

# MapVision® Mobile

## Introduction

The MapVision® Mobile client software system provides users an advanced hybrid online and offline geospatial database with full feature GIS operations, background aerial satellite imagery/street maps, real time employee/truck/boat positional updates once per second and a comprehensive variable flow control system for adulticide and larvacide applications. MapVision® Mobile seamlessly synchronizes with any of the MapVision® platforms, Express, Elite, Premier and Enterprise.

## MapVision® Mobile Constant Flow Control System

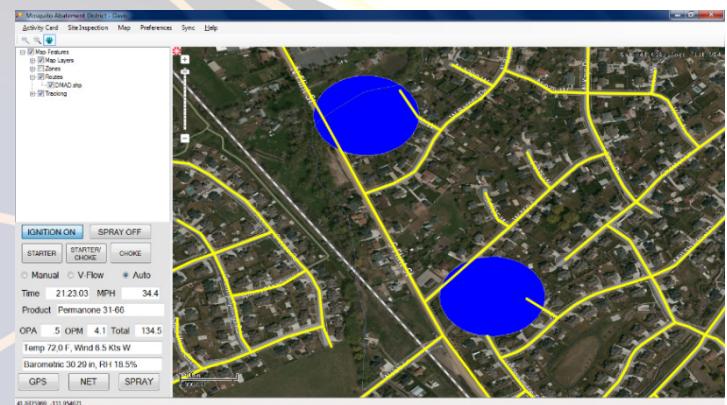
The MapVision® Mobile Flow Control System is a GPS based constant rate flow control solution. The system is designed by Leading Edge Associates and fully integrated into the MapVision® Mobile application software. The system consists of a pump mounted controller, an in-cab USB to CAN transceiver, precision WASS GPS receiver and a laptop running the MapVision® Mobile software. Leading Edge is the first to successfully implement and deploy a real time weather sensor that is fully integrated into the MapVision® Mobile system.

- ✓ Automatic remote choke
- ✓ Automatic remote start
- ✓ Automatic throttle up and throttle down
- ✓ Automatic spray on and off
- ✓ Manual mode
- ✓ Autonomous mode
- ✓ V Flow (Variable Rate Flow) mode
- ✓ Database of all products
- ✓ User friendly, efficient flow rate calibration process
- ✓ Produces precision flow rates from ground speeds
- ✓ Real time display and recording of all weather data

The software provides an extremely reliable mapping interface with built in flow control features and a ULV control console. Information such as time, MPH, product, ounces per acre, ounces per minute and total ounces are displayed at all times. Background satellite imagery is provided in real time using third party mapping sources such as Google, Bing and Open Streets.

ULV controls for ignition, spray on/off, starter, starter & choke, and choke & flush are easily accessed by the operator. Below is a picture of the MapVision® Mobile system as it is displayed on the laptop. The yellow streets are the route(s),

providing the operator real time tracking of specific streets to be treated. As the streets are treated, the yellow route segments



convert to green or red depending on the spray status. This eliminates multiple treatments of streets commonly found in ULV mosquito control operations not using the MapVision® Mobile system. The large blue no spray residents are displayed to the operator in real time. MapVision® Mobile automatically turns the spray off and on when approaching and departing a no spray resident or area. Users can easily update the no spray locations and set the no spray buffer size.



Leading Edge is the first to successfully implement and deploy a real time weather sensor that is fully integrated into the MapVision® Mobile system. The sensor is installed above the truck cab and provides instantaneous meteorological data at one second intervals to the operator.

The most unique features MapVision® Mobile offers that are unavailable from any other provider are:

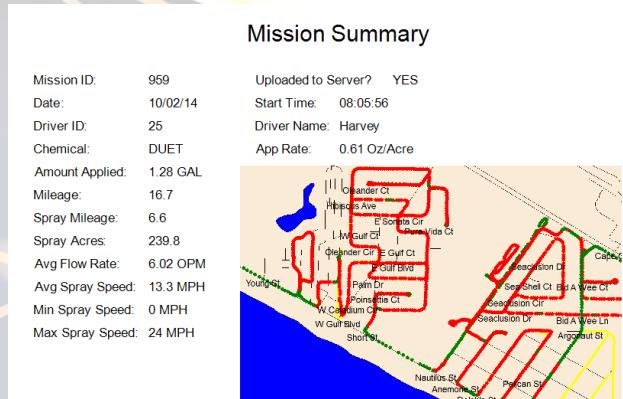
- ✓ Autonomous Mode – enables operator to safely and simply drive the route. All spray on and spray off functions are handled by the system based on the minimum and maximum speed restrictions and if the operator is on the route.
- ✓ Auto spray off/on when approaching or departing a predefined distance of a no spray resident
- ✓ Auto spray off/on when approaching and departing a no spray zone
- ✓ Real time meteorological data is displayed and recorded to the operator every second

Post mission trips are wirelessly uploaded to the MapVision® server for display, reporting, printing and archiving. Above is a mission displaying the details of the



application. Users can click on any point on the route and view detailed information such as date, time, vehicle, driver, latitude, longitude, speed and heading, spray status, temperature, humidity, wind speed, wind direction and barometric pressure.

MapVision® Mobile provides a mission summary report that includes the map and application data sets. This report can be produced from the MapVision® Mobile software without uploading data to MapVision® Express, Elite, Premier or Enterprise.



# VISION®