

USASK / GWF / CARL-ABRC

WISKI Technology Overview

October 27, 2020 / Steve Elgie

Overview



**CARL
ABRC**

Introduction

Core System & Modules

High Level Schematic

Live Demo

Introduction



A few words about KISTERS

- Software Developers specializing in Environmental Data Management
- Headquartered in Aachen Germany, with NA offices in Sacramento, Edmonton, Vancouver, & Toronto
- 40+ years of commercial off the shelf implementations in over 50 countries



KISTERS Water Solutions



Our Core Solution Areas



KISTERS Technology Stack

Water Data Management for Experts



Interfaces
Open standards, Industry standards

Calculations
Long-Term Climate Normals
Loading Calculations
Simple & Advanced Trend Analyses
Configurable Indices



Interfaces
Open standards, Industry standards

Products
Annual Reports, Ad-hoc reporting, Extreme-value statistics, Industry-specific compliance Reports, Base flow / storm load, Alert maps, Public & Internal mapping / analysis tools



Meta data



Time series data



Samplings Observations



Raster data/"Gridded Data"

Cooperation



Partnerships & Integrations

- **ESRI**
Integrating the world leaders of environmental temporal and spatial data
- **Model Platform Integration**
First class solutions for powerful bi-directional integration of forecasting models, including HEC-DSS (USACE), MIKE-SHE (DHI), and FEWS (Deltares)



US Army Corps
of Engineers
Hydrologic Engineering Center



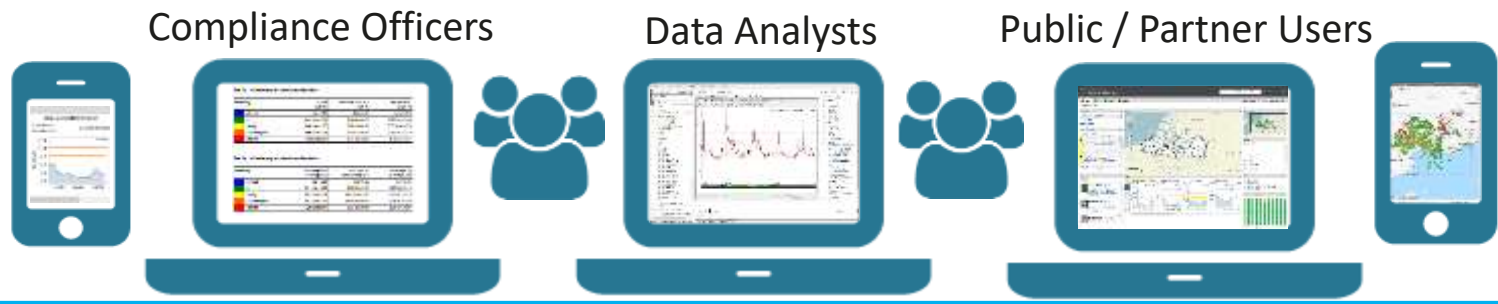
Reference Slide: WISKI

What can *WISKI* do?

- Automated data collection, data import, export, reporting and sharing of **environmental data**
- Automated data validation (**QA/QC**)
- Automated Calculations and '**Agents**' to define tasks
- Data visualization and graphical editing tools
- Standardized and **user defined** reporting tools
- Secure data base with defined user roles and **flexible to configure**
- API support (Application Programming Interface).
- End User and Technical **Support** with 100's of team members
- Powerful and flexible software solution to manage all water data in **ONE** location.

Web Portal & Remote Data Capture Devices

Specialists
Government, Authorities,
Field Staff, Technicians,
Biologists



KiWIS Functionality – API integration with WISKI & All Modules

Interfaces
Open standards, Industry standards



Interfaces
Open standards, Industry standards

WISKI Platform Functionality – Applicable to all embedded modules

Calculations
Time series statistics
Biologic Indices
Automated QA
Load calculations



Products
Water quality reports, Year books, Extreme-value statistics, Retention periods, Base flow, Water quality maps, Alarm maps, Forecasts

WISKI Module Datasets



KiWQM Module Datasets

Samplings

KiECO Module Datasets

Observation

Live Demo



An overview of the USASK WISKI and Web Portal Environment