

Version 2.1
Longterm Water Quality Database for the Onondaga Lake Ambient Monitoring Program

Department of Water Environment Protection
 Onondaga County, New York
 by
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Onondaga Lake Database - Trend Analysis & Outlier Screening

Onondaga County Department of Water Environment Protection
 Version 1.1
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Time Series Analysis.xls

Select Station: ADKAS, BPOUS, DORWIN, FORTUNE, HARVEST, HAWTHORNE, KIRKPATRICK, METRO, NORTH, NORTHWEST, OUTLET12, OUTLET13, PINE, SOUTH, SOUTH1, SOUTH2, SPENCER, TIBBIA, TIBBIA, VELSLO, VELSLO.

Select Variable: ALK, BOD5, CA, CL, FCOLI, FE, HC, MG, NH, NH3N, NO3N, NO3N, PH, PH, SO4, SS.

Select Output Sheet: Index of Sites, Index of Water Quality Variables, Current Results, Trend Time Series Charts, Outlier Listing, Histograms, Data Review, Blank Results, Sample Time Series Charts, Outlier Time Series Charts, Outlier Histograms, Trend Time Series Charts, Seasonally Adjusted Trends, Outlier Listing, Tables of Results, Outlier Counts by Site & Variable, Outlier Counts by Site & Variable, Outlier Counts by Sample, Outlier - Sample Counts, Outlier - Median Concentrations, Outlier - All Trends, Outlier - Significant Trends.

Run

Public Batch Results

Include Outliers in Trend Analysis

Plot Series with Outliers Only

Index: Value, Index, Included in Index

ADKAS 10 1

BPOUS 10 1

DORWIN 10 1

VELSLO 10 1

Click Here for General Help on Database

Click Here for Main Database Menu

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Time Series Charts

Normalized to Index

Time Series Histograms

Trend with Seasonal Variations

Normal Peak Plot

Tributary Load Calculations

Onondaga County Department of Water Environment Protection
 Version 2.2

File: Load_Calculations.xls

Select Site: ADKAS, BPOUS, DORWIN, FORTUNE, HARVEST, HAWTHORNE, KIRKPATRICK, METRO, NORTH, NORTHWEST, OUTLET12, OUTLET13, PINE, SOUTH, SOUTH1, SOUTH2, SPENCER, TIBBIA, TIBBIA, VELSLO, VELSLO.

Select Variable: ALK, BOD5, CA, CL, FCOLI, FE, HC, MG, NH, NH3N, NO3N, NO3N, PH, PH, SO4, SS.

Select Output Sheet: Site Index, Variable Index, Monthly Totals, Daily Totals, Diagnostic Charts, Chart - Flow & Conc, Chart - Loads, Chart - Obs vs. Predicted Conc, Chart - Obs vs. Predicted Load, 80% Output.

Run for Selected Site & Variable

Calculation Method: Flow-Water Conc. All Flows, Flow-Water Conc. 2 Flow Steps, Interpolation, Regression

View Sheet

Help

Returned to Database

Define Data Intervals:

Calculation Period: 4/1/2000 4/30/2002 for outlier/progression search

Output Period: 4/1/2000 4/30/2002 for computing loads & identifying range of dates to assess data sparsity

Query Range: 4/1/2000 4/30/2002

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Output Period: 01/01/00 02/29/02

Calculation Period: 01/01/00 02/29/02

Sample Dates: 01/01/00 02/29/02

Method: 5 - Regression - Interpolation

Comparison of Methods & Yearly Time Series

Regression R²: 49%

Relative Std Error: 20.0%

Regression SE: 1.90

Mean Daily Flow: 0.000 1070 m3/day

Mean Daily Load: 0.324 1070 m3/day

Flow W/CI Error: 2305.23900 4700 m3

Click Here for General Help on Database

Click Here for Main Database Menu

Analysis of Longterm Tributary Loading Database

Onondaga County Department of Water Environment Protection
 Version 2.0
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Historical_Load_Analysis.xls

Select Site: ADKAS, BPOUS, DORWIN, FORTUNE, HARVEST, HAWTHORNE, KIRKPATRICK, METRO, NORTH, NORTHWEST, OUTLET12, OUTLET13, PINE, SOUTH, SOUTH1, SOUTH2, SPENCER, TIBBIA, TIBBIA, VELSLO, VELSLO.

Select Variable: ALK, BOD5, CA, CL, FCOLI, FE, HC, MG, NH, NH3N, NO3N, NO3N, PH, PH, SO4, SS.

Run for Selected Site & Variable

Contents of Current Database:

Years: 1997 - 2010

Sites: 13

Variables: 32

Records: 1,784,138

Years to be Analyzed: 1997 thru 2010

Source Query: master

Reconnect to Database

Click Here for General Help on Database

Click Here for Main Database Menu

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Yearly Time Series Chart

Monthly Time Series for a Given Site, Variable, & Year

Yearly Time Series for a Given Site & Variable

Lake Inflow Volumes, Loads, & Concentrations by Year

Lake Inflow Volumes, Loads, & Concentrations by Station

Lake Outflow Volumes, Loads, & Conc by Variable & Year

Daily Time Series Chart

Yearly Time Series Chart

Click Here for General Help on Database

Click Here for Main Database Menu

Time Series Analysis for AMP Water Quality & Biological Databases

Version: 4/1/2013

Select Station: ADKAS, BPOUS, DORWIN, FORTUNE, HARVEST, HAWTHORNE, KIRKPATRICK, METRO, NORTH, NORTHWEST, OUTLET12, OUTLET13, PINE, SOUTH, SOUTH1, SOUTH2, SPENCER, TIBBIA, TIBBIA, VELSLO, VELSLO.

Select Variable: ALK, BOD5, CA, CL, FCOLI, FE, HC, MG, NH, NH3N, NO3N, NO3N, PH, PH, SO4, SS.

Select Output Sheet: Index of Sites, Index of Water Quality Variables, Current Results, Trend Time Series Charts, Outlier Listing, Histograms, Data Review, Blank Results, Sample Time Series Charts, Outlier Time Series Charts, Outlier Histograms, Trend Time Series Charts, Seasonally Adjusted Trends, Outlier Listing, Tables of Results, Outlier Counts by Site & Variable, Outlier Counts by Site & Variable, Outlier Counts by Sample, Outlier - Sample Counts, Outlier - Median Concentrations, Outlier - All Trends, Outlier - Significant Trends.

Run for Selected Site, Variable & Water Convention

View Output

Public Batch Results

Include Outliers in Trend Analysis

Plot Series with Outliers Only

Index: Value, Index, Included in Index

ADKAS 10 1

BPOUS 10 1

DORWIN 10 1

VELSLO 10 1

Click Here for General Help on Database

Click Here for Main Database Menu

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Time Series Charts

Normalized to Index

Time Series Histograms

Trend with Seasonal Variations

Normal Peak Plot

Onondaga Lake AMP Database - Pivot Tables

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Pivot_tables.xls

Select Output Sheet: Inventory of Database Query, Crosstab - Concentrations vs. Site, Date, Depth, Inventory - Samples vs. Site & Year for a Given Parameter, Inventory - Samples vs. Site & Year for a Given Site, Inventory - Q4QC vs. Site, Comparison of Duplicate Samples, Sampling Method Comparison, Crosstab - Blank Samples, Plot of Blank Samples for a Given Parameter, Chlorophyll-a Samples - Epilimnetic vs. Profic Samples, Lake Mixed Layer Means by Variable & Interval, Plot - Daily Time Series, Plot - Conc vs. Date & Depth Interval, Plot - Conc vs. Month for Each Year, Plot - Conc vs. Julian Day for Each Year, Depth vs. Date Contour Plot, Plot - Lake Shoreline Stations.

View

Help

Press Ctrl+R to return to Menu

Enter Years: 1998 - 2010

Reconnect to Database

Click Here for General Help on Database

Click Here for Main Database Menu

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Query Name: master_filtered

Years: 1995 - 2010

Records: 417,149

Sites: 62

Variables: 329

Click Here for Details

Onondaga Lake Mass Balance Analysis

W. Walker, for Onondaga County DWS

Select Variable: ALK, BOD5, CA, CL, FCOLI, FE, HC, MG, NH, NH3N, NO3N, NO3N, PH, PH, SO4, SS.

Select Season: Year, WaterYr

Select Graph: Inflow_Volumes, Inflow_Loads, Load_Variance, Load_Trends, Load_Source_Trends, Conc_Trends, FlowAdjConc_Trends, FlowAdjLoad_Trends, Rainfall_Runoff, Load_Inflow, Load_Outflow, Conc_Outlet, Conc_Outlets, ConcOut_Conch, Power_Stats, Non_Point, Pie_Flows, Pie2_Flows, Pie2_Loads, Pie_Variance, Model_Conc, Model_Load, Model_Param, Model_Diagnostics.

Select Table: Detailed Mass-Balance, Trend_Summary, Trends_all, Trends_Flows, Trends_Loads, Trends_Concs, Trends_FlowAdjLoads, Trends_FlowAdjConcs, Trend_Crosstab_Loads, Trend_Crosstab_Concs, Model_Cats, Model_Crosstab, Inputs_AUTOFLUX, Inputs_DrainageAreas, Inputs_Precip, Inputs_VariableIndex.

Select Term: Metro Bypass, Crucible, Harbor/Hawthorne, Lay Park, Invernie/R48, Onond./Kirpatrick, Harbor/Velslo, Onondaga/Dorwin, Total Gauged, NonPoint Gauged, Ungauged, Total Nonpoint, Total Industrial, Total Municipal, Total External, Precip, Evap, Total Inflow, Total Outflow, Retention.

View Table

View Table

Update Crosstabs

Trend Plots

View Graph

Enter Year Ranges (>= 1996)

Calculation: 1997 to 2002

Total: 1997 to 2002

User Input Cells are Red

Hit Ctrl+R to Return to This Page

Onondaga Lake Mass Balance Analysis

Framework for Mass-Balance Calculations

