

# WISKI | Water Resources Data Management

WISKI helps you develop a comprehensive understanding of your water data.

Enterprise software engineered with the tools to provide deeper insight into your high-frequency time series data.

**WISKI\*** (Water Information Systems KISTERS) represents the culmination of more than 25 years of experience developing software solutions for the water industry. WISKI is a proven data management platform that integrates numerous application modules with powerful statistical, data analysis, modeling and visualization features.

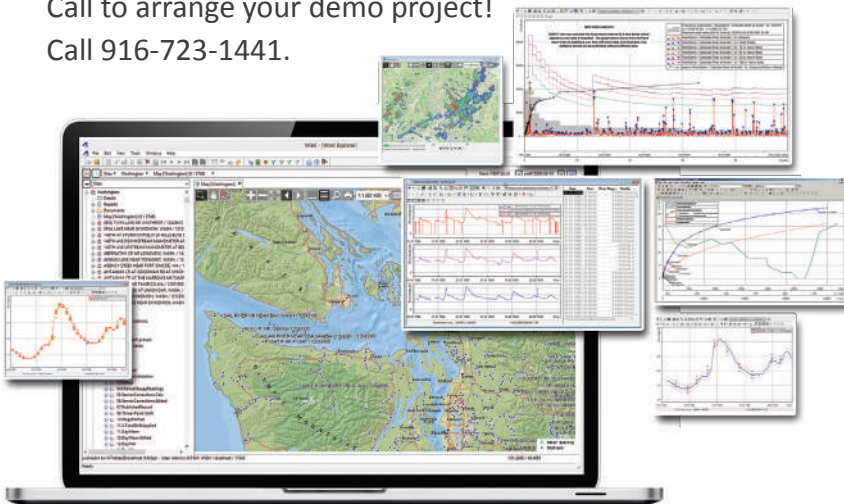
## Professional Applications:

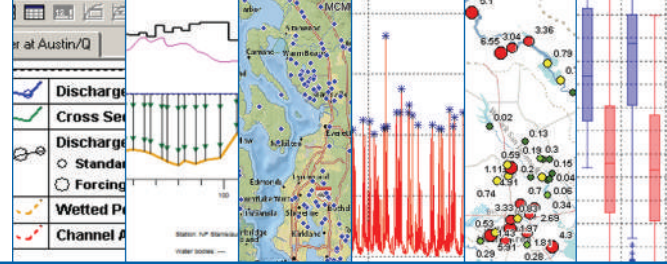
- Surface Water Records Management and Reporting
- Water Quality Data Management and Reporting
- Real-Time Flood Management and Alarming
- Wastewater/Urban Water Data Management
- Groundwater Data Analysis and Reporting
- Drinking Water, Water Meters and Leak Detection
- Dam Safety Monitoring and Alarming
- Irrigation/Water Supply Management and Reporting
- Drought/Water Supply Planning, Analysis and Evaluation
- Meteorology and Hydrometeorology Data Management

## WISKI Modules

- ✓ WISKI BIBER - Discharge Measurement Analysis
- ✓ WISKI SKED - Rating Curve Development
- ✓ WISKI MAP - GIS Data Mapping
- ✓ WISKI KiWQM - Water Quality Data Analysis
- ✓ WISKI KiECO - Biological Sample Data Management
- ✓ WISKI ALARM MANAGER - Real-Time Alerts
- ✓ WISKI Web Pro/Public - Online Data Access
- ✓ WISKI KiWIS - Data Sharing Via Web Services
- ✓ WISKI SODA - Automate Data Collection (Telemetry)
- ✓ WISKI iReD - Standard and Customizable Reports

Call to arrange your demo project!  
Call 916-723-1441.





## Highlights and Features

[www.kisters.net](http://www.kisters.net)



### USER MANAGEMENT

- Enterprise software built on a n-tier client-server architecture.
- Secure data access controls through flexible and highly configurable administrative roles.
- Easily define author, publisher and user rights.
- Scalable from a single-user to hundreds of users.
- Full control over external access.
- Integrates with your existing LDAP system.
- Provides real-time access to staff and public users.



### DATA IMPORT/EXPORT

- Unlimited sites, stations, parameters and data storage.
- Automatic import of SCADA, GOES, CDEC, NWS, USGS data.
- Automated and user-configurable data import and export.
- Open architecture database structure (ODBC compliant) that responds to user-demands and user-defined templates.
- Drag and drop hot folders, email attachments and more.
- **Data loggers and sensors:** water level, flow, precipitation.
- **Telemetry:** telephone, mobile, satellite, internet, etc.
- **External sources:** control systems, GIS, databases, internet.
- **Flow measurement devices:** current meters, sensors, ADCP.
- **Manual capture:** PDAs and handhelds, web interfaces.
- **Historical data:** lists, archives, files, gauge charts.



### QA/QC

- Full range of validation, estimation and editing algorithms.
- Automated and user-configurable data import and export.
- 254 definable color-coded quality flags and an unlimited amount of standard remarks and comments.
- Automated data aggregation and load profiles.
- Available standard and user-defined QA/QC reports.
- User-friendly GUI with on screen editing and visualization.
- Data validation based on client and industry business rules.



### ANALYSIS AND MODELING

- **Time-Series:** Continuous Data Points, Continuous Totals, Continuous Directional Values, Aggregated Minimum, Aggregated Maximum, Aggregated Means, Aggregated Totals.
- **Time-Series Interpolation:** Non-Interpolatable, Linear Interpolatable, Constant Until Next Time Stamp, Constant Since Previous Time Stamp, Non-Interpolatable Linear Until Next Time Stamp, Linear Since Constant Until Next Time, Constant Since Previous Time Stamp.
- **Statistical Forecasts:** Artificial Neural Networks, Adaptive Logic Networks, (Neuro-) Fuzzy Logic, ARMA, ARIMA, ARIMAX and Kalman filtering methodologies.
- **Link-and-Node Model:** Directly links to external models such as USGS, USACE, EPA, or any in-house custom code.
- **Rating Curve Methods:** Interpolated Skeletal Points, Single Point Method with Spline Interpolation, Power Law Method with and Without Zero Offset, Power Law Method in Sections, Predefined Weir Functions (e.g. V-notch weir), Formula Editor for functions that can be defined freely.
- **Graphs:** Time dependent (time-series), Reservoir Inflow, Reservoir Outflow and Precipitation, Deformation Graphs, Parameter In-Dependent Graphs, Stage Discharge Curve, Precision and Uncertainties Plots, Box Whisker Plots, Tiefen-Plots, etc.



### REPORTING

- Interactive report designer offers rapid visualization of WISKI graphs including: True-to-Scale Structural Illustrations, Confidence Interval Plots and Vertical Profiles.
- Quickly customize reports using KiScript scripting language.
- Pick from a range of standard fixed reports including: Annual/Monthly Lists, Daily Mean and Long Term reports.
- Predefined water quality reports include: WQM Exceedance Report, WQM Parameter Report and WQM Station Report.



### ONLINE DATA SHARING

- Publish real-time hydrological data via the Internet.
- Display data using industry-standard GIS software including ESRI ArcGIS, Google Maps, Google Earth or Bing Maps.
- Supported XML Exchange Formats include WaterML 1.0/2.0, SOS, WaterOneFlow, WMS, WFS.
- Supported Formats: ASCII, HTML, CSV, XLS, JSON, GeoJSON and PNG/JPG.
- KiWIS Module based on web services for web publishing.
- Integrates with KISTERS time-series archives.



### SYSTEM REQUIREMENTS

- **Client Software:** MS Windows 7 (32bit & 64bit), MS Windows 8 (32bit & 64bit), MS Excel 2000 or higher, network card with 100 Mbit.
- **Application Server Software:** MS Windows 2008 Server R2 (64bit), MS Windows 2012 Server (64bit).
- **Database Software:** Oracle 11gR2, Oracle 12cR1, Oracle 11gR2, Oracle 11gR2 Enterprise Edition with Partitioning.
- **Client Hardware:** PC with Intel/AMD Double Quad Core or higher, 2 GB available RAM, 5 GB free hard disk space.
- **Application Server Hardware:** Multi processor system, 32-64 GB RAM, Raid 10 hard drive, 200 GB free disk space, network card (1000 MBit).
- **Database Hardware:** Multi processor system, 32-64 GB RAM, Raid 10 hard drive, 200 GB free disk space, network card (1000 MBit).

Based on recommended system requirements. Please inquiry for more information.