DESIGN: EnviroDIY Nodes

Great Lakes Data Watershed (gldw.org)

Instrument Toolkit Program

Revised: June 18, 2019

# Overview

The Great Lakes Data Watershed (gldw.org) Instrument Toolkit program provides software and hardware components that can be assembled to build low-cost customized environmental monitoring instruments and stations.

After researching available options, it has been determined that the EnviroDIY Mayfly board is an excellent building block for construction of these stations.

**This document describes the design of VDAB processing nodes that enhance the integration of VDAB with the Stroud tm Water Research Center’s Mayfly data logger board and their MyWatershed environmental data repository.**

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| Node | Description |
| MayflyControlService | This node can be used to control and configure a sketch. Initially it will only be used to control the type its connectivity to a VDAB server.  A corresponding sketch will be developed which supports handling this control data from a serial port or using HTTP to the Mayfly. |
| MayflyParseFunction | This node takes input received from a Mayfly received using MQTT, HTTP or Serial Input and parses and interprets the data. A standard VDAB data event is created. |
| EnviroDIYTarget | Publishes environmental data to the EnviroDIY MyWatershed data repository |





