**Metadata for 2014-2015 Saint Albans Bay Watershed Cropland Inventory (DRAFT)**

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| **Purpose** | The focus of this data is to create and document an inventory of the Saint Albans Bay Watershed, specifically the Jewett Brook **HUC12** sub-watershedrelevant to 2014-2015 cropland data.  For this watershed where water quality impairment is a concern, it was important to utilize data that reflected both the recommended and actual conditions of that snapshot in time. In this study, it was crucial to have an accurate representation of land management as well as nutrient management. |
| **Data Sources** | The primary references for this study were field boundary polygons with associated farm **NMP** data, as well as in-the-field ground truthing, meetings with **UVM** Extension, and meetings with landowners/operators of each farm field/facility inventoried. |
| **Notes** | It is to be noted that ten farms ranging from **SFO**, **MFO**, and **LFO** sizes were inventoried, and only up to 70% of the total agricultural fields in the **JBW** were identified for the study. |
| **Currency** | Categories match 2014-2015 imagery and in-the-field ground truthing was conducted to reflect conditions of agricultural production areas identified at that snapshot in time. |
| **Description** | Polygon data – in shapefile format – representing 2014-2015 land and nutrient management of the Jewett Brook watershed. Acreage of fields was delineated in two parts – First, any field that intersected the **JBW** boundary was identified and then geometrically calculated within the ArcMap GIS interface, so every field would be represented to its entirety, in the assumption that for certain fields tile drainage lines would extend outside of the watershed boundary yet drain into the watershed. Second, a new set of calculations were run by clipping out any field to be bounded solely by the **JBW** boundary to accurately represent the actual production acreage within Jewett Brook. |
| **Authors** | 2014-2015 Farm/Cropland inventory, aerial imagery and photo-interpretation, and shapefile delineations were completed by Maria Steyaart (MFO/LFO Water Quality Specialist at **VAAFM)**. Additional contributions made from Thomas Bryce (GIS & Field Technician / ECO AmeriCorps member at **VAAFM** for 11 months - 2017- 2018) who compiled this data for Stone Environmental Inc. Cropland inventory. Completed April-May 2018. |

**GIS Field Classification Scheme – categories used for Cropland Inventory:**

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| **Acreage** | Identifies calculated acreage of inventoried crop fields |
| **Field\_Tile** | Identifies presence of tile drainage in inventoried crop fields (Yes/No) |
| **Phosphorous** | Identifies soil test P levels (Low/Medium/Optimum/High/Excessive) |
| **Soil\_Type** | Identifies soil series for inventoried crop fields |
| **Current\_Category\_of\_Field** | Identifies current crop type rotation of inventory snapshot in time (Continuous Corn/Corn Hay Rotation/ Permanent Hay/Permanent Pasture) |
| **When\_is\_manure\_applied** | Identifies manure spreading records by season (Fall/Spring/Summer/Multiple Applications) |

**Abbreviations:**

**HUC12 -** Developed by NRCS. Boundaries consistent with Vermont's Hydrography Dataset (VHD). This data set is a digital hydrologic unit boundary layer at the Subwatershed (12-digit) 6th level for the State of Vermont.

**NMP -** A Nutrient Management Plan (NMP) is a Conservation Activity Plan (CAP) developed in accordance with the NRCS Nutrient Management 590 Conservation Practice Standard. Based upon soil test results and recommendations, it provides appropriate rates and timing for application of fertilizer and/or other soil fertility amendments, such as manure and compost.

**UVM –** University of Vermont

**SFO/MFO/LFO –** Small Farm Operation / Medium Farm Operation / Large Farm Operation.

**JBW** – Jewett Brook Watershed - Calculated 5903.745 Acres. Flows for approximately 5 miles (8 km) south through flat lands in the cities of Swanton and St. Albans, passing along and under the Dunsmore Road before emptying into the Stevens Brook Wetland and under the Black Bridge.

**VAAFM –** Vermont Agency of Agriculture, Food & Markets.

**Feature view:**

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| Jewett/Stevens Brook Watershed – HUC 12 Subwatershed Boundary | Jewett Brook Watershed – Adjusted HUC 12 Subwatershed Boundary | Jewett Brook Watershed – USGS stream gage located on Lower Newton Road. |