Climate Benefits of Nutrient Management: Analytic Blueprint

1. **Lakes Modeling**

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| **Data Needs** | **Data Sources** |
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| **Modeling Steps** | **Model Outputs** |
| Chesapeake Bay Watershed Model | Nutrient loadings to each stream reach in the CBW |
| Northeast lakes model | Steady state TN, TP, Chl-a under baseline and policy scenarios for each lake in CBW |
| Merge lakes model output with LakeCat data | Merged data set with TN, TP, Chl-a, and lake data |
| Interpolate annual values from snapshots | Annual values of TN, TP, and Chl-a from 2015 to 2100 |

1. **GHG Emissions**

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| **Data Needs** | **Data Sources** |
| Steady state values of TN, TP, Chl-a | Lakes model output |
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| **Modeling Steps** | **Model Outputs** |
| Snapshot of GHG emissions |  |
| Time path of GHG emissions |  |

1. **Monetized Climate Benefits**

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| **Data Needs** | **Data Sources** |
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| **Modeling Steps** | **Model Outputs** |
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