*4.4 Nonroad Source Emissions*

Maine’s county-level emission estimates for the majority of the nonroad mobile source emissions for 2015, 2017, 2019, and 2023 were developed using EPA’s MOVES2014a model. Much of the inputs were provided from within the default database (MOVESdb20161117). Meteorological data was provided by EPA. The MOVES2014a version of the model was used to generate emissions for all counties and years. More detailed information on how nonroad emissions were estimated is contained in Appendix D.

~~Emissions from Aircraft, Locomotives and Commercial Marine (ALM) sources were obtained from EPA’s 2011 data. Future year emissions for ALM sources for 2014 and 2018 were developed by growing the base year 2011 emissions by the appropriate SEMAP and Pechan growth factors.~~

Tables 7a and 7b contain the projected inventory for nonroad mobile sources including construction, agriculture, pleasure marine and lawn care equipment. NOx emission are expected to decrease by 29.86% from 2015 through 2023, and VOC emission are expected to decrease by 21.20% for the same period. Comparing the 2019 VOC data, the total value for RVP at 9.0 psi is 3.54% higher than RVP at 7.0 psi.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 7a: Nonroad NOx Emissions for Maine Southern Counties** | | | | | | | | | | |
|  |  | |  | |  | |  | |  | |
| **County** | **Current 7.0 psi RVP** | | | | | | **9.0 psi RVP** | | | |
| **2015** | | **2017** | | **2019** | | **2019** | | **2023** | |
| --tons per typical summer day-- | | | | | | | | | |
| **Androscoggin** | 0.94 | | 0.81 | | 0.71 | | 0.71 | | 0.60 | |
| **Cumberland** | 3.71 | | 3.28 | | 2.96 | | 2.96 | | 2.56 | |
| **Hancock** | 1.09 | | 0.99 | | 1.07 | | 1.07 | | 0.95 | |
| **Kennebec** | 1.14 | | 1.00 | | 0.90 | | 0.90 | | 0.76 | |
| **Knox** | 0.95 | | 0.86 | | 0.79 | | 0.79 | | 0.69 | |
| **Lincoln** | 0.64 | | 0.59 | | 0.55 | | 0.55 | | 0.49 | |
| **Sagadahoc** | 0.53 | | 0.46 | | 0.41 | | 0.41 | | 0.36 | |
| **Waldo** | 0.63 | | 0.54 | | 0.50 | | 0.50 | | 0.41 | |
| **York** | 1.90 | | 1.66 | | 1.48 | | 1.48 | | 1.26 | |
| **Total** | 11.52 | | 10.19 | | 9.37 | | 9.37 | | 8.08 | |
| **Table 7b: Nonroad VOC Emissions for Maine Southern Counties** | | | | | | | | | | |
|  | |  | |  | |  | |  | |  |
| **County** | | **Current 7.0 psi RVP** | | | | | | **9.0 psi RVP** | | |
| **2015** | | **2017** | | **2019** | | **2019** | | **2023** |
| --tons per typical summer day-- | | | | | | | | |
| **Androscoggin** | | 1.05 | | 0.94 | | 0.87 | | 0.90 | | 0.85 |
| **Cumberland** | | 5.99 | | 5.47 | | 5.11 | | 5.26 | | 5.00 |
| **Hancock** | | 2.60 | | 2.23 | | 2.19 | | 2.19 | | 1.82 |
| **Kennebec** | | 2.14 | | 1.89 | | 1.70 | | 1.77 | | 1.61 |
| **Knox** | | 1.51 | | 1.34 | | 1.20 | | 1.28 | | 1.12 |
| **Lincoln** | | 1.64 | | 1.47 | | 1.34 | | 1.42 | | 1.30 |
| **Sagadahoc** | | 0.77 | | 0.68 | | 0.61 | | 0.67 | | 0.60 |
| **Waldo** | | 0.71 | | 0.62 | | 0.67 | | 0.67 | | 0.59 |
| **York** | | 3.40 | | 3.05 | | 2.79 | | 2.90 | | 2.72 |
| **Total** | | 19.81 | | 17.69 | | 16.49 | | 17.07 | | 15.61 |