Begin METADATA documentation

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METADATA Data Description:

Filename: Appendix4.txt

Source: U.S. Geological Survey Data Series 655, appendix 4.
URL http://pubs.usgs.gov/ds/655/

The data provided herein are an UPDATED water-quality dataset processed similarly to that provided 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 21,988 water samples collected from 212 stream-water sites for the period January 16, 1992 through September 14, 2010 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 21,144 samples selected for trend analysis (trend = "KEEP") and for 844 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 1,009,510 rows of data (excludes rows of METADATA comments, 1 row of attribute labels, and 1 row of field descriptions).

METADATA Basic documentation of dataset elements:

Data Attributes:

pstaid	15S
trend	5S
suid	4S
dates	8D
times	4S
dectime	9N
year	9N
month	9N
day	9N
sched	9S
pcode	5S
plname	25S
rem_org	1S
val_org	9N
url	1S
maxltmdl_org	9N
rem_rnd	1S
val_rnd	9N
rrl_rnd	1S
maxltmdl_rnd	9N
rem_adj	1S
val_adj	9N
rrl_adj	1S
p_recov	9N
period	6S
sname	66S

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) 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 = "NSQN") 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
CAZB	Central Arizona Basins
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
NECB	New England Coastal Basins
NSQN	National Stream Quality Accounting Network
NVBR	Las Vegas Valley Area and Carson and Truckee River Basins
OZRK	Ozark Plateaus
PODL	Potomac River Basin and Delmarva Peninsula

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: 24-hour time of sample, HHMM

Attribute label: dectime

Attribute description: Decimal date/time of sample.

Attribute label: year

Attribute description: Year of sample.

Attribute label: month

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 Data Warehouse 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.
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 Data Warehouse data managers. DO NOT use this value for trend analysis. 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_org

Attribute description: The unrounded, maximum value of the Long-Term Method Detection Level for 1994-2011, in micrograms per liter.

Attribute label: rem_rnd

Attribute description: Remark code associated with val_rnd.

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. Fifty two 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_rnd. The concentration value of all routine nondetections was reassigned to maxltmdl_rnd.

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_rnd
D	Detection

Attribute label: maxltmdl_rnd

Attribute description: The rounded maximum value of the Long-Term Method Detection Level for 1994-2011, in micrograms per liter. Routine nondetections (val_org) were reassigned (val_rnd) to maxltmdl_rnd. It is anticipated that maxltmdl_rnd will be used to censor low-level detections of pesticides for some types of trend analysis approaches.

NOTE: maxltmdl_org and maxltmdl_rnd differed for only 4 pesticides:

pcode	plname	maxltmdl_org	maxltmdl_rnd
34653	p,p'-DDE	0.0013	0.001
82668	EPTC	0.0028	0.003
82676	Propyzamide	0.0021	0.002
82682	Dacthal	0.0038	0.004

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.

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. One hundred seventy one nondetections at raised reporting levels were downward adjusted to concentrations less than or equal to maxltmdl_rnd. These recovery-adjusted nondetections were changed to routine nondetections at maxltmdl_rnd.

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_rnd
D	Detection

Attribute label: p_recov

Attribute description: Recovery adjustment factor, in percent. Temporal changes in analytical recovery were modeled by fitting a lowess smooth (10 percent window) to a time-series plot of recovery versus date for 1,819 stream-water matrix spikes. Modeled recovery for any given date was used as the

recovery adjustment factor for pesticide samples collected on that date. Because of a much reduced period of data, a 25-percent smoothing window was used to model recovery for fipronil and the four fipronil degradates.

Attribute label: period

Attribute description: Time period and modeling technique for predicted recovery (p_recov).

Code	Description
before	Recovery for the time period before spikes. Recovery modeled by assigning the lowess-modeled recovery on the date of the first spike to all previous dates.
during	Recovery for the time period of spikes (date of first spike through date of last spike). Recovery modeled by lowess.
after	Recovery for the time period after spikes. Recovery modeled by assigning the lowess-modeled recovery on the date of the last spike to all subsequent dates.

Attribute label: sname

Attribute description: Name of the stream-water site (pstaid), edited by jdmartin.

End METADATA documentation