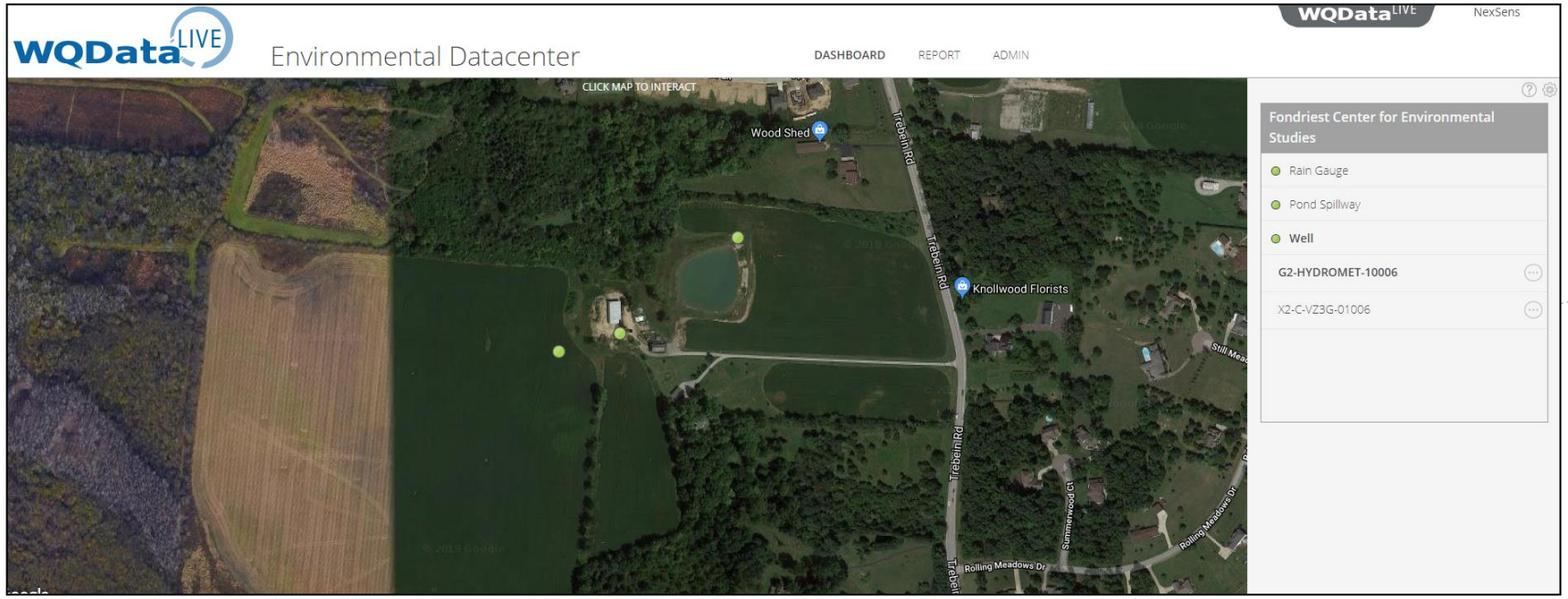
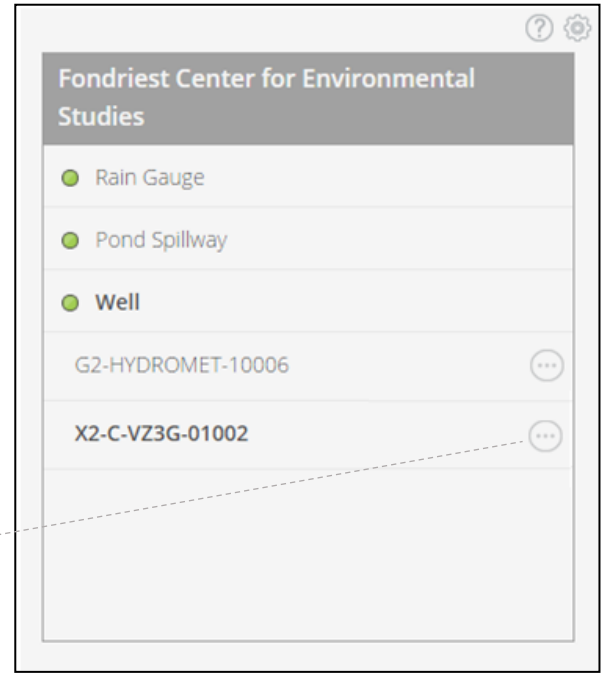
X2 Data Logger – Remote Device Configuration

Accessing the Settings Menu

The *Remote Device Configuration Menu* is accessible through the project Dashboard for each logger and allows settings such as sensor sample and data transmission frequency to be configured.

To make changes, click on the ⋯ icon next to the device





X2 Data Logger – Remote Device Configuration

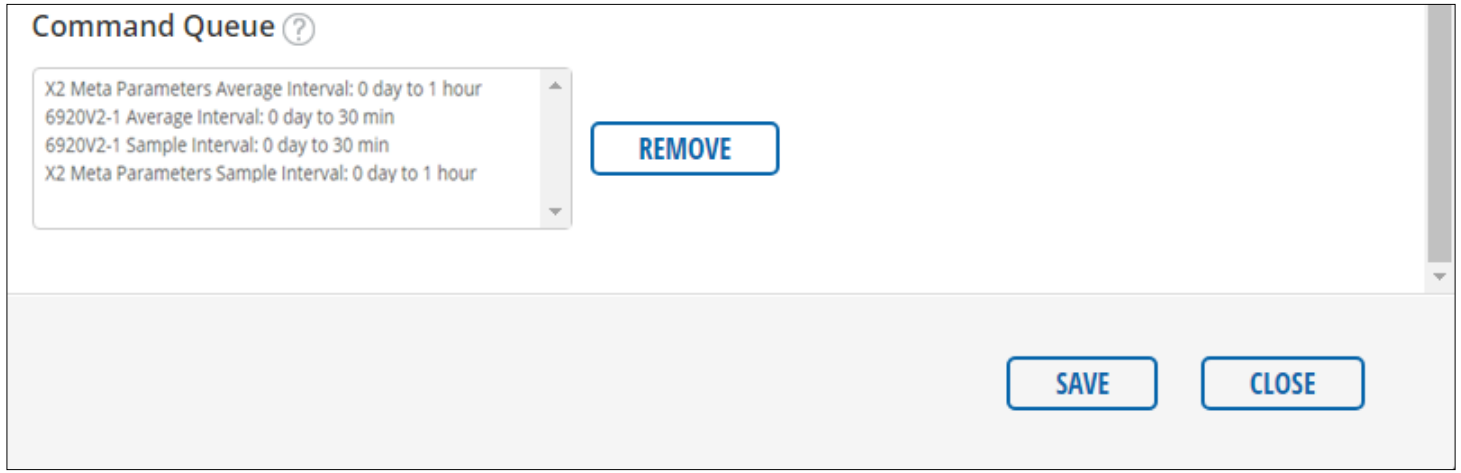
Saving Custom Settings

IMPORTANT: After making changes, click **SAVE** a single time and they will be added to the *Command Queue*.

After clicking **SAVE** the value in the menu will revert to displaying the current device settings and the change will be shown in the queue.

Inspect the Command queue before closing the menu to ensure all changes are loaded.

The next time the logger connects to WQData LIVE it will execute any commands present in the *Command Queue* at that time and remove them.



X2 Data Logger – Remote Device Configuration

Understanding Timed Data Acquisition Settings

Log data every: Sets the time between sensor readings

Starting at: Sets the time of day the device will start taking readings

Note: If this is set in the future, the logger will not begin logging until this time, if set in the past, the logger will log using that exact time as a starting point (keep daylight savings in mind)

Averaging settings: Sets up the sensor to take multiple readings for every logged value, options available here.

X2 Data Logger – Remote Device Configuration

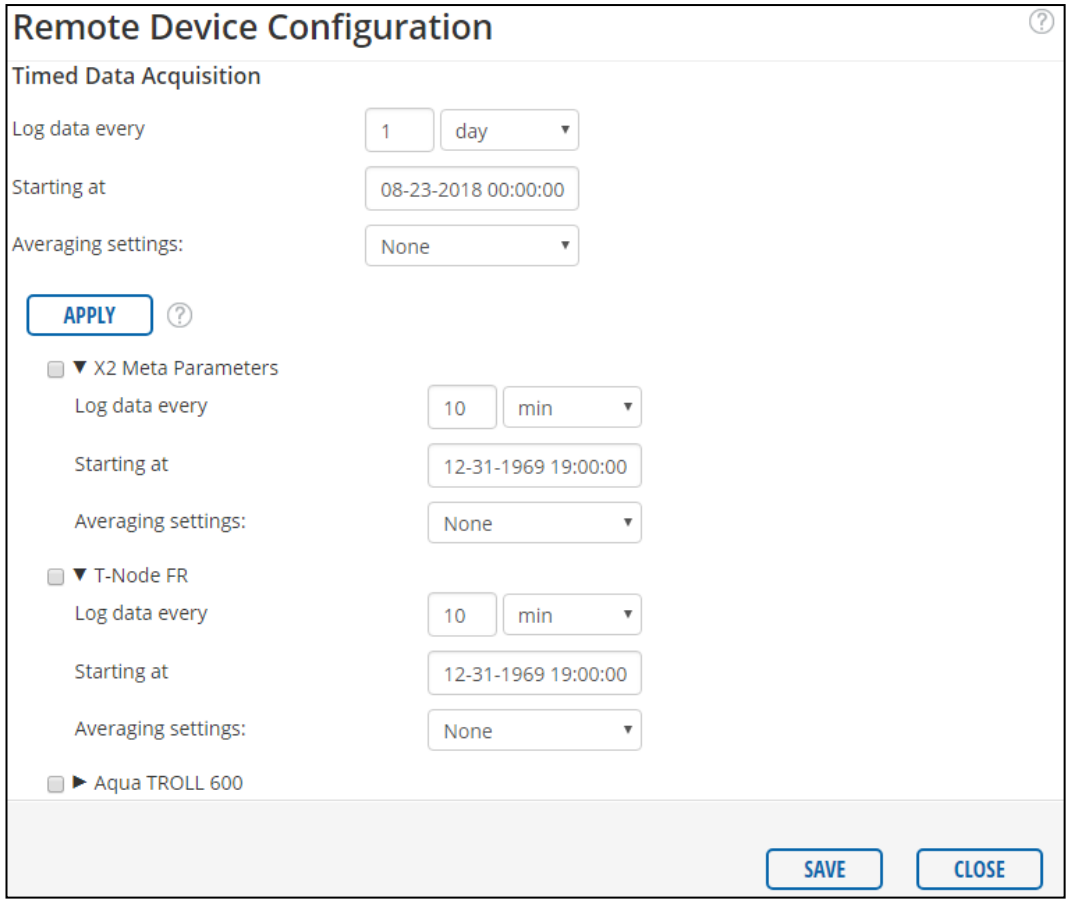
Set Sensor Logging Intervals

Expanding the menu next to each sensor allows the user to set independent sampling intervals for each sensor.

The Default Logging Interval for all sensors is 10 minutes.

Note: It is recommended the X2 Meta Parameters (a diagnostic suite of sensors integrated into the data logger itself) be changed to every 60 minutes.

Note: Every sensor has a unique minimum logging frequency. Be sure to set logging frequencies appropriate for each sensor.



X2 Data Logger – Remote Device Configuration

Configuring Data Logger Transmission

When connected to the internet via telemetry, the X2 communicates with WQData LIVE based on a schedule.

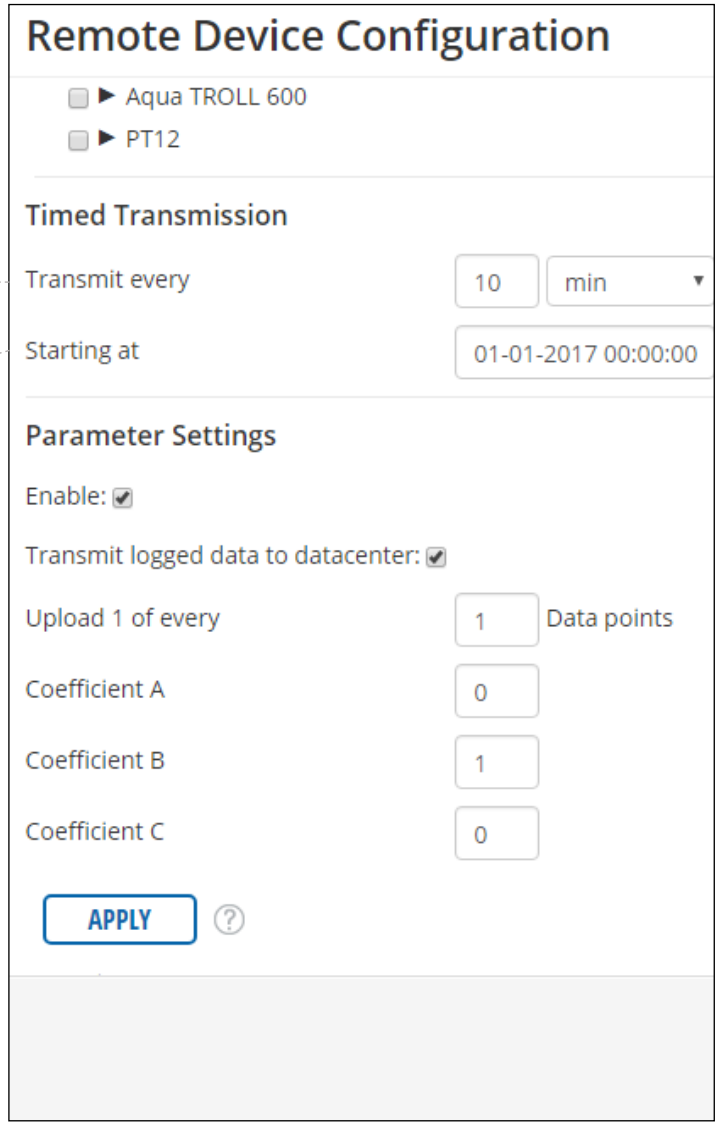
Transmit every: Set the frequency the device will contact the web to post new data, apply new configuration settings. The Default Transmission interval is 10 minutes.

Recommendation: Upload at least once per day to ensure the device is still working

Starting at: Set the time of day the device will start transmitting

Note: If this is set in the future, the logger will not begin transmitting until this time. Set this to a date in the past for transmissions to begin at the set frequency as soon as power is applied.

WARNING: More frequent transmissions will impact battery life. Most frequent transmission frequency should be 10 minutes or greater for most systems.



X2 Data Logger – Remote Device Configuration

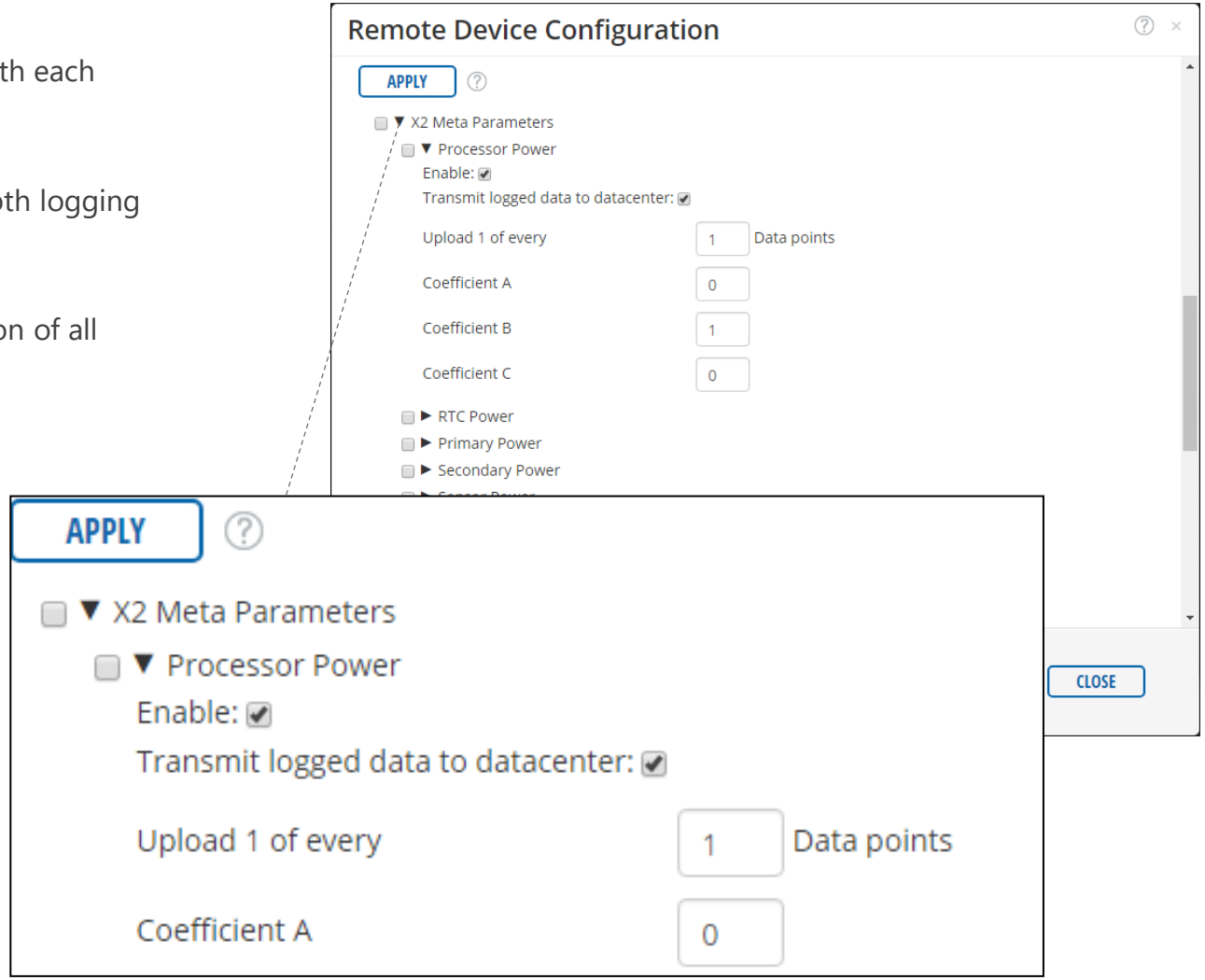
Choosing which parameters are logged and transmitted

During the initial sensor detection standard parameter sets associated with each connected sensor will appear below each device.

Each parameter from every sensor can be **enabled** for logging only or both logging and transmission.

For the X2's *Meta Parameters* , it is recommended to turn **OFF** transmission of all parameters except those listed below to save on data telemetry costs :

- Primary Power
- Humidity
- Cell Signal Strength
- Cell Status



X2 Data Logger – Remote Device Configuration

Changing parameter scaling

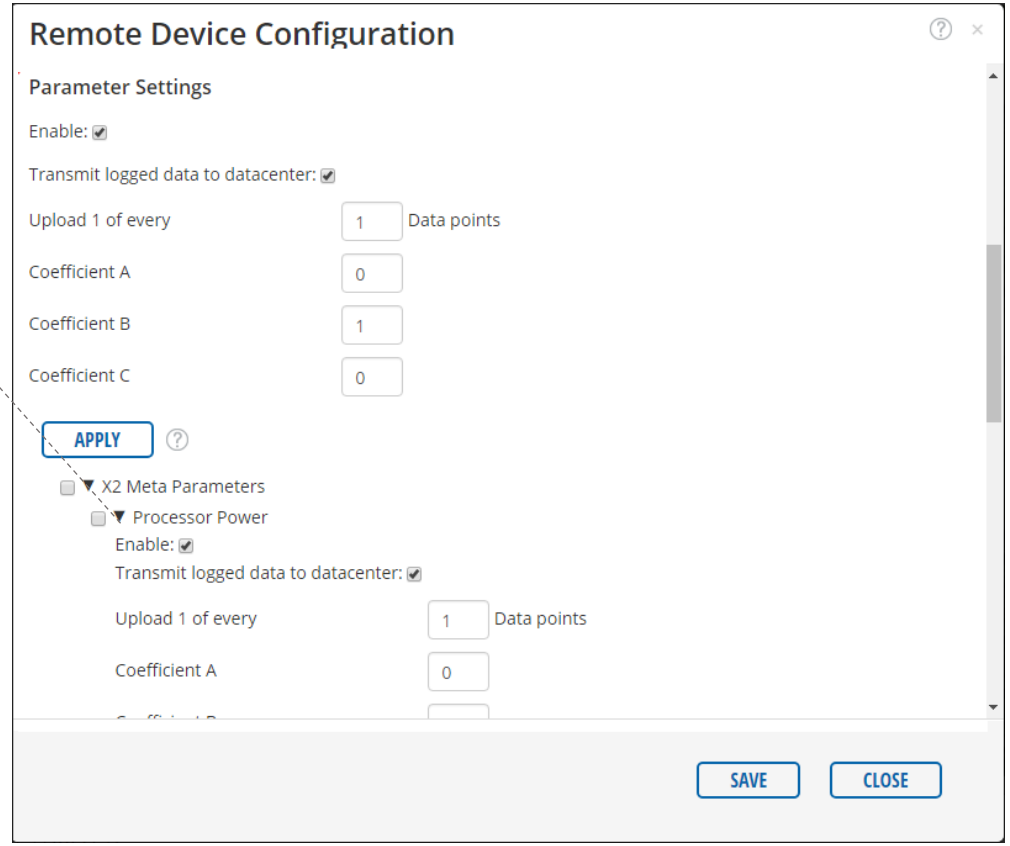
Individual parameters can be configured for the user's preference. To configure multiple parameters, enter the desired values up top, then check which parameters to apply them to before clicking **APPLY**.

To configure an individual parameter, expand that parameter and select the desired settings.

Upload 1 of every xxx Data points: By default, all data is transmitted during a transmission interval, but it is possible to only transmit a subset of recorded data

Coefficient A/B/C: Use to scale a parameter's reading (x) according to the equation Ax^2+Bx+C. Useful for applying mounting distance offsets for level sensors.

Read more about parameter level scaling HERE



X2 Data Logger – Remote Device Configuration

Changing X2 settings

Note: Only run a manual auto-detection if an additional supported sensor is added. Existing sensors must remain connected to their original ports, otherwise it will disrupt the active sensors and web configuration.

Sensor scripts may need to be updated for a detection to be successful. Contact NexSens Technology prior to adding a new sensor.

Device Name: Set the name of the logger to be displayed on WQData LIVE.

Detect Sensors: Place a check in this box after adding or removing sensors from the X2. The X2 will automatically detect which sensors are connected and log from those.

Telemetry Type: Displays the means of data transmission from logger to web

Firmware Version: Shows the current device firmware version