



# USGS Water MeterApp User Guide

## Description

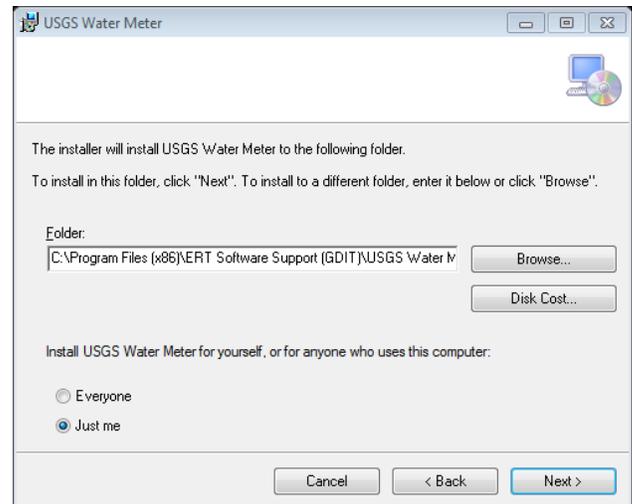
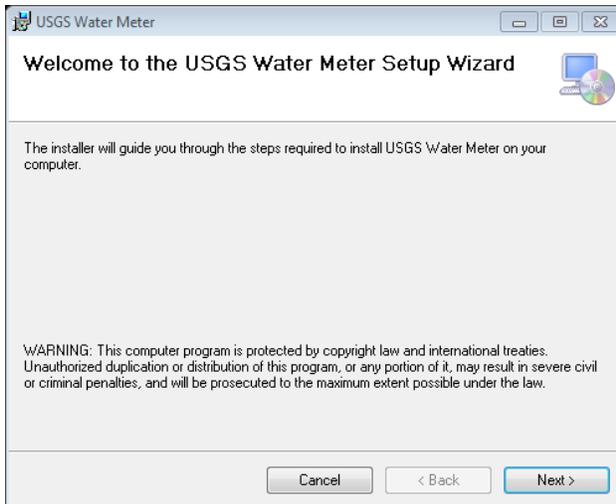
With the ERT USGS Water Meter Application (MeterApp), you are able to acquire and view observed stream conditions (water levels and discharges) throughout US states and territories with information provided by USGS. Stream conditions on the USGS website (<http://waterdata.usgs.gov/nwis/rt>), are updated at increments of 15 minutes. The USGS Water MeterApp provides you with the most recent readings from the site. USGS stream condition readings are added to Survey Controller similar to adding an instrument. **Note: USGS Water is a third-party site that has no affiliation with ERT Support.**

## Installation

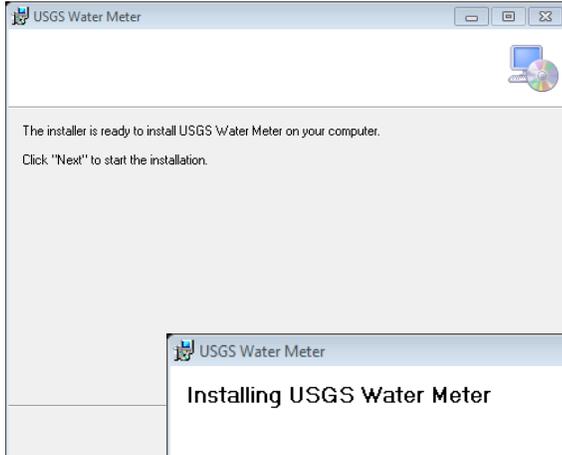
The USGS Meter Application install is available for download from [www.epaosc.org/viper](http://www.epaosc.org/viper).

**Note: The USGS Meter Application must be installed on the computer that is running Survey Controller.**

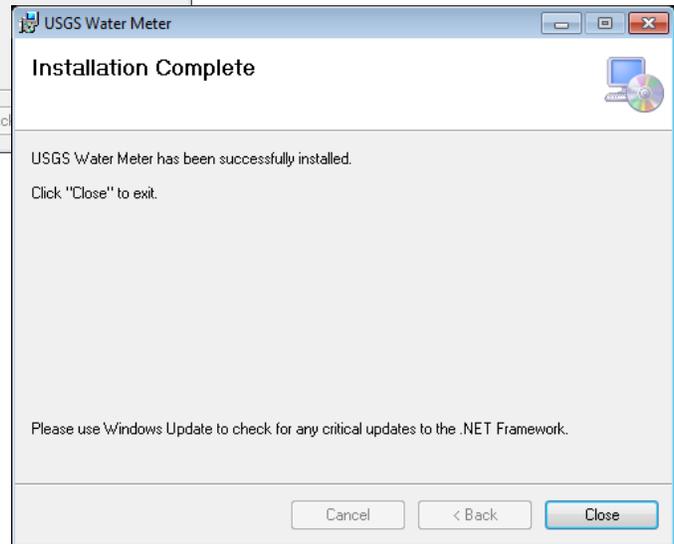
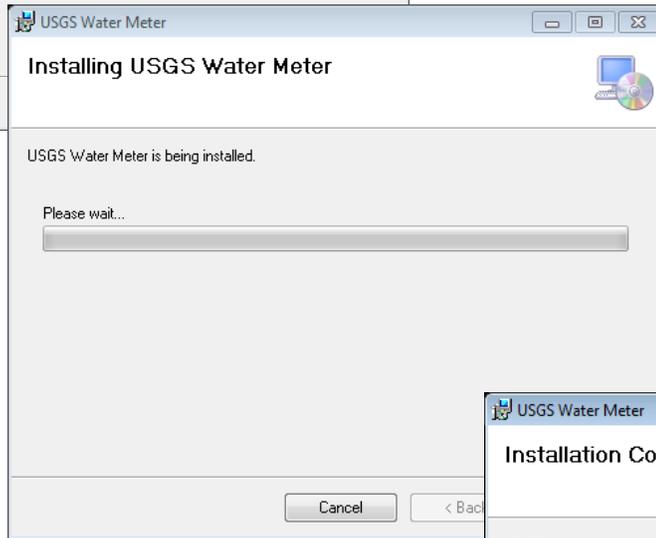
1. Double-click the **'USGSWaterMeterSetup.msi'** to begin the installation. Click **'Next'** and follow the prompts.



2. Browse to the folder to which you want to install the MeterApp. We recommend that you accept the default folder.
3. Choose whether to make the application available to anyone who uses your computer or just you. We recommend that you accept the default of **'Everyone'**.
4. Click **'Next'**.



5. Click 'Next' to continue with the installation. A status bar will appear.
6. Click 'Close' to when the installation is complete.





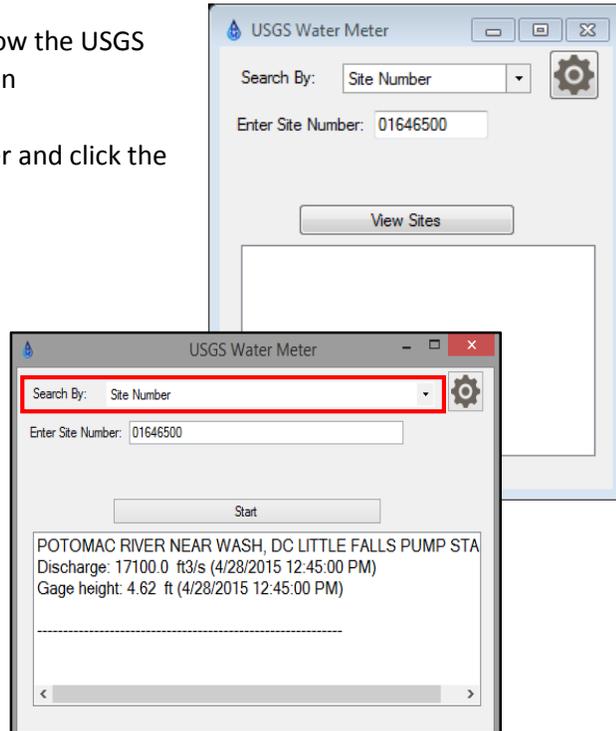
## Search for Reporting Sites



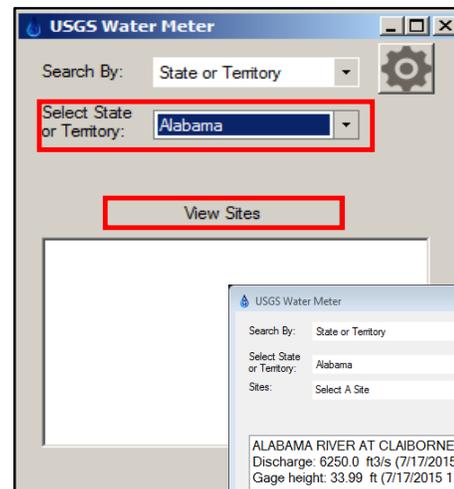
1. Launch the ERT USGS Meter Application by double-clicking the desktop icon:
2. To begin your search, select a search method by selecting the “Search By” dropdown.

- **Search By: Site Number** - If you know the USGS Site Number for a particular location
  - Enter a valid USGS Site number and click the ‘View Sites’ button.
  - The site will be displayed.

**Note:** If Discharge or Gage height information is available for that Site, it will be displayed. Otherwise, a message box will be displayed indicating that no information was found for the selected Site.

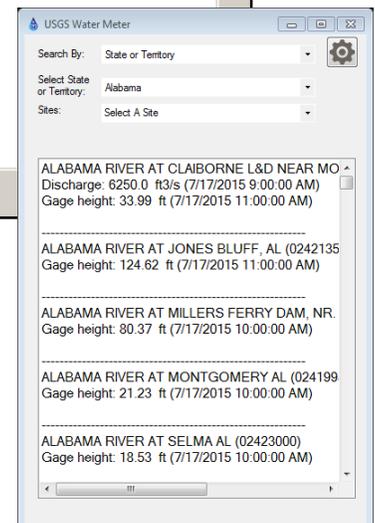


- **Search By: State or Territory**
  - **Select A State or Territory** from the drop down list
  - Click the “View Sites” button.



A list of the USGS Sites reporting Gage height and/or Discharge readings will be displayed for the selected State or Territory.

The USGS MeterApp can report parameters for **one specific site**. For **multiple sites**, run multiple MeterApp instances (see below).

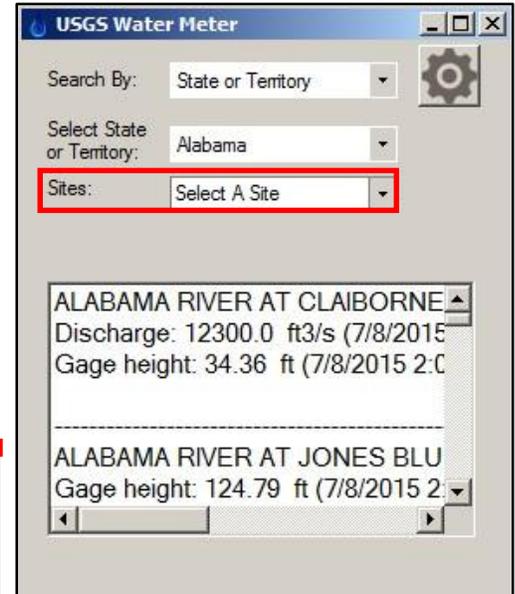
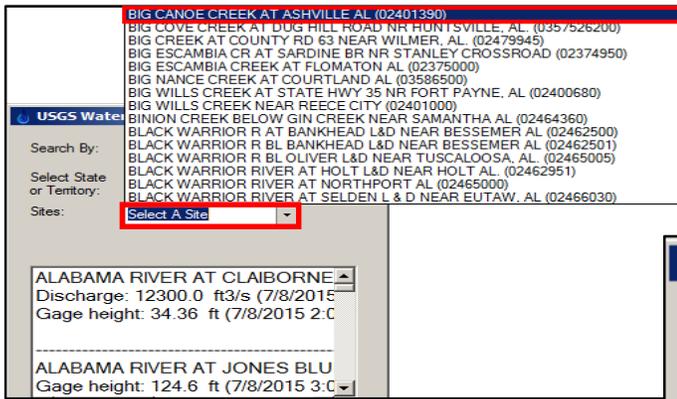




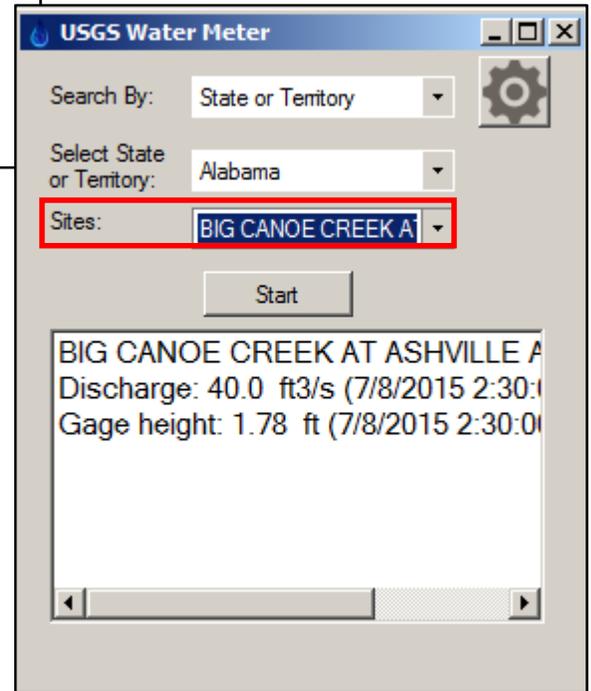
## Reporting Parameters on One Site

When searching by State or Territory, multiple sites may be displayed in the results window.

- Once the Site of interest has been located in the search results list, use the "Sites" drop down box to pick a specific Site (note: *you cannot click in the results list to select a Site*)
  - Select a Site from the results list by clicking the drop down Sites box. The image to the right illustrates selecting a specific Site.



The image to the right illustrates a specific site selected. All available parameters (Discharge and Gage height) for a specific site can be added to the MeterApp and to Survey Controller.



## Reporting Parameters on Multiple Sites

- To add parameters for *Multiple Sites*, multiple instances of the MeterApp need to be running. For example, if you want to display the Gage height values for three sites along a stream, three MeterApps would need to be running. Each MeterApp would have a different site selected.

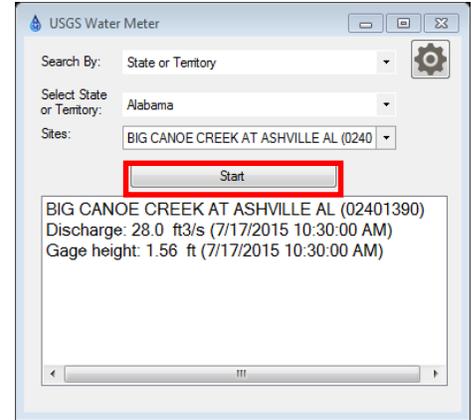


## Start Data Transfers

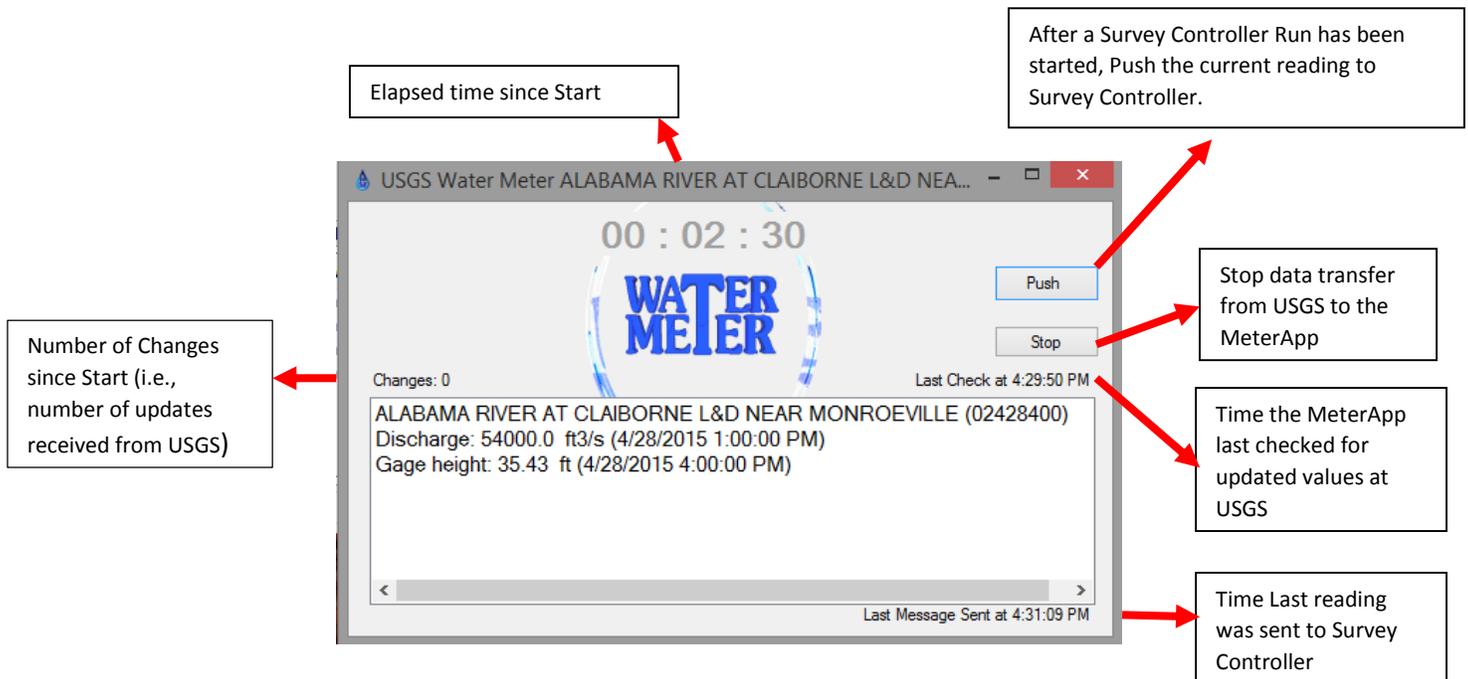
**IMPORTANT: Make sure Survey Controller is open before continuing.**

Pressing the Start button once your site is selected will initiate data transfers from USGS to the Water MeterApp. The data can now be 'pushed' to Survey Controller to be transmitted to Viper Deployment Manager.

- Press the "Start" button in the MeterApp



The image below explains the different parts of the running MeterApp display





## Adding Parameters from the USGS Water MeterApp to a Survey Controller Run

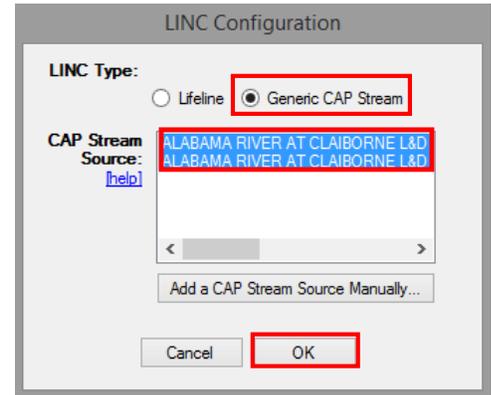
1. **Start a New Run** in Survey Controller
2. At the LINC Setup Window, click **'Add'** (The USGS Parameters are added along with other Viper equipment)
3. In the LINC Configuration Window, select the Radio Button for **'Generic CAP Stream'**

**Note:** If the Generic CAP Stream radio button is not available, go to the RUN menu in Survey Controller, Select Preferences, Check "Allow Generic Cap"

4. In the Cap Stream Source box, select all desired USGS Parameters

**Note:** To select multiple lines at once, hold Ctrl key and click each desired Source (or select the first line, then hold down Shift while selecting the last line to select all sources)

5. After the ERT USGS Meter Application has been added to Survey Controller, go back to the Meter Application and click the **"Push"** button to push the data to Survey Controller.



## USGS Meter App Settings

### 1. Change Port or Host

- By default, the Port is set to "6991" and the Host Name is set to "localhost."
- To change the Port or Host Name, click the Settings button . Click the "Change button" to enter the new values. When finished, select continue.

**Note:** The Port and Host Name will revert back to default when the application is closed.