality control ranges and alert/alarm limits) by SHEF physical element code, SHEF duration code, and time of year. These are the default data limits that apply to all station locations and areas except where overridden by station-specific data limits stored in locdatalimits. Alert/alarm limits currently not used.
drain	NWSRFS	Stores the descriptions of valid drainage abbreviations for NWSRFS segments.
fgroup	NWSRFS	Stores the forecast groups defined in the NWSRFS model.
fgroupseg	NWSRFS	Stores the list of segments for each forecast group.
flashflood	Meta-Data	Stores an inventory of flashfloods that have occurred in the RFC's area.
huc2	Reference	Look-up table for the first 2 digits, i.e. the region, of the USGS Hydrologic Unit Codes.
huc4	Reference	Look-up table for the first 4 digits, i.e. the sub-region, of the USGS Hydrologic Unit Codes.
huc6	Reference	Look-up table for the first 6 digits, i.e. the accounting unit, of the USGS Hydrologic Unit Codes.
huc8	Reference	Look-up table for the full 8 digit, i.e. the cataloging unit, USGS Hydrologic Unit Codes.

ingestfilter	Meta-Data	Defines the set of (Location, SHEF PE code, SHEF duration code, SHEF TS code, and SHEF extremum code) combinations that are eligible for posting observation and forecast data to the database The ingest attribute is a flag indicating whether this combination is to be posted or not posted to the database. The ofs_input and mpe_input attributes are currently not used by any RAX applications.
location	Meta-Data	Stores a history of geographic information for particular location. The most current entry must have the sed attribute equal to NULL. The lid and sbd attributes are what makes each entry unique.
locdatalimits	Quality Control	Stores data limits (i.e. quality control ranges and alert/alarm limits) by location or area identifier, SHEF physical element code, SHEF duration code, and time of year. Alert/alarm limits currently not used.
modaeicqn	NWSRFS	Stores mods for changes to the EI value in API operations.
modaescchng	NWSRFS	Stores mods for changes to the value of areal extent of snow cover for snow-217 operations.
modaiadj	NWSRFS	Stores mods for changes to the AI adjustment factor for API operations.
modapicbasf	NWSRFS	Stores mods that multiply the baseflow runoff from Operation APi-Cont by constant.
modapicco	NWSRFS	Stores mods for changes to the operation API-CONT carryover values.
modbublshft	NWSRFS	Stores mods that shift the rating curve by specifying a new stage, discharge point and upper and lower stage values.
modchgblend	NWSRFS	Stores mods for changes to the length of blending period in Operation Adjust-Q.
modctrl	NWSRFS	Stores the switches that determine which mods get stored to the database and then written back into mod files for operational and "spin" purposes.
modignorets	NWSRFS	Stores IGNORETS mods made for each segment.
modmatchng	NWSRFS	Stores MATCHNG mods made for each segment.
modmfc	NWSRFS	Stores MFC mods made for each segment.
modqcshift	NWSRFS	Stores QCSHIFT mods made for each segment.
modqpshift	NWSRFS	Stores QPSSHIFT mods made for each segment.
modrainsnow	NWSRFS	Stores RAINSNOW mods made for each segment.
modrochng	NWSRFS	Stores ROCHNG mods made for each segment.
modromult	NWSRFS	Stores ROMULT mods made for each segment
modrrichng	NWSRFS	Stores RRICHNG mods made for each segment.
modrrimult	NWSRFS	Stores RRIMULT mods made for each segment
modsacbasef	NWSRFS	Stores SACBASEF mods made for each segment.
modsacco	NWSRFS	Stores SACCO mods made for each segment.

modsetmsng	NWSRFS	Stores SETMSNG mods made for each segment.
modsetqmean	NWSRFS	Stores SETQMEAN mods made for each segment.
modssarreg	NWSRFS	Stores SSARREG mods made for each segment.
modswitchts	NWSRFS	Stores SWITCHTS mods made for each segment.
modtsadd	NWSRFS	Stores TSADD mods made for each segment.
modtschng	NWSRFS	Stores TSCHNG mods made for each segment.
modtsmult	NWSRFS	Stores TSMULT mods made for each segment.
modtsrepl	NWSRFS	Stores TSREPL mods made for each segment.
moduadj	NWSRFS	Stores UADJ mods made for each segment.
moduhgchng	NWSRFS	Stores UHGCHNG mods made for each segment.
modweadd	NWSRFS	Stores WEADD mods made for each segment.
modwechng	NWSRFS	Stores WECHNG mods made for each segment.
modxinco	NWSRFS	Stores XINCO mods made for each segment.
modzerodiff	NWSRFS	Stores ZERODIFF mods made for each segment.
ofsdatatrans	NWSRFS	Translates SHEF data types to OFS data types.
ofsstntrans	NWSRFS	Translates from original SHEF station identifier(s) to station identifier(s) that are used in OFS.
operapicont	NWSRFS	Stores the CONT-API parameter values defined for each segment area.
opersacsma	NWSRFS	Stores the SAC-SMA parameter values defined for each segment area.
opersnow17	NWSRFS	Stores the SNOW-17 parameter values for each segment area.
opertype	NWSRFS	Stores the list of valid NWSRFS operations.
operunithg	NWSRFS	Stores the UNIT-HG parameter values defined for each segment area.
pairedvalues	SHEF Data Value	Stores special SHEF physical elements which require a second independent variable for the primary key. Examples are TB (temperature at a depth under bare soil), HQ (distance to river's edge from stake) and ST (snow temperatures at various depths). Data is posted to this table by the shef_decode_raw application.
pecrsep	SHEF Data Value	Stores all* data where the SHEF Type code is R and the SHEF Duration code is I, U, C, J, H, B, T, F or Q. (*Data is stored down to 15-minute resolution, for data with durations less than 15 minutes (e.g., Duration code of U, or 1 minute data) the values closest to 0, 15, 30, and 45 minutes after the hour are saved.) Data is posted to this table by the shef_decode_raw application.
pedcsep	SHEF Data Value	Stores all data where the SHEF Type code is C, i.e., contingency data. Data is posted to this table by shef_decode_raw application.
pedfsep	SHEF Data Value	Stores all data where the SHEF Type code is F and all SHEF Duration codes except H and Q. Data is posted to this table by the shef_decode_raw application.

pedpsep	SHEF Data Value	Stores all daily data where the SHEF Type code is P, or 1 thru 9. Data is posted to this table by the shef_decode_pro application. The shef_decode_raw application can not see it.
pedrsep	SHEF Data Value	Stores all data where the SHEF Type code is R and the SHEF Duration code is K, L, D and P. Data is posted to this table by the shef_decode_raw application.
pehfsep	SHEF Data Value	Stores all data where the SHEF Type code is F and SHEF Duration code is H. Data is posted to this table by the shef_decode_raw application.
pehpsep	SHEF Data Value	Stores all 1-hour time series data where the SHEF Type code is P, or 1 thru 9. Data is posted to this table by the shef_decode_pro application. The shef_decode_raw application can not see it.
pempsep	SHEF Data Value	Stores all monthly data where the SHEF Type code is P, or 1 thru 9. Data is posted to this table by the shef_decode_pro application. The shef_decode_raw application can not see it.
pemrsep	SHEF Data Value	Stores all data where the SHEF Type code is R and the SHEF Duration code is M. Data is posted to this table by the shef_decode_raw application.
peoosep	SHEF Data Value	Catch-all table for the shef_decode_raw application. Stores only data where the SHEF Type and Duration codes do not fit other tables. The shef_decode_pro application can not see this table.
peqfsep	SHEF Data Value	Stores all data where the SHEF Type code is F and all SHEF Duration code is Q. Data is posted to this table by the shef_decode_raw application.
peqpsep	SHEF Data Value	Stores all 6-hour time step data where the SHEF Type code is P, or 1 thru 9. Data is posted to this table by the shef_decode_pro application. The shef_decode_raw application can not see it.
pos	NWSRFS	Stores the descriptions of valid area position abbreviations for NWSRFS segments.
prod	Reference	Stores the nine character product ids for transmitting HM data, forecasts, guidance, etc.
qadjust	Meta-Data	Stores information that allows the reconstruction of natural (unregulated or pre-regulation) flow. It stores the target lid/PE and as many LID/PE's as it takes to calculate the natural flow.
rating	Meta-Data	Stores a history of rating curve data for a particular river station and storage-elevation data for a particular reservoir station.
ratingshift	Meta-Data	Stores a history of the rating curve shift information for a particular river station and rating curve.
reservoir	Meta-Data	Stores a history of reservoir reference information.

rfc	Reference	Look-up table of all 13 RFC identifiers.
rivercrit	Meta-Data	Stores a history of reference information about river stations. Also includes some quality control fields which are used by the level 1 processors.
seg	NWSRFS	Stores the list of segments defined in the NWSRFS model.
segoper	NWSRFS	Stores the list of operations defined for each segment.
sensok	Quality Control	Stores information that indicates when a sensor's data is bad for a specified period of time.
shefdur	Reference	Look-up table of SHEF Duration codes.
shefex	Reference	Look-up table of SHEF Extremum codes.
shefpe	Reference	Look-up table of all defined SHEF PE codes.
shefpe1	Reference	Look-up table for the 1st letter of the SHEF PE Codes.
shefpetrans	Reference	Stores translations for SHEF Physical Element codes.
shefprob	Reference	Look-up table of SHEF Probability codes.
shefqc	Reference	Look-up table of SHEF Quality Control Codes.
shefts	Reference	Look-up table of SHEF Type and Source codes.
slopeprofile	Meta-Data	Stores slope distance-elevation relations for a slope river gage.
state	Reference	Look-up table of U.S. states, Canadian Provinces and Mexican states. Includes U.S. commonwealths and trust territories.
statesapicont	NWSRFS	Stores the API-CONT states for each segment area for each carryover date.
statessacsma	NWSRFS	Stores the SAC-SMA states for each segment area for each carryover date.
statessnow17	NWSRFS	Stores the SNOW-17 states for each segment area for each carryover date.
swsmail	SWS*	Stores mailing information for recipients of water supply publications.
unkstnvalue	SHEF Data Value	Stores decoded SHEF data for locations that are not defined in the location table. Whether or not the shef_decode_raw writes to this table is controlled by an apps_defaults token.
vaddadjust	Verification	Stores a value that is to be added to observation/forecast for a particular location.
vfypairs	Verification	Stores the constructed forecast and observed data pairs for the locations specified in the vfyruninfo table.
vfyprocpairs	Verification	Stores the constructed forecast and processed data pairs for the locations specified in the vfyruninfo table.
vfyruninfo	Verification	Stores information about locations for which verification statistics are to be computed.
wfo_hsa	Reference	Look-up table for WFO and HSA identifiers.
wsequation	SWS*	Stores water supply *equation* characteristics. Space is reserved for up to fifteen variables for each equation.

_____

wsfcst	SWS*	Stores *forecasts* produced by the water supply equations.
wshistorical	SWS*	Stores *historical* output from water supply equations.
wsperstats	SWS*	Stores *period statistics* for target data sets for water supply purposes.

* SWS stands for Statistical Water Supply