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#
#  Begin METADATA documentation
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#
#  METADATA Data Description:
#
#    Filename: Appendix5a.txt
#
#    The data provided herein are the water-quality data discussed in
#
#    U.S. Geological Survey Scientific Investigations Report 2009-5062, Sources and Preparation of Data
#    for Assessing Trends in Concentrations of Pesticides in Streams of the United States, 1992-2006
#    URL http://pubs.usgs.gov/sir/2009/5062/
#
#    Concentrations of 44 pesticides and 8 degradates measured in 17,696 water samples from
#     201 stream-water sites are provided in this tab-delimited ASCII file.
#
#    NOTE: ALL samples are provided in this file, NOT JUST THOSE SELECTED FOR TREND ANALYSIS!
#          Keep only those samples where attribute trend = "KEEP" to obtain the samples selected for
#          trend analysis. This file provides data for 16,869 samples selected for trend analysis
#          (trend = "KEEP") and for 827 samples rejected for trend analysis (trend = "DROP").
#
#    NOTE: This is a "row" format data file. Each row contains information about one pesticide measured
#          in one sample.
#
#    This data file contains 823,613 rows of data (excludes rows of METADATA comments, 1 row of
#     attribute labels, and 1 row of field descriptions).
#
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#
#  METADATA Basic documentation of data set elements:
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#
#       Data Attributes:
#
#               pstaid          15S
#               trend           5S
#               suid            4s
#               dates           8D
#               times           4S
#               dectime         9N
#               year            9N
#               month           9N
#               day             9N
#               sched           9S
#               pcode           6S
#               plname          25S
#               rem_org         1S
#               val_org         9N
#               url             1S
#               maxltmdl        9N
#               rem_rnd         1S
#               val_rnd         9N
#               rrl_rnd         1S
#               rem_adj         1S
#               val_adj         9N
#               rrl_adj         1S
#               p_recov         9N
#               sname           63s
#
#
#           Note: The row in the data file that follows the row of attribute labels describes the
#                 width of the field and the data type. S or s indicates a text attribute,
#                 D or d indicates a date attribute, and N or n indicates a numeric attribute.
#                 For example: 15s indicates a 0- to 15-character text attribute whereas
#                 9N indicates a 0- to 9-digit numeric attribute. Attribute labels may be longer
#                 than the width of the field.
#
#
#       Attribute label: pstaid
#
#       Attribute description: U.S. Geological Survey (USGS) site identification number.
#
#            Note: pstaid is the "parent" site identification number. At some sites, the actual
#                  location of sample collection (at the "child" site identification number)
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#                may have changed during the period of sample collection, but the sites
#                are considered equivalent.
#
#
#       Attribute label: trend
#
#       Attribute description: Sample selection code for trend analysis.
#
#                Code   Description
#                ----   -----------------------------------
#                KEEP   Sample selected for trend analysis
#                DROP   Sample rejected for trend analysis
#
#
#       Attribute label: suid
#
#       Attribute description: National Stream Quality Accounting Network (NASQAN) (suid = nasq) or
#                              National Water-Quality Assessment Program (NAWQA) Study Unit identifier.
#
#                Code   Description
#                ----   ------------------------------------------------------------
#                acad   Acadian-Pontchartrain Drainages
#                acfb   Apalachicola-Chattahoochee-Flint River Basin
#                albe   Albemarle-Pamlico Drainage Basin
#                ccyk   Central Columbia Plateau-Yakima River Basin
#                cnbr   Central Nebraska Basins
#                conn   Connecticut, Housatonic, and Thames River Basins
#                delr   Delaware River Basin
#                eiwa   Eastern Iowa Basins
#                gafl   Georgia-Florida Coastal Plain
#                grsl   Great Salt Lake Basins
#                hdsn   Hudson River Basin
#                leri   Lake Erie-Lake Saint Clair Drainages
#                linj   Long Island-New Jersey Coastal Drainages
#                lirb   Lower Illinois River Basin
#                lsus   Lower Susquehanna River Basin
#                mise   Mississippi Embayment
#                mobl   Mobile River Basin
#                nasq   NASQAN
#                necb   New England Coastal Basins
#                nvbr   Las Vegas Valley Area and Carson and Truckee River Basins
#                ozrk   Ozark Plateaus
#                podl   Potomac River Basin and Delmarva Peninsula
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#               pugt   Puget Sound Basin
#               redn   Red River of the North Basin
#               riog   Rio Grande Valley
#               sacr   Sacramento River Basin
#               sana   Santa Ana Basin
#               sanj   San Joaquin-Tulare Basins
#               sant   Santee River Basin and Coastal Drainages
#               sctx   South-Central Texas
#               sofl   Southern Florida
#               splt   South Platte River Basin
#               tenn   Tennessee River Basin
#               trin   Trinity River Basin
#               ucol   Upper Colorado River Basin
#               uirb   Upper Illinois River Basin
#               umis   Upper Mississippi River Basin
#               usnk   Upper Snake River Basin
#               whmi   White, Great Miami, and Little Miami River Basins
#               will   Willamette Basin
#               wmic   Western Lake Michigan Drainages
#               yell   Yellowstone River Basin
#
#
#       Attribute label: dates
#
#       Attribute description: Date of sample, YYYYMMDD.
#
#
#       Attribute label: times
#
#       Attribute description: Time of sample.
#
#
#       Attribute label: dectime
#
#       Attribute description: Decimal time of sample.
#
#
#       Attribute label: year
#
#       Attribute description: Year of sample.
#
#
#       Attribute label: month
```

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#
#       Attribute description: Month of sample.
#
#
#       Attribute label: day
#
#       Attribute description: Day of sample.
#
#
#       Attribute label: sched
#
#       Attribute description: Analytical schedule (analytical method and suite of pesticides) used
#                              to measure pesticides.
#
#               Code       Description
#               --------   --------------------
#               NWQL2001   NWQL schedule 2001
#               NWQL2003   NWQL schedule 2003
#               NWQL2010   NWQL schedule 2010
#               NWQL2033   NWQL schedule 2033
#
#
#       Attribute label: pcode
#
#       Attribute description: Parameter code. The 5-digit number used to identify variables
#                               in the USGS National Water Information System.
#
#       Attribute label: plname
#
#       Attribute description: Common name of the pesticide or degradate.
#
#
#       Attribute label: rem_org
#
#       Attribute description: Remark code associated with val_org. The original remark
#                               code as provided by NAWQA and NASQAN data managers.
#
#               Code      Description
#               -------   ------------------------------------------------------------------------------
#               <         Not Detected. Concentration reported as less than val_org.
#               >         Detected. Concentration reported as greater than val_org. Only two measurements
#                          of deethylatrazine have rem_org = ">".
#               (blank)   Detected. Concentration reported as val_org.
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#               E         Detected. Concentration is estimated as val_org.
#                          Estimated concentration may result from any of the following reasons:
#                          1. The compound is characterized as a "poor performer" in the method on the
#                             basis of laboratory QC samples. In general compounds with less than 60 %
#                             recovery, greater than 120 % recovery, or greater than 25 % relative standard
#                             deviation of recovery are considered poor performers. All detections of
#                             these compounds are remarked E.
#                          2. The compound was detected at a concentration less than the reporting level
#                             or less than the lowest calibration standard.
#                          3. The sample was diluted to bring the concentration into the calibration range.
#
#
#       Attribute label: val_org
#
#       Attribute description: Concentration of the pesticide, in micrograms per liter. The original
#                               value as provided by NAWQA and NASQAN data managers. DO NOT use this
#                               value for trend analsis. It is provided only to document data preparation
#                               for trend analysis.
#
#
#       Attribute label: url
#
#       Attribute description: Reporting level code for val_org
#
#               Code   Description
#               ----   -----------------------------------------------------------------------------
#               Y      Nondetection at a raised reporting level or at an unusually low reporting level
#               N      Nondetection at a routine reporting level
#               D      Detection
#
#
#       Attribute label: maxltmdl
#
#       Attribute description: The maximum value of the Long-Term Method Detection Level for 1994-2006,
#                               in micrograms per liter. Routine nondetections (val_org) were reassigned
#                               (val_rnd) to maxltmdl. It is anticipated that maxltmdl will be used to
#                               censor low-level detections of pesticides for some types of trend
#                               analysis approaches.
#
#
#       Attribute label: rem_rnd
#
#       Attribute description: Remark code associated with val_rnd.
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#
#               Code      Description
#               -------   ------------------------------------------------------------------
#               <         Not Detected. Concentration less than val_rnd.
#               >         Detected. Concentration greater than val_rnd. Only two measurements
#                          of deethylatrazine have rem_rnd = ">".
#               (blank)   Detected. Concentration is val_rnd.
#
#
#       Attribute label: val_rnd
#
#       Attribute description: Rounded and (for routine nondetections) reassigned concentration of the
#                              pesticide, in micrograms per liter. Original concentrations (val_org) were
#                              rounded to a uniform precision dependent on the magnitude of the
#                              concentration. Thirty very low-level detections (less than 0.0005 ug/L)
#                              rounded to 0.000 ug/L and these were set to routine nondetections
#                              at maxltmdl. The concentration value of all routine nondetections
#                              was reassigned to maxltmdl.
#
#
#       Attribute label: rrl_rnd
#
#       Attribute description: Reporting level code for val_rnd
#
#               Code   Description
#               ----   ----------------------------------------------------
#               Y      Nondetection at a raised reporting level
#               N      Nondetection at a routine reporting level at maxltmdl
#               D      Detection
#
#
#       Attribute label: rem_adj
#
#       Attribute description: Remark code associated with val_adj.
#
#               Code      Description
#               -------   ------------------------------------------------------------------
#               <         Not Detected. Concentration less than val_adj.
#               >         Detected. Concentration greater than val_adj. Only two measurements
#                          of deethylatrazine have rem_adj = ">".
#               (blank)   Detected. Concentration is val_adj.
#
#               Note: rem_adj equals rem_rnd for all samples.
```

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#
#
#       Attribute label: val_adj
#
#       Attribute description: Recovery-adjusted concentration of the pesticide, in micrograms per liter.
#                              Rounded and reassigned concentrations (val_rnd) were adjusted for temporal
#                              changes in analytical recovery as follows: Detected concentrations (rrl_rnd = D)
#                              were adjusted for recovery. Nondetected concentrations at raised
#                              reporting levels (rrl_rnd = Y) were adjusted for recovery. Nondetected
#                              concentrations at routine reporting levels (rrl_rnd = N) were NOT adjusted
#                              for recovery.
#
#                              Concentration was adjusted as: val_adj = val_rnd / (p_recov x 0.01).
#
#                              Adjusted concentrations were rounded to the same precision as was done
#                              for val_rnd. No adjusted concentrations rounded to 0.000. Some nondetections
#                              at raised reporting levels were downward adjusted to concentrations less
#                              than or equal to maxltmdl. These recovery-adjusted nondetections were
#                              changed to routine nondetections at maxltmdl.
#
#       Attribute label: rrl_adj
#
#       Attribute description: Reporting level code for val_adj
#
#                Code   Description
#                ----   -----------------------------------------------------
#                Y      Nondetection at a raised reporting level
#                N      Nondetection at a routine reporting level at maxltmdl
#                D      Detection
#
#
#       Attribute label: p_recov
#
#       Attribute description: Recovery adjustment factor, in percent. Temporal changes in analytical
#                              recovery were modelled by fitting a lowess smooth (10 percent window)
#                              to a timeseries plot of recovery versus date for 1,231 stream water
#                              matrix spikes. Modelled recovery for any given day was used as the
#                              recovery adjustment factor for pesticide samples collected on that day.
#
#
#       Attribute label: sname
#
#       Attribute description: Name of the stream-water site (pstaid)
```

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#
#
#  End METADATA documentation
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