

10. References

Executive Summary

BEA (2019) *2017 Comprehensive Revision of the National Income and Product Accounts: Current-dollar and "real" GDP, 1929–2017*. Bureau of Economic Analysis (BEA), U.S. Department of Commerce, Washington, D.C. Available online at: <<http://www.bea.gov/national/index.htm#gdp>>.

Duffield, J. (2006) Personal communication. Jim Duffield, Office of Energy Policy and New Uses, U.S. Department of Agriculture, and Lauren Flinn, ICF International. December 2006.

EIA (2019) *Electricity Generation. Monthly Energy Review, February 2019*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2019/02).

EIA (2018) *Electricity in the United States. Electricity Explained*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. Available online at: <https://www.eia.gov/energyexplained/index.php?page=electricity_in_the_united_states>.

EIA (2017) *International Energy Statistics 1980-2017*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available online at: <<https://www.eia.gov/beta/international/>>.

EPA (2018a) Acid Rain Program Dataset 1996-2017. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

EPA (2018b) Greenhouse Gas Reporting Program (GHGRP). 2018 Envirofacts. Subpart HH: Municipal Solid Waste Landfills and Subpart TT: Industrial Waste Landfills. Available online at: <<http://www.epa.gov/enviro/facts/ghg/search.html>>.

EPA (2018c) “1970 - 2017 Average annual emissions, all criteria pollutants in MS Excel.” National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards, March 2018. Available online at: <<https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>>.

EPA (1997) Compilation of Air Pollutant Emission Factors, AP-42. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. October 1997.

FHWA (1996 through 2017) *Highway Statistics*. Federal Highway Administration, U.S. Department of Transportation, Washington, D.C. Report FHWA-PL-96-023-annual. Available online at: <<http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>>.

IEA (2018) CO₂ Emissions from Fossil Fuel Combustion – Overview. International Energy Agency. Available online at: <<https://webstore.iea.org/CO2-emissions-from-fuel-combustion-2018>>.

IPCC (2013) *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. [Stocker, T.F., D. Qin, G.-K., Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp.

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. [S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

IPCC (1996) *Climate Change 1995: The Science of Climate Change*. Intergovernmental Panel on Climate Change. [J.T. Houghton, L.G. Meira Filho, B.A. Callander, N. Harris, A. Kattenberg, and K. Maskell (eds.)]. Cambridge University Press, Cambridge, United Kingdom.

National Academies of Sciences, Engineering, and Medicine (2018) *Improving Characterization of Anthropogenic Methane Emissions in the United States*. Washington, DC: The National Academies Press. Available online at: <<https://doi.org/10.17226/24987>>.

National Research Council (2010) *Verifying Greenhouse Gas Emissions: Methods to Support International Climate Agreements*. Washington, DC: The National Academies Press. Available online at: <<https://doi.org/10.17226/12883>>.

NOAA/ESRL (2018a) *Trends in Atmospheric Carbon Dioxide*. Available online at: <<http://www.esrl.noaa.gov/gmd/ccgg/trends/>>. 19 December 2018.

NOAA/ESRL (2018b) *Trends in Atmospheric Methane*. Available online at: <https://www.esrl.noaa.gov/gmd/ccgg/trends_ch4/>. 19 December 2018.

NOAA/ESRL (2018c) *Nitrous Oxide (N₂O) hemispheric and global monthly means from the NOAA/ESRL Chromatograph for Atmospheric Trace Species data from baseline observatories (Barrow, Alaska; Summit, Greenland; Niwot Ridge, Colorado; Mauna Loa, Hawaii; American Samoa; South Pole)*. Available online at: <https://www.esrl.noaa.gov/gmd/dv/hats/cats/cats_conc.html>. 19 December 2018.

UNFCCC (2014) *Report of the Conference of the Parties on its Nineteenth Session, Held in Warsaw from 11 to 23 November 2013*. (FCCC/CP/2013/10/Add.3). January 31, 2014. Available online at: <<http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf>>.

U.S. Census Bureau (2018) U.S. Census Bureau International Database (IDB). Available online at: <<https://www.census.gov/programs-surveys/international-programs.html>>.

Introduction

Carbon Dioxide Information Analysis Center (CDIAC) (2016) Recent Greenhouse Gas Concentrations. April 2016. Available online at: <http://cdiac.ornl.gov/pns/current_ghg>.

EPA (2009) Technical Support Document for the Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act. U.S. Environmental Protection Agency. December 2009.

EPA (2017) *Climate Change*. Available online at: <<https://www.epa.gov/climatechange/>>. 6 April 2017.

IPCC (2014) *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, J. Minx, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlomer, C. von Stechow, and T. Zwickel (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1435 pp.

- IPCC (2013) *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp.
- IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. [S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom 996 pp.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.
- IPCC (2001) *Climate Change 2001: The Scientific Basis. Intergovernmental Panel on Climate Change*. [J.T. Houghton, Y. Ding, D.J. Griggs, M. Noguer, P.J. van der Linden, X. Dai, C.A. Johnson, and K. Maskell (eds.)]. Cambridge University Press, Cambridge, United Kingdom.
- IPCC (1999) *Aviation and the Global Atmosphere*. Intergovernmental Panel on Climate Change. [J.E. Penner, et al. (eds.)]. Cambridge University Press, Cambridge, United Kingdom.
- IPCC/TEAP (2005) *Special Report: Safeguarding the Ozone Layer and the Global Climate System, Chapter 4: Refrigeration*. 2005. Available online at: <<http://www.auto-ts.com/hcfc/technology%20option/Refrigeration/transport%20refrigeration.pdf>>.
- Jacobson, M.Z. (2001) “Strong Radiative Heating Due to the Mixing State of Black Carbon in Atmospheric Aerosols.” *Nature*, 409:695-697.
- NOAA (2017) *Vital Signs of the Planet*. Available online at: <<http://climate.nasa.gov/causes/>>. Accessed on 9 January 2017.
- NOAA/ESRL (2018a) *Trends in Atmospheric Carbon Dioxide*. Available online at: <<http://www.esrl.noaa.gov/gmd/ccgg/trends/>>. 19 December 2018.
- NOAA/ESRL (2018b) *Trends in Atmospheric Methane*. Available online at: <https://www.esrl.noaa.gov/gmd/ccgg/trends_ch4/>. 19 December 2018.
- NOAA/ESRL (2018c) *Nitrous Oxide (N₂O) hemispheric and global monthly means from the NOAA/ESRL Chromatograph for Atmospheric Trace Species data from baseline observatories (Barrow, Alaska; Summit, Greenland; Niwot Ridge, Colorado; Mauna Loa, Hawaii; American Samoa; South Pole)*. Available online at: <https://www.esrl.noaa.gov/gmd/dv/hats/cats/cats_conc.html>. 19 December 2018.
- NOAA/ESRL (2018d) *Sulfur Hexafluoride (SF₆) hemispheric and global monthly means from the NOAA/ESRL Chromatograph for Atmospheric Trace Species data from baseline observatories (Barrow, Alaska; Summit, Greenland; Niwot Ridge, Colorado; Mauna Loa, Hawaii; American Samoa; South Pole)*. Available online at: <https://www.esrl.noaa.gov/gmd/dv/hats/cats/cats_conc.html>. 10 January 2018.
- NRC (2012) *Climate Change: Evidence, Impacts, and Choices*. Available online at: <<https://www.nap.edu/catalog/14673/climate-change-evidence-impacts-and-choices-pdf-booklet>>.
- UNEP/WMO (1999) *Information Unit on Climate Change*. Framework Convention on Climate Change. Available online at: <<http://unfccc.int>>.
- UNFCCC (2014) *Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013*. (FCCC/CP/2013/10/Add.3). January 31, 2014. Available online at: <<http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf>>.
- USGCRP (2017) *Climate Science Special Report: Fourth National Climate Assessment, Volume I*. [Wuebbles, D.J., D.W. Fahey, K.A. Hibbard, D.J. Dokken, B.C. Stewart, and T.K. Maycock (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 470 pp, doi: 10.7930/J0J964J6. Available online at: <<https://science2017.globalchange.gov/>>.
- WMO/UNEP (2014) *Assessment for Decision-Makers: Scientific Assessment of Ozone Depletion: 2014*. Available online at: <http://ozone.unep.org/en/Assessment_Panels/SAP/ADM_2014OzoneAssessment_Final.pdf>.

WMO (2015) “Is the Ozone Layer on the Mend? Highlights from the most recent WMO/UNDP Ozone Assessment” Bulletin no. Vol (64)(1). Available online at: <<https://public.wmo.int/en/resources/bulletin/ozone-layer-mend-0>>.

Trends in Greenhouse Gas Emissions

BEA (2019) *2017 Comprehensive Revision of the National Income and Product Accounts: Current-dollar and "real" GDP, 1929–2017*. Bureau of Economic Analysis (BEA), U.S. Department of Commerce, Washington, D.C. Available online at: <<http://www.bea.gov/national/index.htm#gdp>>.

Duffield, J. (2006) Personal communication. Jim Duffield, Office of Energy Policy and New Uses, U.S. Department of Agriculture, and Lauren Flinn, ICF International. December 2006.

EIA (2019a) *Monthly Energy Review, February 2019*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2019/02).

EIA (2019b) *Fuel Oil and Kerosene Sales*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. January 2019.

EIA (2018) “In 2017, U.S. electricity sales fell by the greatest amount since the recession” Available online at: <<https://www.eia.gov/todayinenergy/detail.php?id=35612>>.

EPA (2019) *Light-Duty Automotive Technology, Carbon Dioxide Emissions, and Fuel Economy Trends: 1975 - 2018*. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at: <<https://www.epa.gov/fuel-economy/trends-report>>.

EPA (2018) 1970 - 2017 Average annual emissions, all criteria pollutants in MS Excel. National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards, March 2018. Available online at: <<https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>>.

IPCC (2007) *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. [S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

U.S. Census Bureau (2018) U.S. Census Bureau International Database (IDB). Available online at: <<https://www.census.gov/programs-surveys/international-programs.html>>.

USDA (2018) Personal communication. Claudia Hitaj, USDA Economic Research Service, and Vincent Camobreco, U.S. EPA. December 2018.

Energy

EIA (2019) *Monthly Energy Review, February 2019*, Energy Information Administration, U.S. Department of Energy, Washington, DC. DOE/EIA-0035(2019/02).

IEA (2018) CO₂ Emissions from Fossil Fuel Combustion – Overview. International Energy Agency. Available online at: <<https://webstore.iea.org/co2-emissions-from-fuel-combustion-2018>>.

Carbon Dioxide Emissions from Fossil Fuel Combustion

AAR (2008 through 2018) *Railroad Facts*. Policy and Economics Department, Association of American Railroads, Washington, D.C. Obtained from Clyde Crimmel at AAR.

AISI (2004 through 2018) *Annual Statistical Report*, American Iron and Steel Institute, Washington, D.C.

APTA (2007 through 2017) *Public Transportation Fact Book*. American Public Transportation Association, Washington, D.C. Available online at: <<http://www.apta.com/resources/statistics/Pages/transitstats.aspx>>.

APTA (2006) *Commuter Rail National Totals*. American Public Transportation Association, Washington, D.C.

BEA (2018) *Table 1.1.6. Real Gross Domestic Product, Chained 2012 Dollars*. Bureau of Economic Analysis (BEA), U.S. Department of Commerce, Washington, D.C. September 2018. Available online at: <<https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey>>.

Benson, D. (2002 through 2004) Unpublished data. Upper Great Plains Transportation Institute, North Dakota State University and American Short Line & Regional Railroad Association.

Browning, L. (2018a). *Updated Methodology for Estimating Electricity Use from Highway Plug-In Electric Vehicles*. Technical Memo, October 2018.

Browning, L. (2018b). *Updated Non-Highway CH₄ and N₂O Emission Factors for U.S. GHG Inventory*. Technical Memo, November 2018.

Browning, L. (2017) *Updated Methodology for Estimating CH₄ and N₂O Emissions from Highway Vehicle Alternative Fuel Vehicles*. Technical Memo, October 2017.

Coffeyville Resources Nitrogen Fertilizers (2012) Nitrogen Fertilizer Operations. Available online at: <<http://coffeyvillegroup.com/NitrogenFertilizerOperations/index.html>>.

Dakota Gasification Company (2006) *CO₂ Pipeline Route and Designation Information*. Bismarck, ND.

DHS (2008) Email Communication. Elissa Kay, Department of Homeland Security and Joe Aamidor, ICF International. January 11, 2008.

DLA Energy (2018) Unpublished data from the Fuels Automated System (FAS). Defense Logistics Agency Energy, U.S. Department of Defense. Washington, D.C.

DOC (1991 through 2018) Unpublished Report of Bunker Fuel Oil Laden on Vessels Cleared for Foreign Countries. Form-563. Foreign Trade Division, Bureau of the Census, U.S. Department of Commerce. Washington, D.C.

DOE (1993 through 2017) *Transportation Energy Data Book Edition 37*. Office of Transportation Technologies, Center for Transportation Analysis, Energy Division, Oak Ridge National Laboratory. ORNL-6978.

DOE (2012) *2010 Worldwide Gasification Database*. National Energy Technology Laboratory and Gasification Technologies Council. Available online at: <<http://www.netl.doe.gov/technologies/coalpower/gasification/worlddatabase/index.html>>. Accessed on 15 March 2012.

DOT (1991 through 2017) *Airline Fuel Cost and Consumption*. U.S. Department of Transportation, Bureau of Transportation Statistics, Washington, D.C. DAI-10. Available online at: <<http://www.transtats.bts.gov/fuel.asp>>.

Eastman Gasification Services Company (2011) Project Data on Eastman Chemical Company's Chemicals-from-Coal Complex in Kingsport, TN.

EIA (2019a) *Monthly Energy Review, February 2019*, Energy Information Administration, U.S. Department of Energy, Washington, DC. DOE/EIA-0035(2019/02).

EIA (2019b) *Quarterly Coal Report: July – September 2018*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0121.

EIA (2019c) Form EIA-923 detailed data with previous form data (EIA-906/920), Energy Information Administration, U.S. Department of Energy. Washington, DC. DOE/EIA.

EIA (2018a) *Natural Gas Annual 2017*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0131(17).

EIA (2018b) *Annual Coal Report 2017*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0584.

EIA (2018c) *Alternative Fuels Data Tables*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available online at: <<https://www.eia.gov/renewable/>>.

EIA (2018d) *Electric Power Annual 2017*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0348(17).

EIA (2018e) “In 2017, U.S. electricity sales fell by the greatest amount since the recession.” Available online at: <<https://www.eia.gov/todayinenergy/detail.php?id=35612>>.

EIA (2017) *International Energy Statistics 1980-2016*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available online at: <<https://www.eia.gov/beta/international/>>.

EIA (1991 through 2018) *Fuel Oil and Kerosene Sales*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available online at: <<http://www.eia.gov/petroleum/fueloilkerosene>>.

EIA (2009a) *Emissions of Greenhouse Gases in the United States 2008, Draft Report*. Office of Integrated Analysis and Forecasting, Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE-EIA-0573(2009).

EIA (2009b) *Manufacturing Consumption of Energy 2006*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Released July, 2009.

EIA (2008) *Historical Natural Gas Annual, 1930 – 2008*. Energy Information Administration, U.S. Department of Energy. Washington, D.C.

EIA (2007) Personal Communication. Joel Lou, Energy Information Administration and Aaron Beaudette, ICF International. *Residual and Distillate Fuel Oil Consumption for Vessel Bunkering (Both International and Domestic) for American Samoa, U.S. Pacific Islands, and Wake Island*. October 24, 2007.

EIA (2001) *U.S. Coal, Domestic and International Issues*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. March 2001.

EPA (2018a) Acid Rain Program Dataset 1996-2017. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

EPA (2018b) *Motor Vehicle Emissions Simulator (Moves) 2014b*. Office of Transportation and Air Quality, U.S. Environmental Protection Agency, Washington, D.C. Available online at: <<https://www.epa.gov/moves>>.

EPA (2018c) The Emissions & Generation Resource Integrated Database (eGRID) 2016 Technical Support Document. Clean Air Markets Division, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C. Available Online at: <https://www.epa.gov/sites/production/files/2018-02/documents/egrid2016_technicalsupportdocument_0.pdf>.

EPA (2010) Carbon Content Coefficients Developed for EPA's Mandatory Reporting Rule. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

Erickson, T. (2003) *Plains CO₂ Reduction (PCOR) Partnership*. Presented at the Regional Carbon Sequestration Partnership Meeting Pittsburgh, Pennsylvania, Energy and Environmental Research Center, University of North Dakota. November 3, 2003.

FAA (2019) Personal Communication between FAA and John Steller, Mausami Desai, and Vincent Camobreco for aviation emissions estimates from the Aviation Environmental Design Tool (AEDT). January 2019.

FHWA (1996 through 2017) *Highway Statistics*. Federal Highway Administration, U.S. Department of Transportation, Washington, D.C. Report FHWA-PL-96-023-annual. Available online at: <<http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>>.

FHWA (2015) *Off-Highway and Public-Use Gasoline Consumption Estimation Models Used in the Federal Highway Administration*, Publication Number FHWA-PL-17-012. Available online at: <<https://www.fhwa.dot.gov/policyinformation/pubs/pl17012.pdf>>.

Fitzpatrick, E. (2002) *The Weyburn Project: A Model for International Collaboration*.

FRB (2019) *Industrial Production and Capacity Utilization*. Federal Reserve Statistical Release, G.17, Federal Reserve Board. Available online at: <http://www.federalreserve.gov/releases/G17/table1_2.htm>.

Gaffney, J. (2007) Email Communication. John Gaffney, American Public Transportation Association and Joe Aamidor, ICF International. December 17, 2007.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Marland, G. and A. Pippin (1990) “United States Emissions of Carbon Dioxide to the Earth’s Atmosphere by Economic Activity.” *Energy Systems and Policy*, 14(4):323.

SAIC/EIA (2001) *Monte Carlo Simulations of Uncertainty in U.S. Greenhouse Gas Emission Estimates. Final Report*. Prepared by Science Applications International Corporation (SAIC) for Office of Integrated Analysis and Forecasting, Energy Information Administration, U.S. Department of Energy. Washington, D.C. June 22, 2001.

U.S. Aluminum Association (USAA) (2008 through 2018) *U.S. Primary Aluminum Production*. U.S. Aluminum Association, Washington, D.C.

USAF (1998) Fuel Logistics Planning. U.S. Air Force: AFPAM23-221. May 1, 1998.

U.S. Census Bureau (2001 through 2011) *Current Industrial Reports Fertilizer Materials and Related Products: Annual Summary*. Available online at: <<https://www.census.gov/data/tables/time-series/econ/cir/mq325b.html>>.

United States Geological Survey (USGS) (2018a) *2018 Mineral Commodity Summaries: Aluminum*. U.S. Geological Survey, Reston, VA.

USGS (2018b) *Minerals Industry Surveys: Manufactured Abrasives in the Second Quarter*. U.S. Geological Survey, Reston, VA. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/abrasives/mis-2018q2-abras.pdf>>.

USGS (2018c) *2018 Mineral Commodity Summary: Titanium and Titanium Dioxide*. U.S. Geological Survey, Reston, VA.

USGS (2014 through 2018a) *Mineral Industry Surveys: Silicon*. U.S. Geological Survey, Reston, VA.

USGS (2014 through 2018b) *Mineral Commodity Summary, Lead*. U.S. Geological Survey, Reston, VA.

USGS (2014 through 2017) *Minerals Yearbook: Nitrogen [Advance Release]*. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/>>.

USGS (1991 through 2017) *Minerals Yearbook – Iron and Steel Scrap*. U.S. Geological Survey, Reston, VA.

USGS (1991 through 2015a) *Minerals Yearbook: Manufactured Abrasives Annual Report*. U.S. Geological Survey, Reston, VA. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/abrasives/>>.

USGS (1991 through 2015b) *Minerals Yearbook: Titanium*. U.S. Geological Survey, Reston, VA.

USGS (1991 through 2015c) *Minerals Yearbook: Silicon Annual Report*. U.S. Geological Survey, Reston, VA. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/silicon/>>.

USGS (1996 through 2013) *Minerals Yearbook: Silicon*. U.S. Geological Survey, Reston, VA.

USGS (1995 through 2013) *Minerals Yearbook: Lead Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (1995, 1998, 2000, 2001, 2002, 2007) *Minerals Yearbook: Aluminum Annual Report*. U.S. Geological Survey, Reston, VA.

Stationary Combustion (excluding CO₂)

EIA (2019) *Monthly Energy Review, February 2019*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0035(2019/02).

EIA (2017) *International Energy Statistics 1980-2014*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available online at: <<https://www.eia.gov/beta/international/>>.

EPA (2018a) Acid Rain Program Dataset 1996-2017. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

EPA (2018b). Motor Vehicle Emissions Simulator (MOVES) 2014b. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at: <<http://www.epa.gov/otaq/models/moves/index.htm>>.

EPA (1997) Compilation of Air Pollutant Emission Factors, AP-42. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. October 1997.

FHWA (1996 through 2017) Highway Statistics. Federal Highway Administration, U.S. Department of Transportation, Washington, D.C. Report FHWA-PL-96-023-annual. Available online at: <<http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>>.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

SAIC/EIA (2001) *Monte Carlo Simulations of Uncertainty in U.S. Greenhouse Gas Emission Estimates. Final Report*. Prepared by Science Applications International Corporation (SAIC) for Office of Integrated Analysis and Forecasting, Energy Information Administration, U.S. Department of Energy. Washington, D.C. June 22, 2001.

Mobile Combustion (excluding CO₂)

AAR (2008 through 2018) *Railroad Facts*. Policy and Economics Department, Association of American Railroads, Washington, D.C. Obtained from Clyde Crimmel at AAR.

ANL (2006) Argonne National Laboratory (2006) GREET model Version 1.7. June 2006.

ANL (2017) *The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation Model (GREET2017)*. Argonne National Laboratory. October 2017. Available online at: <<https://greet.es.anl.gov>>.

APTA (2007 through 2017) *Public Transportation Fact Book*. American Public Transportation Association, Washington, D.C. Available online at: <<http://www.apta.com/resources/statistics/Pages/transitstats.aspx>>.

APTA (2006) *Commuter Rail National Totals*. American Public Transportation Association, Washington, D.C. Available online at: <<http://www.apta.com/research/stats/rail/crsum.cfm>>.

BEA (1991 through 2015) Unpublished BE-36 survey data. Bureau of Economic Analysis, U.S. Department of Commerce. Washington, D.C.

Benson, D. (2002 through 2004) Personal communication. Unpublished data developed by the Upper Great Plains Transportation Institute, North Dakota State University and American Short Line & Regional Railroad Association.

Browning, L. (2018a). Updated Methodology for Estimating Electricity Use from Highway Plug-In Electric Vehicles. Technical Memo, October 2018.

Browning, L. (2018b) “Updated Non-Highway CH₄ and N₂O Emission Factors for U.S. GHG Inventory”. Technical Memo, October 2018.

Browning, L. (2017) “Updated Methodology for Estimating CH₄ and N₂O Emissions from Highway Vehicle Alternative Fuel Vehicles”. Technical Memo, October 18, 2017.

Browning, L. (2009) Personal communication with Lou Browning, “Suggested New Emission Factors for Marine Vessels,” ICF International.

Browning, L. (2005) Personal communication with Lou Browning, Emission control technologies for diesel highway vehicles specialist, ICF International.

DHS (2008) Email Communication. Elissa Kay, Department of Homeland Security and Joe Aamidor, ICF International. January 11, 2008.

DLA Energy (2018) Unpublished data from the Defense Fuels Automated Management System (DFAMS). Defense Energy Support Center, Defense Logistics Agency, U.S. Department of Defense. Washington, D.C.

DOC (1991 through 2018) Unpublished Report of Bunker Fuel Oil Laden on Vessels Cleared for Foreign Countries. Form-563. Foreign Trade Division, Bureau of the Census, U.S. Department of Commerce. Washington, D.C.

DOE (1993 through 2017) *Transportation Energy Data Book*. Office of Transportation Technologies, Center for Transportation Analysis, Energy Division, Oak Ridge National Laboratory. ORNL-6978.

DOT (1991 through 2017) *Airline Fuel Cost and Consumption*. U.S. Department of Transportation, Bureau of Transportation Statistics, Washington, D.C. DAI-10. Available online at: <<http://www.transtats.bts.gov/fuel.asp>>.

EIA (2019a) *Monthly Energy Review, February 2019*, Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2019/02).

EIA (2019b) *Natural Gas Annual*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0131(11).

EIA (1991 through 2018) *Fuel Oil and Kerosene Sales*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available online at: <<http://www.eia.gov/petroleum/fueloilkerosene>>.

EIA (2016) "Table 3.1: World Petroleum Supply and Disposition." *International Energy Annual*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available online at: <<https://www.eia.gov/cfapps/ipdbproject/IEDIndex3.cfm?tid=5&pid=66&aid=13>>.

EIA (2011) *Annual Energy Review 2010*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0384(2011). October 19, 2011.

EIA (2007) Personal Communication. Joel Lou, Energy Information Administration and Aaron Beaudette, ICF International. *Residual and Distillate Fuel Oil Consumption for Vessel Bunkering (Both International and Domestic) for American Samoa, U.S. Pacific Islands, and Wake Island*. October 24, 2007.

EIA (2002) *Alternative Fuels Data Tables*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. Available online at: <<http://www.eia.doe.gov/fuelrenewable.html>>.

EPA (2018b) *Motor Vehicle Emissions Simulator (MOVES) 2014b*. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at: <<https://www.epa.gov/moves>>.

EPA (2018c) Annual Certification Test Results Report. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at: <<https://www.epa.gov/compliance-and-fuel-economy-data/annual-certification-test-data-vehicles-and-engines>>.

EPA (2018d) Light-Duty Automotive Technology, Carbon Dioxide Emissions, and Fuel Economy Trends: 1975 - 2017. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at: <<https://www.epa.gov/fuel-economy/trends-report>>.

EPA (2017a) Annual Certification Test Results Report. Office of Transportation and Air Quality, U.S. Environmental Protection Agency. Available online at <<https://www.epa.gov/compliance-and-fuel-economy-data/annual-certification-data-vehicles-engines-and-equipment>>.

EPA (2017b) Confidential engine family sales data submitted to EPA by manufacturers. Office of Transportation and Air Quality, U.S. Environmental Protection Agency.

EPA (2017c) Confidential Engine Family Sales Data Submitted to EPA by Manufacturers. Office of Transportation and Air Quality, U.S. Environmental Protection Agency.

EPA (2016g) "1970 - 2015 Average annual emissions, all criteria pollutants in MS Excel." *National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data*. Office of Air Quality Planning and Standards. Available online at: <<https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>>.

EPA (2000) *Mobile6 Vehicle Emission Modeling Software*. Office of Mobile Sources, U.S. Environmental Protection Agency, Ann Arbor, Michigan.

EPA (1999a) *Emission Facts: The History of Reducing Tailpipe Emissions*. Office of Mobile Sources. May 1999. EPA 420-F-99-017. Available online at: <<https://www.epa.gov/nscep>>.

EPA (1999b) Regulatory Announcement: EPA's Program for Cleaner Vehicles and Cleaner Gasoline. Office of Mobile Sources. December 1999. EPA420-F-99-051. Available online at: <<https://nepis.epa.gov/Exe/ZyPDF.cgi/P1001Z9W.PDF?Dockkey=P1001Z9W.PDF>>.

EPA (1998) *Emissions of Nitrous Oxide from Highway Mobile Sources: Comments on the Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990–1996*. Office of Mobile Sources, Assessment and Modeling Division, U.S. Environmental Protection Agency. August 1998. EPA420-R-98-009.

EPA (1997) *Mobile Source Emission Factor Model (MOBILE5a)*. Office of Mobile Sources, U.S. Environmental Protection Agency, Ann Arbor, Michigan.

EPA (1994a) *Automobile Emissions: An Overview*. Office of Mobile Sources. August 1994. EPA 400-F-92-007. Available online at: <<https://www.epa.gov/nscep>>.

EPA (1994b) *Milestones in Auto Emissions Control*. Office of Mobile Sources. August 1994. EPA 400-F-92-014. Available online at: <<https://www.epa.gov/nscep>>.

EPA (1993) *Automobiles and Carbon Monoxide*. Office of Mobile Sources. January 1993. EPA 400-F-92-005. Available online at: <<https://www.epa.gov/nscep>>.

Esser, C. (2003 through 2004) Personal Communication with Charles Esser, Residual and Distillate Fuel Oil Consumption for Vessel Bunkering (Both International and Domestic) for American Samoa, U.S. Pacific Islands, and Wake Island.

FAA (2019) Personal Communication between FAA and John Steller, Mausami Desai and Vincent Camobreco for aviation emission estimates from the Aviation Environmental Design Tool (AEDT). January 2019.

FHWA (1996 through 2017) *Highway Statistics*. Federal Highway Administration, U.S. Department of Transportation, Washington, D.C. Report FHWA-PL-96-023-annual. Available online at: <<http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm>>.

FHWA (2017) *Off-Highway and Public-Use Gasoline Consumption Estimation Models Used in the Federal Highway Administration*, Publication Number FHWA-PL-17-012. Available online at: <<https://www.fhwa.dot.gov/policyinformation/pubs/pl17012.pdf>>.

Gaffney, J. (2007) Email Communication. John Gaffney, American Public Transportation Association and Joe Aamidor, ICF International. December 17, 2007.

HybridCars.com (2017). Monthly Plug-In Electric Vehicle Sales Dashboard, 2010-2017. Available online at <<https://www.hybridcars.com/december-2017-dashboard/>>.

ICF (2006a) *Revised Gasoline Vehicle EFs for LEV and Tier 2 Emission Levels*. Memorandum from ICF International to John Davies, Office of Transportation and Air Quality, U.S. Environmental Protection Agency. November 2006.

ICF (2006b) *Revisions to Alternative Fuel Vehicle (AFV) Emission Factors for the U.S. Greenhouse Gas Inventory*. Memorandum from ICF International to John Davies, Office of Transportation and Air Quality, U.S. Environmental Protection Agency. November 2006.

ICF (2004) *Update of Methane and Nitrous Oxide Emission Factors for On-Highway Vehicles*. Final Report to U.S. Environmental Protection Agency. February 2004.

ICF (2017a) Updated On-highway CH₄ and N₂O Emission Factors for GHG Inventory. Memorandum from ICF to Sarah Roberts and Justine Geidosch, Office of Transportation and Air Quality, U.S. Environmental Protection Agency. October 2017.

ICF (2017b) Updated Non-Highway CH₄ and N₂O Emission Factors for U.S. GHG Inventory. Memorandum from ICF to Sarah Roberts and Justine Geidosch, Office of Transportation and Air Quality, U.S. Environmental Protection Agency. October 2017.

Lipman, T. and M. Delucchi (2002) “Emissions of Nitrous Oxide and Methane from Conventional and Alternative Fuel Motor Vehicles.” *Climate Change*, 53:477-516.

SAE (2010) *Utility Factor Definitions for Plug-In Hybrid Electric Vehicles Using Travel Survey Data*. Society of Automotive Engineers. Report J2841, Available online at: <https://www.sae.org/standards/content/j2841_201009/>.

Santoni, G., B. Lee, E. Wood, S. Herndon, R. Miake-Lye, S. Wofsy, J. McManus, D. Nelson, M. Zahniser (2011) Aircraft emissions of methane and nitrous oxide during the alternative aviation fuel experiment. *Environ Sci Technol*. 2011 Aug 15; 45(16):7075-82.

U.S. Census Bureau (2000) *Vehicle Inventory and Use Survey*. U.S. Census Bureau, Washington, D.C. Database CD-EC97-VIUS.

Whorton, D. (2006 through 2014) Personal communication, Class II and III Rail energy consumption, American Short Line and Regional Railroad Association.

Carbon Emitted from Non-Energy Uses of Fossil Fuels

ACC (2017a) “*Guide to the Business of Chemistry, 2017*,” American Chemistry Council.

ACC (2018a) “*Guide to the Business of Chemistry, 2018*,” American Chemistry Council.

ACC (2018b) “U.S. Resin Production & Sales 2017 vs. 2016.” Available online at: <<https://plastics.americanchemistry.com/Sales-Data-by-Resin.pdf>>.

ACC (2017b) “U.S. Resin Production & Sales 2016 vs. 2015.”

ACC (2016a) “*Guide to the Business of Chemistry, 2016*,” American Chemistry Council.

ACC (2016b) “U.S. Resin Production & Sales 2015 vs. 2014.”

ACC (2015a) “PIPS Year-End Resin Statistics for 2014 vs. 2013: Production, Sales and Captive Use.” Available online at: <<http://www.americanchemistry.com/Jobs/EconomicStatistics/Plastics-Statistics/Production-and-Sales-Data-by-Resin.pdf>>.

ACC (2015b) “*Guide to the Business of Chemistry, 2015*,” American Chemistry Council.

ACC (2014) “U.S. Resin Production & Sales: 2013 vs. 2012,” American Chemistry Council. Available online at: <<http://www.americanchemistry.com/Jobs/EconomicStatistics/Plastics-Statistics/Production-and-Sales-Data-by-Resin.pdf>>.

ACC (2013) “U.S. Resin Production & Sales: 2012 vs. 2011,” American Chemistry Council. Available online at: <<http://www.americanchemistry.com/Jobs/EconomicStatistics/Plastics-Statistics/Production-and-Sales-Data-by-Resin.pdf>>.

ACC (2012) “*Guide to the Business of Chemistry, 2012*,” American Chemistry Council.

ACC (2003-2011) “PIPS Year-End Resin Statistics for 2010: Production, Sales and Captive Use.” Available online at: <<http://www.americanchemistry.com/Jobs/EconomicStatistics/Plastics-Statistics/Production-and-Sales-Data-by-Resin.pdf>>.

Bank of Canada (2018) Financial Markets Department Year Average of Exchange Rates. Available online at: <<https://www.bankofcanada.ca/rates/exchange/annual-average-exchange-rates/>>.

Bank of Canada (2017) Financial Markets Department Year Average of Exchange Rates. Available online at: <<https://www.icao.int/CAFICS/News%20Library/nraa-2016-en-2.pdf>>.

Bank of Canada (2016) Financial Markets Department Year Average of Exchange Rates. Available online at: <<http://www.bankofcanada.ca/stats/assets/pdf/nraa-2015.pdf>>.

Bank of Canada (2014) Financial Markets Department Year Average of Exchange Rates. Available online at: <<http://www.bankofcanada.ca/stats/assets/pdf/nraa-2013.pdf>>.

Bank of Canada (2013) Financial Markets Department Year Average of Exchange Rates. Available online at: <<http://www.bankofcanada.ca/stats/assets/pdf/nraa-2012.pdf>>.

Bank of Canada (2012) Financial Markets Department Year Average of Exchange Rates. Available online at: <<http://www.bankofcanada.ca/stats/assets/pdf/nraa-2011.pdf>>.

C&EN (2017) *U.S. textile makers look for a revival*, Chemical & Engineering News, American Chemical Society, 19 June. Available online at: <<http://www.cen-online.org>>.

EIA (2019) *Monthly Energy Review, February 2019*. Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035 (2019/2).

EIA (2017) *EIA Manufacturing Consumption of Energy (MECS) 2014*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EIA (2013) *EIA Manufacturing Consumption of Energy (MECS) 2010*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EIA (2010) *EIA Manufacturing Consumption of Energy (MECS) 2006*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EIA (2005) *EIA Manufacturing Consumption of Energy (MECS) 2002*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EIA (2001) *EIA Manufacturing Consumption of Energy (MECS) 1998*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EIA (1997) *EIA Manufacturing Consumption of Energy (MECS) 1994*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EIA (1994) *EIA Manufacturing Consumption of Energy (MECS) 1991*. U.S. Department of Energy, Energy Information Administration, Washington, D.C.

EPA (2017) EPA's Pesticides Industry Sales and Usage, 2008 – 2012 Market Estimates. Available online at: <https://www.epa.gov/sites/production/files/2017-01/documents/pesticides-industry-sales-usage-2016_0.pdf> Accessed September 2017.

EPA (2018a) “1970 - 2017 Average annual emissions, all criteria pollutants in MS Excel.” National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards, December 2016. Available online at: <<https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>>.

EPA (2018b) *Advancing Sustainable Materials Management: Facts and Figures 2015, Assessing Trends in Material Generation, Recycling and Disposal in the United States*. Washington, D.C.

EPA (2018c) *Resource Conservation and Recovery Act (RCRA) Info*, Biennial Report, GM Form (Section 2- Onsite Management) and WR Form.

EPA (2016a) *Advancing Sustainable Materials Management: 2014 Facts and Figures Fact Sheet*. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Available online at: <https://www.epa.gov/sites/production/files/2016-11/documents/2014_smmfactsheet_508.pdf>.

EPA (2016b) *Resource Conservation and Recovery Act (RCRA) Info*, Biennial Report, GM Form (Section 2- Onsite Management) and WR Form.

EPA (2015) *Resource Conservation and Recovery Act (RCRA) Info*, Biennial Report, GM Form (Section 2- Onsite Management) and WR Form.

EPA (2014a) *Municipal Solid Waste in the United States: 2012 Facts and Figures*. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Available online at: <<http://www.epa.gov/epaoswer/non-hw/muncpl/msw99.htm>>.

EPA (2014b) *Chemical Data Access Tool (CDAT)*. U.S. Environmental Protection Agency, June 2014. Available online at: <http://java.epa.gov/oppt_chemical_search/>. Accessed January 2015.

EPA (2013a) *Municipal Solid Waste in the United States: 2011 Facts and Figures*. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Available online at: <<http://www.epa.gov/epaoswer/non-hw/muncpl/msw99.htm>>.

EPA (2013b) *Resource Conservation and Recovery Act (RCRA) Info*, Biennial Report, GM Form (Section 2- Onsite Management) and WR Form.

EPA (2011) EPA's Pesticides Industry Sales and Usage, 2006 and 2007 Market Estimates. Available online at: <<http://www.epa.gov/oppbead1/pestsales/>>. Accessed January 2012.

EPA (2009) Biennial Reporting System (BRS) Database. U.S. Environmental Protection Agency, Envirofacts Warehouse. Washington, D.C. Available online at: <<http://www.epa.gov/enviro/html/brs/>>. Data for 2001-2007 are current as of Sept. 9, 2009.

EPA (2004) EPA's Pesticides Industry Sales and Usage, 2000 and 2001 Market Estimates. Available online at: <<http://www.epa.gov/oppbead1/pestsales/>>. Accessed September 2006.

EPA (2002) EPA's Pesticides Industry Sales and Usage, 1998 and 1999 Market Estimates, table 3.6. Available online at: <http://www.epa.gov/oppbead1/pestsales/99pestsales/market_estimates1999.pdf>. Accessed July 2003.

EPA (2001) AP 42, Volume I, Fifth Edition. Chapter 11: Mineral Products Industry. Available online at: <<http://www.epa.gov/ttn/chief/ap42/ch11/index.html>>.

EPA (2000a) *Biennial Reporting System (BRS)*. U.S. Environmental Protection Agency, Envirofacts Warehouse. Washington, D.C. Available online at: <<http://www.epa.gov/enviro/html/brs/>>.

EPA (2000b) *Toxics Release Inventory, 1998*. U.S. Environmental Protection Agency, Office of Environmental Information, Office of Information Analysis and Access, Washington, D.C. Available online at: <<http://www.epa.gov/triexplorer/chemical.htm>>.

EPA (1999) EPA's Pesticides Industry Sales and Usage, 1996-1997 Market Estimates. Available online at: <http://www.epa.gov/oppbead1/pestsales/97pestsales/market_estimates1997.pdf>.

EPA (1998) EPA's Pesticides Industry Sales and Usage, 1994-1995 Market Estimates. Available online at: <http://www.epa.gov/oppbead1/pestsales/95pestsales/market_estimates1995.pdf>.

FEB (2013) Fiber Economics Bureau, as cited in C&EN (2013) Lackluster Year for Chemical Output: Production stayed flat or dipped in most world regions in 2012. Chemical & Engineering News, American Chemical Society, 1 July. Available online at: <<http://www.cen-online.org>>.

FEB (2012) Fiber Economics Bureau, as cited in C&EN (2012) Too Quiet After the Storm: After a rebound in 2010, chemical production hardly grew in 2011. Chemical & Engineering News, American Chemical Society, 2 July. Available online at: <<http://www.cen-online.org>>.

FEB (2011) Fiber Economics Bureau, as cited in C&EN (2011) *Output Ramps up in all Regions*. Chemical Engineering News, American Chemical Society, 4 July. Available online at: <<http://www.cen-online.org>>.

FEB (2010) Fiber Economics Bureau, as cited in C&EN (2010) *Output Declines in U.S., Europe*. Chemical & Engineering News, American Chemical Society, 6 July. Available online at: <<http://www.cen-online.org>>.

FEB (2009) Fiber Economics Bureau, as cited in C&EN (2009) *Chemical Output Slipped In Most Regions* Chemical & Engineering News, American Chemical Society, 6 July. Available online at: <<http://www.cen-online.org>>.

FEB (2007) Fiber Economics Bureau, as cited in C&EN (2007) *Gains in Chemical Output Continue*. Chemical & Engineering News, American Chemical Society, July 2, 2007. Available online at: <<http://www.cen-online.org>>.

FEB (2005) Fiber Economics Bureau, as cited in C&EN (2005) *Production: Growth in Most Regions* Chemical & Engineering News, American Chemical Society, 11 July. Available online at: <<http://www.cen-online.org>>.

FEB (2003) Fiber Economics Bureau, as cited in C&EN (2003) *Production Inches Up in Most Countries*, Chemical & Engineering News, American Chemical Society, 7 July. Available online at: <<http://www.cen-online.org>>.

FEB (2001) Fiber Economics Bureau, as cited in ACS (2001) *Production: slow gains in output of chemicals and products lagged behind U.S. economy as a whole* Chemical & Engineering News, American Chemical Society, 25 June. Available online at: <<http://pubs.acs.org/cen>>.

Financial Planning Association (2006) Canada/US Cross-Border Tools: US/Canada Exchange Rates. Available online at: <http://www.fpanet.org/global/planners/US_Canada_ex_rates.cfm>. Accessed on August 16, 2006.

Gosselin, Smith, and Hodge (1984) "Clinical Toxicology of Commercial Products." Fifth Edition, Williams & Wilkins, Baltimore.

ICIS (2016) “Production issues force US melamine plant down” Available online at: <<https://www.icis.com/resources/news/2016/05/03/9994556/production-issues-force-us-melamine-plant-down/>>.

ICIS (2008) “Chemical profile: Melamine” Available online at: <<https://www.icis.com/resources/news/2008/12/01/9174886/chemical-profile-melamine/>>. Accessed November, 2017.

IISRP (2003) "*IISRP Forecasts Moderate Growth in North America to 2007*" International Institute of Synthetic Rubber Producers, Inc. New Release. Available online at: <<http://www.iisrp.com/press-releases/2003-Press-Releases/IISRP-NA-Forecast-03-07.html>>.

IISRP (2000) "Synthetic Rubber Use Growth to Continue Through 2004, Says IISRP and RMA" International Institute of Synthetic Rubber Producers press release.

INEGI (2006) Producción bruta total de las unidades económicas manufactureras por Subsector, Rama, Subrama y Clase de actividad. Available online at: <http://www.inegi.gob.mx/est/contenidos/espanol/proyectos/censos/ce2004/tb_manufacturas.asp>. Accessed on August 15, 2006.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Marland, G., and R.M. Rotty (1984) “Carbon dioxide emissions from fossil fuels: A procedure for estimation and results for 1950-1982,” *Tellus* 36b:232-261.

NPRA (2002) North American Wax - A Report Card. Available online at: <<http://www.npra.org/members/publications/papers/lubes/LW-02-126.pdf>>.

RMA (2018) *2017 U.S. Scrap Tire Management Summary*. Rubber Manufacturers Association, Washington, D.C. July 2018.

RMA (2016) *2015 U.S. Scrap Tire Management Summary*. Rubber Manufacturers Association, Washington, D.C. August 2016.

RMA (2014) *2013 U.S. Scrap Tire Management Summary*. Rubber Manufacturers Association, Washington, D.C. November 2014.

RMA (2011) *U.S. Scrap Tire Management Summary: 2005-2009*. Rubber Manufacturers Association, Washington, D.C. October 2011, updated September 2013.

RMA (2009) “Scrap Tire Markets: Facts and Figures – Scrap Tire Characteristics.” Rubber Manufacturers Association., Washington D.C. Available online at: http://www.rma.org/scrap_tires/scrap_tire_markets/scrap_tire_characteristics/ Accessed on 17 September 2009.

U.S. Census Bureau (2014) 2012 Economic Census. Available online at: <http://www.census.gov/econ/census/schedule/whats_been_released.html>. Accessed November 2014.

U.S. Census Bureau (2009) *Soap and Other Detergent Manufacturing: 2007*. Available online at: <http://smplib1.dsd.census.gov/TheDataWeb_HotReport/servlet/HotReportEngineServlet?emailname=vh@boc&filename=mfg1.hrml&20071204152004.Var.NAICS2002=325611&forward=20071204152004.Var.NAICS2002>.

U.S. Census Bureau (2004) *Soap and Other Detergent Manufacturing: 2002*. Issued December 2004. EC02-31I-325611 (RV). Available online at: <<http://www.census.gov/prod/ec02/ec0231i325611.pdf>>.

U.S. Census Bureau (1999) *Soap and Other Detergent Manufacturing: 1997*. Available online at: <<http://www.census.gov/epcd/www/ec97stat.htm>>.

U.S. International Trade Commission (1990-2017) “Interactive Tariff and Trade DataWeb: Quick Query.” Available online at: <<http://dataweb.usitc.gov/>>. Accessed September 2018.

Incineration of Waste

ArSova, Ljupka, Rob van Haaren, Nora Goldstein, Scott M. Kaufman, and Nickolas J. Themelis (2008) “16th Annual BioCycle Nationwide Survey: The State of Garbage in America” *BioCycle*, JG Press, Emmaus, PA. December.

Bahor, B (2009) Covanta Energy’s public review comments re: *Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2007*. Submitted via email on April 9, 2009 to Leif Hockstad, U.S. EPA.

De Soete, G.G. (1993) “Nitrous Oxide from Combustion and Industry: Chemistry, Emissions and Control.” In A. R. Van Amstel, (ed.) *Proc. of the International Workshop Methane and Nitrous Oxide: Methods in National Emission Inventories and Options for Control*, Amersfoort, NL. February 3-5, 1993.

Energy Recovery Council (2009) “2007 Directory of Waste-to-Energy Plants in the United States.” Accessed on September 29, 2009.

EIA (2017) *MSW Incineration for Heating or Electrical Generation, December 2017*, Energy Information Administration, U.S. Department of Energy, Washington, DC. DOE/EIA-0035. Available online at: <<https://www.eia.gov/opendata/?src=-f3>>.

EPA (2018a) *Advancing Sustainable Materials Management: 2015 Data Tables*. Office of Land and Emergency Managements, U.S. Environmental Protection Agency. Washington, D.C. Available online at: <https://www.epa.gov/sites/production/files/2018-07/documents/smm_2015_tables_and_figures_07252018_fnl_508_0.pdf>.

EPA (2018b). *Greenhouse Gas Reporting Program Data*. Washington, DC: U.S. Environmental Protection Agency. Available online at: <<https://www.epa.gov/ghgreporting/ghg-reporting-program-data-sets>>.

EPA (2016) *Advancing Sustainable Materials Management: 2014 Fact Sheet*. Office of Land and Emergency Managements, U.S. Environmental Protection Agency. Washington, D.C. Available online at: <https://www.epa.gov/sites/production/files/2016-11/documents/2014_smmfactsheet_508.pdf>.

EPA (2015) *Advancing Sustainable Materials Management: Facts and Figures 2013 – Assessing Trends in Material Generation, Recycling and Disposal in the United States*. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency. Washington, D.C. Available online at: <http://www3.epa.gov/epawaste/nonhaz/municipal/pubs/2013_advncng_smm_rpt.pdf>.

EPA (2007, 2008, 2011, 2013, 2014) *Municipal Solid Waste in the United States: Facts and Figures*. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency. Washington, D.C. Available online at: <<http://www.epa.gov/osw/nonhaz/municipal/msw99.htm>>.

EPA (2006) *Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks*. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency. Washington, D.C.

EPA (2000) *Characterization of Municipal Solid Waste in the United States: Source Data on the 1999 Update*. Office of Solid Waste, U.S. Environmental Protection Agency. Washington, D.C. EPA530-F-00-024.

Goldstein, N. and C. Madtes (2001) “13th Annual BioCycle Nationwide Survey: The State of Garbage in America.” *BioCycle*, JG Press, Emmaus, PA. December 2001.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Kaufman, et al. (2004) “14th Annual BioCycle Nationwide Survey: The State of Garbage in America 2004” *BioCycle*, JG Press, Emmaus, PA. January 2004.

RMA (2018) 2017 U.S. Scrap Tire Management Summary. Rubber Manufacturers Association, Washington, DC. July 2018. https://www.ustires.org/system/files/USTMA_scraptire_summ_2017_072018.pdf. September 27, 2018

RMA (2016) “2015 U.S. Scrap Tire Management Summary.” Rubber Manufacturers Association. August 2016. Available online at: <https://rma.org/sites/default/files/RMA_scraptire_summ_2015.pdf>.

RMA (2014) “2013 U.S. Scrap Tire Management Summary.” Rubber Manufacturers Association. November 2014. Available online at: <http://www.rma.org/download/scrap-tires/market-reports/US_STMarket2013.pdf>.

RMA (2012a) “Rubber FAQs.” Rubber Manufacturers Association. Available online at: <<http://www.rma.org/about-rma/rubber-faqs/>>. Accessed on 19 November 2014.

RMA (2012b) “Scrap Tire Markets: Facts and Figures – Scrap Tire Characteristics.” Rubber Manufacturers Association. Available online at: <http://www.rma.org/scrap_tires/scrap_tire_markets/scrap_tire_characteristics/>. Accessed 18 on January 2012.

RMA (2011) “U.S. Scrap Tire Management Summary 2005-2009.” Rubber Manufacturers Association. October 2011. Available online at: <http://www.rma.org/scrap_tires/scrap_tire_markets/2009_summary.pdf>.

Schneider, S. (2007) E-mail between Shelly Schneider of Franklin Associates (a division of ERG) and Sarah Shapiro of ICF International, January 10, 2007.

Shin, D. (2014) Generation and Disposition of Municipal Solid Waste (MSW) in the United States—A National Survey. Thesis. Columbia University, Department of Earth and Environmental Engineering, January 3, 2014.

Simmons, et al. (2006) “15th Nationwide Survey of Municipal Solid Waste Management in the United States: The State of Garbage in America.” BioCycle, JG Press, Emmaus, PA. April 2006.

van Haaren, Rob, Themelis, N., and Goldstein, N. (2010) “The State of Garbage in America.” BioCycle, October 2010. Volume 51, Number 10, pg. 16-23.

Coal Mining

AAPG (1984) *Coalbed Methane Resources of the United States*. AAPG Studies in Geology Series #17.

Creedy, D.P. (1993) Methane Emissions from Coal Related Sources in Britain: Development of a Methodology. *Chemosphere*, 26: 419-439.

DMME (2018) *DGO Data Information System*. Department of Mines, Minerals and Energy of Virginia. Available online at <<https://www.dmme.virginia.gov/dgo inquiry/frmmain.aspx>>.

EIA (2018) *Annual Coal Report 2017*. Table 1. Energy Information Administration, U.S. Department of Energy.

El Paso (2009) Shoal Creek Mine Plan, El Paso Exploration & Production.

EPA (2018) Greenhouse Gas Reporting Program (GHGRP) 2017 Envirofacts. Subpart FF: Underground Coal Mines. Available online at <<http://www.epa.gov/ghgreporting/ghgdata/reported/coalmines.html>>.

EPA (2005) *Surface Mines Emissions Assessment*. Draft. U.S. Environmental Protection Agency.

EPA (1996) *Evaluation and Analysis of Gas Content and Coal Properties of Major Coal Bearing Regions of the United States*. EPA/600/R-96-065. U.S. Environmental Protection Agency.

Geological Survey of Alabama State Oil and Gas Board (GSA) (2018) Well Records Database. Available online at <<http://www.gsa.state.al.us/ogb/database.aspx>>.

IEA (2018) *Key World Energy Statistics*. Coal Production, International Energy Agency.

IPCC (2011) *Use of Models and Facility-Level Data in Greenhouse Gas Inventories*. Report of IPCC Expert Meeting on Use of Models and Measurements in Greenhouse Gas Inventories 9-11 August 2010, Sydney, Australia. Eds: Eggleston H.S., Srivastava N., Tanabe K., Baasansuren J., Fukuda M. IGES.

JWR (2010) *No. 4 & 7 Mines General Area Maps*. Walter Energy: Jim Walter Resources.

King, Brian (1994) *Management of Methane Emissions from Coal Mines: Environmental, Engineering, Economic and Institutional Implication of Options*. Neil and Gunter Ltd.

McElroy OVS (2018) Marshall County VAM Abatement Project Offset Verification Statement submitted to California Air Resources Board, August 2018.

MSHA (2018) Data Transparency at MSHA. Mine Safety and Health Administration. Available online at <<http://www.msha.gov/>>.

Mutmansky, Jan M. and Yanbei Wang (2000) Analysis of Potential Errors in Determination of Coal Mine Annual Methane Emissions. *Mineral Resources Engineering*, 9(4).

Saghafi, Abouna (2013) *Estimation of Fugitive Emissions from Open Cut Coal Mining and Measurable Gas Content*. 13th Coal Operators' Conference, University of Wollongong, The Australian Institute of Mining and Metallurgy & Mine Managers Association of Australia. 306-313.

USBM (1986) *Results of the Direct Method Determination of the Gas Contents of U.S. Coal Basins*. Circular 9067. U.S. Bureau of Mines.

West Virginia Geological & Economic Survey (WVGES) (2018) Oil & Gas Production Data. Available online at <<http://www.wvgs.wvnet.edu/www/datastat/datastat.htm>>.

Abandoned Underground Coal Mines

EPA (2004) *Methane Emissions Estimates & Methodology for Abandoned Coal Mines in the U.S.* Draft Final Report. Washington, D.C. April 2004.

MSHA (2018) U.S. Department of Labor, Mine Health & Safety Administration, *Data Retrieval System*. Available online at: <<http://arlweb.msha.gov/drs/drshome.htm>>.

Petroleum Systems

API (1992) *Global Emissions of Methane from Petroleum Sources*. American Petroleum Institute, Health and Environmental Affairs Department, Report No. DR140, February 1992.

DrillingInfo (2018) July 2018 Download. DI Desktop® DrillingInfo, Inc.

EPA (1997) *Compilation of Air Pollutant Emission Factors, AP-42*. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. October 1997.

EPA (1999) *Estimates of Methane Emissions from the U.S. Oil Industry (Draft Report)*. Prepared by ICF International. Office of Air and Radiation, U.S. Environmental Protection Agency. October 1999.

EPA (2018) *Greenhouse Gas Reporting Program*. Environmental Protection Agency. Data reported as of August 19, 2018.

EPA/GRI (1996) *Methane Emissions from the Natural Gas Industry*. Prepared by Radian. U.S. Environmental Protection Agency. April 1996.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Lavoie et al. (2017) "Assessing the Methane Emissions from Natural Gas-Fired Power Plants and Oil Refineries." *Environmental Science & Technology*. 2017 Mar 21;51(6):3373-3381. doi: 10.1021/acs.est.6b05531.

Natural Gas Systems

DrillingInfo (2018) July 2018 Download. DI Desktop® DrillingInfo, Inc.

EPA (2018) *Greenhouse Gas Reporting Program- Subpart W – Petroleum and Natural Gas Systems*. Environmental Protection Agency. Data reported as of August 19, 2018.

GRI/EPA (1996) *Methane Emissions from the Natural Gas Industry*. Prepared by Harrison, M., T. Shires, J. Wessels, and R. Cowgill, eds., Radian International LLC for National Risk Management Research Laboratory, Air Pollution Prevention and Control Division, Research Triangle Park, NC. EPA-600/R-96-080a.

GTI (2001) Gas Resource Database: Unconventional Natural Gas and Gas Composition Databases. Second Edition. GRI-01/0136.

Lamb, et al. (2015) "Direct Measurements Show Decreasing Methane Emissions from Natural Gas Local Distribution Systems in the United States." *Environmental Science & Technology*, Vol. 49 5161-5169.

Lavoie et al. (2017) "Assessing the Methane Emissions from Natural Gas-Fired Power Plants and Oil Refineries." *Environmental Science & Technology*. 2017 Mar 21;51(6):3373-3381. doi: 10.1021/acs.est.6b05531.

PHMSA (2018) Gas Distribution Annual Data. Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, Washington, DC. Available online at: <<https://cms.phmsa.dot.gov/data-and-statistics/pipeline/gas-distribution-gas-gathering-gas-transmission-hazardous-liquids>>.

Zimmerle, et al. (2015) "Methane Emissions from the Natural Gas Transmission and Storage System in the United States." *Environmental Science and Technology*, Vol. 49 9374–9383.

Abandoned Oil and Gas Wells

Alaska Oil and Gas Conservation Commission, Available online at: <<http://doa.alaska.gov/ogc/publicdb.html>>

Arkansas Geological & Conservation Commission, "List of Oil & Gas Wells - Data From November 1, 1936 to January 1, 1955." http://www.geology.ar.gov/pdf/IC-10%20SUPPLEMENT_v.pdf.

The Derrick's Handbook of Petroleum: A Complete Chronological and Statistical Review of Petroleum Developments From 1859 to 1898 (V.1), (1898-1899) (V.2).

DrillingInfo (2018) July 2018 Download. DI Desktop® DrillingInfo, Inc.

GRI/EPA (1996) *Methane Emissions from the Natural Gas Industry*. Prepared by Harrison, M., T. Shires, J. Wessels, and R. Cowgill, eds., Radian International LLC for National Risk Management Research Laboratory, Air Pollution Prevention and Control Division, Research Triangle Park, NC. EPA-600/R-96-080a.

Florida Department of Environmental Protection - Oil and Gas Program, Available online at: <<https://floridadep.gov/water/oil-gas>>.

Geological Survey of Alabama, Oil & Gas Board, Available online at: <<https://www.gsa.state.al.us/ogb/>>.

GTI (2001) Gas Resource Database: Unconventional Natural Gas and Gas Composition Databases. Second Edition. GRI-01/0136.

Kang, et al. (2016) "Identification and characterization of high methane-emitting abandoned oil and gas wells." *PNAS*, vol. 113 no. 48, 13636–13641, doi: 10.1073/pnas.1605913113.

Oklahoma Geological Survey. "Oklahoma Oil: Past, Present, and Future." *Oklahoma Geology Notes*, v. 62 no. 3, 2002 pp .97-106.

Pennsylvania Department of Environmental Protection, Oil and Gas Reports - Oil and Gas Operator Well Inventory. Available online at: <http://www.depreportingservices.state.pa.us/ReportServer/Pages/ReportViewer.aspx?/Oil_Gas/OG_Well_Inventor>.

Texas Railroad Commission, Oil and Gas Division, "History of Texas Initial Crude Oil, Annual Production and Producing Wells, Crude Oil Production and Well Counts (since 1935)." Available online at: <<http://www.rrc.state.tx.us/oil-gas/research-and-statistics/production-data/historical-production-data/crude-oil-production-and-well-counts-since-1935/>>.

Townsend-Small, et al. (2016) "Emissions of coalbed and natural gas methane from abandoned oil and gas wells in the United States." *Geophysical Research Letters*, Vol. 43, 1789–1792.

United States Geological Survey's (USGS) Mineral Resources of the United States Annual Yearbooks, available online at: <<https://minerals.usgs.gov/minerals/pubs/usbmmbyb.html>>.

Virginia Department of Mines Minerals and Energy, "Wells Drilled for Oil and Gas in Virginia prior to 1962.", Virginia Division of Mineral Resources. Available online at: <https://www.dmme.virginia.gov/commercedocs/MRR_4.pdf>.

Energy Sources of Precursor Greenhouse Gases

EPA (2018) "1970 - 2017 Average annual emissions, all criteria pollutants in MS Excel." National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards, March 2018. Available online at: <<https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>>.

EPA (2003) E-mail correspondence containing preliminary ambient air pollutant data. Office of Air Pollution and the Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. December 22, 2003.

EPA (1997) *Compilation of Air Pollutant Emission Factors, AP-42*. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. October 1997.

International Bunker Fuels

Anderson, B.E., et al. (2011) *Alternative Aviation Fuel Experiment (AAFEX)*, NASA Technical Memorandum, in press.

ASTM (1989) *Military Specification for Turbine Fuels, Aviation, Kerosene Types*, NATO F-34 (JP-8) and NATO F-35. February 10, 1989.

Chevron (2000) *Aviation Fuels Technical Review (FTR-3)*. Chevron Products Company, Chapter 2.

DHS (2008) Personal Communication with Elissa Kay, Residual and Distillate Fuel Oil Consumption (International Bunker Fuels). Department of Homeland Security, Bunker Report. January 11, 2008.

DLA Energy (2018) Unpublished data from the Defense Fuels Automated Management System (DFAMS). Defense Energy Support Center, Defense Logistics Agency, U.S. Department of Defense. Washington, D.C.

DOC (1991 through 2018) Unpublished Report of Bunker Fuel Oil Laden on Vessels Cleared for Foreign Countries. Form-563. Foreign Trade Division, Bureau of the Census, U.S. Department of Commerce. Washington, D.C.

DOT (1991 through 2013) Fuel Cost and Consumption. Federal Aviation Administration, Bureau of Transportation Statistics, U.S. Department of Transportation. Washington, D.C. DAI-10.

EIA (2019) *Monthly Energy Review, February 2019*, Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2019/02).

FAA (2019) Personal Communication between FAA and Vince Camobreco for aviation emission estimates from the Aviation Environmental Design Tool (AEDT). January 2019.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

USAF (1998) *Fuel Logistics Planning*. U.S. Air Force pamphlet AFPAM23-221, May 1, 1998.

Wood Biomass and Biofuel Consumption

EIA (2019a) *Monthly Energy Review, February 2019*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0035(2019/02).

EIA (2019b) *Monthly Biodiesel Production Report. February 2019*. Energy Information Administration, U.S. Department of Energy. Washington, D.C.

EPA (2018) Acid Rain Program Dataset 1996-2017. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

EPA (2010) Carbon Content Coefficients Developed for EPA's Mandatory Reporting Rule. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

Lindstrom, P. (2006) Personal Communication. Perry Lindstrom, Energy Information Administration and Jean Kim, ICF International.

Industrial Processes and Product Use

EPA (2014) *Greenhouse Gas Reporting Program. Developments on Publication of Aggregated Greenhouse Gas Data, November 25, 2014*. See <<http://www.epa.gov/ghgreporting/confidential-business-information-ghg-reporting>>.

EPA (2002) Quality Assurance/Quality Control and Uncertainty Management Plan for the U.S. Greenhouse Gas Inventory: Procedures Manual for Quality Assurance/Quality Control and Uncertainty Analysis, U.S. Greenhouse Gas Inventory Program, U.S. Environmental Protection Agency, Office of Atmospheric Programs, EPA 430-R-02-007B, June 2002.

IPCC (2011) *Use of Models and Facility-Level Data in Greenhouse Gas Inventories* (Report of IPCC Expert Meeting on Use of Models and Measurements in Greenhouse Gas Inventories 9-11 August 2010, Sydney, Australia) eds.: Eggleston H.S., Srivastava N., Tanabe K., Baasansuren J., Fukuda M., Pub. IGES, Japan 2011.

Cement Production

EPA Greenhouse Gas Reporting Program (2018) Aggregation of Reported Facility Level Data under Subpart H - National Level Clinker Production from Cement Production for Calendar Years 2014, 2015, 2016, and 2017. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

U.S. Bureau of Mines (1990 through 1993) *Minerals Yearbook: Cement Annual Report*. U.S. Department of the Interior, Washington, D.C.

United States Geological Survey (USGS) (2017) Mineral Industry Surveys: Cement in April 2017, June 2017.

USGS (2018a) *Mineral Commodity Summaries: Cement 2018*. U.S. Geological Survey, Reston, VA. January, 2018.

USGS (2018b) Mineral Industry Surveys: Cement in August 2018.

USGS (1995 through 2014) *Minerals Yearbook - Cement*. U.S. Geological Survey, Reston, VA.

Van Oss (2013a) 1990 through 2012 Clinker Production Data Provided by Hendrik van Oss (USGS) via email on November 8, 2013.

Van Oss (2013b) Personal communication. Hendrik van Oss, Commodity Specialist of the U.S. Geological Survey and Gopi Manne, Eastern Research Group, Inc. October 28, 2013.

Lime Production

EPA (2018) Greenhouse Gas Reporting Program (GHGRP). Aggregation of Reported Facility Level Data under Subpart S-National Lime Production for Calendar Years 2010 through 2017. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Males, E. (2003) Memorandum from Eric Males, National Lime Association to Mr. William N. Irving & Mr. Leif Hockstad, Environmental Protection Agency. March 6, 2003.

Miner, R. and B. Upton (2002) Methods for estimating greenhouse gas emissions from lime kilns at kraft pulp mills. *Energy*. Vol. 27 (2002), p. 729-738.

Seeger (2013) Memorandum from Arline M. Seeger, National Lime Association to Mr. Leif Hockstad, Environmental Protection Agency. March 15, 2013.

United States Geological Survey (USGS 2018a) *2017 Mineral Commodities Summary: Lime*. U.S. Geological Survey, Reston, VA (January 2018).

USGS (2018b) (1992 through 2015) *Minerals Yearbook: Lime*. U.S. Geological Survey, Reston, VA (March 2018).

USGS (2017) *2016 Mineral Commodities Summary: Lime*. U.S. Geological Survey, Reston, VA (January 2017).

Glass Production

EPA (2009) *Technical Support Document for the Glass Manufacturing Sector: Proposed Rule for Mandatory Reporting of Greenhouse Gases*. U.S. Environmental Protection Agency, Washington, D.C.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

OIT (2002) *Glass Industry of the Future: Energy and Environmental Profile of the U.S. Glass Industry*. Office of Industrial Technologies, U.S. Department of Energy. Washington, D.C.

U.S. Bureau of Mines (1991 and 1993a) *Minerals Yearbook: Crushed Stone Annual Report*. U.S. Department of the Interior. Washington, D.C.

United States Geological Survey (USGS) (2017) *Minerals Industry Surveys; Soda Ash in January 2017*. U.S. Geological Survey, Reston, VA. March, 2017.

USGS (2018) *Mineral Industry Surveys: Soda Ash in February 2018*. U.S. Geological Survey, Reston, VA. Accessed September 2018.

USGS (1995 through 2015a) *Minerals Yearbook: Crushed Stone Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (1995 through 2015b) *Minerals Yearbook: Soda Ash Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (2016a) *Minerals Yearbook: Crushed Stone Annual Report: Advance Data Release of the 2016 Annual Tables*. U.S. Geological Survey, Reston, VA. November 2018.

Willett (2018a) Personal communication, Jason Christopher Willett, U.S. Geological Survey and John Steller, U.S. Environmental Protection Agency. January 4, 2018.

Willett (2018b) Personal communication, Jason Christopher Willett, U.S. Geological Survey and John Steller, U.S. Environmental Protection Agency. December 4, 2018.

Other Process Uses of Carbonates

AISI (2018) *2017 Annual Statistical Report*. American Iron and Steel Institute.

Kostick, D. S. (2012) Personal communication. Dennis S. Kostick of U.S. Department of the Interior - U.S. Geological Survey, Soda Ash Commodity Specialist with Gopi Manne and Bryan Lange of Eastern Research Group, Inc. October 2012.

U.S. Bureau of Mines (1991 and 1993a) *Minerals Yearbook: Crushed Stone Annual Report*. U.S. Department of the Interior. Washington, D.C.

U.S. Bureau of Mines (1990 through 1993b) *Minerals Yearbook: Magnesium and Magnesium Compounds Annual Report*. U.S. Department of the Interior. Washington, D.C.

United States Geological Survey (USGS) (2013) *Magnesium Metal Mineral Commodity Summary for 2013*. U.S. Geological Survey, Reston, VA.

USGS (2017a) *Mineral Industry Surveys: Soda Ash in January 2017*. U.S. Geological Survey, Reston, VA. March, 2017.

USGS (2018) *Mineral Industry Surveys: Soda Ash in February 2018*. U.S. Geological Survey, Reston, VA. Accessed September 2018.

USGS (1995a through 2017) *Minerals Yearbook: Crushed Stone Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (1994 through 2015b) *Minerals Yearbook: Soda Ash Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (1995b through 2012) *Minerals Yearbook: Magnesium Annual Report*. U.S. Geological Survey, Reston, VA.

Willett (2017a) Personal communication, Jason Christopher Willett, U.S. Geological Survey and Mausami Desai and John Steller, U.S. Environmental Protection Agency. March 9, 2017.

Willett (2018a) Personal communication, Jason Christopher Willett, U.S. Geological Survey and John Steller, U.S. Environmental Protection Agency. January 4, 2018.

Willett (2018b) Personal communication, Jason Christopher Willett, U.S. Geological Survey and John Steller, U.S. Environmental Protection Agency. December 4, 2018.

Ammonia Production

ACC (2018) Business of Chemistry (Annual Data). American Chemistry Council, Arlington, VA.

Bark (2004) *Coffeyville Nitrogen Plant*. December 15, 2004. Available online at: <http://www.gasification.org/uploads/downloads/Conferences/2003/07BARK.pdf>.

Coffeyville Resources Nitrogen Fertilizers (2012) Nitrogen Fertilizer Operations. Available online at: <http://coffeyvillegroup.com/NitrogenFertilizerOperations/index.html>.

Coffeyville Resources Nitrogen Fertilizers (2011) Nitrogen Fertilizer Operations. Available online at: <http://coffeyvillegroup.com/NitrogenFertilizerOperations/index.html>.

Coffeyville Resources Nitrogen Fertilizers (2010) Nitrogen Fertilizer Operations. Available online at: <http://coffeyvillegroup.com/NitrogenFertilizerOperations/index.html>.

Coffeyville Resources Nitrogen Fertilizers (2009) Nitrogen Fertilizer Operations. Available online at: <http://coffeyvillegroup.com/NitrogenFertilizerOperations/index.html>.

Coffeyville Resources Nitrogen Fertilizers, LLC (2005 through 2007a) Business Data. Available online at: <http://www.coffeyvillegroup.com/businessSnapshot.asp>.

Coffeyville Resources Nitrogen Fertilizers (2007b) Nitrogen Fertilizer Operations. Available online at: <http://coffeyvillegroup.com/nitrogenMain.aspx>.

Coffeyville Resources Energy, Inc. (CVR) (2012) *CVR Energy, Inc. 2012 Annual Report*. Available online at: <http://cvrenergy.com>.

CVR (2013) *CVR Energy, Inc. 2013 Annual Report*. Available online at: <http://cvrenergy.com>.

CVR (2014) *CVR Energy, Inc. 2014 Annual Report*. Available online at: <http://cvrenergy.com>.

CVR (2015) *CVR Energy, Inc. 2015 Annual Report*. Available online at: <http://cvrenergy.com>.

CVR (2016) *CVR Energy, Inc. 2016 Annual Report*. Available online at: <http://cvrenergy.com>.

CVR (2017) *CVR Energy, Inc. 2017 Annual Report*. Available online at: <http://cvrenergy.com>.

EFMA (2000a) *Best Available Techniques for Pollution Prevention and Control in the European Fertilizer Industry*. Booklet No. 1 of 8: Production of Ammonium. Available online at: <http://fertilizerseurope.com/site/index.php?id=390>.

EFMA (2000b) *Best Available Techniques for Pollution Prevention and Control in the European Fertilizer Industry*. Booklet No. 5 of 8: Production of Urea and Urea Ammonium Nitrate. Available online at: <<http://fertilizerseurope.com/site/index.php?id=390>>.

EPA Greenhouse Gas Reporting Program (2018) Aggregation of Reported Facility Level Data under Subpart G - Annual Urea Production from Ammonia Manufacturing for Calendar Years 2011-2016. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

U.S. Census Bureau (2011) *Current Industrial Reports Fertilizer Materials and Related Products: 2010 Summary*. Available online at: <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

U.S. Census Bureau (2010) *Current Industrial Reports Fertilizer Materials and Related Products: 2009 Summary*. Available online at: <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

U.S. Census Bureau (2009) *Current Industrial Reports Fertilizer Materials and Related Products: 2008 Summary*. Available online at: <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

U.S. Census Bureau (2008) *Current Industrial Reports Fertilizer Materials and Related Products: 2007 Summary*. Available online at: <<http://www.census.gov/cir/www/325/mq325b/mq325b075.xls>>.

U.S. Census Bureau (2007) *Current Industrial Reports Fertilizer Materials and Related Products: 2006 Summary*. Available online at: <<http://www.census.gov/industry/1/mq325b065.pdf>>.

U.S. Census Bureau (2006) *Current Industrial Reports Fertilizer Materials and Related Products: 2005 Summary*. Available online at: <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Census Bureau (2004, 2005) *Current Industrial Reports Fertilizer Materials and Related Products: Fourth Quarter Report Summary*. Available online at: <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Census Bureau (1998 through 2003) *Current Industrial Reports Fertilizer Materials and Related Products: Annual Reports Summary*. Available online at: <<http://www.census.gov/cir/www/325/mq325b.html>>.

U.S. Census Bureau (1991 through 1994) *Current Industrial Reports Fertilizer Materials Annual Report*. Report No. MQ28B. U.S. Census Bureau, Washington, D.C.

United States Geological Survey (USGS) (2018) *2018 Mineral Commodity Summaries: Nitrogen (Fixed) - Ammonia*. January 2018. Available online at: <<https://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/mcs-2018-nitro.pdf>>.

USGS (2018a) *2016 Minerals Yearbook: Nitrogen [Advance Release]*. August 2018. Available online at: <<https://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/myb1-2016-nitro.pdf>>.

USGS (2018b) *Minerals Commodity Summaries: Nitrogen (Fixed) – Ammonia*. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/>>. Accessed September 28, 2018.

USGS (2017) *2015 Minerals Yearbook: Nitrogen [Advance Release]*. August 2017. Available online at: <<https://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/myb1-2015-nitro.pdf>>.

USGS (2016) *2014 Minerals Yearbook: Nitrogen [Advance Release]*. October 2016. Available online at: <<https://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/myb1-2014-nitro.pdf>>.

USGS (2015) *2013 Minerals Yearbook: Nitrogen [Advance Release]*. August 2015. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/myb1-2013-nitro.pdf>>.

USGS (2014) *2012 Minerals Yearbook: Nitrogen [Advance Release]*. September 2014. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/myb1-2012-nitro.pdf>>.

USGS (1994 through 2009) *Minerals Yearbook: Nitrogen*. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/>>.

Urea Consumption for Non-Agricultural Purposes

EFMA (2000) *Best Available Techniques for Pollution Prevention and Control in the European Fertilizer Industry*. Booklet No. 5 of 8: Production of Urea and Urea Ammonium Nitrate.

EPA Greenhouse Gas Reporting Program (2018) Aggregation of Reported Facility Level Data under Subpart G - Annual Urea Production from Ammonia Manufacturing for Calendar Years 2011-2016. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

TFI (2002) *U.S. Nitrogen Imports/Exports Table*. The Fertilizer Institute. Available online at: <http://www.tfi.org/statistics/usnexim.asp>. August 2002.

U.S. Census Bureau (2001 through 2011) *Current Industrial Reports Fertilizer Materials and Related Products: Annual Summary*. Available online at: http://www.census.gov/manufacturing/cir/historical_data/index.html.

U.S. Department of Agriculture (2012) Economic Research Service Data Sets, Data Sets, U.S. Fertilizer Imports/Exports: Standard Tables. Available online at: <http://www.ers.usda.gov/data-products/fertilizer-importsexports/standard-tables.aspx>.

U.S. ITC (2002) *United States International Trade Commission Interactive Tariff and Trade DataWeb, Version 2.5.0*. Available online at: http://dataweb.usitc.gov/scripts/user_set.asp. August 2002.

United States Geological Survey (USGS) (2014 through 2016) *Minerals Yearbook: Nitrogen [Advance Release]*. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/>.

USGS (1994 through 2018a) *Minerals Yearbook: Nitrogen*. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/>.

USGS (2018b) *Minerals Commodity Summaries: Nitrogen (Fixed) – Ammonia*. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/nitrogen/>. Accessed September 28, 2018.

Nitric Acid Production

Climate Action Reserve (CAR) (2013) Project Report. Available online at: <https://thereserve2.apx.com/myModule/rpt/myrpt.asp?r=111>. Accessed on 18 January 2013.

Desai (2012) Personal communication. Mausami Desai, U.S. Environmental Protection Agency, January 25, 2012.

EPA (2018) Greenhouse Gas Reporting Program (GHGRP). Aggregation of Reported Facility Level Data under Subpart V -National Nitric Acid Production for Calendar Years 2010 through 2017. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

EPA (2013) *Draft Nitric Acid Database*. U.S. Environmental Protection Agency, Office of Air and Radiation. September, 2010.

EPA (2012) Memorandum from Mausami Desai, U.S. EPA to Mr. Bill Herz, The Fertilizer Institute. November 26, 2012.

EPA (2010) *Available and Emerging Technologies for Reducing Greenhouse Gas Emissions from the Nitric Acid Production Industry*. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. December 2010. Available online at: <http://www.epa.gov/nsr/ghgdocs/nitricacid.pdf>.

EPA (1998) *Compilation of Air Pollutant Emission Factors, AP-42*. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. February 1998.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

U.S. Census Bureau (2010a) *Current Industrial Reports. Fertilizers and Related Chemicals: 2009*. “Table 1: Summary of Production of Principle Fertilizers and Related Chemicals: 2009 and 2008.” June, 2010. MQ325B(08)-5. Available online at: <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

U.S. Census Bureau (2010b) Personal communication between Hilda Ward (of U.S. Census Bureau) and Caroline Cochran (of ICF International). October 26, 2010 and November 5, 2010.

U.S. Census Bureau (2009) *Current Industrial Reports. Fertilizers and Related Chemicals: 2008*. “Table 1: Shipments and Production of Principal Fertilizers and Related Chemicals: 2004 to 2008.” June, 2009. MQ325B(08)-5. Available online at: <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

U.S. Census Bureau (2008) *Current Industrial Reports. Fertilizers and Related Chemicals: 2007*. “Table 1: Shipments and Production of Principal Fertilizers and Related Chemicals: 2003 to 2007.” June, 2008. MQ325B(07)-5. Available online at: <http://www.census.gov/manufacturing/cir/historical_data/mq325b/index.html>.

Adipic Acid Production

ACC (2018) Business of Chemistry (Annual Data). American Chemistry Council, Arlington, VA.

C&EN (1995) “Production of Top 50 Chemicals Increased Substantially in 1994.” *Chemical & Engineering News*, 73(15):17. April 10, 1995.

C&EN (1994) “Top 50 Chemicals Production Rose Modestly Last Year.” *Chemical & Engineering News*, 72(15):13. April 11, 1994.

C&EN (1993) “Top 50 Chemicals Production Recovered Last Year.” *Chemical & Engineering News*, 71(15):11. April 12, 1993.

C&EN (1992) “Production of Top 50 Chemicals Stagnates in 1991.” *Chemical & Engineering News*, 70(15): 17. April 13, 1992.

CMR (2001) “Chemical Profile: Adipic Acid.” *Chemical Market Reporter*. July 16, 2001.

CMR (1998) “Chemical Profile: Adipic Acid.” *Chemical Market Reporter*. June 15, 1998.

CW (2005) “Product Focus: Adipic Acid.” *Chemical Week*. May 4, 2005.

CW (1999) “Product Focus: Adipic Acid/Adiponitrile.” *Chemical Week*, p. 31. March 10, 1999.

Desai (2010, 2011) Personal communication. Mausami Desai, U.S. Environmental Protection Agency and Adipic Acid Plant Engineers. 2010 and 2011.

EPA (2017) Greenhouse Gas Reporting Program. Full Subpart E, S-CEMS, BB, CC, LL Data Set (XLS) (Adipic Acid Tab). Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C. Accessed on March 5, 2019, Available online at: <<http://www2.epa.gov/ghgreporting/ghg-reporting-program-data-sets>>

EPA (2014 through 2016) Greenhouse Gas Reporting Program. Full Subpart E, O, S-CEMS, BB, CC, LL, RR, F Data Set (XLS) (Adipic Acid Tab). Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C. Accessed on November 15, 2017, Available online at: <<http://www2.epa.gov/ghgreporting/ghg-reporting-program-data-sets>>.

EPA (2010 through 2013) Analysis of Greenhouse Gas Reporting Program data – Subpart E (Adipic Acid), Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

ICIS (2007) “Adipic Acid.” *ICIS Chemical Business Americas*. July 9, 2007.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Reimer, R.A., Slaten, C.S., Seapan, M., Koch, T.A. and Triner, V.G. (1999) "Implementation of Technologies for Abatement of N₂O Emissions Associated with Adipic Acid Manufacture." Proceedings of the 2nd Symposium on Non-CO₂ Greenhouse Gases (NCGG-2), Noordwijkerhout, The Netherlands, 8-10 Sept. 1999, Ed. J. van Ham *et al.*, Kluwer Academic Publishers, Dordrecht, pp. 347-358.

Thiemens, M.H., and W.C. Trogler (1991) "Nylon production; an unknown source of atmospheric nitrous oxide." *Science* 251:932-934.

Caprolactam, Glyoxal and Glyoxylic Acid Production

ACC (2018) Business of Chemistry (Annual Data). American Chemistry Council, Arlington, VA.

AdvanSix (2018). AdvanSix Hopewell Virginia Information Sheet. Retrieved from: <https://www.advan6.com/hopewell/> on October 2, 2018.

BASF (2018). BASF: Freeport, Texas Fact Sheet. Retrieved from https://www.basf.com/documents/corp/en/about-us/strategy-and-organization/verbund/BASF_Freeport.pdf on October 2, 2018.

Fibrant (2018). Fibrant LLC Contact Page. Retrieved from: <http://www.fibrant52.com/en/contact> on October 2, 2018.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

TechSci n.d. (2017). Fibrant B.V. to Discontinue Caprolactam Plant in the United States. Retrieved from: <https://www.techsciresearch.com/news/1356-fibrant-b-v-to-discontinue-caprolactam-plant-in-the-united-states.html>

Silicon Carbide Production and Consumption

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

U.S. Census Bureau (2005 through 2018) *USITC Trade DataWeb*. Available online at: <<http://dataweb.usitc.gov/>>.

United States Geological Survey (2018a) *2016 Minerals Yearbook: Abrasives, Manufactured [Advance Release]*. U.S. Geological Survey, Reston, VA. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/abrasives/myb1-2016-abras.pdf>>.

USGS (2018b) *Mineral Industry Surveys: Manufactured Abrasives in the Second Quarter*. U.S. Geological Survey, Reston, VA. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/abrasives/mis-2018q2-abras.pdf>>.

USGS (2017c) *USGS 2015 Minerals Yearbook Silicon [Advance Release]*. November 2017. Table 4. U.S. Geological Survey, Reston, VA. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/silicon/>>.

USGS (2018) Mineral Commodity Summaries: Abrasives (Manufactured). Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/abrasives/mcs-2018-abras.pdf>

USGS (1991a through 2015) *Minerals Yearbook: Manufactured Abrasives Annual Report*. U.S. Geological Survey, Reston, VA. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/abrasives/>>.

USGS (1991b through 2015) *Minerals Yearbook: Silicon Annual Report*. U.S. Geological Survey, Reston, VA. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/silicon/>>.

Titanium Dioxide Production

Gambogi, J. (2002) Telephone communication. Joseph Gambogi, Commodity Specialist, U.S. Geological Survey and Philip Groth, ICF International. November 2002.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

United States Geological Survey (2018) *2018 Mineral Commodity Summary: Titanium and Titanium Dioxide*. U.S. Geological Survey, Reston, Va. January, 2018. Available online at: <<https://minerals.usgs.gov/minerals/pubs/commodity/titanium/index.html>>.

USGS (1991 through 2015) *Minerals Yearbook: Titanium*. U.S. Geological Survey, Reston, VA.

Soda Ash Production

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

United States Geological Survey (USGS) (2017) *Mineral Industry Surveys: Soda Ash in January 2017*. U.S. Geological Survey, Reston, VA. March, 2017.

USGS (2018) *Mineral Industry Surveys: Soda Ash in February 2018*. U.S. Geological Survey, Reston, VA. Accessed September 2018.

USGS (2018b) *Mineral Commodity Summary: Soda Ash*. U.S. Geological Survey, Reston, VA. Accessed September 2018.

USGS (2016) *Mineral Industry Surveys: Soda Ash in November 2016*. U.S. Geological Survey, Reston, VA. January, 2017.

USGS (2015a) *Mineral Industry Surveys: Soda Ash in July 2015*. U.S. Geological Survey, Reston, VA. September, 2015.

USGS (1994 through 2015b) *Minerals Yearbook: Soda Ash Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (1995) *Trona Resources in the Green River Basin, Southwest Wyoming*. U.S. Department of the Interior, U.S. Geological Survey. Open-File Report 95-476. Wiig, Stephen, Grundy, W.D., Dyni, John R.

Petrochemical Production

ACC (2018) *Business of Chemistry (Annual Data)*. American Chemistry Council, Arlington, VA.

ACC (2014a) *U.S. Chemical Industry Statistical Handbook*. American Chemistry Council, Arlington, VA.

ACC (2014b) *Business of Chemistry (Annual Data)*. American Chemistry Council, Arlington, VA.

ACC (2002, 2003, 2005 through 2011) *Guide to the Business of Chemistry*. American Chemistry Council, Arlington, VA.

AN (2014) *About Acrylonitrile: Production*. AN Group, Washington, D.C. Available online at: <<http://www.angroup.org/about/production.cfm>>.

EPA Greenhouse Gas Reporting Program (2017) *Aggregation of Reported Facility Level Data under Subpart X - National Petrochemical Production for Calendar Years 2010 through 2016*. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

EPA (2008) *Technical Support Document for the Petrochemical Production Sector: Proposed Rule for Mandatory Reporting of Greenhouse Gases*. U.S. Environmental Protection Agency. September 2008.

EPA (2000) *Economic Impact Analysis for the Proposed Carbon Black Manufacturing NESHAP*, U.S. Environmental Protection Agency. Research Triangle Park, NC. EPA-452/D-00-003. May 2000.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Johnson, G. L. (2005 through 2010) Personal communication. Greg Johnson of Liskow & Lewis, on behalf of the International Carbon Black Association (ICBA) and Caroline Cochran, ICF International. September 2010.

Johnson, G. L. (2003) Personal communication. Greg Johnson of Liskow & Lewis, on behalf of the International Carbon Black Association (ICBA) and Caren Mintz, ICF International. November 2003.

HCFC-22 Production

ARAP (2010) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. September 10, 2010.

ARAP (2009) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. September 21, 2009.

ARAP (2008) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. October 17, 2008.

ARAP (2007) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. October 2, 2007.

ARAP (2006) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Sally Rand of the U.S. Environmental Protection Agency. July 11, 2006.

ARAP (2005) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. August 9, 2005.

ARAP (2004) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. June 3, 2004.

ARAP (2003) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Sally Rand of the U.S. Environmental Protection Agency. August 18, 2003.

ARAP (2002) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. August 7, 2002.

ARAP (2001) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger of the U.S. Environmental Protection Agency. August 6, 2001.

ARAP (2000) Electronic mail communication from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Sally Rand of the U.S. Environmental Protection Agency. August 13, 2000.

ARAP (1999) Facsimile from Dave Stirpe, Executive Director, Alliance for Responsible Atmospheric Policy to Deborah Ottinger Schaefer of the U.S. Environmental Protection Agency. September 23, 1999.

ARAP (1997) Letter from Dave Stirpe, Director, Alliance for Responsible Atmospheric Policy to Elizabeth Dutrow of the U.S. Environmental Protection Agency. December 23, 1997.

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. [S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

RTI (2008) "Verification of Emission Estimates of HFC-23 from the Production of HCFC-22: Emissions from 1990 through 2006." Report prepared by RTI International for the Climate Change Division. March, 2008.

RTI (1997) "Verification of Emission Estimates of HFC-23 from the Production of HCFC-22: Emissions from 1990 through 1996." Report prepared by Research Triangle Institute for the Cadmus Group. November 25, 1997; revised February 16, 1998.

UNFCCC (2014) Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013. United Nations Framework Convention on Climate Change, Warsaw. (FCCC/CP/2013/10/Add.3). January 31, 2014. Available online at: <<http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf>>.

Carbon Dioxide Consumption

ARI (1990 through 2010) *CO₂ Use in Enhanced Oil Recovery*. Deliverable to ICF International under Task Order 102, July 15, 2011.

ARI (2007) *CO₂-EOR: An Enabling Bridge for the Oil Transition*. Presented at “Modeling the Oil Transition—a DOE/EPA Workshop on the Economic and Environmental Implications of Global Energy Transitions.” Washington, D.C. April 20-21, 2007.

ARI (2006) *CO₂-EOR: An Enabling Bridge for the Oil Transition*. Presented at “Modeling the Oil Transition—a DOE/EPA Workshop on the Economic and Environmental Implications of Global Energy Transitions.” Washington, D.C. April 20-21, 2006.

Broadhead (2003) Personal communication. Ron Broadhead, Principal Senior Petroleum Geologist and Adjunct faculty, Earth and Environmental Sciences Department, New Mexico Bureau of Geology and Mineral Resources, and Robin Pestrusak, ICF International. September 5, 2003.

COGCC (2014) Monthly CO₂ Produced by County (1999-2009). Available online at: <<http://cogcc.state.co.us/COGCCReports/production.aspx?id=MonthlyCO2ProdByCounty>>. Accessed October 2014.

Denbury Resources Inc. (2002 through 2010) Annual Report: 2001 through 2009, Form 10-K. Available online at: <<http://www.denbury.com/investor-relations/SEC-Filings/SEC-Filings-Details/default.aspx?FilingId=9823015>>. Accessed September 2014.

EPA Greenhouse Gas Reporting Program (2019). Aggregation of Reported Facility Level Data under Subpart PP - National Level CO₂ Transferred for Food & Beverage Applications for Calendar Years 2010 through 2017. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

New Mexico Bureau of Geology and Mineral Resources (2006) Natural Accumulations of Carbon Dioxide in New Mexico and Adjacent Parts of Colorado and Arizona: Commercial Accumulation of CO₂. Available online at: <<http://geoinfo.nmt.edu/staff/broadhead/CO2.html#commercial>>.

Phosphoric Acid Production

EFMA (2000) “Production of Phosphoric Acid.” *Best Available Techniques for Pollution Prevention and Control in the European Fertilizer Industry*. Booklet 4 of 8. European Fertilizer Manufacturers Association. Available online at: <<http://www.efma.org/Publications/BAT%202000/Bat04/section04.asp>>.

FIPR (2003a) “Analyses of Some Phosphate Rocks.” Facsimile Gary Albarelli, the Florida Institute of Phosphate Research, Bartow, Florida, to Robert Lanza, ICF International. July 29, 2003.

FIPR (2003b) Florida Institute of Phosphate Research. Personal communication. Mr. Michael Lloyd, Laboratory Manager, FIPR, Bartow, Florida, to Mr. Robert Lanza, ICF International. August 2003.

NCDENR (2013) North Carolina Department of Environment and Natural Resources, Title V Air Permit Review for PCS Phosphate Company, Inc. – Aurora. Available online at: <http://www.ncair.org/permits/permit_reviews/PCS_rev_08282012.pdf>. Accessed on January 25, 2013.

United States Geological Survey (USGS) (2018) *Mineral Commodity Summaries: Phosphate Rock 2018*. January 2018. U.S. Geological Survey, Reston, VA. Available online at: <https://minerals.usgs.gov/minerals/pubs/commodity/phosphate_rock/mcs-2018-phosp.pdf>.

United States Geological Survey (USGS) (2017) *Mineral Commodity Summaries: Phosphate Rock 2017*. January 2017. U.S. Geological Survey, Reston, VA. Available online at: <https://minerals.usgs.gov/minerals/pubs/commodity/phosphate_rock/mcs-2017-phosp.pdf>.

USGS (2016) *Mineral Commodity Summaries: Phosphate Rock 2016*. January 2016. U.S. Geological Survey, Reston, VA. Available online at: <https://minerals.usgs.gov/minerals/pubs/commodity/phosphate_rock/mcs-2016-phosp.pdf>.

USGS (1994 through 2015b) *Minerals Yearbook. Phosphate Rock Annual Report*. U.S. Geological Survey, Reston, VA.

USGS (2012) Personal communication between Stephen Jasinski (USGS) and Mausami Desai (EPA) on October 12, 2012.

Iron and Steel Production and Metallurgical Coke Production

American Coke and Coal Chemicals Institute (ACCCI) (2016) *U.S. & Canadian Coke Plants as of February 2016*. ACCCI, Washington, D.C. February 2016.

American Iron and Steel Institute (AISI) (2004 through 2018) *Annual Statistical Report*, American Iron and Steel Institute, Washington, D.C.

AISI (2006 through 2017) Personal communication, Mausami Desai, U.S. EPA, and American Iron and Steel Institute, December 2017.

AISI (2008) Personal communication, Mausami Desai, U.S. EPA, and Bruce Steiner, Technical Consultant with the American Iron and Steel Institute, October 2008.

Carroll (2016) Personal communication, Mausami Desai, U.S. EPA, and Colin P. Carroll, Director of Environment, Health and Safety, American Iron and Steel Institute, December 2016.

Carroll (2017) Personal communication, John Steller, U.S. EPA, and Colin P. Carroll, Director of Environment, Health and Safety, American Iron and Steel Institute, November 2017.

DOE (2000) *Energy and Environmental Profile of the U.S. Iron and Steel Industry*. Office of Industrial Technologies, U.S. Department of Energy. August 2000. DOE/EE-0229.EIA.

EIA (1998 through 2018) *Quarterly Coal Report: October-December*, Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0121.

EIA (2016b) *Natural Gas Annual 2016*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0131(06).

EIA (2017c) *Monthly Energy Review, December 2017*, Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2015/12).

EIA (2016c) *Monthly Energy Review, December 2016*, Energy Information Administration, U.S. Department of Energy, Washington, D.C. DOE/EIA-0035(2015/12).

EIA (1992) Coal and lignite production. *EIA State Energy Data Report 1992*, Energy Information Administration, U.S. Department of Energy, Washington, D.C.

EPA (2010) Carbon Content Coefficients Developed for EPA's Mandatory Reporting Rule. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

Fenton (2015 through 2018) Personal communication. Michael Fenton, Commodity Specialist, U.S. Geological Survey and Marty Wolf, Eastern Research Group. September 16, 2015.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

IPCC/UNEP/OECD/IEA (1995) “Volume 3: Greenhouse Gas Inventory Reference Manual. Table 2-2”. *IPCC Guidelines for National Greenhouse Gas Inventories*. Intergovernmental Panel on Climate Change, United Nations Environment Programme, Organization for Economic Co-Operation and Development, International Energy Agency. IPCC WG1 Technical Support Unit, United Kingdom.

United States Geological Survey (USGS) (2018) *2018 USGS Minerals Yearbook – Iron and Steel*. U.S. Geological Survey, Reston, VA.

USGS (2017) *2017 USGS Minerals Yearbook – Iron and Steel*. U.S. Geological Survey, Reston, VA.

USGS (1991 through 2017) *USGS Minerals Yearbook – Iron and Steel Scrap*. U.S. Geological Survey, Reston, VA.

Ferroalloy Production

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Onder, H., and E.A. Bagdoyan (1993) *Everything You’ve Always Wanted to Know about Petroleum Coke*. Allis Mineral Systems.

United States Geological Survey (USGS) (2016a) *2014 Minerals Yearbook: Ferroalloys*. U.S. Geological Survey, Reston, VA. October 2016.

USGS (2018) *Mineral Industry Surveys: Silicon in July 2018*. U.S. Geological Survey, Reston, VA. September 2018.

USGS (2017) *Mineral Industry Surveys: Silicon in April 2017*. U.S. Geological Survey, Reston, VA. June 2017.

USGS (2015a) *2012 Minerals Yearbook: Ferroalloys*. U.S. Geological Survey, Reston, VA. April 2015.

USGS (2016b) *Mineral Industry Surveys: Silicon in December 2016*. U.S. Geological Survey, Reston, VA. December 2016.

USGS (2015b) *Mineral Industry Surveys: Silicon in June 2015*. U.S. Geological Survey, Reston, VA. September 2015.

USGS (2014) *Mineral Industry Surveys: Silicon in September 2014*. U.S. Geological Survey, Reston, VA. December 2014.

USGS (1996 through 2013) *Minerals Yearbook: Silicon*. U.S. Geological Survey, Reston, VA.

Aluminum Production

EPA (2018) Greenhouse Gas Reporting Program (GHGRP). Envirofacts, Subpart: F Aluminum Production. Available online at: <<http://www.epa.gov/enviro/facts/ghg/search.html>>.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

USAA (2018) *U.S. Primary Aluminum Production: Report for August 2018*. U.S. Aluminum Association, Washington, D.C. September, 2017.

USAA (2017) *U.S. Primary Aluminum Production: Report for September 2017*. U.S. Aluminum Association, Washington, D.C. October, 2017.

USAA (2016b) *U.S. Primary Aluminum Production: Report for August 2016*. U.S. Aluminum Association, Washington, D.C. August, 2016.

USAA (2016a) *U.S. Primary Aluminum Production: Report for February 2016*. U.S. Aluminum Association, Washington, D.C. March, 2016.

USAA (2015) *U.S. Primary Aluminum Production: Report for June 2015*. U.S. Aluminum Association, Washington, D.C. July, 2015.

USAA (2014) *U.S. Primary Aluminum Production 2013*. U.S. Aluminum Association, Washington, D.C. October, 2014.

USAA (2013) *U.S. Primary Aluminum Production 2012*. U.S. Aluminum Association, Washington, D.C. January, 2013.

USAA (2012) *U.S. Primary Aluminum Production 2011*. U.S. Aluminum Association, Washington, D.C. January, 2012.

USAA (2011) *U.S. Primary Aluminum Production 2010*. U.S. Aluminum Association, Washington, D.C.

USAA (2010) *U.S. Primary Aluminum Production 2009*. U.S. Aluminum Association, Washington, D.C.

USAA (2008, 2009) *U.S. Primary Aluminum Production*. U.S. Aluminum Association, Washington, D.C.

USAA (2004, 2005, 2006) *Primary Aluminum Statistics*. U.S. Aluminum Association, Washington, D.C.

USGS (2018) *2018 Mineral Commodity Summaries: Aluminum*. U.S. Geological Survey, Reston, VA.

USGS (2007) *2006 Mineral Yearbook: Aluminum*. U.S. Geological Survey, Reston, VA.

USGS (1995, 1998, 2000, 2001, 2002) *Minerals Yearbook: Aluminum Annual Report*. U.S. Geological Survey, Reston, VA.

Magnesium Production and Processing

ARB (2015) “Magnesium casters successfully retool for a cleaner future.” California Air Resources Board News Release. Release # 15-07. February 5, 2015. Accessed October 2017. Available online at: <<https://www.arb.ca.gov/newsrel/newsrelease.php?id=704>>.

Bartos S., C. Laush, J. Scharfenberg, and R. Kantamaneni (2007) “Reducing greenhouse gas emissions from magnesium die casting.” *Journal of Cleaner Production*, 15: 979-987, March.

EPA (2018) Envirofacts. Greenhouse Gas Reporting Program (GHGRP), Subpart T: Magnesium Production and Processing. Available online at: <<http://www.epa.gov/enviro/facts/ghg/search.html>>. Accessed on October, 2018.

Gjestland, H. and D. Magers (1996) “Practical Usage of Sulphur [Sulfur] Hexafluoride for Melt Protection in the Magnesium Die Casting Industry.” #13, *1996 Annual Conference Proceedings*, International Magnesium Association. Ube City, Japan.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

RAND (2002) RAND Environmental Science and Policy Center, “Production and Distribution of SF₆ by End-Use Applications” Katie D. Smythe. *International Conference on SF₆ and the Environment: Emission Reduction Strategies*. San Diego, CA. November 21-22, 2002.

USGS (2018, 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006, 2005a, 2003, 2002) *Minerals Yearbook: Magnesium Annual Report*. U.S. Geological Survey, Reston, VA. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/magnesium/index.html#mis>>.

USGS (2010b) *Mineral Commodity Summaries: Magnesium Metal*. U.S. Geological Survey, Reston, VA. Available online at: <<http://minerals.usgs.gov/minerals/pubs/commodity/magnesium/mcs-2010-mgmet.pdf>>.

USGS (2005b) Personal Communication between Deborah Kramer of the USGS and Jeremy Scharfenberg of ICF Consulting.

Lead Production

Dutrizac, J.E., V. Ramachandran, and J.A. Gonzalez (2000) *Lead-Zinc 2000*. The Minerals, Metals, and Materials Society.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Morris, D., F.R. Steward, and P. Evans (1983) *Energy Efficiency of a Lead Smelter*. Energy 8(5):337-349.

Sjardin, M. (2003) *CO₂ Emission Factors for Non-Energy Use in the Non-Ferrous Metal, Ferroalloys and Inorganics Industry*. Copernicus Institute. Utrecht, the Netherlands.

Ullman (1997) *Ullman's Encyclopedia of Industrial Chemistry: Fifth Edition*. Volume A5. John Wiley and Sons.

United States Geological Survey (USGS) (2018) *2018 Mineral Commodity Summary, Lead*. U.S. Geological Survey, Reston, VA. January 2018. Available online at: <<https://minerals.usgs.gov/minerals/pubs/commodity/lead/mcs-2018-lead.pdf>>.

USGS (2017) *2017 Mineral Commodity Summary, Lead*. U.S. Geological Survey, Reston, VA. January 2017.

USGS (2016) *2016 Mineral Commodity Summary, Lead*. U.S. Geological Survey, Reston, VA. January 2016.

USGS (2015) *2015 Mineral Commodity Summary, Lead*. U.S. Geological Survey, Reston, VA. January 2015.

USGS (2014) *Mineral Commodity Summary, Lead*. U.S. Geological Survey, Reston, VA. February 2014.

USGS (1995 through 2013) *Minerals Yearbook: Lead Annual Report*. U.S. Geological Survey, Reston, VA.

Zinc Production

Horsehead Corp. (2016) Form 10-k, Annual Report for the Fiscal Year Ended December 31, 2015. Available online at: <<https://www.sec.gov/Archives/edgar/data/1385544/000119312516725704/d236839d10k.htm>>. Submitted on January 25, 2017.

Horsehead Corp. (2015) Form 10-k, Annual Report for the Fiscal Year Ended December 31, 2014. Available online at: <<http://www.sec.gov/Archives/edgar/data/1385544/000138554415000005/zinc-2014123110k.htm>>. Submitted on March 2, 2015.

Horsehead Corp. (2014) Form 10-k, Annual Report for the Fiscal Year Ended December 31, 2013. Available online at: <<http://www.sec.gov/Archives/edgar/data/1385544/000138554414000003/zinc-2013123110k.htm>>. Submitted on March 13, 2014.

Horsehead Corp. (2013) Form 10-k, Annual Report for the Fiscal Year Ended December 31, 2012. Available online at: <<http://www.sec.gov/Archives/edgar/data/1385544/000119312513110431/0001193125-13-110431-index.htm>>. Submitted March 18, 2013.

Horsehead Corp. (2012a) Form 10-k, Annual Report for the Fiscal Year Ended December, 31, 2011. Available online at: <<http://www.sec.gov/Archives/edgar/data/1385544/000119312512107345/d293011d10k.htm>>. Submitted on March 9, 2012.

Horsehead Corp. (2012b) *Horsehead's New Zinc Plant and its Impact on the Zinc Oxide Business*. February 22, 2012. Available online at: <<http://www.horsehead.net/downloadAttachmentNDO.php?ID=118>>. Accessed on September 10, 2015.

Horsehead Corp. (2011) 10-k Annual Report for the Fiscal Year Ended December, 31 2010. Available online at: <<http://google.brand.edgar-online.com/default.aspx?sym=zinc>>. Submitted on March 16, 2011.

Horsehead Corp. (2010a) 10-k Annual Report for the Fiscal Year Ended December, 31 2009. Available online at: <<http://google.brand.edgar-online.com/default.aspx?sym=zinc>>. Submitted on March 16, 2010.

Horsehead Corp. (2010b) *Horsehead Holding Corp. Provides Update on Operations at its Monaca, PA Plant*. July 28, 2010. Available online at: <<http://www.horsehead.net/pressreleases.php?showall=no&news=&ID=65>>.

Horsehead Corp (2008) 10-k Annual Report for the Fiscal Year Ended December 31, 2007. Available online at: <<http://google.brand.edgar-online.com/default.aspx?sym=zinc>>. Submitted on March 31, 2008.

Horsehead Corp (2007) Registration Statement (General Form) S-1. Available online at <<http://google.brand.edgar-online.com/default.aspx?sym=zinc>>. Submitted on April 13, 2007.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Nyrstar (2017) 2016 Clarksville Fact Sheet. Available online at: <http://www.nyrstar.com/~media/Files/N/Nyrstar/operations/melting/fact-sheet-clarksville-en.pdf>>. Accessed on September 27, 2017.

Nyrstar (2016) 2015 Clarksville Fact Sheet.

PIZO (2017) Available online at <<http://pizotech.com/index.html>>. Accessed on January 12, 2017.

PIZO (2014) Available online at <<http://pizotech.com/index.html>>. Accessed on December 9, 2014.

PIZO (2012) Available online at <<http://pizotech.com/index.html>>. Accessed on October 10, 2012.

Steel Dust Recycling (SDR) (2017) Personal communication. Jeremy Whitten, EHS Manager, Steel Dust Recycling LLC and John Steller, U.S. Environmental Protection Agency. January 26, 2017

SDR (2015) Personal communication. Jeremy Whitten, EHS Manager, Steel Dust Recycling LLC and Gopi Manne, Eastern Research Group, Inc. September 22, 2015.

SDR (2014) Personal communication. Art Rowland, Plant Manager, Steel Dust Recycling LLC and Gopi Manne, Eastern Research Group, Inc. December 9, 2014.

SDR (2013) Available online at <<http://steeldust.com/home.htm>>. Accessed on October 29, 2013.

SDR (2012) Personal communication. Art Rowland, Plant Manager, Steel Dust Recycling LLC and Gopi Manne, Eastern Research Group, Inc. October 5, 2012.

Sjardin (2003) *CO₂ Emission Factors for Non-Energy Use in the Non-Ferrous Metal, Ferroalloys and Inorganics Industry*. Copernicus Institute. Utrecht, the Netherlands.

United States Geological Survey (USGS) (2018) *2018 Mineral Commodity Summary: Zinc*. U.S. Geological Survey, Reston, VA. January 2018.

USGS (2017) *2017 Mineral Commodity Summary: Zinc*. U.S. Geological Survey, Reston, VA. January 2017. USGS (2016) *2016 Mineral Commodity Summary: Zinc*. U.S. Geological Survey, Reston, VA. January 2016.

USGS (2015) *2015 Mineral Commodity Summary: Zinc*. U.S. Geological Survey, Reston, VA. January 2015.

USGS (1995 through 2014) *Minerals Yearbook: Zinc Annual Report*. U.S. Geological Survey, Reston, VA.

Viklund-White (2000) *The use of LCA for the environmental evaluation of the recycling of galvanized steel*. ISIJ International, Vol. 40. No. 3, pp 292-299.

Semiconductor Manufacture

Burton, C.S., and R. Beizaie (2001) “EPA’s PFC Emissions Model (PEVM) v. 2.14: Description and Documentation” prepared for Office of Global Programs, U. S. Environmental Protection Agency, Washington, DC. November 2001.

Citigroup Smith Barney (2005) *Global Supply/Demand Model for Semiconductors*. March 2005.

Doering, R. and Nishi, Y (2000) “Handbook of Semiconductor Manufacturing Technology”, Marcel Dekker, New York, USA, 2000.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

ISMI (2009) *Analysis of Nitrous Oxide Survey Data*. Walter Worth. June 8, 2009. Available online at: <<http://sematech.org/docubase/document/5015atr.pdf>>.

ITRS (2007, 2008, 2011, 2013) *International Technology Roadmap for Semiconductors: 2006 Update*, January 2007; *International Technology Roadmap for Semiconductors: 2007 Edition*, January 2008; *International Technology Roadmap for Semiconductors: 2011, January 2012; Update, International Technology Roadmap for Semiconductors: 2013 Edition*, Available online at: <<http://www.itrs.net/Links/2013ITRS/Home2013.htm>>. These and earlier editions and updates are available online at: <<http://public.itrs.net>>. Information about the number of interconnect layers for years 1990–2010 is contained in Burton and Beizaie, 2001. PEVM is updated using new editions and updates of the ITRS, which are published annually. SEMI - Semiconductor Equipment and Materials Industry (2017) *World Fab Forecast, August 2018 Edition*.

SEMI - Semiconductor Equipment and Materials Industry (2016) *World Fab Forecast, May 2017 Edition*.

SEMI - Semiconductor Equipment and Materials Industry (2013) *World Fab Forecast, May 2013 Edition*.

SEMI - Semiconductor Equipment and Materials Industry (2012) *World Fab Forecast, August 2012 Edition*.

Semiconductor Industry Association (SIA) (2009-2011) STATS: SICAS Capacity and Utilization Rates Q1-Q4 2008, Q1-Q4 2009, Q1-Q4 2010. Available online at: <http://www.semiconductors.org/industry_statistics/semiconductor_capacity_utilization_sicas_reports/>.

United States Census Bureau (USCB) (2011, 2012, 2015, 2016, 2017) *Historical Data: Quarterly Survey of Plant Capacity Utilization*. Available online at: <<https://www.census.gov/programs-surveys/qpc.html>>.

U.S. EPA (2006) *Uses and Emissions of Liquid PFC Heat Transfer Fluids from the Electronics Sector*. U.S. Environmental Protection Agency, Washington, DC. EPA-430-R-06-901.

U.S. EPA Greenhouse Gas Reporting Program (GHGRP) Envirofacts. Subpart I: Electronics Manufacture. Available online at: <<http://www.epa.gov/enviro/facts/ghg/search.html>>.

VLSI Research, Inc. (2012) *Worldwide Silicon Demand*. August 2012.

Substitution of Ozone Depleting Substances

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

U.S. EPA (2018) EPA's Vintaging Model of ODS Substitutes: A Summary of the 2017 Peer Review. Office of Air and Radiation. Document Number EPA-400-F-18-001. Available online at: <<https://www.epa.gov/sites/production/files/2018-09/documents/epas-vintaging-model-of-ods-substitutes-peer-review-factsheet.pdf>>.

U.S. EPA (2019a) Suppliers of Industrial GHGs and Products Containing GHGs. Greenhouse Gas Reporting Program. Available online at: <<https://www.epa.gov/ghgreporting/suppliers-industrial-ghgs-and-products-containing-ghgs>>

U.S. EPA (2019b) Vintaging Model Foam Sector Updates. Greenhouse Gas Reporting Program. Prepared for U.S. EPA's Stratospheric Protection Division by ICF under EPA Contract Number EP-BPA-16-H-0021. February 13, 2019.

U.S. EPA (2019c) Proposed First-fill Loss Rates for the Refrigeration and Air Conditioning Sector. Greenhouse Gas Reporting Program. Prepared for U.S. EPA's Stratospheric Protection Division by ICF under EPA Contract Number EP-BPA-16-H-0021. March 21, 2019.

Electrical Transmission and Distribution

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

IPCC (1996) *Climate Change 1995: The Science of Climate Change*. Intergovernmental Panel on Climate Change, J.T. Houghton, L.G. Meira Filho, B.A. Callander, N. Harris, A. Kattenberg, and K. Maskell (eds.). Cambridge University Press. Cambridge, United Kingdom.

Levin et al. (2010) “The Global SF₆ Source Inferred from Long-term High Precision Atmospheric Measurements and its Comparison with Emission Inventories.” *Atmospheric Chemistry and Physics*, 10: 2655–2662.

O’Connell, P., F. Heil, J. Henriot, G. Mauthe, H. Morrison, L. Neimeyer, M. Pittroff, R. Probst, J.P. Tailebois (2002) *SF₆ in the Electric Industry, Status 2000*, CIGRE. February 2002.

RAND (2004) “Trends in SF₆ Sales and End-Use Applications: 1961-2003,” Katie D. Smythe. *International Conference on SF₆ and the Environment: Emission Reduction Strategies*. RAND Environmental Science and Policy Center, Scottsdale, AZ. December 1-3, 2004.

UDI (2017) *2017 UDI Directory of Electric Power Producers and Distributors*, 125th Edition, Platts.

UDI (2013) *2013 UDI Directory of Electric Power Producers and Distributors*, 121st Edition, Platts.

UDI (2010) *2010 UDI Directory of Electric Power Producers and Distributors*, 118th Edition, Platts.

UDI (2007) *2007 UDI Directory of Electric Power Producers and Distributors*, 115th Edition, Platts.

UDI (2004) *2004 UDI Directory of Electric Power Producers and Distributors*, 112th Edition, Platts.

UDI (2001) *2001 UDI Directory of Electric Power Producers and Distributors*, 109th Edition, Platts.

UNFCCC (2014) Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013. United Nations Framework Convention on Climate Change, Warsaw. (FCCC/CP/2013/10/Add.3). January 31, 2014. Available online at: <<http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf>>.

Nitrous Oxide from Product Use

CGA (2003) “CGA Nitrous Oxide Abuse Hotline: CGA/NWSA Nitrous Oxide Fact Sheet.” Compressed Gas Association. November 3, 2003.

CGA (2002) “CGA/NWSA Nitrous Oxide Fact Sheet.” Compressed Gas Association. March 25, 2002.

Heydorn, B. (1997) “Nitrous Oxide—North America.” *Chemical Economics Handbook*, SRI Consulting. May 1997.

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. [S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Ottinger (2014) Personal communication. Deborah Ottinger (CCD, U.S. EPA) and Mausami Desai (U.S. EPA). Email received on January 29, 2014.

Tupman, M. (2003) Personal communication. Martin Tupman, Airgas Nitrous Oxide and Daniel Lieberman, ICF International. August 8, 2003.

Industrial Processes and Product Use Sources of Precursor Greenhouse Gases

EPA (2018) “1970 - 2017 Average annual emissions, all criteria pollutants in MS Excel.” National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards, March 2018. Available online at: <<https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>>.

EPA (2003) Email correspondence containing preliminary ambient air pollutant data. Office of Air Pollution and the Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. December 22, 2003.

EPA (1997) Compilation of Air Pollutant Emission Factors, AP-42. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. October 1997.

Agriculture

Enteric Fermentation

Archibeque, S. (2011) Personal Communication. Shawn Archibeque, Colorado State University, Fort Collins, Colorado and staff at ICF International.

Crutzen, P.J., I. Aselmann, and W. Seiler (1986) Methane Production by Domestic Animals, Wild Ruminants, Other Herbivores, Fauna, and Humans. *Tellus*, 38B:271-284.

Donovan, K. (1999) Personal Communication. Kacey Donovan, University of California at Davis and staff at ICF International.

Doren, P.E., J. F. Baker, C. R. Long and T. C. Cartwright (1989) Estimating Parameters of Growth Curves of Bulls, *J Animal Science* 67:1432-1445.

Enns, M. (2008) Personal Communication. Dr. Mark Enns, Colorado State University and staff at ICF International.

EPA (2002) Quality Assurance/Quality Control and Uncertainty Management Plan for the U.S. Greenhouse Gas Inventory: Procedures Manual for Quality Assurance/Quality Control and Uncertainty Analysis, U.S. Greenhouse Gas Inventory Program, U.S. Environmental Protection Agency, Office of Atmospheric Programs, EPA 430-R-02-007B, June 2002.

ERG (2016) Development of Methane Conversion Rate Scaling Factor and Diet-Related Inputs to the Cattle Enteric Fermentation Model for Dairy Cows, Dairy Heifers, and Feedlot Animals. ERG, Lexington, MA. December 2016.

Galyean and Gleghorn (2001) Summary of the 2000 Texas Tech University Consulting Nutritionist Survey. Texas Tech University. Available online at <http://www.depts.ttu.edu/afs/burnett_center/progress_reports/bc12.pdf>. June 2009.

Holstein Association (2010) *History of the Holstein Breed* (website). Available online at: <http://www.holsteinusa.com/holstein_breed/breedhistory.html>. Accessed September 2010.

ICF (2006) *Cattle Enteric Fermentation Model: Model Documentation*. Prepared by ICF International for the Environmental Protection Agency. June 2006.

ICF (2003) *Uncertainty Analysis of 2001 Inventory Estimates of Methane Emissions from Livestock Enteric Fermentation in the U.S.* Memorandum from ICF International to the Environmental Protection Agency. May 2003.

IPCC (2007) *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. S. Solomon, D. Qin, M. Manning, Z. Chen,

M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.). Cambridge University Press. Cambridge, United Kingdom 996 pp.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Johnson, D. (2002) Personal Communication. Don Johnson, Colorado State University, Fort Collins, and ICF International.

Johnson, D. (1999) Personal Communication. Don Johnson, Colorado State University, Fort Collins, and David Conneely, ICF International.

Kebreab E., K. A. Johnson, S. L. Archibeque, D. Pape, and T. Wirth (2008) Model for estimating enteric methane emissions from United States dairy and feedlot cattle. *J. Anim. Sci.* 86: 2738-2748.

Lippke, H., T. D. Forbes, and W. C. Ellis. (2000) Effect of supplements on growth and forage intake by stocker steers grazing wheat pasture. *J. Anim. Sci.* 78:1625-1635.

National Bison Association (1999) Total Bison Population—1999. Report provided during personal email communication with Dave Carter, Executive Director, National Bison Association, July 19, 2011.

Pinchak, W.E., D. R. Tolleson, M. McCloy, L. J. Hunt, R. J. Gill, R. J. Ansley, and S. J. Bevers (2004) Morbidity effects on productivity and profitability of stocker cattle grazing in the southern plains. *J. Anim. Sci.* 82:2773-2779.

Platter, W. J., J. D. Tatum, K. E. Belk, J. A. Scanga, and G. C. Smith (2003) Effects of repetitive use of hormonal implants on beef carcass quality, tenderness, and consumer ratings of beef palatability. *J. Anim. Sci.* 81:984-996.

Preston, R.L. (2010) What's The Feed Composition Value of That Cattle Feed? *Beef Magazine*, March 1, 2010. Available at: <<http://beefmagazine.com/nutrition/feed-composition-tables/feed-composition-value-cattle--0301>>.

Skogerboe, T. L., L. Thompson, J. M. Cunningham, A. C. Brake, V. K. Karle (2000) The effectiveness of a single dose of doramectin pour-on in the control of gastrointestinal nematodes in yearling stocker cattle. *Vet. Parasitology* 87:173-181.

Soliva, C.R. (2006) Report to the attention of IPCC about the data set and calculation method used to estimate methane formation from enteric fermentation of agricultural livestock population and manure management in Swiss agriculture. On behalf of the Federal Office for the Environment (FOEN), Berne, Switzerland.

U.S. Department of Agriculture USDA (2017) *Quick Stats: Agricultural Statistics Database*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. Available online at <<http://quickstats.nass.usda.gov/>>. Accessed June 1, 2017.

USDA (2018) *Quick Stats: Agricultural Statistics Database*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. Available online at <<http://quickstats.nass.usda.gov/>>. Accessed August 1, 2016.

USDA (2012) *Census of Agriculture: 2012 Census Report*. United States Department of Agriculture. Available online at: <<http://www.agcensus.usda.gov/Publications/2012/>>.

USDA (2007) *Census of Agriculture: 2007 Census Report*. United States Department of Agriculture. Available online at: <<http://www.agcensus.usda.gov/Publications/2007/index.asp>>.

USDA (2002) *Census of Agriculture: 2002 Census Report*. United States Department of Agriculture. Available online at: <<http://www.agcensus.usda.gov/Publications/2002/index.asp>>.

USDA (1997) *Census of Agriculture: 1997 Census Report*. United States Department of Agriculture. Available online at: <<http://www.agcensus.usda.gov/Publications/1997/index.asp>>. Accessed July 18, 2011.

USDA (1996) *Beef Cow/Calf Health and Productivity Audit (CHAPA): Forage Analyses from Cow/Calf Herds in 18 States*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. Available online at <<http://www.aphis.usda.gov/vs/ceah/cahm>>. March 1996.

USDA (1992) *Census of Agriculture: 1992 Census Report*. United States Department of Agriculture. Available online at: <<http://www.agcensus.usda.gov/Publications/1992/index.asp>>. Accessed July 18, 2011.

USDA:APHIS:VS (2010) *Beef 2007–08, Part V: Reference of Beef Cow-calf Management Practices in the United States, 2007–08*. USDA–APHIS–VS, CEAH. Fort Collins, CO.

USDA:APHIS:VS (2002) *Reference of 2002 Dairy Management Practices*. USDA–APHIS–VS, CEAH. Fort Collins, CO. Available online at <<http://www.aphis.usda.gov/vs/ceah/cahm>>.

USDA:APHIS:VS (1998) *Beef '97, Parts I-IV*. USDA–APHIS–VS, CEAH. Fort Collins, CO. Available online at <http://www.aphis.usda.gov/animal_health/nahms/beefcowcalf/index.shtml#beef97>.

USDA:APHIS:VS (1996) *Reference of 1996 Dairy Management Practices*. USDA–APHIS–VS, CEAH. Fort Collins, CO. Available online at <<http://www.aphis.usda.gov/vs/ceah/cahm>>.

USDA:APHIS:VS (1994) *Beef Cow/Calf Health and Productivity Audit*. USDA–APHIS–VS, CEAH. Fort Collins, CO. Available online at <<http://www.aphis.usda.gov/vs/ceah/cahm>>.

USDA:APHIS:VS (1993) *Beef Cow/Calf Health and Productivity Audit*. USDA–APHIS–VS, CEAH. Fort Collins, CO. August 1993. Available online at <<http://www.aphis.usda.gov/vs/ceah/cahm>>.

Vasconcelos and Galyean (2007) Nutritional recommendations of feedlot consulting nutritionists: The 2007 Texas Tech University Study. *J. Anim. Sci.* 85:2772-2781.

Manure Management

ASAE (1998) *ASAE Standards 1998, 45th Edition*. American Society of Agricultural Engineers. [St. Joseph, MI.]

Bryant, M.P., V.H. Varel, R.A. Frobish, and H.R. Isaacson (1976) In H.G. Schlegel (ed.); *Seminar on Microbial Energy Conversion*. E. Goltz KG. Göttingen, Germany.

Bush, E. (1998) Personal communication with Eric Bush, Centers for Epidemiology and Animal Health, U.S. Department of Agriculture regarding *National Animal Health Monitoring System's (NAHMS) Swine '95 Study*.

EPA (2018) AgSTAR Anaerobic Digester Database. Available online at: <<https://www.epa.gov/agstar/livestock-anaerobic-digester-database>>. Accessed July 2018.

EPA (2016) AgSTAR Anaerobic Digester Database. Available online at: <<https://www.epa.gov/agstar/livestock-anaerobic-digester-database>>. Accessed July 2016.

EPA (2008) *Climate Leaders Greenhouse Gas Inventory Protocol Offset Project Methodology for Project Type Managing Manure with Biogas Recovery Systems*. Available online at: <http://www.epa.gov/climateleaders/documents/resources/ClimateLeaders_DraftManureOffsetProtocol.pdf>.

EPA (2006) *AgSTAR Digest*. Office of Air and Radiation, U.S. Environmental Protection Agency. Washington, D.C. Winter 2006. Available online at: <<http://www.epa.gov/agstar/pdf/2006digest.pdf>>. Retrieved July 2006.

EPA (2005) *National Emission Inventory—Ammonia Emissions from Animal Agricultural Operations, Revised Draft Report*. U.S. Environmental Protection Agency. Washington, D.C. April 22, 2005. Available online at: <ftp://ftp.epa.gov/EmisInventory/2002finalnei/documentation/nonpoint/nh3inventory_draft_042205.pdf>. Accessed August 2007.

EPA (2003) *AgSTAR Digest*. Office of Air and Radiation, U.S. Environmental Protection Agency. Washington, D.C. Winter 2003. Available online at: <<http://www.epa.gov/agstar/pdf/2003digest.pdf>>. Retrieved July 2006.

EPA (2002a) *Development Document for the Final Revisions to the National Pollutant Discharge Elimination System (NPDES) Regulation and the Effluent Guidelines for Concentrated Animal Feeding Operations (CAFOS)*. U.S. Environmental Protection Agency. EPA-821-R-03-001. December 2002.

EPA (2002b) *Cost Methodology for the Final Revisions to the National Pollutant Discharge Elimination System Regulation and the Effluent Guidelines for Concentrated Animal Feeding Operations*. U.S. Environmental Protection Agency. EPA-821-R-03-004. December 2002.

EPA (2000) *AgSTAR Digest*. Office of Air and Radiation, U.S. Environmental Protection Agency. Washington, D.C. Spring 2000. Available online at: <<http://www.epa.gov/agstar/news-events/digest/2000digest.pdf>>.

EPA (1992) *Global Methane Emissions from Livestock and Poultry Manure*, Office of Air and Radiation, U.S. Environmental Protection Agency. February 1992.

ERG (2018) “Incorporation of USDA 2009 ARMS Swine Data into the Manure Management Greenhouse Gas Inventory.” Memorandum to USDA OCE and EPA from ERG, November 2018.

ERG (2010a) “Typical Animal Mass Values for Inventory Swine Categories.” Memorandum to EPA from ERG. July 19, 2010.

ERG (2010b) Telecon with William Boyd of USDA NRCS and Cortney Itle of ERG Concerning Updated VS and Nex Rates. August 8, 2010.

ERG (2010c) “Updating Current Inventory Manure Characteristics new USDA Agricultural Waste Management Field Handbook Values.” Memorandum to EPA from ERG. August 13, 2010.

ERG (2008) “Methodology for Improving Methane Emissions Estimates and Emission Reductions from Anaerobic Digestion System for the 1990-2007 Greenhouse Gas Inventory for Manure Management.” Memorandum to EPA from ERG. August 18, 2008.

ERG (2003a) “Methodology for Estimating Uncertainty for Manure Management Greenhouse Gas Inventory.” Contract No. GS-10F-0036, Task Order 005. Memorandum to EPA from ERG, Lexington, MA. September 26, 2003.

ERG (2003b) “Changes to Beef Calves and Beef Cows Typical Animal Mass in the Manure Management Greenhouse Gas Inventory.” Memorandum to EPA from ERG, October 7, 2003.

ERG (2001) *Summary of development of MDP Factor for methane conversion factor calculations*. ERG, Lexington, MA. September 2001.

ERG (2000a) *Calculations: Percent Distribution of Manure for Waste Management Systems*. ERG, Lexington, MA. August 2000.

ERG (2000b) *Discussion of Methodology for Estimating Animal Waste Characteristics* (Summary of B₀ Literature Review). ERG, Lexington, MA. June 2000.

Gleason (2018) Personal communication. Karin Gleason, National Oceanic and Atmospheric Administration and Cortney Itle, ERG. August 2018.

Groffman, P.M., R. Brumme, K. Butterbach-Bahl, K.E. Dobbie, A.R. Mosier, D. Ojima, H. Papen, W.J. Parton, K.A. Smith, and C. Wagner-Riddle (2000) “Evaluating annual nitrous oxide fluxes at the ecosystem scale.” *Global Biogeochemical Cycles*, 14(4):1061-1070.

Hashimoto, A.G. (1984) “Methane from Swine Manure: Effect of Temperature and Influent Substrate Composition on Kinetic Parameter (k).” *Agricultural Wastes*, 9:299-308.

Hashimoto, A.G., V.H. Varel, and Y.R. Chen (1981) “Ultimate Methane Yield from Beef Cattle Manure; Effect of Temperature, Ration Constituents, Antibiotics and Manure Age.” *Agricultural Wastes*, 3:241-256.

Hill, D.T. (1984) “Methane Productivity of the Major Animal Types.” *Transactions of the ASAE*, 27(2):530-540.

Hill, D.T. (1982) “Design of Digestion Systems for Maximum Methane Production.” *Transactions of the ASAE*, 25(1):226-230.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Morris, G.R. (1976) *Anaerobic Fermentation of Animal Wastes: A Kinetic and Empirical Design Fermentation*. M.S. Thesis. Cornell University.

National Bison Association (1999) Total Bison Population—1999. Report provided during personal email communication with Dave Carter, Executive Director, National Bison Association July 19, 2011.

Ott, S.L. (2000) *Dairy '96 Study*. Stephen L. Ott, Animal and Plant Health Inspection Service, U.S. Department of Agriculture. June 19, 2000.

- Robertson, G. P. and P. M. Groffman. 2015. *Nitrogen transformations*. Pages 421-446 in E. A. Paul, editor. *Soil Microbiology, Ecology, and Biochemistry*. Academic Press, Burlington, Massachusetts, USA.
- Safley, L.M., Jr. (2000) Personal Communication. Deb Bartram, ERG and L.M. Safley, President, Agri-Waste Technology. June and October 2000.
- Sweeten, J. (2000) Personal Communication. John Sweeten, Texas A&M University and Indra Mitra, ERG. June 2000.
- UEP (1999) *Voluntary Survey Results—Estimated Percentage Participation/Activity*. Caged Layer Environmental Management Practices, Industry data submissions for EPA profile development, United Egg Producers and National Chicken Council. Received from John Thorne, Capitolink. June 2000.
- USDA (2018a) *Quick Stats: Agricultural Statistics Database*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. Available online at: <<http://quickstats.nass.usda.gov/>>.
- USDA (2018b) *Chicken and Eggs 2017 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2018. Available online at: <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2018c) *Poultry - Production and Value 2017 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2018. Available online at: <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2017a) *Chicken and Eggs 2016 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2017. Available online at: <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2017b) *Poultry - Production and Value 2016 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2017. Available online at: <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2016a) *Chicken and Eggs 2015 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2016. Available online at: <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2016b) *Poultry - Production and Value 2015 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2016. Available online at: <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2016c) *1987, 1992, 1997, 2002, 2007, and 2012 Census of Agriculture*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. Available online at: <<http://www.nass.usda.gov/census/>>. July 2016.
- USDA (2015a) *Chicken and Eggs 2014 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2015. Available online at: <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2015b) *Poultry - Production and Value 2014 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2015. Available online at: <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2014a) *1987, 1992, 1997, 2002, 2007, and 2012 Census of Agriculture*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. May 2014. Available online at: <<http://www.nass.usda.gov/census/>>.
- USDA (2014b) *Chicken and Eggs 2013 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2014. Available online at: <<http://www.nass.usda.gov/Publications/index.asp>>.
- USDA (2014c) *Poultry - Production and Value 2013 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2014. Available online at: <<http://www.nass.usda.gov/Publications/index.asp>>.

USDA (2013a) *Chicken and Eggs 2012 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2013. Available online at: <http://www.nass.usda.gov/Publications/index.asp>.

USDA (2013b) *Poultry - Production and Value 2012 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2013. Available online at: <http://www.nass.usda.gov/Publications/index.asp>.

USDA (2012a) *Chicken and Eggs 2011 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2012. Available online at: <http://www.nass.usda.gov/Publications/index.asp>.

USDA (2012b) *Poultry - Production and Value 2011 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2012. Available online at: <http://www.nass.usda.gov/Publications/index.asp>.

USDA (2011a) *Chicken and Eggs 2010 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2011. Available online at: <http://www.nass.usda.gov/Publications/index.asp>.

USDA (2011b) *Poultry - Production and Value 2010 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2011. Available online at: <http://www.nass.usda.gov/Publications/index.asp>.

USDA (2010a) *Chicken and Eggs 2009 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2010. Available online at: <http://www.nass.usda.gov/Publications/index.asp>.

USDA (2010b) *Poultry - Production and Value 2009 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2010. Available online at: <http://www.nass.usda.gov/Publications/index.asp>.

USDA (2009a) *Chicken and Eggs 2008 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. February 2009. Available online at: <http://www.nass.usda.gov/Publications/index.asp>.

USDA (2009b) *Poultry - Production and Value 2008 Summary*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2009. Available online at: <http://www.nass.usda.gov/Publications/index.asp>.

USDA (2009c) *Chicken and Eggs – Final Estimates 2003-2007*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. March 2009. Available online at: <http://usda.mannlib.cornell.edu/usda/nass/SB980/sb1024.pdf>.

USDA (2009d) *Poultry Production and Value—Final Estimates 2003-2007*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. May 2009. Available online at: <http://usda.mannlib.cornell.edu/usda/nass/SB994/sb1028.pdf>.

USDA (2008) *Agricultural Waste Management Field Handbook, National Engineering Handbook (NEH)*, Part 651. Natural Resources Conservation Service, U.S. Department of Agriculture.

USDA (2004a) *Chicken and Eggs—Final Estimates 1998-2003*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2004. Available online at: <http://usda.mannlib.cornell.edu/reports/general/sb/>.

USDA (2004b) *Poultry Production and Value—Final Estimates 1998-2002*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. April 2004. Available online at: <http://usda.mannlib.cornell.edu/reports/general/sb/>.

USDA (1999) *Poultry Production and Value—Final Estimates 1994-97*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. March 1999. Available online at: <http://usda.mannlib.cornell.edu/reports/general/sb/>.

- USDA (1998) *Chicken and Eggs—Final Estimates 1994-97*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. December 1998. Available online at: <http://usda.mannlib.cornell.edu/reports/general/sb/>.
- USDA (1996) *Agricultural Waste Management Field Handbook, National Engineering Handbook (NEH)*, Part 651. Natural Resources Conservation Service, U.S. Department of Agriculture. July 1996.
- USDA (1995a) *Poultry Production and Value—Final Estimates 1988-1993*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. March 1995. Available online at: <http://usda.mannlib.cornell.edu/reports/general/sb/>.
- USDA (1995b) *Chicken and Eggs—Final Estimates 1988-1993*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. December 1995. Available online at: <http://usda.mannlib.cornell.edu/reports/general/sb/>.
- USDA (1994) *Sheep and Goats—Final Estimates 1989-1993*. National Agriculture Statistics Service, U.S. Department of Agriculture. Washington, D.C. January 31, 1994. Available online at: <http://usda.mannlib.cornell.edu/reports/general/sb/>.
- USDA APHIS (2003) *Sheep 2001, Part I: Reference of Sheep Management in the United States, 2001 and Part IV: Baseline Reference of 2001 Sheep Feedlot Health and Management*. USDA-APHIS-VS. Fort Collins, CO. #N356.0702. Available online at: http://www.aphis.usda.gov/animal_health/nahms/sheep/index.shtml#sheep2001.
- USDA APHIS (2000) *Layers '99—Part II: References of 1999 Table Egg Layer Management in the U.S.* USDA-APHIS-VS. Fort Collins, CO. Available online at http://www.aphis.usda.gov/animal_health/nahms/poultry/downloads/layers99/Layers99_dr_PartII.pdf.
- USDA APHIS (1996) *Swine '95: Grower/Finisher Part II: Reference of 1995 U.S. Grower/Finisher Health & Management Practices*. USDA-APHIS-VS. Fort Collins, CO. Available online at: http://www.aphis.usda.gov/animal_health/nahms/swine/downloads/swine95/Swine95_dr_PartII.pdf.

Rice Cultivation

- Baicich, P. (2013) The Birds and Rice Connection. *Bird Watcher's Digest*. Available online at: <http://www.usarice.com/doclib/194/6867.pdf>.
- Brockwell, P.J., and R.A. Davis (2016) *Introduction to time series and forecasting*. Springer.
- Cantens, G. (2004 through 2005) Personal Communication. Janet Lewis, Assistant to Gaston Cantens, Vice President of Corporate Relations, Florida Crystals Company and ICF International.
- Cheng, K., S.M. Ogle, W.J. Parton, G. Pan. (2014) "Simulating greenhouse gas mitigation potentials for Chinese croplands using the DAYCENT ecosystem model." *Global Change Biology* 20:948-962.
- Cheng, K., S.M. Ogle, W.J. Parton and G. Pan. (2013) "Predicting methanogenesis from rice paddies using the DAYCENT ecosystem model." *Ecological Modelling* 261-262:19-31.
- Del Grosso, S.J., S.M. Ogle, W.J. Parton, and F.J. Breidt (2010) "Estimating Uncertainty in N₂O Emissions from U.S. Cropland Soils." *Global Biogeochemical Cycles*, 24, GB1009, doi:10.1029/2009GB003544.
- Deren, C. (2002) Personal Communication and Dr. Chris Deren, Everglades Research and Education Centre at the University of Florida and Caren Mintz, ICF International. August 15, 2002.
- Fitzgerald, G.J., K. M. Scow & J. E. Hill (2000) "Fallow Season Straw and Rice Management Effects on Methane Emissions in California Rice." *Global biogeochemical cycles*, 14 (3), 767-776.
- Fleskes, J.P., Perry, W.M., Petrik, K.L., Spell, R., and Reid, F. (2005) Change in area of winter-flood and dry rice in the northern Central Valley of California determined by satellite imagery. *California Fish and Game*, 91: 207-215.
- Gonzalez, R. (2007 through 2014) Email correspondence. Rene Gonzalez, Plant Manager, Sem-Chi Rice Company and ICF International.

- Hardke, J.T., (2015) Trends in Arkansas rice production, 2014. B.R. Wells Arkansas Rice Research Studies 2014. Norman, R.J., and Moldenhauer, K.A.K., (Eds.). Research Series 626, Arkansas Agricultural Experiment Station, University of Arkansas.
- Hardke, J. (2014) Personal Communication. Dr. Jarrod Hardke, Rice Extension Agronomist at the University of Arkansas Rice Research and Extension Center and Kirsten Jaglo, ICF International. September 11, 2014.
- Hardke, J. (2013) Email correspondence. Dr. Jarrod Hardke, Rice Extension Agronomist at the University of Arkansas Rice Research and Extension Center and Cassandra Snow, ICF International. July 15, 2013.
- Hardke, J.T., and Wilson, C.E. Jr., (2014) Trends in Arkansas rice production, 2013. B.R. Wells Arkansas Rice Research Studies 2013. Norman, R.J., and Moldenhauer, K.A.K., (Eds.). Research Series 617, Arkansas Agricultural Experiment Station, University of Arkansas.
- Hardke, J.T., and Wilson, C.E. Jr., (2013) Trends in Arkansas rice production. B.R. Wells Arkansas Rice Research Studies 2012. Norman, R.J., and Moldenhauer, K.A.K., (Eds.). Research Series 609, Arkansas Agricultural Experiment Station, University of Arkansas.
- Hollier, C. A. (ed), (1999) Louisiana rice production handbook. Louisiana State University Agricultural Center. LCES Publication Number 2321. 116 pp.
- Holzapel-Pschorn, A., R. Conrad, and W. Seiler (1985) "Production, Oxidation, and Emissions of Methane in Rice Paddies." *FEMS Microbiology Ecology*, 31:343-351.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.
- Kirstein, A. (2003 through 2004, 2006) Personal Communication. Arthur Kirstein, Coordinator, Agricultural Economic Development Program, Palm Beach County Cooperative Extension Service, FL and ICF International.
- Klosterboer, A. (1997, 1999 through 2003) Personal Communication. Arlen Klosterboer, retired Extension Agronomist, Texas A&M University and ICF International. July 7, 2003.
- Lindau, C.W. and P.K. Bollich (1993) "Methane Emissions from Louisiana First and Ratoon Crop Rice." *Soil Science*, 156:42-48.
- Linquist, B.A., M.A. Adviento-Borbe, C.M. Pittelkow, C.v. Kessel, et al. (2012) Fertilizer management practices and greenhouse gas emissions from rice systems: A quantitative review and analysis. *Field Crops Research*, 135:10-21.
- Linscombe, S. (1999, 2001 through 2014) Email correspondence. Steve Linscombe, Professor with the Rice Research Station at Louisiana State University Agriculture Center and ICF International.
- LSU, (2015) Louisiana ratoon crop and conservation: Ratoon & Conservation Tillage Estimates. Louisiana State University, College of Agriculture AgCenter. Online at: www.lsuagcenter.com.
- Miller, M.R., Garr, J.D., and Coates, P.S., (2010) Changes in the status of harvested rice fields in the Sacramento Valley, California: Implications for wintering waterfowl. *Wetlands*, 30: 939-947.
- Neue, H.U., R. Wassmann, H.K. Kludze, W. Bujun, and R.S. Lantin (1997) "Factors and processes controlling methane emissions from rice fields." *Nutrient Cycling in Agroecosystems* 49: 111-117.
- Ogle, S.M., F.J. Breidt, M. Easter, S. Williams and K. Paustian. (2007) "An empirically based approach for estimating uncertainty associated with modeling carbon sequestration in soils." *Ecological Modelling* 205:453-463.
- Ogle, S.M., S. Spencer, M. Hartman, L. Buendia, L. Stevens, D. du Toit, J. Witi (2016) "Developing national baseline GHG emissions and analyzing mitigation potentials for agriculture and forestry using an advanced national GHG inventory software system." In *Advances in Agricultural Systems Modeling 6, Synthesis and Modeling of Greenhouse Gas Emissions and Carbon Storage in Agricultural and Forestry Systems to Guide Mitigation and Adaptation*, S. Del Grosso, L.R. Ahuja and W.J. Parton (eds.), American Society of Agriculture, Crop Society of America and Soil Science Society of America, pp. 129-148.

- Parton, W.J., M.D. Hartman, D.S. Ojima, and D.S. Schimel (1998) "DAYCENT: Its Land Surface Submodel: Description and Testing". *Glob. Planet. Chang.* 19: 35-48.
- Parton, W.J., D.S. Schimel, C.V. Cole, D.S. Ojima (1987) "Analysis of factors controlling soil organic matter levels in Great Plains grasslands." *Soil Science Society of America Journal* 51:1173-1179.
- Sass, R. L. (2001) CH₄ Emissions from Rice Agriculture. Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories. 399-417. Available online at: <http://www.ipcc-nggip.iges.or.jp/public/gp/bgp/4_7_CH4_Rice_Agriculture.pdf>.
- Sass, R.L., F.M. Fisher, P.A. Harcombe, and F.T. Turner (1990) "Methane Production and Emissions in a Texas Rice Field." *Global Biogeochemical Cycles*, 4:47-68.
- Sass, R.L., F.M. Fisher, S.T. Lewis, M.F. Jund, and F.T. Turner. (1994) "Methane emissions from rice fields: effect of soil texture." *Global Biogeochemical Cycles* 8:135-140.
- Schueneman, T. (1997, 1999 through 2001) Personal Communication. Tom Schueneman, Agricultural Extension Agent, Palm Beach County, FL and ICF International.
- Slaton, N. (1999 through 2001) Personal Communication. Nathan Slaton, Extension Agronomist—Rice, University of Arkansas Division of Agriculture Cooperative Extension Service and ICF International.
- Stansel, J. (2004 through 2005) Email correspondence. Dr. Jim Stansel, Resident Director and Professor Emeritus, Texas A&M University Agricultural Research and Extension Center and ICF International.
- TAMU (2015) Texas Rice Crop Survey. Texas A&M AgriLIFE Research Center at Beaumont. Online at: <<https://beaumont.tamu.edu/>>.
- Texas Agricultural Experiment Station (2007 through 2014) *Texas Rice Acreage by Variety*. Agricultural Research and Extension Center, Texas Agricultural Experiment Station, Texas A&M University System. Available online at: <<http://beaumont.tamu.edu/CropSurvey/CropSurveyReport.aspx>>.
- Texas Agricultural Experiment Station (2006) *2005 - Texas Rice Crop Statistics Report*. Agricultural Research and Extension Center, Texas Agricultural Experiment Station, Texas A&M University System, p. 8. Available online at: <http://beaumont.tamu.edu/eLibrary/TRRFReport_default.htm>.
- University of California Cooperative Extension (UCCE) (2015) Rice Production Manual. Revised (2015) UCCE, Davis, in collaboration with the California Rice Research Board.
- USDA (2005 through 2014) *Crop Production Summary*. National Agricultural Statistics Service, Agricultural Statistics Board, U.S. Department of Agriculture, Washington, D.C. Available online at: <<http://usda.mannlib.cornell.edu>>.
- USDA (2012) *Summary of USDA-ARS Research on the Interrelationship of Genetic and Cultural Management Factors That Impact Grain Arsenic Accumulation in Rice*. News and Events. Agricultural Research Service, U.S. Department of Agriculture, Washington, D.C. Available online at: <<http://www.ars.usda.gov/is/pr/2012/120919.htm>>. September 2013.
- USDA (2003) *Field Crops, Final Estimates 1997-2002*. Statistical Bulletin No. 982. National Agricultural Statistics Service, Agricultural Statistics Board, U.S. Department of Agriculture, Washington, D.C. Available online at: <<http://usda.mannlib.cornell.edu/usda/reports/general/sb/>>. September 2005.
- USDA (1998) *Field Crops Final Estimates 1992-1997*. Statistical Bulletin Number 947 a. National Agricultural Statistics Service, Agricultural Statistics Board, U.S. Department of Agriculture, Washington, D.C. Available online at: <<http://usda.mannlib.cornell.edu/>>. July 2001.
- USDA (1994) *Field Crops Final Estimates 1987-1992*. Statistical Bulletin Number 896. National Agricultural Statistics Service, Agricultural Statistics Board, U.S. Department of Agriculture, Washington, D.C. Available online at: <<http://usda.mannlib.cornell.edu/>>. July 2001.
- USDA-NRCS (2015) Summary Report: 2012 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. Available online at: <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd396218.pdf>.

- van Bodegom, P.M., R. Wassmann, T.M. Metra-Corton (2001) “A process based model for methane emission predictions from flooded rice paddies.” *Global Biogeochemical Cycles* 15: 247-263.
- Wang, J.J., S.K. Dodla, S. Viator, M. Kongchum, S. Harrison, S. D. Mudi, S. Liu, Z. Tian (2013) Agriculture Field Management Practices and Greenhouse Gas Emissions from Louisiana Soils. *Louisiana Agriculture*, Spring 2013: 8-9. Available online at: <<http://www.lsuagcenter.com/NR/rdonlyres/78D8B61A-96A8-49E1-B2EF-BA1D4CE4E698/93016/v56no2Spring2013.pdf>>.
- Wassmann, R. H.U. Neue, R.S. Lantin, K. Makarim, N. Chareonsil, L.V. Buendia, and H. Rennenberg (2000a) Characterization of methane emissions from rice fields in Asia II. Differences among irrigated, rainfed, and deepwater rice.” *Nutrient Cycling in Agroecosystems*, 58(1):13-22.
- Wassmann, R., R.S. Lantin, H.U. Neue, L.V. Buendia, et al. (2000b) “Characterization of Methane Emissions from Rice Fields in Asia. III. Mitigation Options and Future Research Needs.” *Nutrient Cycling in Agroecosystems*, 58(1):23-36.
- Way, M.O., McCauley, G.M., Zhou, X.G., Wilson, L.T., and Morace, B. (Eds.), (2014) 2014 Texas Rice Production Guidelines. Texas A&M AgriLIFE Research Center at Beaumont.
- Wilson, C. (2002 through 2007, 2009 through 2012) Personal Communication. Dr. Chuck Wilson, Rice Specialist at the University of Arkansas Cooperative Extension Service and ICF International.
- Wilson, C.E. Jr., and Branson, J.W., (2006) Trends in Arkansas rice production. B.R. Wells Arkansas Rice Research Studies 2005. Norman, R.J., Meullenet, J.-F., and Moldenhauer, K.A.K., (Eds.). Research Series 540, Arkansas Agricultural Experiment Station, University of Arkansas.
- Wilson, C.E. Jr., and Branson, J.W., (2005) Trends in Arkansas rice production. B.R. Wells Arkansas Rice Research Studies 2004. Norman, R.J., Meullenet, J.-F., and Moldenhauer, K.A.K., (Eds.). Research Series 529, Arkansas Agricultural Experiment Station, University of Arkansas.
- Wilson, C.E. Jr., Runsick, S.K., and Mazzanti, R., (2010) Trends in Arkansas rice production. B.R. Wells Arkansas Rice Research Studies 2009. Norman, R.J., and Moldenhauer, K.A.K., (Eds.). Research Series 581, Arkansas Agricultural Experiment Station, University of Arkansas.
- Wilson, C.E. Jr., Runsick, S.K., Mazzanti, R., (2009) Trends in Arkansas rice production. B.R. Wells Arkansas Rice Research Studies (2008) Norman, R.J., Meullenet, J.-F., and Moldenhauer, K.A.K., (Eds.). Research Series 571, Arkansas Agricultural Experiment Station, University of Arkansas.
- Wilson, C.E. Jr., and Runsick, S.K., (2008) Trends in Arkansas rice production. B.R. Wells Arkansas Rice Research Studies 2007. Norman, R.J., Meullenet, J.-F., and Moldenhauer, K.A.K., (Eds.). Research Series 560, Arkansas Agricultural Experiment Station, University of Arkansas.
- Wilson, C.E. Jr., and Runsick, S.K., (2007) Trends in Arkansas rice production. B.R. Wells Arkansas Rice Research Studies 2006. Norman, R.J., Meullenet, J.-F., and Moldenhauer, K.A.K., (Eds.). Research Series 550, Arkansas Agricultural Experiment Station, University of Arkansas.
- Yan, X., H. Akiyana, K. Yagi, and H. Akimoto (2009) “Global estimations of the inventory and mitigation potential of methane emissions from rice cultivation conducted using the 2006 Intergovernmental Panel on Climate Change Guidelines.” *Global Biogeochemical Cycles*, 23, DOI: 0.1029/2008GB003299.
- Young, M. (2013) Rice and Ducks. Ducks Unlimited, Memphis, TN. Available online at: <<http://www.ducks.org/conservation/farm-bill/rice-and-ducks---by-matt-young>>.

Agricultural Soil Management

- AAPFCO (2008 through 2018) Commercial Fertilizers: 2008-2015. Association of American Plant Food Control Officials. University of Missouri. Columbia, MO.
- AAPFCO (1995 through 2000a, 2002 through 2007) Commercial Fertilizers: 1995-2007. Association of American Plant Food Control Officials. University of Kentucky. Lexington, KY.

Brockwell, Peter J., and Richard A. Davis (2016) Introduction to time series and forecasting. Springer. Cibrowski, P. (1996) Personal Communication. Peter Cibrowski, Minnesota Pollution Control Agency and Heike Mainhardt, ICF Incorporated. July 29, 1996.

CTIC (2004) 2004 Crop Residue Management Survey. Conservation Technology Information Center. Available at <<http://www.ctic.purdue.edu/CRM/>>.

Del Grosso, S.J., A.R. Mosier, W.J. Parton, and D.S. Ojima (2005) "DAYCENT Model Analysis of Past and Contemporary Soil N₂O and Net Greenhouse Gas Flux for Major Crops in the USA." *Soil Tillage and Research*, 83: 9-24. doi: 10.1016/j.still.2005.02.007.

Del Grosso, S.J., S.M. Ogle, W.J. Parton, and F.J. Breidt (2010) "Estimating Uncertainty in N₂O Emissions from U.S. Cropland Soils." *Global Biogeochemical Cycles*, 24, GB1009, doi:10.1029/2009GB003544.

Del Grosso, S.J., W.J. Parton, C.A. Keough, and M. Reyes-Fox. (2011) Special features of the DAYCENT modeling package and additional procedures for parameterization, calibration, validation, and applications, in Methods of Introducing System Models into Agricultural Research, L.R. Ahuja and Liwang Ma, editors, p. 155-176, American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, Madison, WI. USA.

Del Grosso, S.J., W.J. Parton, A.R. Mosier, M.D. Hartman, J. Brenner, D.S. Ojima, and D.S. Schimel (2001) "Simulated Interaction of Carbon Dynamics and Nitrogen Trace Gas Fluxes Using the DAYCENT Model." In Schaffer, M., L. Ma, S. Hansen, (eds.). Modeling Carbon and Nitrogen Dynamics for Soil Management. CRC Press. Boca Raton, Florida. 303-332.

Del Grosso, S.J., T. Wirth, S.M. Ogle, W.J. Parton (2008) Estimating agricultural nitrous oxide emissions. EOS 89, 529-530.

Delgado, J.A., S.J. Del Grosso, and S.M. Ogle (2009) "15N isotopic crop residue cycling studies and modeling suggest that IPCC methodologies to assess residue contributions to N₂O-N emissions should be reevaluated." *Nutrient Cycling in Agroecosystems*, DOI 10.1007/s10705-009-9300-9.

Edmonds, L., N. Gollehon, R.L. Kellogg, B. Kintzer, L. Knight, C. Lander, J. Lemunyon, D. Meyer, D.C. Moffitt, and J. Schaeffer (2003) "Costs Associated with Development and Implementation of Comprehensive Nutrient Management Plans." Part 1. Nutrient Management, Land Treatment, Manure and Wastewater Handling and Storage, and Recordkeeping. Natural Resource Conservation Service, U.S. Department of Agriculture.

EPA (2003) Clean Watersheds Needs Survey 2000—Report to Congress, U.S. Environmental Protection Agency. Washington, D.C. Available online at: <<http://www.epa.gov/owm/mtb/cwns/2000rtc/toc.htm>>.

EPA (1999) Biosolids Generation, Use and Disposal in the United States. Office of Solid Waste, U.S. Environmental Protection Agency. Available online at: <<http://biosolids.policy.net/relatives/18941.PDF>>.

EPA (1993) Federal Register. Part II. Standards for the Use and Disposal of Sewage Sludge; Final Rules. U.S. Environmental Protection Agency, 40 CFR Parts 257, 403, and 503.

Firestone, M. K., and E.A. Davidson, Ed. (1989) Microbiological basis of NO and N₂O production and consumption in soil. Exchange of trace gases between terrestrial ecosystems and the atmosphere. New York, John Wiley & Sons.

ILENR (1993) Illinois Inventory of Greenhouse Gas Emissions and Sinks: 1990. Office of Research and Planning, Illinois Department of Energy and Natural Resources. Springfield, IL.

IPCC (2013) 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands. The Intergovernmental Panel on Climate Change. [T. Hiraishi, T. Krug, K. Tanabe, N. Srivastava, B. Jamsranjav, M. Fukuda and T. Troxler (eds.)]. Hayama, Kanagawa, Japan.

IPCC (2006) 2006 IPCC Guidelines for National Greenhouse Gas Inventories. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

McFarland, M.J. (2001) Biosolids Engineering, New York: McGraw-Hill, p. 2.12.

McGill, W.B., and C.V. Cole (1981) Comparative aspects of cycling of organic C, N, S and P through soil organic matter. *Geoderma* 26:267-286.

- NASS (2004) Agricultural Chemical Usage: 2003 Field Crops Summary. Report AgCh1(04)a, National Agricultural Statistics Service, U.S. Department of Agriculture. Available online at: <http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agcs0504.pdf>.
- NASS (1999) Agricultural Chemical Usage: 1998 Field Crops Summary. Report AgCh1(99). National Agricultural Statistics Service, U.S. Department of Agriculture. Available online at: <http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agch0599.pdf>.
- NASS (1992) Agricultural Chemical Usage: 1991 Field Crops Summary. Report AgCh1(92). National Agricultural Statistics Service, U.S. Department of Agriculture. Available online at: <http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agch0392.txt>.
- NEBRA (2007) A National Biosolids Regulation, Quality, End Use & Disposal Survey. North East Biosolids and Residuals Association, July 21, 2007.
- Noller, J. (1996) Personal Communication. John Noller, Missouri Department of Natural Resources and Heike Mainhardt, ICF Incorporated. July 30, 1996.
- Oregon Department of Energy (1995) Report on Reducing Oregon's Greenhouse Gas Emissions: Appendix D Inventory and Technical Discussion. Oregon Department of Energy. Salem, OR.
- Parton, W.J., M.D. Hartman, D.S. Ojima, and D.S. Schimel (1998) "DAYCENT: Its Land Surface Submodel: Description and Testing." *Glob. Planet. Chang.* 19: 35-48.
- Potter, C., S. Klooster, A. Huete, and V. Genovese (2007) Terrestrial carbon sinks for the United States predicted from MODIS satellite data and ecosystem modeling. *Earth Interactions* 11, Article No. 13, DOI 10.1175/EI228.1.
- Potter, C. S., J.T. Randerson, C.B. Fields, P.A. Matson, P.M. Vitousek, H.A. Mooney, and S.A. Klooster (1993) "Terrestrial ecosystem production: a process model based on global satellite and surface data." *Global Biogeochemical Cycles* 7:811-841.
- PRISM Climate Group (2015) *PRISM Climate Data*. Oregon State University. July 24, 2015. Available online at: <http://prism.oregonstate.edu>.
- Ruddy B.C., D.L. Lorenz, and D.K. Mueller (2006) County-level estimates of nutrient inputs to the land surface of the conterminous United States, 1982-2001. Scientific Investigations Report 2006-5012. U.S Department of the Interior.
- Scheer, C., S.J. Del Grosso, W.J. Parton, D.W. Rowlings, P.R. Grace (2013) Modeling Nitrous Oxide Emissions from Irrigated Agriculture: Testing DAYCENT with High Frequency Measurements, Ecological Applications, in press. Available online at: <http://dx.doi.org/10.1890/13-0570.1>.
- Soil Survey Staff (2011) State Soil Geographic (STATSGO) Database for State. Natural Resources Conservation Service, United States Department of Agriculture. Available online at: <http://www.ncgc.nrcs.usda.gov/products/datasets/statsgo/index.html>.
- Towery, D. (2001) Personal Communication. Dan Towery regarding adjustments to the CTIC (1998) tillage data to reflect long-term trends, Conservation Technology Information Center, West Lafayette, IN, and Marlen Eve, National Resource Ecology Laboratory, Fort Collins, CO. February 2001.
- TVA (1991 through 1992a, 1993 through 1994) Commercial Fertilizers. Tennessee Valley Authority, Muscle Shoals, AL.
- USDA-ERS (2015) Agricultural Resource Management Survey (ARMS) Farm Financial and Crop Production Practices: Tailored Reports. Available online at: <https://www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices/>.
- USDA-ERS (1997) Cropping Practices Survey Data—1995. Economic Research Service, United States Department of Agriculture. Available online at: <http://www.ers.usda.gov/data/archive/93018/>.
- USDA-NASS (2018) Quick Stats. National Agricultural Statistics Service, United States Department of Agriculture, Washington, D.C. <http://quickstats.nass.usda.gov/>.

USDA-NRCS (2015) *Summary Report: 2012 National Resources Inventory*, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd396218.pdf>.

Wisconsin Department of Natural Resources (1993) Wisconsin Greenhouse Gas Emissions: Estimates for 1990. Bureau of Air Management, Wisconsin Department of Natural Resources, Madison, WI.

Liming

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Tepordei, V.V. (1997 through 2015) "Crushed Stone," In *Minerals Yearbook*. U.S. Department of the Interior/U.S. Geological Survey. Washington, D.C. Available online at: <<http://minerals.usgs.gov/minerals/>>.

Tepordei, V.V. (2003b) Personal communication. Valentin Tepordei, U.S. Geological Survey and ICF Consulting, August 18, 2003.

Tepordei, V.V. (1996) "Crushed Stone," In *Minerals Yearbook 1994*. U.S. Department of the Interior/Bureau of Mines, Washington, D.C. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed August 2000.

Tepordei, V.V. (1995) "Crushed Stone," In *Minerals Yearbook 1993*. U.S. Department of the Interior/Bureau of Mines, Washington, D.C. pp. 1107–1147.

Tepordei, V. V. (1994) "Crushed Stone," In *Minerals Yearbook 1992*. U.S. Department of the Interior/Bureau of Mines, Washington, D.C. pp. 1279-1303.

USGS (2018) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2018*, U.S. Geological Survey, Reston, VA. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2017) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2017*, U.S. Geological Survey, Reston, VA. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2016) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2016*, U.S. Geological Survey, Reston, VA. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2015) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2015*, U.S. Geological Survey, Reston, VA. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2014) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2014*, U.S. Geological Survey, Reston, VA. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2013) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2013*, U.S. Geological Survey, Reston, VA. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2012) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2012*, U.S. Geological Survey, Reston, VA. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

USGS (2011) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2011*, U.S. Geological Survey, Reston, VA. Available online at: <http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>.

- USGS (2010) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2010*, U.S. Geological Survey, Reston, VA. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis.
- USGS (2009) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2009*, U.S. Geological Survey, Reston, VA. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis.
- USGS (2008) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2008*, U.S. Geological Survey, Reston, VA. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis.
- USGS (2007) *Mineral Industry Surveys: Crushed Stone and Sand and Gravel in the First Quarter of 2007*. U.S. Geological Survey, Reston, VA. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis.
- West, T.O., and A.C. McBride (2005) "The contribution of agricultural lime to carbon dioxide emissions in the United States: dissolution, transport, and net emissions," *Agricultural Ecosystems & Environment* 108:145-154.
- West, T.O. (2008) Email correspondence. Tristram West, Environmental Sciences Division, Oak Ridge National Laboratory, U.S. Department of Energy and Nikhil Nadkarni, ICF International on suitability of liming emission factor for the entire United States. June 9, 2008.
- Willett, J.C. (2016) "Crushed Stone," In *Minerals Yearbook*. U.S. Department of the Interior/U.S. Geological Survey. Washington, D.C. Available online at: <http://minerals.usgs.gov/minerals/>. Accessed: 30 August 2017.
- Willett, J.C. (2018) Personal communication. Jason Willett. Preliminary data tables from "Crushed Stone," In 2016 *Minerals Yearbook*. U.S. Department of the Interior/U.S. Geological Survey. Washington, D.C. November 16, 2018.
- Willett, J.C. (2017) Personal communication. Jason Willett. Preliminary data tables from "Crushed Stone," In 2015 *Minerals Yearbook*. U.S. Department of the Interior/U.S. Geological Survey. Washington, D.C. August 31, 2017.
- Willett, J.C. and Thompson, D.V. (2017) Crushed stone and sand and gravel in the second quarter 2015: U.S. Geological Survey Mineral Industry Surveys. <http://minerals.usgs.gov/minerals/>. Accessed: 30 August 2017.
- Willett, J.C. (2016) "Crushed Stone," In *Minerals Yearbook 2014*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis. Accessed September 2016.
- Willett, J.C. (2015) "Crushed Stone," In *Minerals Yearbook 2013*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis. Accessed September 2015.
- Willett, J.C. (2014) "Crushed Stone," In *Minerals Yearbook 2012*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis. Accessed September 2014.
- Willett, J.C. (2013a) "Crushed Stone," In *Minerals Yearbook 2011*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis. Accessed May 2013.
- Willett, J.C. (2013b) Personal Communication. Jason Willett, U.S. Geological Survey and ICF International. September 9, 2013.
- Willett, J.C. (2011a) "Crushed Stone," In *Minerals Yearbook 2009*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis. Accessed August 2011.
- Willett, J.C. (2011b) "Crushed Stone," In *Minerals Yearbook 2010*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis. Accessed September 2012.

- Willett, J.C. (2010) "Crushed Stone," In *Minerals Yearbook 2008*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed August 2010.
- Willett, J.C. (2009) "Crushed Stone," In *Minerals Yearbook 2007*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed August 2009.
- Willett, J.C. (2007a) "Crushed Stone," In *Minerals Yearbook 2005*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed August 2007.
- Willett, J.C. (2007b) "Crushed Stone," In *Minerals Yearbook 2006*. U.S. Department of the Interior/U.S. Geological Survey, Washington, D.C. Available online at: http://minerals.usgs.gov/minerals/pubs/commodity/stone_crushed/index.html#mis>. Accessed August 2008.

Urea Fertilization

- AAPFCO (2008 through 2018) Commercial Fertilizers. Association of American Plant Food Control Officials. University of Missouri. Columbia, MO.
- AAPFCO (1995 through 2000a, 2002 through 2007) Commercial Fertilizers. Association of American Plant Food Control Officials. University of Kentucky. Lexington, KY.
- AAPFCO (2000b) *1999-2000 Commercial Fertilizers Data, ASCII files*. Available from David Terry, Secretary, AAPFCO.
- EPA (2000) Preliminary Data Summary: Airport Deicing Operations (Revised). EPA-821-R-00-016. August 2000.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.
- Ite, C. (2009) Email correspondence. Cortney Ite, ERG and Tom Wirth, U.S. Environmental Protection Agency on the amount of urea used in aircraft deicing. January 7, 2009.
- TVA (1991 through 1994) *Commercial Fertilizers*. Tennessee Valley Authority, Muscle Shoals, AL.
- TVA (1992b) Fertilizer Summary Data 1992. Tennessee Valley Authority, Muscle Shoals, AL.

Field Burning of Agricultural Residues

- Akintoye, H.A., Agbeyi, E.O., and Olaniyan, A.B. (2005) "The effects of live mulches on tomato (*Lycopersicon esculentum*) yield under tropical conditions." *Journal of Sustainable Agriculture* 26: 27-37.
- Bange, M.P., Milroy, S.P., and Thongbai, P. (2004) "Growth and yield of cotton in response to waterlogging." *Field Crops Research* 88: 129-142.
- Beyaert, R.P. (1996) *The effect of cropping and tillage management on the dynamics of soil organic matter*. PhD Thesis. University of Guelph.
- Bouquet, D.J., and Breitenbeck, G.A. (2000) "Nitrogen rate effect on partitioning of nitrogen and dry matter by cotton." *Crop Science* 40: 1685-1693.
- Brockwell, Peter J., and Richard A. Davis (2016) Introduction to time series and forecasting. Springer.
- Cantens, G. (2004 through 2005) Personal Communication. Janet Lewis, Assistant to Gaston Cantens, Vice President of Corporate Relations, Florida Crystals Company and ICF International.
- Brouder, S.M., and Cassman, K.G (1990) "Root development of two cotton cultivars in relation to potassium uptake and plant growth in a vermiculitic soil." *Field Crops Res.* 23: 187-203.
- Costa, L.D., and Gianquinto, G. (2002) "Water stress and watertable depth influence yield, water use efficiency, and nitrogen recovery in bell pepper: lysimeter studies." *Aust. J. Agric. Res.* 53: 201-210.

- Crafts-Brandner, S.J., Collins, M., Sutton, T.G., and Burton, H.R. (1994) "Effect of leaf maleic hydrazide concentration on yield and dry matter partitioning in burley tobacco (*Nicotiana tabacum* L.)." *Field Crops Research* 37: 121-128.
- De Pinheiro Henriques, A.R., and Marcelis, L.F.M. (2000) "Regulation of growth at steady-state nitrogen nutrition in lettuce (*Lactuca sativa* L.): Interactive effects of nitrogen and irradiance." *Annals of Botany* 86: 1073-1080.
- Díaz-Pérez, J.C., Silvoy, J., Phatak, S.C., Ruberson, J., and Morse, R. (2008) Effect of winter cover crops and co-till on the yield of organically-grown bell pepper (*Capsicum annum* L.). *Acta Hort.* 767:243-247.
- Dua, K.L., and Sharma, V.K. (1976) "Dry matter production and energy contents of ten varieties of sugarcane at Muzaffarnagar (Western Uttar Pradesh)." *Tropical Ecology* 17: 45-49.
- EPA (1994) *International Anthropogenic Methane Emissions: Estimates for 1990, Report to Congress*. EPA 230-R-93-010. Office of Policy Planning and Evaluation, U.S. Environmental Protection Agency, Washington, D.C.
- Fritschi, F.B., Roberts, B.A., Travis, R.L., Rains, D.W., and Hutmacher, R.B. (2003) "Seasonal nitrogen concentration, uptake, and partitioning pattern of irrigated Acala and Pima cotton as influenced by nitrogen fertility level." *Crop Science* 44:516-527.
- Gerik, T.J., K.L. Faver, P.M. Thaxton, and K.M. El-Zik. (1996) "Late season water stress in cotton: I. Plant growth, water use, and yield." *Crop Science* 36: 914-921.
- Gibberd, M.R., McKay, A.G., Calder, T.C., and Turner, N.C. (2003) "Limitations to carrot (*Daucus carota* L.) productivity when grown with reduced rates of frequent irrigation on a free-draining, sandy soil." *Australian Journal of Agricultural Research* 54: 499-506.
- Giglio, L., I. Csizar, and C.O. Justice (2006) "Global distribution and seasonality of active fires as observed with the Terra and Aqua Moderate Resolution Imaging Spectroradiometer (MODIS) sensors" *J. Geophys. Res.* 111, G02016, doi:10.1029/2005JG000142.
- Halevy, J. (1976) "Growth rate and nutrient uptake of two cotton cultivars grown under irrigation." *Agronomy Journal* 68: 701-705.
- Halvorson, A.D., Follett, R.F., Bartolo, M.E., and Schweissing, F.C. (2002) "Nitrogen fertilizer use efficiency of furrow-irrigated onion and corn." *Agronomy Journal* 94: 442-449.
- Heitholt, J.J., Pettigrew, W.T., and Meredith, W.R. (1992) "Light interception and lint yield of narrow-row cotton." *Crop Science* 32: 728-733.
- Hollifield, C.D., Silvertooth, J.C., and Moser, H. (2000) "Comparison of obsolete and modern cotton cultivars for irrigated production in Arizona." *2000 Arizona Cotton Report*, University of Arizona College of Agriculture, <http://ag.arizona.edu/pubs/crops/az1170/>
- Hopkinson, J.M. (1967) "Effects of night temperature on the growth of *Nicotiana tabacum*." *Australian Journal of Experimental Agriculture and Animal Husbandry* 7: 78-82.
- Huett, D.O., and Dettman, E.B. (1991) Effect of nitrogen on growth, quality and nutrient uptake of cabbages grown in sand culture. *Australian Journal of Experimental Agriculture* 29: 875-81.
- Huett, D.O., and Dettman, B. (1989) "Nitrogen response surface models of zucchini squash, head lettuce and potato." *Plant and Soil* 134: 243-254.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.
- IPCC/UNEP/OECD/IEA (1997) *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*. Intergovernmental Panel on Climate Change, United Nations Environment Programme, Organization for Economic Co-Operation and Development, International Energy Agency, Paris, France.
- Jacobs, J.L., Ward, G.N., and Kearney, G. (2004) "Effects of irrigation strategies and nitrogen fertilizer on turnip dry matter yield, water use efficiency, nutritive characteristics and mineral content in western Victoria." *Australian Journal of Experimental Agriculture* 44: 13-26.

- Jacobs, J.L., Ward, G.N., McDowell, A.M., and Kearney, G. (2002) “Effect of seedbed cultivation techniques, variety, soil type and sowing time, on brassica dry matter yields, water use efficiency and crop nutritive characteristics in western Victoria.” *Australian Journal of Experimental Agriculture* 42: 945-952.
- Jacobs, J.L., Ward, G.N., McDowell, A.M., and Kearney, G.A. (2001) “A survey on the effect of establishment techniques, crop management, moisture availability and soil type on turnip dry matter yields and nutritive characteristics in western Victoria.” *Australian Journal of Experimental Agriculture* 41: 743-751.
- Kage, H., Alt, C., and Stützel, H. (2003) “Aspects of nitrogen use efficiency of cauliflower II. Productivity and nitrogen partitioning as influenced by N supply.” *Journal of Agricultural Science* 141: 17-29.
- Kumar, A., Singh, D.P., and Singh, P. (1994) “Influence of water stress on photosynthesis, transpiration, water-use efficiency and yield of Brassica juncea L. *Field Crops Research* 37: 95-101.
- LANDFIRE (2008) Existing Vegetation Type Layer, LANDFIRE 1.1.0, U.S. Department of the Interior, Geological Survey. Accessed 28 October 2010 at <<http://landfire.cr.usgs.gov/viewer/>>.
- MacLeod, L.B., Gupta, U.C., and Cutcliffe, J.A. (1971) “Effect of N, P, and K on root yield and nutrient levels in the leaves and roots of rutabagas grown in a greenhouse.” *Plant and Soil* 35: 281-288.
- Mahrani, A., and Aharonov, B. (1964) “Rate of nitrogen absorption and dry matter production by upland cotton grown under irrigation.” *Israel J. Agric. Res.* 14: 3-9.
- Marcussi, F.F.N., Bôas, R.L.V., de Godoy, L.J.G., and Goto, R. (2004) “Macronutrient accumulation and partitioning in fertiligated sweet pepper plants.” *Sci. Agric. (Piracicaba, Braz.)* 61: 62-68.
- McCarty, J.L. (2011) “Remote Sensing-Based Estimates of Annual and Seasonal Emissions from Crop Residue Burning in the Contiguous United States.” *Journal of the Air & Waste Management Association*, 61:1, 22-34, DOI: 10.3155/1047-3289.61.1.22.
- McCarty, J.L. (2010) Agricultural Residue Burning in the Contiguous United States by Crop Type and State. Geographic Information Systems (GIS) Data provided to the EPA Climate Change Division by George Pouliot, Atmospheric Modeling and Analysis Division, EPA. Dr. McCarty’s research was supported by the NRI Air Quality Program of the Cooperative State Research, Education, and Extension Service, USDA, under Agreement No. 20063511216669 and the NASA Earth System Science Fellowship.
- McCarty, J.L. (2009) *Seasonal and Interannual Variability of Emissions from Crop Residue Burning in the Contiguous United States*. Dissertation. University of Maryland, College Park.
- McPharlin, I.R., Aylmore, P.M., and Jeffery, R.C. (1992) “Response of carrots (*Daucus carota* L.) to applied phosphorus and phosphorus leaching on a Karrakatta sand, under two irrigation regimes.” *Australian Journal of Experimental Agriculture* 32:225-232.
- Mondino, M.H., Peterlin, O.A., and Garay, F. (2004) “Response of late-planted cotton to the application of growth regulator (chlorocholine chloride, CYCOCEL 75).” *Expl Agric.* 40: 381-387.
- Moustakas, N.K., and Ntzanis, H. (2005) “Dry matter accumulation and nutrient uptake in flue-cured tobacco (*Nicotiana tabacum* L.).” *Field Crops Research* 94: 1-13.
- Peach, L., Benjamin, L.R., and Mead, A. (2000) “Effects on the growth of carrots (*Daucus carota* L.), cabbage (*Brassica oleracea* var. capitata L.) and onion (*Allium cepa* L.) of restricting the ability of the plants to intercept resources.” *Journal of Experimental Botany* 51: 605-615.
- Pettigrew, W.T., and Meredith, W.R., Jr. (1997) “Dry matter production, nutrient uptake, and growth of cotton as affected by potassium fertilization.” *J. Plant Nutr.* 20:531-548.
- Pettigrew, W.T., Meredith, W.R., Jr., and Young, L.D. (2005) “Potassium fertilization effects on cotton lint yield, yield components, and reniform nematode populations.” *Agronomy Journal* 97: 1245-1251.
- PRISM Climate Group (2015) PRISM Climate Data. Oregon State University. July 24, 2015. Available online at: <<http://prism.oregonstate.edu>>.
- Reid, J.B., and English, J.M. (2000) “Potential yield in carrots (*Daucus carota* L.): Theory, test, and an application.” *Annals of Botany* 85: 593-605.

- Sadras, V.O., and Wilson, L.J. (1997) "Growth analysis of cotton crops infested with spider mites: II. Partitioning of dry matter." *Crop Science* 37: 492-497.
- Scholberg, J., McNeal, B.L., Jones, J.W., Boote, K.J., Stanley, C.D., and Obreza, T.A. (2000a) "Growth and canopy characteristics of field-grown tomato." *Agronomy Journal* 92: 152-159.
- Scholberg, J., McNeal, B.L., Boote, K.J., Jones, J.W., Locasio, S.J., and Olson, S.M. (2000b) "Nitrogen stress effects on growth and nitrogen accumulation by field-grown tomato." *Agronomy Journal* 92:159-167.
- Singels, A. and Bezuidenhout, C.N. (2002) "A new method of simulating dry matter partitioning in the Canegro sugarcane model." *Field Crops Research* 78: 151 - 164.
- Sitompul, S.M., Hairiah, K., Cadisch, G., and Van Noordwijk, M. (2000) "Dynamics of density fractions of macro-organic matter after forest conversion to sugarcane and woodlots, accounted for in a modified Century model." *Netherlands Journal of Agricultural Science* 48: 61-73.
- Stirling, G.R., Blair, B.L., Whittle, P.J.L., and Garside, A.L. (1999) "Lesion nematode (*Pratylenchus zeae*) is a component of the yield decline complex of sugarcane." In: Magarey, R.C. (Ed.), *Proceedings of the First Australasian Soilborne Disease Symposium*. Bureau of Sugar Experiment Stations, Brisbane, pp. 15-16.
- Tan, D.K.Y., Wearing, A.H., Rickert, K.G., and Birch, C.J. (1999) "Broccoli yield and quality can be determined by cultivar and temperature but not photoperiod in south-east Queensland." *Australian Journal of Experimental Agriculture* 39: 901-909.
- Tadesse, T., Nichols, M.A., and Fisher, K.J., 1999. Nutrient conductivity effects on sweet pepper plants grown using a nutrient film technique. 1. Yield and fruit quality. *New Zealand Journal of Crop and Horticultural Science*, 27: 229-237.
- Torbert, H.A., and Reeves, D.W. (1994) "Fertilizer nitrogen requirements for cotton production as affected by tillage and traffic." *Soil Sci. Soc. Am. J.* 58:1416-1423.
- USDA-NRCS (2015) *Summary Report: 2012 National Resources Inventory*, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd396218.pdf>.
- USDA (2016) Quick Stats: U.S. & All States Data; Crops; Production and Area Harvested; 1990 - 2015. National Agricultural Statistics Service, U.S. Department of Agriculture. Washington, D.C. U.S. Department of Agriculture, National Agricultural Statistics Service. Washington, D.C., Available online at: <<http://quickstats.nass.usda.gov/>>.
- Valantin, M., Gary, C., Vaissière, B.E., and Frossard, J.S. (1999) "Effect of fruit load on partitioning of dry matter and energy in cantaloupe (*Cucumis melo* L.)." *Annals of Botany* 84: 173-181.
- Wallach, D., Marani, A., and Kletter, E. (1978) "The relation of cotton crop growth and development to final yield." *Field Crops Research* 1: 283-294.
- Wells, R., and Meredith, W.R., Jr. (1984) "Comparative growth of obsolete and modern cultivars. I. Vegetative dry matter partitioning." *Crop Science* 24: 858-872.
- Wiedenfels, R.P. (2000) "Effects of irrigation and N fertilizer application on sugarcane yield and quality." *Field Crops Research* 43: 101-108.

Land Use, Land-Use Change, and Forestry

- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.
- UNFCCC (2014) Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013. United Nations Framework Convention on Climate Change, Warsaw. (FCCC/CP/2013/10/Add.3). January 31, 2014. Available online at: <<http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf>>.

Representation of the U.S. Land Base

- Alaska Department of Natural Resources (2006) Alaska Infrastructure 1:63,360. Available online at: <<http://dnr.alaska.gov/SpatialUtility/SUC?cmd=extract&layerid=75>>.
- Alaska Interagency Fire Management Council (1998) Alaska Interagency Wildland Fire Management Plan. Available online at: <<http://agdc.usgs.gov/data/blm/fire/index.html>>.
- Alaska Oil and Gas Conservation Commission (2009) Oil and Gas Information System. Available online at: <<http://doa.alaska.gov/ogc/publicdb.html>>.
- EIA (2011) Coal Production and Preparation Report Shapefile. Available online at: <<http://www.eia.gov/state/notes-sources.cfm#maps>>.
- ESRI (2008) ESRI Data & Maps. Redlands, CA: Environmental Systems Research Institute. [CD-ROM].
- Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and J. Wickham. (2011) Completion of the 2006 National Land Cover Database for the Conterminous United States, *PE&RS*, Vol. 77(9):858-864.
- Homer, C., J. Dewitz, J. Fry, M. Coan, N. Hossain, C. Larson, N. Herold, A. McKerrow, J.N. VanDriel and J. Wickham. (2007) Completion of the 2001 National Land Cover Database for the Conterminous United States, *Photogrammetric Engineering and Remote Sensing*, Vol. 73, No. 4, pp 337-341.
- Homer, C.G., Dewitz, J.A., Yang, L., Jin, S., Danielson, P., Xian, G., Coulston, J., Herold, N.D., Wickham, J.D., and Megown, K. (2015) Completion of the 2011 National Land Cover Database for the conterminous United States-Representing a decade of land cover change information. *Photogrammetric Engineering and Remote Sensing*, v. 81, no. 5, p. 345-354.
- IPCC (2014) *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*. Hiraishi, T., Krug, T., Tanabe, K., Srivastava, N., Baasansuren, J., Fukuda, M. and Troxler, T.G. (eds.). Published: IPCC, Switzerland.
- IPCC (2010) Revisiting the use of managed land as a proxy for estimating national anthropogenic emissions and removals. [Eggleston HS, Srivastava N, Tanabe K, Baasansuren J, (eds.)]. Institute for Global Environmental Studies, Intergovernmental Panel on Climate Change, Hayama, Kanagawa, Japan.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.
- Jin, S., L. Yang, P. Danielson, C. Homer, J. Fry, and G. Xian. (2013) A comprehensive change detection method for updating the National Land Cover Database to circa 2011. *Remote Sensing of Environment*, 132: 159-175.
- NOAA Coastal Change Analysis Program (C-CAP) Regional Land Cover Database. Data collected 1995-present Charleston, SC: National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center. Data accessed at: <www.csc.noaa.gov/landcover>.
- Nusser, S.M. and J.J. Goebel (1997) "The national resources inventory: a long-term multi-resource monitoring programme." *Environmental and Ecological Statistics* 4:181-204.
- Ogle, S.M., G. Domke, W.A. Zurz, M.T. Rocha, T. Huffman, A. Swan, J.E. Smith, C. Woodall, T. Krug (2018) Delineating managed land for reporting greenhouse gas emissions and removals to the United Nations Framework Convention on Climate Change. *Carbon Balance and Management* 13:9.
- Smith, W.B., P.D. Miles, C.H. Perry, and S.A. Pugh (2009) *Forest Resources of the United States, 2007*. Gen. Tech. Rep. WO-78. U.S. Department of Agriculture Forest Service, Washington, D.C.
- U.S. Census Bureau (2010) Topologically Integrated Geographic Encoding and Referencing (TIGER) system shapefiles. U.S. Census Bureau, Washington, D.C. Available online at: <<http://www.census.gov/geo/www/tiger>>.
- U.S. Department of Agriculture (2015) County Data - Livestock, 1990-2014. U.S. Department of Agriculture, National Agriculture Statistics Service, Washington, D.C.

U.S. Department of Interior (2005) *Federal Lands of the United States*. National Atlas of the United States, U.S. Department of the Interior, Washington D.C. Available online at: <http://nationalatlas.gov/atlasftp.html?openChapters=chpbound#chpbound>.

United States Geological Survey (USGS), Gap Analysis Program (2012) Protected Areas Database of the United States (PADUS), version 1.3 Combined Feature Class. November 2012.

USGS (2012) Alaska Resource Data File. Available online at: <http://ardf.wr.usgs.gov/>.

USGS (2005) Active Mines and Mineral Processing Plants in the United States in 2003. U.S. Geological Survey, Reston, VA.

Forest Land Remaining Forest Land: Changes in Forest Carbon Stocks

AF&PA (2006a and earlier) Statistical roundup. (Monthly). Washington, D.C. American Forest & Paper Association.

AF&PA (2006b and earlier) Statistics of paper, paperboard and wood pulp. Washington, D.C. American Forest & Paper Association.

Amichev, B.Y. and J.M. Galbraith (2004) “A Revised Methodology for Estimation of Forest Soil Carbon from Spatial Soils and Forest Inventory Data Sets.” *Environmental Management* 33(Suppl. 1):S74-S86.

Bechtold, W.A.; Patterson, P.L. (2005) The enhanced forest inventory and analysis program—national sampling design and estimation procedures. Gen. Tech. Rep. SRS-80. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 85 p.

Birdsey, R. (1996) “Carbon Storage for Major Forest Types and Regions in the Conterminous United States.” In R.N. Sampson and D. Hair, (eds.). *Forest and Global Change, Volume 2: Forest Management Opportunities for Mitigating Carbon Emissions*. American Forests. Washington, D.C., 1-26 and 261-379 (appendices 262 and 263).

Coulston, J.W., Wear, D.N., and Vose, J.M. (2015) Complex forest dynamics indicate potential for slowing carbon accumulation in the southeastern United States. *Scientific Reports*. 5: 8002.

Domke, G.M., J.E. Smith, and C.W. Woodall. (2011) Accounting for density reduction and structural loss in standing dead trees: Implications for forest biomass and carbon stock estimates in the United States. *Carbon Balance and Management*. 6:14.

Domke, G.M., Woodall, C.W., Smith, J.E., Westfall, J.A., McRoberts, R.E. (2012) Consequences of alternative tree-level biomass estimation procedures on U.S. forest carbon stock estimates. *Forest Ecology and Management*. 270: 108-116.

Domke, G.M., Perry, C.H., Walters, B.F., Woodall, C.W., and Smith, J.E. (2016) A framework for estimating litter carbon stocks in forests of the United States. *Science of the Total Environment* 557–558: 469–478.

Domke, G.M., Woodall, C.W., Walters, B.F., Smith, J.E. (2013) From models to measurements: comparing down dead wood carbon stock estimates in the U.S. forest inventory. *PLoS ONE* 8(3): e59949.

Domke, G.M., Perry, C.H., Walters, B.F., Woodall, C.W., Nave, L., Swanston, C. (2017) Toward inventory-based estimates of soil organic carbon in forests of the United States. *Ecological Applications*. 27(4), 1223-1235.

EPA (2006) *Municipal solid waste in the United States: 2005 Facts and figures*. Office of Solid Waste, U.S. Environmental Protection Agency. Washington, D.C. (5306P) EPA530-R-06-011. Available online at: <http://www.epa.gov/msw/msw99.htm>.

Frayser, W.E., and G.M. Furnival (1999) “Forest Survey Sampling Designs: A History.” *Journal of Forestry* 97(12): 4-10.

Freed, R. (2004) Open-dump and Landfill timeline spreadsheet (unpublished). ICF International. Washington, D.C.

Hair, D. (1958) “Historical forestry statistics of the United States.” Statistical Bull. 228. U.S. Department of Agriculture Forest Service, Washington, D.C.

- Hair, D. and A.H. Ulrich (1963) The Demand and price situation for forest products – 1963. U.S. Department of Agriculture Forest Service, Misc Publication No. 953. Washington, D.C.
- Harmon, M.E., C.W. Woodall, B. Fasth, J. Sexton, M. Yatkov. (2011) Differences between standing and downed dead tree wood density reduction factors: A comparison across decay classes and tree species. Res. Paper. NRS-15. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 40 p.
- Howard, J. L. and Jones, K.C. In preparation. U.S. timber production, trade, consumption, and price statistics 1965 to 2015. Res. Pap. FPL-RP-XXX. Madison, WI: USDA, Forest Service, Forest Products Laboratory.
- Howard, J. L. and Jones, K.C. (2016) *U.S. timber production, trade, consumption, and price statistics 1965 to 2013*. Res. Pap. FPL-RP-679. Madison, WI: USDA, Forest Service, Forest Products Laboratory.
- Howard, J. L. (2007) *U.S. timber production, trade, consumption, and price statistics 1965 to 2005*. Res. Pap. FPL-RP-637. Madison, WI: USDA, Forest Service, Forest Products Laboratory.
- Howard, J. L. (2003) *U.S. timber production, trade, consumption, and price statistics 1965 to 2002*. Res. Pap. FPL-RP-615. Madison, WI: USDA, Forest Service, Forest Products Laboratory. Available online at: <http://www.fpl.fs.fed.us/documnts/fplrp/fplrp615/fplrp615.pdf>.
- IPCC (2014) *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*. [Hiraishi, T., Krug, T., Tanabe, K., Srivastava, N., Baasansuren, J., Fukuda, M., and Troxler, T.G. (eds.)]. Switzerland.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.
- IPCC (2007) *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 996 pp.
- Jenkins, J.C., D.C. Chojnacky, L.S. Heath, and R.A. Birdsey (2003) “National-scale biomass estimators for United States tree species.” *Forest Science* 49(1):12-35.
- Jandl, R., Rodeghiero, M., Martinez, C., Cotrufo, M. F., Bampa, F., van Wesemael, B., Harrison, R.B., Guerrini, I.A., deB Richter Jr., D., Rustad, L., Lorenz, K., Chabbi, A., Miglietta, F. (2014) Current status, uncertainty and future needs in soil organic carbon monitoring. *Science of the Total Environment*, 468, 376-383.
- Johnson, K. Domke, G.M., Russell, M.B., Walters, B.F., Hom, J., Peduzzi, A., Birdsey, R., Dolan, K., Huang, W. (2017). Estimating aboveground live understory vegetation carbon in the United States. *Environmental Research Letters*.
- Ogle, S.M., Woodall, C.W., Swan, A., Smith, J.E., Wirth, T. In preparation. Determining the Managed Land Base for Delineating Carbon Sources and Sinks in the United States. *Environmental Science and Policy*.
- O'Neill, K.P., Amacher, M.C., Perry, C.H. (2005) Soils as an indicator of forest health: a guide to the collection, analysis, and interpretation of soil indicator data in the Forest Inventory and Analysis program. Gen. Tech. Rep. NC-258. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Research Station. 53 p.
- Oswalt, S.N.; Smith, W.B.; Miles, P.D.; Pugh, S.A. (2014) Forest Resources of the United States, 2012. Gen. Tech. Rep. WO-91. Washington, D.C. U.S. Department of Agriculture, Forest Service, Washington Office. 218 p.
- Perry, C.H., C.W. Woodall, and M. Schoeneberger (2005) Inventorying trees in agricultural landscapes: towards an accounting of “working trees”. In: “Moving Agroforestry into the Mainstream.” *Proc. 9th N. Am. Agroforestry Conf.*, Brooks, K.N. and Folliott, P.F. (eds.). 12-15 June 2005, Rochester, MN [CD-ROM]. Dept. of Forest Resources, Univ. Minnesota, St. Paul, MN, 12 p. Available online at: <http://cinram.umn.edu/afta2005/>. (verified 23 Sept 2006).
- Russell, M.B.; D’Amato, A.W.; Schulz, B.K.; Woodall, C.W.; Domke, G.M.; Bradford, J.B. (2014) Quantifying understory vegetation in the U.S. Lake States: a proposed framework to inform regional forest carbon stocks. *Forestry*. 87: 629-638.

- Russell, M.B.; Domke, G.M.; Woodall, C.W.; D'Amato, A.W. (2015) Comparisons of allometric and climate-derived estimates of tree coarse root carbon in forests of the United States. *Carbon Balance and Management*. 10: 20.
- Skog, K.E. (2008) Sequestration of carbon in harvested wood products for the United States. *Forest Products Journal* 58:56-72.
- Smith, J.E.; Heath, L.S.; Skog, K.E.; Birdsey, R.A. (2006) *Methods for calculating forest ecosystem and harvested carbon with standard estimates for forest types of the United States*. Gen. Tech. Rep. NE-343. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. 216 p.
- Smith, W. B., P. D. Miles, C. H. Perry, and S. A. Pugh (2009) *Forest Resources of the United States, 2007*. General Technical Report WO-78, U.S. Department of Agriculture Forest Service, Washington Office.
- Smith, J.E., L.S. Heath, and M.C. Nichols (2010) U.S. Forest Carbon Calculation Tool User's Guide: Forestland Carbon Stocks and Net Annual Stock Change. General Technical Report NRS-13 revised, U.S. Department of Agriculture Forest Service, Northern Research Station, 34 p.
- Steer, Henry B. (1948) *Lumber production in the United States*. Misc. Pub. 669, U.S. Department of Agriculture Forest Service. Washington, D.C.
- Ulrich, Alice (1985) *U.S. Timber Production, Trade, Consumption, and Price Statistics 1950-1985*. Misc. Pub. 1453, U.S. Department of Agriculture Forest Service. Washington, D.C.
- Ulrich, A.H. (1989) *U.S. Timber Production, Trade, Consumption, and Price Statistics, 1950-1987*. USDA Miscellaneous Publication No. 1471, U.S. Department of Agriculture Forest Service. Washington, D.C., 77.
- United Nations Framework Convention on Climate Change (2013) Report on the individual review of the inventory submission of the United States of America submitted in 2012. FCCC/ARR/2012/USA. 42 p.
- USDA Forest Service (2018a) Forest Inventory and Analysis National Program: Program Features. U.S. Department of Agriculture Forest Service. Washington, D.C. Available online at: <<http://fia.fs.fed.us/program-features/>>. Accessed 1 November 2018.
- USDA Forest Service. (2018b) Forest Inventory and Analysis National Program: FIA Data Mart. U.S. Department of Agriculture Forest Service. Washington, D.C. Available online at: <<http://apps.fs.fed.us/fiadb-downloads/datamart.html>>. Accessed on 1 November 2018.
- USDA Forest Service. (2018c) Forest Inventory and Analysis National Program, FIA library: Field Guides, Methods and Procedures. U.S. Department of Agriculture Forest Service. Washington, D.C. Available online at: <<http://www.fia.fs.fed.us/library/field-guides-methods-proc/>>. Accessed on 1 November 2018.
- USDA Forest Service (2018d) Forest Inventory and Analysis National Program, FIA library: Database Documentation. U.S. Department of Agriculture, Forest Service, Washington Office. Available online at: <<http://fia.fs.fed.us/library/database-documentation/>>. Accessed on 1 November 2018.
- U.S. Census Bureau (1976) *Historical Statistics of the United States, Colonial Times to 1970, Vol. 1*. Washington, D.C.
- Wear, D.N., Coulston, J.W. (2015) From sink to source: Regional variation in U.S. forest carbon futures. *Scientific Reports*. 5: 16518.
- Westfall, J.A., Woodall, C.W., Hatfield, M.A. (2013) A statistical power analysis of woody carbon flux from forest inventory data. *Climatic Change*. 118: 919-931.
- Woodall, C.W., Coulston, J.W., Domke, G.M., Walters, B.F., Wear, D.N., Smith, J.E., Anderson, H.-E., Clough, B.J., Cohen, W.B., Griffith, D.M., Hagan, S.C., Hanou, I.S.; Nichols, M.C., Perry, C.H., Russell, M.B., Westfall, J.A., Wilson, B.T. (2015a) The U.S. Forest Carbon Accounting Framework: Stocks and Stock change 1990-2016. Gen. Tech. Rep. NRS-154. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 49 pp.
- Woodall, C.W., L.S. Heath, G.M. Domke, and M.C. Nichols (2011a) Methods and equations for estimating aboveground volume, biomass, and carbon for trees in the U.S. forest inventory, 2010. Gen. Tech. Rep. NRS-88. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 30 p.

Woodall, C.W., Amacher, M.C., Bechtold, W.A., Coulston, J.W., Jovan, S., Perry, C.H., Randolph, K.C., Schulz, B.K., Smith, G.C., Tkacz, B., Will-Wolf, S. (2011b) "Status and future of the forest health indicators program of the United States." *Environmental Monitoring and Assessment*. 177: 419-436.

Woodall, C.W., and V.J. Monleon (2008) Sampling protocol, estimation, and analysis procedures for the down woody materials indicator of the FIA program. Gen. Tech. Rep. NRS-22. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 68 p.

Woodall, C.W., Walters, B.F., Oswalt, S.N., Domke, G.M., Toney, C., Gray, A.N. (2013) Biomass and carbon attributes of downed woody materials in forests of the United States. *Forest Ecology and Management* 305: 48-59.

Woodall, C.W., Walters, B.F., Coulston, J.W., D'Amato, A.W., Domke, G.M., Russell, M.B., Sowers, P.A. (2015b) Monitoring network confirms land use change is a substantial component of the forest carbon sink in the eastern United States. *Scientific Reports*. 5: 17028.

Zhu, Zhiliang, and McGuire, A.D., eds., (2016) Baseline and projected future carbon storage and greenhouse-gas fluxes in ecosystems of Alaska: U.S. Geological Survey Professional Paper 1826, 196 p., Available online at: <<http://dx.doi.org/10.3133/pp1826>>.

Forest Land Remaining Forest Land: Non-CO₂ Emissions from Forest Fires

Eidenshink, J., Schwind, B., Brewer, K., Zhu, Z.L., Quayle, B. and Howard, S., (2007). A project for monitoring trends in burn severity. *Fire ecology*, 3(1), pp.3-21.

Homer, C., Dewitz, J., Yang, L., Jin, S., Danielson, P., Xian, G., Coulston, J., Herold, N., Wickham, J. and Megown, K., (2015). Completion of the 2011 National Land Cover Database for the conterminous United States—representing a decade of land cover change information. *Photogrammetric Engineering & Remote Sensing*, 81(5), pp.345-354.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

MTBS Data Summaries. 2018. MTBS Data Access: Fire Level Geospatial Data. (2018, August - last revised). MTBS Project (USDA Forest Service/U.S. Geological Survey). Available online: <http://mtbs.gov/direct-download> [06Aug2018].

Ogle, S. M., G. M. Domke, W. A. Kurz, M. T. Rocha, T. Huffman, A. Swan, J. E. Smith, C. W. Woodall, and T. Krug. (2018). Delineating managed land for reporting national greenhouse gas emissions and removals to the United Nations framework convention on climate change. *Carbon Balance and Management* 13:9.

Ruefenacht, B., Finco, M.V., Nelson, M.D., Czaplewski, R., Helmer, E.H., Blackard, J.A., Holden, G.R., Lister, A.J., Salajano, D., Weyermann, D. and Winterberger, K., (2008). Conterminous US and Alaska forest type mapping using forest inventory and analysis data. *Photogrammetric Engineering & Remote Sensing*, 74(11), pp.1379-1388.

Smith, J. E., L. S. Heath, and C. M. Hoover. (2013). Carbon factors and models for forest carbon estimates for the 2005-2011 National Greenhouse Gas Inventories of the United States. *For. Ecology and Management* 307:7–19.

USDA Forest Service (2018b) Forest Inventory and Analysis National Program: FIA Data Mart. U.S. Department of Agriculture Forest Service. Washington, D.C. Available online at: <<http://apps.fs.fed.us/fiadb-downloads/datamart.html>>. Accessed on 1 November 2018.

USDA Forest Service (2018d) Forest Inventory and Analysis National Program, FIA library: Database Documentation. U.S. Department of Agriculture, Forest Service, Washington Office. Available online at: <<http://fia.fs.fed.us/library/database-documentation/>>. Accessed on 1 November 2018.

Forest Land Remaining Forest Land: N₂O Emissions from Soils

Albaugh, T.J., Allen, H.L., Fox, T.R. (2007) Historical Patterns of Forest Fertilization in the Southeastern United States from 1969 to 2004. *Southern Journal of Applied Forestry*, 31, 129-137(9).

Binkley, D. (2004) Email correspondence regarding the 95 percent confidence interval for area estimates of southern pine plantations receiving N fertilizer ($\pm 20\%$) and the rate applied for areas receiving N fertilizer (100 to 200 pounds/acre). Dan Binkley, Department of Forest, Rangeland, and Watershed Stewardship, Colorado State University and Stephen Del Grosso, Natural Resource Ecology Laboratory, Colorado State University. September 19, 2004.

Binkley, D., R. Carter, and H.L. Allen (1995) Nitrogen Fertilization Practices in Forestry. In: *Nitrogen Fertilization in the Environment*, P.E. Bacon (ed.), Marcel Decker, Inc., New York.

Briggs, D. (2007) *Management Practices on Pacific Northwest West-Side Industrial Forest Lands, 1991-2005: With Projections to 2010*. Stand Management Cooperative, SMC Working Paper Number 6, College of Forest Resources, University of Washington, Seattle.

Fox, T.R., H. L. Allen, T.J. Albaugh, R. Rubilar, and C.A. Carlson (2007) Tree Nutrition and Forest Fertilization of Pine Plantations in the Southern United States. *Southern Journal of Applied Forestry*, 31, 5-11.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

USDA Forest Service (2001) *U.S. Forest Facts and Historical Trends*. FS-696. U.S. Department of Agriculture Forest Service, Washington, D.C. Available online at: <<http://www.fia.fs.fed.us/library/ForestFactsMetric.pdf>>.

Forest Land Remaining Forest Land: Drained Organic Soils

IPCC (2014) *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*, Hiraishi, T., Krug, T., Tanabe, K., Srivastava, N., Baasansuren, J., Fukuda, M. and Troxler, T.G. (eds.). Published: IPCC, Switzerland.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change, H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

STATSGO2 (2016) Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. U.S. General Soil Map (STATSGO2). Available online at <<https://sdmdataaccess.sc.egov.usda.gov>>. Accessed 10 November 2016.

USDA Forest Service (2018) Forest Inventory and Analysis National Program: FIA Data Mart. U.S. Department of Agriculture Forest Service. Washington, DC; 2015. Available online at <<http://apps.fs.fed.us/fiadb-downloads/datamart.html>>. Accessed 1 November 2018.

Land Converted to Forest Land

Birdsey, R. (1996) "Carbon Storage for Major Forest Types and Regions in the Conterminous United States." In R.N. Sampson and D. Hair, (eds.). *Forest and Global Change, Volume 2: Forest Management Opportunities for Mitigating Carbon Emissions*. American Forests. Washington, D.C., 1-26 and 261-379 (appendices 262 and 263).

Brockwell, Peter J., and Richard A. Davis. Introduction to time series and forecasting. Springer, 2016.

Domke, G.M., J.E. Smith, and C.W. Woodall. (2011) Accounting for density reduction and structural loss in standing dead trees: Implications for forest biomass and carbon stock estimates in the United States. *Carbon Balance and Management*. 6:14. Domke, G.M., Perry, C.H., Walters, B.F., Woodall, C.W., Nave, L., Swanston, C. (2017) Toward inventory-based estimates of soil organic carbon in forests of the United States. *Ecological Applications*. 27(4), 1223-1235.

Domke, G.M., Perry, C.H., Walters, B.F., Woodall, C.W., and Smith, J.E. (2016) A framework for estimating litter carbon stocks in forests of the United States. *Science of the Total Environment* 557–558: 469–478.

Domke, G.M., Woodall, C.W., Walters, B.F., Smith, J.E. (2013) From models to measurements: comparing down dead wood carbon stock estimates in the U.S. forest inventory. *PLoS ONE* 8(3): e59949.

Harmon, M.E., C.W. Woodall, B. Fasth, J. Sexton, M. Yatkov. (2011) Differences between standing and downed dead tree wood density reduction factors: A comparison across decay classes and tree species. Res. Paper. NRS-15. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 40 p.

Homer, C., Dewitz, J., Fry, J., Coan, M., Hossain, N., Larson, C., Herold, N., McKerrow, A., VanDriel, J.N., and Wickham, J. (2007) Completion of the 2001 National Land Cover Database for the Conterminous United States. *Photogrammetric Engineering and Remote Sensing*, Vol. 73, No. 4, pp 337-341.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories. The National Greenhouse Gas Inventories Programme*, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Jenkins, J.C., D.C. Chojnacky, L.S. Heath, and R.A. Birdsey (2003) "National-scale biomass estimators for United States tree species." *Forest Science* 49(1):12-35.

Ogle, S.M., M.D. Eve, F.J. Breidt, and K. Paustian (2003) "Uncertainty in estimating land use and management impacts on soil organic carbon storage for U.S. agroecosystems between 1982 and 1997." *Global Change Biology* 9:1521-1542.

Ogle, S.M., F.J. Breidt, and K. Paustian. (2006) "Bias and variance in model results due to spatial scaling of measurements for parameterization in regional assessments." *Global Change Biology* 12:516-523.

Smith, J.E.; Heath, L.S.; Skog, K.E.; Birdsey, R.A. (2006) Methods for calculating forest ecosystem and harvested carbon with standard estimates for forest types of the United States. Gen. Tech. Rep. NE-343. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. 216 p.

USDA Forest Service (2018b) Forest Inventory and Analysis National Program: FIA Data Mart. U.S. Department of Agriculture Forest Service. Washington, D.C. Available online at: <<http://apps.fs.fed.us/fiadb-downloads/datamart.html>>. Accessed on 1 November 2018.

USDA Forest Service (2018c) Forest Inventory and Analysis National Program, FIA library: Field Guides, Methods and Procedures. U.S. Department of Agriculture Forest Service. Washington, D.C. Available online at: <<http://www.fia.fs.fed.us/library/field-guides-methods-proc/>>. Accessed on 1 November 2018.

USDA-NRCS (1997) "National Soil Survey Laboratory Characterization Data," Digital Data, Natural Resources Conservation Service, U.S. Department of Agriculture. Lincoln, NE.

USDA-NRCS (2013) Summary Report: 2010 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. Available online at: <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1167354.pdf>.

USDA-NRCS (2009) Summary Report: 2007 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. Available online at: <http://www.nrcs.usdagov?technical/NRI/2007/2007_NRI_Summary.pdf>.

Woodall, C.W., L.S. Heath, G.M. Domke, and M.C. Nichols (2011a) Methods and equations for estimating aboveground volume, biomass, and carbon for trees in the U.S. forest inventory, 2010. Gen. Tech. Rep. NRS-88. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 30 p.

Woodall, C.W., and V.J. Monleon (2008) Sampling protocol, estimation, and analysis procedures for the down woody materials indicator of the FIA program. Gen. Tech. Rep. NRS-22. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 68 p.

Woodall, C.W., Walters, B.F., Coulston, J.W., D'Amato, A.W., Domke, G.M., Russell, M.B., Sowers, P.A. (2015b) Monitoring network confirms land use change is a substantial component of the forest carbon sink in the eastern United States. *Scientific Reports*. 5: 17028.

Woodall, C.W., Walters, B.F., Oswalt, S.N., Domke, G.M., Toney, C., Gray, A.N. (2013) Biomass and carbon attributes of downed woody materials in forests of the United States. *Forest Ecology and Management* 305: 48-59.

Cropland Remaining Cropland

Armentano, T. V., and E.S. Menges (1986). Patterns of change in the carbon balance of organic soil-wetlands of the temperate zone. *Journal of Ecology* 74: 755-774.

- Brady, N.C. and R.R. Weil (1999) *The Nature and Properties of Soils*. Prentice Hall. Upper Saddle River, NJ, 881.
- Conant, R. T., K. Paustian, and E.T. Elliott (2001). "Grassland management and conversion into grassland: effects on soil carbon." *Ecological Applications* 11: 343-355.
- Brockwell, Peter J., and Richard A. Davis (2016) *Introduction to time series and forecasting*. Springer.
- CTIC (2004) National Crop Residue Management Survey: 1989-2004. Conservation Technology Information Center, Purdue University, Available online at: <<http://www.ctic.purdue.edu/CRM/>>.
- Daly, C., R.P. Neilson, and D.L. Phillips (1994) "A Statistical-Topographic Model for Mapping Climatological Precipitation Over Mountainous Terrain." *Journal of Applied Meteorology* 33:140-158.
- Del Grosso, S.J., W.J. Parton, A.R. Mosier, M.D. Hartman, J. Brenner, D.S. Ojima, and D.S. Schimel (2001) "Simulated Interaction of Carbon Dynamics and Nitrogen Trace Gas Fluxes Using the DAYCENT Model." In *Modeling Carbon and Nitrogen Dynamics for Soil Management*, Schaffer, M., L. Ma, S. Hansen, (eds.). CRC Press, Boca Raton, Florida, pp. 303-332.
- Del Grosso, S.J., S.M. Ogle, W.J. Parton (2011) Soil organic matter cycling and greenhouse gas accounting methodologies, Chapter 1, pp 3-13 DOI: 10.1021/bk-2011-1072.ch001. In: *Understanding Greenhouse Gas Emissions from Agricultural Management*, L. Guo, A. Gunasekara, L. McConnell (eds.). American Chemical Society, Washington, D.C.
- Edmonds, L., R. L. Kellogg, B. Kintzer, L. Knight, C. Lander, J. Lemunyon, D. Meyer, D.C. Moffitt, and J. Schaefer (2003) "Costs associated with development and implementation of Comprehensive Nutrient Management Plans." Part I—Nutrient management, land treatment, manure and wastewater handling and storage, and recordkeeping. Natural Resources Conservation Service, U.S. Department of Agriculture. Available online at: <<http://www.nrcs.usda.gov/technical/land/pubs/cnmp1.html>>.
- Euliss, N., and R. Gleason (2002) Personal communication regarding wetland restoration factor estimates and restoration activity data. Ned Euliss and Robert Gleason of the U.S. Geological Survey, Jamestown, ND, to Stephen Ogle of the National Resource Ecology Laboratory, Fort Collins, CO. August 2002.
- Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and Wickham, J. (2011) Completion of the 2006 National Land Cover Database for the Conterminous United States, PE&RS, Vol. 77(9):858-864.
- Hijmans, R.J., S.E. Cameron, J.L. Parra, P.G. Jones and A. Jarvis (2005) Very high resolution interpolated climate surfaces for global land areas. *International Journal of Climatology* 25: 1965-1978.
- Homer, C., Dewitz, J., Fry, J., Coan, M., Hossain, N., Larson, C., Herold, N., McKerrow, A., VanDriel, J.N., and Wickham, J. (2007) Completion of the 2001 National Land Cover Database for the Conterminous United States. *Photogrammetric Engineering and Remote Sensing*, Vol. 73, No. 4, pp 337-341.
- Homer, C.G., Dewitz, J.A., Yang, L., Jin, S., Danielson, P., Xian, G., Coulston, J., Herold, N.D., Wickham, J.D., and Megown, K. (2015) Completion of the 2011 National Land Cover Database for the conterminous United States-Representing a decade of land cover change information. *Photogrammetric Engineering and Remote Sensing*, v. 81, no. 5, p. 345-354.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.
- IPCC (2003) *Good Practice Guidance for Land Use, Land-Use Change, and Forestry*. The Intergovernmental Panel on Climate Change, National Greenhouse Gas Inventories Programme, J. Penman, et al., eds. August 13, 2004. Available online at: <<http://www.ipcc-nggip.iges.or.jp/public/gpglulucf/gpglulucf.htm>>.
- McGill, W.B., and C.V. Cole (1981) Comparative aspects of cycling of organic C, N, S and P through soil organic matter. *Geoderma* 26:267-286.
- Metherell, A.K., L.A. Harding, C.V. Cole, and W.J. Parton (1993) "CENTURY Soil Organic Matter Model Environment." Agroecosystem version 4.0. Technical documentation, GPSR Tech. Report No. 4, USDA/ARS, Ft. Collins, CO.

- Mesinger, F., G. DiMego, E. Kalnay, K. Mitchell, P. C. Shafran, W. Ebisuzaki, D. Jovic, J. Woollen, E. Rogers, E. H. Berbery, M. B. Ek, Y. Fan, R. Grumbine, W. Higgins, H. Li, Y. Lin, G. Manikin, D. Parrish, and W. Shi (2006) North American regional reanalysis. *Bulletin of the American Meteorological Society* 87:343-360.
- NASS (2004) Agricultural Chemical Usage: 2003 Field Crops Summary. Report AgCh1(04)a. National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, D.C. Available online at: <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agcs0504.pdf>>.
- NASS (1999) Agricultural Chemical Usage: 1998 Field Crops Summary. Report AgCH1(99). National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, DC. Available online at: <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agch0599.pdf>>.
- NASS (1992) Agricultural Chemical Usage: 1991 Field Crops Summary. Report AgCh1(92). National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, D.C. Available online at: <<http://usda.mannlib.cornell.edu/reports/nassr/other/pcu-bb/agch0392.txt>>.
- NRCS (1999) Soil Taxonomy: A basic system of soil classification for making and interpreting soil surveys, 2nd Edition. Agricultural Handbook Number 436, Natural Resources Conservation Service, U.S. Department of Agriculture, Washington, D.C.
- NRCS (1997) "National Soil Survey Laboratory Characterization Data," Digital Data, Natural Resources Conservation Service, U.S. Department of Agriculture. Lincoln, NE.
- NRCS (1981) Land Resource Regions and Major Land Resource Areas of the United States, USDA Agriculture Handbook 296, United States Department of Agriculture, Natural Resources Conservation Service, National Soil Survey Center, Lincoln, NE, pp. 156.
- Ogle, S.M., F.J. Breidt, M. Easter, S. Williams, K. Killian, and K. Paustian (2010) "Scale and uncertainty in modeled soil organic carbon stock changes for U.S. croplands using a process-based model." *Global Change Biology* 16:810-820.
- Ogle, S.M., F.J. Breidt, M. Easter, S. Williams and K. Paustian (2007) "Empirically-Based Uncertainty Associated with Modeling Carbon Sequestration Rates in Soils." *Ecological Modeling* 205:453-463.
- Ogle, S.M., F.J. Breidt, and K. Paustian (2006) "Bias and variance in model results due to spatial scaling of measurements for parameterization in regional assessments." *Global Change Biology* 12:516-523.
- Ogle, S. M., et al. (2005) "Agricultural management impacts on soil organic carbon storage under moist and dry climatic conditions of temperate and tropical regions." *Biogeochemistry* 72: 87-121.
- Ogle, S.M., M.D. Eve, F.J. Breidt, and K. Paustian (2003) "Uncertainty in estimating land use and management impacts on soil organic carbon storage for U.S. agroecosystems between 1982 and 1997." *Global Change Biology* 9:1521-1542.
- Ogle, S., M. Eve, M. Sperrow, F.J. Breidt, and K. Paustian (2002) Agricultural Soil C Emissions, 1990-2001: Documentation to Accompany EPA Inventory Tables. Natural Resources Ecology Laboratory, Fort Collins, CO. Provided in an e-mail from Stephen Ogle, NREL to Barbara Braatz, ICF International. September 23, 2002.
- Parton, W.J., M.D. Hartman, D.S. Ojima, and D.S. Schimel (1998) "DAYCENT: Its Land Surface Submodel: Description and Testing". *Glob. Planet. Chang.* 19: 35-48.
- Parton, W.J., D.S. Ojima, C.V. Cole, and D.S. Schimel (1994) "A General Model for Soil Organic Matter Dynamics: Sensitivity to litter chemistry, texture and management," in Quantitative Modeling of Soil Forming Processes. Special Publication 39, *Soil Science Society of America*, Madison, WI, 147-167.
- Parton, W.J., D.S. Schimel, C.V. Cole, D.S. Ojima (1987) "Analysis of factors controlling soil organic matter levels in Great Plains grasslands." *Soil Science Society of America Journal* 51:1173-1179.
- Parton, W.J., J.W.B. Stewart, C.V. Cole. (1988) "Dynamics of C, N, P, and S in grassland soils: a model." *Biogeochemistry* 5:109-131.
- Paustian, K., et al. (1997a). "Agricultural soils as a sink to mitigate CO₂ emissions." *Soil Use and Management* 13: 230-244.

- Paustian, K., et al. (1997b) Management controls on soil carbon. In *Soil organic matter in temperate agroecosystems: long-term experiments in North America* (Paul E.A., K. Paustian, and C.V. Cole, eds.). Boca Raton, CRC Press, pp. 15-49.
- Potter, C. S., J.T. Randerson, C.B. Fields, P.A. Matson, P.M. Vitousek, H.A. Mooney, and S.A. Klooster (1993) "Terrestrial ecosystem production: a process model based on global satellite and surface data." *Global Biogeochemical Cycles* 7:811-841.
- Potter, C., S. Klooster, A. Huete, and V. Genovese (2007) Terrestrial carbon sinks for the United States predicted from MODIS satellite data and ecosystem modeling. *Earth Interactions* 11, Article No. 13, DOI 10.1175/EI228.1.
- PRISM Climate Group, Oregon State University, <<http://prism.oregonstate.edu>>, created 24 July 2015.
- Soil Survey Staff (2016) State Soil Geographic (STATSGO) Database for State. Natural Resources Conservation Service, United States Department of Agriculture. Available online at: <<http://www.ncgc.nrcs.usda.gov/products/datasets/statsgo/index.html>>.
- Towery, D. (2001) Personal Communication. Dan Towery regarding adjustments to the CTIC (1998) tillage data to reflect long-term trends, Conservation Technology Information Center, West Lafayette, IN, and Marlen Eve, National Resource Ecology Laboratory, Fort Collins, CO. February 2001.
- USDA-ERS (2015) Agricultural Resource Management Survey (ARMS) Farm Financial and Crop Production Practices: Tailored Reports. Available online at: <<https://www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices/>>.
- USDA-ERS (1997) Cropping Practices Survey Data—1995. Economic Research Service, United States Department of Agriculture. Available online at: <<http://www.ers.usda.gov/data/archive/93018/>>.
- USDA-FSA (2015) Conservation Reserve Program Monthly Summary – September 2015. U.S. Department of Agriculture, Farm Service Agency, Washington, D.C. Available online at: <<https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/Conservation/PDF/sep2015summary.pdf>>.
- USDA-NRCS (2015) Summary Report: 2012 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. Available online at: <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd396218.pdf>.
- USDA-NRCS (2000) Digital Data and Summary Report: 1997 National Resources Inventory. Revised December 2000. Resources Inventory Division, Natural Resources Conservation Service, United States Department of Agriculture, Beltsville, MD.
- Zomer RJ, Trabucco A, Bossio DA, van Straaten O, Verchot LV (2008) Climate Change Mitigation: A Spatial Analysis of Global Land Suitability for Clean Development Mechanism Afforestation and Reforestation. *Agric. Ecosystems and Envir.* 126: 67-80.
- Zomer RJ, Bossio DA, Trabucco A, Yuanjie L, Gupta DC & Singh VP (2007) *Trees and Water: Smallholder Agroforestry on Irrigated Lands in Northern India*. Colombo, Sri Lanka: International Water Management Institute. pp 45. (IWMI Research Report 122).

Land Converted to Cropland

- Birdsey, R. (1996) "Carbon Storage for Major Forest Types and Regions in the Conterminous United States." In R.N. Sampson and D. Hair, (eds.). *Forest and Global Change, Volume 2: Forest Management Opportunities for Mitigating Carbon Emissions*. American Forests. Washington, D.C., 1-26 and 261-379 (appendices 262 and 263).
- Brockwell, Peter J., and Richard A. Davis (2016) *Introduction to time series and forecasting*. Springer. Del Grosso, S.J., W.J. Parton, A.R. Mosier, M.D. Hartman, J. Brenner, D.S. Ojima, and D.S. Schimel (2001) "Simulated Interaction of Carbon Dynamics and Nitrogen Trace Gas Fluxes Using the DAYCENT Model." In *Modeling Carbon and Nitrogen Dynamics for Soil Management*, Schaffer, M., L. Ma, S. Hansen, (eds.). CRC Press, Boca Raton, Florida, pp. 303-332.

- Del Grosso, S.J., S.M. Ogle, W.J. Parton (2011) Soil organic matter cycling and greenhouse gas accounting methodologies, Chapter 1, pp 3-13 DOI: 10.1021/bk-2011-1072.ch001. In: Understanding Greenhouse Gas Emissions from Agricultural Management (L. Guo, A. Gunasekara, L. McConnell. Eds.), American Chemical Society, Washington, D.C.
- Del Grosso, S.J., W.J. Parton, A.R. Mosier, M.D. Hartman, J. Brenner, D.S. Ojima, and D.S. Schimel (2001) "Simulated Interaction of Carbon Dynamics and Nitrogen Trace Gas Fluxes Using the DAYCENT Model." In Schaffer, M., L. Ma, S. Hansen, (eds.); Modeling Carbon and Nitrogen Dynamics for Soil Management. CRC Press. Boca Raton, Florida. 303-332.
- Domke, G.M., J.E. Smith, and C.W. Woodall. (2011) Accounting for density reduction and structural loss in standing dead trees: Implications for forest biomass and carbon stock estimates in the United States. *Carbon Balance and Management*. 6:14.
- Domke, G.M., et al. (2013) From models to measurements: comparing down dead wood carbon stock estimates in the U.S. forest inventory. *PLoS ONE* 8(3): e59949.
- Domke, G.M., Perry, C.H., Walters, B.F., Woodall, C.W., and Smith, J.E. (2016) A framework for estimating litter carbon stocks in forests of the United States. *Science of the Total Environment* 557–558: 469–478.
- Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and Wickham, J. (2011) Completion of the 2006 National Land Cover Database for the Conterminous United States, *PE&RS*, Vol. 77(9):858-864.
- Harmon, M.E., C.W. Woodall, B. Fasth, J. Sexton, M. Yatkov. (2011) Differences between standing and downed dead tree wood density reduction factors: A comparison across decay classes and tree species. Res. Paper. NRS-15. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 40 p.
- Homer, C., Dewitz, J., Fry, J., Coan, M., Hossain, N., Larson, C., Herold, N., McKerrow, A., VanDriel, J.N., and Wickham, J. (2007) Completion of the 2001 National Land Cover Database for the Conterminous United States. *Photogrammetric Engineering and Remote Sensing*, Vol. 73, No. 4, pp 337-341.
- Homer, C.G., Dewitz, J.A., Yang, L., Jin, S., Danielson, P., Xian, G., Coulston, J., Herold, N.D., Wickham, J.D., and Megown, K. (2015) Completion of the 2011 National Land Cover Database for the conterminous United States-Representing a decade of land cover change information. *Photogrammetric Engineering and Remote Sensing*, v. 81, no. 5, p. 345-354.
- Houghton, R.A., et al. (1983) "Changes in the carbon content of terrestrial biota and soils between 1860 and 1980: a net release of CO₂ to the atmosphere." *Ecological Monographs* 53: 235-262.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.
- Jenkins, J.C., D.C. Chojnacky, L.S. Heath, and R.A. Birdsey (2003) "National-scale biomass estimators for United States tree species." *Forest Science* 49(1):12-35.
- Metherell, A.K., L.A. Harding, C.V. Cole, and W.J. Parton (1993) "CENTURY Soil Organic Matter Model Environment." Agroecosystem version 4.0. Technical documentation, GPSR Tech. Report No. 4, USDA/ARS, Ft. Collins, CO.
- Ogle, S.M., F.J. Breidt, M. Easter, S. Williams, K. Killian, and K. Paustian (2010) "Scale and uncertainty in modeled soil organic carbon stock changes for U.S. croplands using a process-based model." *Global Change Biology* 16:810-820.
- Ogle, S.M., M.D. Eve, F.J. Breidt, and K. Paustian (2003) "Uncertainty in estimating land use and management impacts on soil organic carbon storage for U.S. agroecosystems between 1982 and 1997." *Global Change Biology* 9:1521-1542.
- Parton, W.J., M.D. Hartman, D.S. Ojima, and D.S. Schimel (1998) "DAYCENT: Its Land Surface Submodel: Description and Testing". *Glob. Planet. Chang.* 19: 35-48.
- Parton, W.J., D.S. Ojima, C.V. Cole, and D.S. Schimel (1994) "A General Model for Soil Organic Matter Dynamics: Sensitivity to litter chemistry, texture and management," in Quantitative Modeling of Soil Forming Processes. Special Publication 39, Soil Science Society of America, Madison, WI, 147-167.

Parton, W.J., D.S. Schimel, C.V. Cole, D.S. Ojima (1987) "Analysis of factors controlling soil organic matter levels in Great Plains grasslands." *Soil Science Society of America Journal* 51:1173-1179.

Parton, W.J., J.W.B. Stewart, C.V. Cole. (1988) "Dynamics of C, N, P, and S in grassland soils: a model." *Biogeochemistry* 5:109-131.

PRISM Climate Group, Oregon State University, <<http://prism.oregonstate.edu>>, created 24 July 2015.

Schimel, D.S. (1995) "Terrestrial ecosystems and the carbon cycle." *Global Change Biology* 1: 77-91.

Smith, J.E.; Heath, L.S.; Skog, K.E.; Birdsey, R.A. (2006) Methods for calculating forest ecosystem and harvested carbon with standard estimates for forest types of the United States. Gen. Tech. Rep. NE-343. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. 216 p.

Tubiello, F. N., et al. (2015) "The Contribution of Agriculture, Forestry and other Land Use activities to Global Warming, 1990-2012." *Global Change Biology* 21:2655-2660.

USDA Forest Service (2018) Forest Inventory and Analysis National Program: FIA Data Mart. U.S. Department of Agriculture Forest Service. Washington, DC; 2015. Available online at <<http://apps.fs.fed.us/fiadb-downloads/datamart.html>>. Accessed 1 November 2018.

USDA-NRCS (2015) Summary Report: 2012 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. Available online at: <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd396218.pdf>.

Woodall, C.W., and V.J. Monleon (2008) Sampling protocol, estimation, and analysis procedures for the down woody materials indicator of the FIA program. Gen. Tech. Rep. NRS-22. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 68 p.

Woodall, C.W., L.S. Heath, G.M. Domke, and M.C. Nichols (2011) Methods and equations for estimating aboveground volume, biomass, and carbon for trees in the U.S. forest inventory, 2010. Gen. Tech. Rep. NRS-88. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 30 p.

Grassland Remaining Grassland: Soil Carbon Stock Changes

Brockwell, Peter J., and Richard A. Davis (2016) Introduction to time series and forecasting. Springer.

Del Grosso, S.J., S.M. Ogle, W.J. Parton (2011) Soil organic matter cycling and greenhouse gas accounting methodologies, Chapter 1, pp 3-13 DOI: 10.1021/bk-2011-1072.ch001. In: Understanding Greenhouse Gas Emissions from Agricultural Management (L. Guo, A. Gunasekara, L. McConnell. Eds.), American Chemical Society, Washington, D.C.

Del Grosso, S.J., W.J. Parton, A.R. Mosier, M.D. Hartman, J. Brenner, D.S. Ojima, and D.S. Schimel (2001) "Simulated Interaction of Carbon Dynamics and Nitrogen Trace Gas Fluxes Using the DAYCENT Model." In Modeling Carbon and Nitrogen Dynamics for Soil Management, Schaffer, M., L. Ma, S. Hansen, (eds.). CRC Press, Boca Raton, Florida, pp. 303-332.

Edmonds, L., R. L. Kellogg, B. Kintzer, L. Knight, C. Lander, J. Lemunyon, D. Meyer, D.C. Moffitt, and J. Schaefer (2003) "Costs associated with development and implementation of Comprehensive Nutrient Management Plans." Part I—Nutrient management, land treatment, manure and wastewater handling and storage, and recordkeeping. Natural Resources Conservation Service, U.S. Department of Agriculture. Available online at: <<http://www.nrcs.usda.gov/technical/land/pubs/cnmp1.html>>.

EPA (1999) Biosolids Generation, Use and Disposal in the United States. Office of Solid Waste, U.S. Environmental Protection Agency. Available online at: <<http://biosolids.policy.net/relatives/18941.PDF>>.

Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and Wickham, J. (2011) Completion of the 2006 National Land Cover Database for the Conterminous United States, PE&RS, Vol. 77(9):858-864.

Homer, C., Dewitz, J., Fry, J., Coan, M., Hossain, N., Larson, C., Herold, N., McKerrow, A., VanDriel, J.N., and Wickham, J. (2007) Completion of the 2001 National Land Cover Database for the Conterminous United States. Photogrammetric Engineering and Remote Sensing, Vol. 73, No. 4, pp 337-341.

Homer, C.G., Dewitz, J.A., Yang, L., Jin, S., Danielson, P., Xian, G., Coulston, J., Herold, N.D., Wickham, J.D., and Megown, K. (2015) Completion of the 2011 National Land Cover Database for the conterminous United States-Representing a decade of land cover change information. *Photogrammetric Engineering and Remote Sensing*, v. 81, no. 5, p. 345-354.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Kellogg, R.L., C.H. Lander, D.C. Moffitt, and N. Gollehon (2000) Manure Nutrients Relative to the Capacity of Cropland and Pastureland to Assimilate Nutrients: Spatial and Temporal Trends for the United States. U.S. Department of Agriculture, Washington, D.C. Publication number nps00-0579.

Metherell, A.K., L.A. Harding, C.V. Cole, and W.J. Parton (1993) "CENTURY Soil Organic Matter Model Environment." Agroecosystem version 4.0. Technical documentation, GPSR Tech. Report No. 4, USDA/ARS, Ft. Collins, CO.

NEBRA (2007) A National Biosolids Regulation, Quality, End Use & Disposal Survey. North East Biosolids and Residuals Association. July 21, 2007.

Nusser, S.M. and J.J. Goebel (1997) The national resources inventory: a long-term multi-resource monitoring programme. *Environmental and Ecological Statistics* 4:181-204.

Ogle, S.M., F.J. Breidt, M. Easter, S. Williams, K. Killian, and K. Paustian (2010) "Scale and uncertainty in modeled soil organic carbon stock changes for U.S. croplands using a process-based model." *Global Change Biology* 16:810-820.

Ogle, S.M., M.D. Eve, F.J. Breidt, and K. Paustian (2003) "Uncertainty in estimating land use and management impacts on soil organic carbon storage for U.S. agroecosystems between 1982 and 1997." *Global Change Biology* 9:1521-1542.

Parton, W.J., D.S. Ojima, C.V. Cole, and D.S. Schimel (1994) "A General Model for Soil Organic Matter Dynamics: Sensitivity to litter chemistry, texture and management," in Quantitative Modeling of Soil Forming Processes. Special Publication 39, *Soil Science Society of America*, Madison, WI, 147-167.

Parton, W.J., D.S. Schimel, C.V. Cole, D.S. Ojima (1987) "Analysis of factors controlling soil organic matter levels in Great Plains grasslands." *Soil Science Society of America Journal* 51:1173-1179.

Parton, W.J., J.W.B. Stewart, C.V. Cole. (1988) "Dynamics of C, N, P, and S in grassland soils: a model." *Biogeochemistry* 5:109-131.

Parton, W.J., M.D. Hartman, D.S. Ojima, and D.S. Schimel (1998) "DAYCENT: Its Land Surface Submodel: Description and Testing". *Glob. Planet. Chang.* 19: 35-48. PRISM Climate Group, Oregon State University, <<http://prism.oregonstate.edu>>, created 24 July 2015.

United States Bureau of Land Management (BLM) (2014) *Rangeland Inventory, Monitoring, and Evaluation Reports*. Bureau of Land Management. U.S. Department of the Interior. Available online at: <http://www.blm.gov/wo/st/en/prog/more/rangeland_management/rangeland_inventory.html>.

USDA-NRCS (2015) Summary Report: 2012 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. Available online at: <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd396218.pdf>.

Grassland Remaining Grassland: Non-CO₂ Emissions from Grassland Fires

Anderson, R.C. Evolution and origin of the Central Grassland of North America: climate, fire and mammalian grazers. *Journal of the Torrey Botanical Society* 133: 626-647.

Andreae, M.O. and P. Merlet (2001) Emission of trace gases and aerosols from biomass burning. *Global Biogeochemical Cycles* 15:955-966.

- Brockwell, Peter J., and Richard A. Davis (2016) *Introduction to time series and forecasting*. Springer.
- Chapin, F.S., S.F. Trainor, O. Huntington, A.L. Lovecraft, E. Zavaleta, D.C. Natcher, A.D. McGuire, J.L. Nelson, L. Ray, M. Calef, N. Fresco, H. Huntington, T.S. Rupp, L. DeWilde, and R.L. Naylor (2008) Increasing wildfires in Alaska's Boreal Forest: Pathways to potential solutions of a wicked problem. *Bioscience* 58:531-540.
- Daubenmire, R. (1968) Ecology of fire in grasslands. *Advances in Ecological Research* 5:209-266.
- Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and Wickham, J. (2011) Completion of the 2006 National Land Cover Database for the Conterminous United States, PE&RS, Vol. 77(9):858-864.
- Homer, C., Dewitz, J., Fry, J., Coan, M., Hossain, N., Larson, C., Herold, N., McKerrow, A., VanDriel, J.N., and Wickham, J. (2007) Completion of the 2001 National Land Cover Database for the Conterminous United States. *Photogrammetric Engineering and Remote Sensing*, Vol. 73, No. 4, pp 337-341.
- Homer, C.G., Dewitz, J.A., Yang, L., Jin, S., Danielson, P., Xian, G., Coulston, J., Herold, N.D., Wickham, J.D., and Megown, K. (2015) Completion of the 2011 National Land Cover Database for the conterminous United States-Representing a decade of land cover change information. *Photogrammetric Engineering and Remote Sensing*, v. 81, no. 5, p. 345-354.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.
- Ogle, S.M., S. Spencer, M. Hartman, L. Buendia, L. Stevens, D. du Toit, J. Witi (2016) "Developing national baseline GHG emissions and analyzing mitigation potentials for agriculture and forestry using an advanced national GHG inventory software system." In *Advances in Agricultural Systems Modeling 6, Synthesis and Modeling of Greenhouse Gas Emissions and Carbon Storage in Agricultural and Forestry Systems to Guide Mitigation and Adaptation*, S. Del Grosso, L.R. Ahuja and W.J. Parton (eds.), American Society of Agriculture, Crop Society of America and Soil Science Society of America, pp. 129-148.
- Nusser, S.M. and J.J. Goebel (1997) The national resources inventory: a long-term multi-resource monitoring programme. *Environmental and Ecological Statistics* 4:181-204.
- USDA-NRCS (2015) Summary Report: 2012 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. Available online at: <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd396218.pdf>.

Land Converted to Grassland

- Asner, G.P., Archer, S., Hughes, R.F., Ansley, R.J. and Wessman, C.A., 2003. Net changes in regional woody vegetation cover and carbon storage in Texas drylands, 1937–1999. *Global Change Biology*, 9(3), pp.316-335.
- Birdsey, R. (1996) "Carbon Storage for Major Forest Types and Regions in the Conterminous United States." In R.N. Sampson and D. Hair, (eds.). *Forest and Global Change, Volume 2: Forest Management Opportunities for Mitigating Carbon Emissions*. American Forests. Washington, D.C., 1-26 and 261-379 (appendices 262 and 263).
- Breshears, D.D., Knapp, A.K., Law, D.J., Smith, M.D., Twidwell, D. and Wonkka, C.L., 2016. Rangeland Responses to Predicted Increases in Drought Extremity. *Rangelands*, 38(4), pp.191-196.
- Brockwell, Peter J., and Richard A. Davis (2016) *Introduction to time series and forecasting*. Springer.
- Del Grosso, S.J., S.M. Ogle, W.J. Parton. (2011) Soil organic matter cycling and greenhouse gas accounting methodologies, Chapter 1, pp 3-13 DOI: 10.1021/bk-2011-1072.ch001. In: *Understanding Greenhouse Gas Emissions from Agricultural Management* (L. Guo, A. Gunasekara, L. McConnell. Eds.), American Chemical Society, Washington, D.C.
- Del Grosso, S.J., W.J. Parton, A.R. Mosier, M.D. Hartman, J. Brenner, D.S. Ojima, and D.S. Schimel (2001) "Simulated Interaction of Carbon Dynamics and Nitrogen Trace Gas Fluxes Using the DAYCENT Model." In *Modeling Carbon and Nitrogen Dynamics for Soil Management* (Schaffer, M., L. Ma, S. Hansen, (eds.). CRC Press, Boca Raton, Florida, pp. 303-332.

- Domke, G.M., J.E. Smith, and C.W. Woodall. (2011) Accounting for density reduction and structural loss in standing dead trees: Implications for forest biomass and carbon stock estimates in the United States. *Carbon Balance and Management*. 6:14.
- Domke, G.M., et al. 2013. From models to measurements: comparing down dead wood carbon stock estimates in the U.S. forest inventory. *PLoS ONE* 8(3): e59949.
- Domke, G.M., Perry, C.H., Walters, B.F., Woodall, C.W., and Smith, J.E. (2016) A framework for estimating litter carbon stocks in forests of the United States. *Science of the Total Environment* 557–558: 469–478.
- Epstein, H.E., Gill, R.A., Paruelo, J.M., Lauenroth, W.K., Jia, G.J. and Burke, I.C., 2002. The relative abundance of three plant functional types in temperate grasslands and shrublands of North and South America: effects of projected climate change. *Journal of Biogeography*, 29(7), pp.875-888.
- Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and Wickham, J. (2011) Completion of the 2006 National Land Cover Database for the Conterminous United States, *PE&RS*, Vol. 77(9):858-864.
- Harmon, M.E., C.W. Woodall, B. Fasth, J. Sexton, M. Yatkov. (2011) Differences between standing and downed dead tree wood density reduction factors: A comparison across decay classes and tree species. Res. Paper. NRS-15. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 40 p.
- Homer, C., Dewitz, J., Fry, J., Coan, M., Hossain, N., Larson, C., Herold, N., McKerrow, A., VanDriel, J.N., and Wickham, J. (2007) Completion of the 2001 National Land Cover Database for the Conterminous United States. *Photogrammetric Engineering and Remote Sensing*, Vol. 73, No. 4, pp 337-341.
- Homer, C.G., Dewitz, J.A., Yang, L., Jin, S., Danielson, P., Xian, G., Coulston, J., Herold, N.D., Wickham, J.D., and Megown, K. (2015) Completion of the 2011 National Land Cover Database for the conterminous United States-Representing a decade of land cover change information. *Photogrammetric Engineering and Remote Sensing*, v. 81, no. 5, p. 345-354.
- Houghton, R.A., et al. (1983) "Changes in the carbon content of terrestrial biota and soils between 1860 and 1980: a net release of CO₂ to the atmosphere." *Ecological Monographs* 53: 235-262.
- Huang, C.Y., Asner, G.P., Martin, R.E., Barger, N.N. and Neff, J.C., 2009. Multiscale analysis of tree cover and aboveground carbon stocks in pinyon–juniper woodlands. *Ecological Applications*, 19(3), pp.668-681.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change, [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.
- Jenkins, J.C., D.C. Chojnacky, L.S. Heath, and R.A. Birdsey (2003) “National-scale biomass estimators for United States tree species.” *Forest Science* 49(1):12-35.
- Jurena, P.N. and Archer, S., (2003). Woody plant establishment and spatial heterogeneity in grasslands. *Ecology*, 84(4), pp.907-919.
- Lenihan, J.M., Drapek, R., Bachelet, D. and Neilson, R.P., (2003). Climate change effects on vegetation distribution, carbon, and fire in California. *Ecological Applications*, 13(6), pp.1667-1681.
- Metherell, A.K., L.A. Harding, C.V. Cole, and W.J. Parton (1993) “CENTURY Soil Organic Matter Model Environment.” Agroecosystem version 4.0. Technical documentation, GPSR Tech. Report No. 4, USDA/ARS, Ft. Collins, CO.
- Ogle, S.M., F.J. Breidt, M. Easter, S. Williams, K. Killian, and K. Paustian (2010) “Scale and uncertainty in modeled soil organic carbon stock changes for U.S. croplands using a process-based model.” *Global Change Biology* 16:810-820.
- Ogle, S.M., M.D. Eve, F.J. Breidt, and K. Paustian (2003) “Uncertainty in estimating land use and management impacts on soil organic carbon storage for U.S. agroecosystems between 1982 and 1997.” *Global Change Biology* 9:1521-1542.

- Parton, W.J., D.S. Ojima, C.V. Cole, and D.S. Schimel (1994) "A General Model for Soil Organic Matter Dynamics: Sensitivity to litter chemistry, texture and management," in Quantitative Modeling of Soil Forming Processes. Special Publication 39, *Soil Science Society of America*, Madison, WI, 147-167.
- Parton, W.J., D.S. Schimel, C.V. Cole, D.S. Ojima (1987) "Analysis of factors controlling soil organic matter levels in Great Plains grasslands." *Soil Science Society of America Journal* 51:1173-1179.
- Parton, W.J., J.W.B. Stewart, C.V. Cole (1988) "Dynamics of C, N, P, and S in grassland soils: a model." *Biogeochemistry* 5:109-131.
- Parton, W.J., M.D. Hartman, D.S. Ojima, and D.S. Schimel (1998) "DAYCENT: Its Land Surface Submodel: Description and Testing". *Glob. Planet. Chang.* 19: 35-48.
- PRISM Climate Group, Oregon State University, <<http://prism.oregonstate.edu>>, created 24 July 2015.
- Schimel, D.S. (1995) "Terrestrial ecosystems and the carbon cycle." *Global Change Biology* 1: 77-91.
- Scholes, R.J. and Archer, S.R., 1997. Tree-grass interactions in savannas 1. *Annual review of Ecology and Systematics*, 28(1), pp.517-544.
- Sims, P.L., Singh, J.S. and Lauenroth, W.K., 1978. The structure and function of ten western North American grasslands: I. Abiotic and vegetational characteristics. *The Journal of Ecology*, pp.251-285.
- Smith, J.E.; Heath, L.S.; Skog, K.E.; Birdsey, R.A. (2006) Methods for calculating forest ecosystem and harvested carbon with standard estimates for forest types of the United States. Gen. Tech. Rep. NE-343. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. 216 p.
- Tarhouni, M., et al. 2016. Measurement of the aboveground biomass of some rangeland species using a digital non-destructive technique. *Botany Letters*, 163(3), pp.281-287.
- Tubiello, F. N., et al. (2015) "The Contribution of Agriculture, Forestry and other Land Use activities to Global Warming, 1990-2012." *Global Change Biology* 21:2655-2660.
- United States Bureau of Land Management (BLM) (2014) *Rangeland Inventory, Monitoring, and Evaluation Reports*. Bureau of Land Management. U.S. Department of the Interior. Available online at: <http://www.blm.gov/wo/st/en/prog/more/rangeland_management/rangeland_inventory.html>.
- USDA Forest Service (2018) Forest Inventory and Analysis National Program: FIA Data Mart. U.S. Department of Agriculture Forest Service. Washington, DC; 2015. Available online at <<http://apps.fs.fed.us/fiadb-downloads/datamart.html>>. Accessed 1 November 2018.
- USDA-NRCS (2015) Summary Report: 2012 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. Available online at: <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd396218.pdf>.
- Woodall, C.W., and V.J. Monleon (2008) Sampling protocol, estimation, and analysis procedures for the down woody materials indicator of the FIA program. Gen. Tech. Rep. NRS-22. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 68 p.
- Woodall, C.W., L.S. Heath, G.M. Domke, and M.C. Nichols. (2011) Methods and equations for estimating aboveground volume, biomass, and carbon for trees in the U.S. forest inventory, 2010. Gen. Tech. Rep. NRS-88. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 30 p.

Wetlands Remaining Wetlands: CO₂, CH₄, and N₂O Emissions from Peatlands Remaining Peatlands

- Apodaca, L. (2011) Email correspondence. Lori Apodaca, Peat Commodity Specialist, USGS and Emily Rowan, ICF International. November.
- Apodaca, L. (2008) E-mail correspondence. Lori Apodaca, Peat Commodity Specialist, USGS and Emily Rowan, ICF International. October and November.

Cleary, J., N. Roulet and T.R. Moore (2005) "Greenhouse gas emissions from Canadian peat extraction, 1990-2000: A life-cycle analysis." *Ambio* 34:456–461.

Division of Geological & Geophysical Surveys (DGGs), Alaska Department of Natural Resources (1993–2015) *Alaska's Mineral Industry Report (1997–2014)*. Alaska Department of Natural Resources, Fairbanks, AK. Available online at <<http://www.dggs.dnr.state.ak.us/pubs/pubs?reqtype=minerals>>.

IPCC (2014) *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*. Hiraishi, T., Krug, T., Tanabe, K., Srivastava, N., Baasansuren, J., Fukuda, M. and Troxler, T.G. (eds.). Published: IPCC, Switzerland.

IPCC (2007) *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report (AR4) of the IPCC*. The Intergovernmental Panel on Climate Change, R.K. Pachauri, A. Resinger (eds.). Geneva, Switzerland.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

Szumigala, D.J. (2011) Phone conversation. Dr. David Szumigala, Division of Geological and Geophysical Surveys, Alaska Department of Natural Resources and Emily Rowan, ICF International. January 18, 2011.

Szumigala, D.J. (2008) Phone conversation. Dr. David Szumigala, Division of Geological and Geophysical Surveys, Alaska Department of Natural Resources and Emily Rowan, ICF International. October 17, 2008.

USGS (1991–2016) *Minerals Yearbook: Peat (1994–2016)*. United States Geological Survey, Reston, VA. Available online at <<http://minerals.usgs.gov/minerals/pubs/commodity/peat/index.html#myb>>.

USGS (2018) *Mineral Commodity Summaries: Peat (2018)*. United States Geological Survey, Reston, VA. Available online at <<http://minerals.usgs.gov/minerals/pubs/mcs/2018/mcs2018.pdf>>.

Wetlands Remaining Coastal Wetlands: Emissions and Removals from Coastal Wetlands Remaining Coastal Wetlands

Bianchi, T. S., Allison, M. A., Zhao, J., Li, X., Comeaux, R. S., Feagin, R. A., & Kulawardhana, R. W. (2013) Historical reconstruction of mangrove expansion in the Gulf of Mexico: linking climate change with carbon sequestration in coastal wetlands. *Estuarine, Coastal and Shelf Science* 119: 7-16.

Byrd, K. B., Ballanti, L. R., Thomas, N. M., Nguyen, D. K., Holmquist, J. R., Simard, M., Windham-Myers, L., Schile, L. M., Parker, V. T., ... and Castaneda-Moya, E. (2017) Biomass/Remote Sensing dataset: 30m resolution tidal marsh biomass samples and remote sensing data for six regions in the conterminous United States: U.S. Geological Survey data release, <https://doi.org/10.5066/F77943K8>.

Byrd, K. B., Ballanti, L., Thomas, N., Nguyen, D., Holmquist, J.R., Simard, M., and Windham-Myers, L. (2018) A remote sensing-based model of tidal marsh aboveground carbon stocks for the conterminous United States. *ISPRS Journal of Photogrammetry and Remote Sensing* 139: 255-271.

Callaway, J. C., Borgnis, E. L., Turner, R. E. & Milan, C. S. (2012a) Carbon sequestration and sediment accretion in San Francisco Bay tidal wetlands. *Estuaries and Coasts* 35(5): 1163-1181.

Callaway, J. C., Borgnis, E. L., Turner, R. E., Milan, C. S., Goodfriend, W., & Richmond, S. (2012b). "Wetland Sediment Accumulation at Corte Madera Marsh and Muzzi Marsh". San Francisco Bay Conservation and Development Commission.

Church, T. M., Sommerfield, C. K., Velinsky, D. J., Point, D., Benoit, C., Amouroux, D. & Donard, O. F. X. (2006). Marsh sediments as records of sedimentation, eutrophication and metal pollution in the urban Delaware Estuary. *Marine Chemistry* 102(1-2): 72-95.

Couvillion, B. R., Barras, J. A., Steyer, G. D., Sleavin, W., Fischer, M., Beck, H., & Heckman, D. (2011). *Land area change in coastal Louisiana (1932 to 2010)* (pp. 1-12). U.S. Department of the Interior, U.S. Geological Survey.

- Couvillion, B.R., Fischer, M.R., Beck, H.J. and Sleavin, W.J. (2016) Spatial Configuration Trends in Coastal Louisiana from 1986 to 2010. *Wetlands* 1-13.
- Craft, C. B., & Richardson, C. J. (1998). Recent and long-term organic soil accretion and nutrient accumulation in the Everglades. *Soil Science Society of America Journal* 62(3): 834-843.
- Crooks, S., Findsen, J., Igusky, K., Orr, M.K. and Brew, D. (2009) *Greenhouse Gas Mitigation Typology Issues Paper: Tidal Wetlands Restoration*. Report by PWA and SAIC to the California Climate Action Reserve.
- Crooks, S., Rybczyk, J., O'Connell, K., Devier, D.L., Poppe, K., Emmett-Mattox, S. (2014) *Coastal Blue Carbon Opportunity Assessment for the Snohomish Estuary: The Climate Benefits of Estuary Restoration*. Report by Environmental Science Associates, Western Washington University, EarthCorps, and Restore America's Estuaries.
- DeLaune, R. D., & White, J. R. (2012). Will coastal wetlands continue to sequester carbon in response to an increase in global sea level?: A case study of the rapidly subsiding Mississippi river deltaic plain. *Climatic Change*, 110(1), 297-314.
- Holmquist, J. R., Windham-Myers, L., Bliss, N., Crooks, S., Morris, J. T., Megonigal, J. P. & Woodrey, M. (2018) Accuracy and Precision of Tidal Wetland Soil Carbon Mapping in the Conterminous United States. *Scientific reports* 8(1): 9478.
- Hu, Z., Lee, J.W., Chandran, K., Kim, S. and Khanal, S.K. (2012) N₂O Emissions from Aquaculture: A Review. *Environmental Science & Technology* 46(12): 6470-6480.
- Hussein, A. H., Rabenhorst, M. C. & Tucker, M. L. (2004) Modeling of carbon sequestration in coastal marsh soils. *Soil Science Society of America Journal* 68(5): 1786-1795.
- IPCC (2000) *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*. Quantifying Uncertainties in Practice, Chapter 6. Penman, J and Kruger, D and Galbally, I and Hiraishi, T and Nyenzi, B and Emmanuel, S and Buendia, L and Hoppaus, R and Martinsen, T and Meijer, J and Miwa, K and Tanabe, K (eds). Institute of Global Environmental Strategies (IGES), on behalf of the Intergovernmental Panel on Climate Change (IPCC): Hayama, Japan.
- IPCC (2003) *Good Practice Guidance for Land Use, Land-Use Change and Forestry*. LUCF Sector Good Practice Guidance, Chapter 3. Jim Penman, Michael Gytarsky, Taka Hiraishi, Thelma Krug, Dina Kruger, Riitta Pipatti, Leandro Buendia, Kyoko Miwa, Todd Ngara, Kiyoto Tanabe and Fabian Wagner (eds). Institute of Global Environmental Strategies (IGES), on behalf of the Intergovernmental Panel on Climate Change (IPCC): Hayama, Japan.
- IPCC (2013) *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*. Hiraishi, T., Krug, T., Tanabe, K., Srivastava, N., Baasansuren, J., Fukuda, M. and Troxler, T.G. (eds.). Published: IPCC, Switzerland.
- Kearney, M. S. & Stevenson, J. C. (1991) Island land loss and marsh vertical accretion rate evidence for historical sea-level changes in Chesapeake Bay. *Journal of Coastal Research* 7(2): 403-415.
- Köster, D., Lichter, J., Lea, P. D., & Nurse, A. (2007). Historical eutrophication in a river–estuary complex in mid-coast Maine. *Ecological Applications* 17(3): 765-778.
- Lu, M & Megonigal, J.P. (2017) Final Report for RAE Baseline Assessment Project. Memo to Silvestrum Climate Associates by Smithsonian Environmental Research Center, Maryland.
- Lynch, J. C., *Sedimentation and nutrient accumulation in mangrove ecosystems of the Gulf of Mexico*, M.S. thesis, Univ. of Southwestern Louisiana, Lafayette, La., 1989.
- Marchio, D.A., Savarese, M., Bovard, B., & Mitsch, W.J. (2016) Carbon sequestration and sedimentation in mangrove swamps influenced by hydrogeomorphic conditions and urbanization in Southwest Florida. *Forests* 7: 116-135.
- McCombs, J.W., Herold, N.D., Burkhalter, S.G. and Robinson C.J., (2016) Accuracy Assessment of NOAA Coastal Change Analysis Program 2006-2010 Land Cover and Land Cover Change Data. *Photogrammetric Engineering & Remote Sensing*. 82:711-718.
- Merrill, J. Z. 1999. Tidal Freshwater Marshes as Nutrient Sinks: particulate Nutrient Burial and Denitrification.

Ph.D. Dissertation, University of Maryland, College Park, MD, 342pp.

National Marine Fisheries Service (2016) *Fisheries of the United States, 2015*. U.S. Department of Commerce, NOAA Current Fisheries Statistics No. 2015.

Noe, G. B., Hupp, C. R., Bernhardt, C. E., & Krauss, K. W. (2016). Contemporary deposition and long-term accumulation of sediment and nutrients by tidal freshwater forested wetlands impacted by sea level rise. *Estuaries and Coasts* 39(4): 1006-1019.

Orson, R. A., Simpson, R. L., & Good, R. E. (1990). Rates of sediment accumulation in a tidal freshwater marsh. *Journal of Sedimentary Research* 60(6): 859-869.

Orson, R., Warren, R. & Niering, W. (1998) Interpreting sea level rise and rates of vertical marsh accretion in a southern New England tidal salt marsh. *Estuarine, Coastal and Shelf Science* 47(4): 419-429.

Roman, C., Peck, J., Allen, J., King, J. & Appleby, P. (1997) Accretion of a New England (USA) salt marsh in response to inlet migration, storms, and sea-level rise. *Estuarine, Coastal and Shelf Science* 45(6): 717-727.

Villa, J. A. & Mitsch W. J. (2015) "Carbon sequestration in different wetland plant communities of Southwest Florida". *International Journal for Biodiversity Science, Ecosystems Services and Management* 11: 17-28

Weston, N. B., Neubauer, S. C., Velinsky, D. J., & Vile, M. A. (2014) Net ecosystem carbon exchange and the greenhouse gas balance of tidal marshes along an estuarine salinity gradient. *Biogeochemistry* 120: 163-189.

Land Converted to Wetlands

Bianchi, T. S., Allison, M. A., Zhao, J., Li, X., Comeaux, R. S., Feagin, R. A., & Kulawardhana, R. W. (2013) Historical reconstruction of mangrove expansion in the Gulf of Mexico: linking climate change with carbon sequestration in coastal wetlands. *Estuarine, Coastal and Shelf Science* 119: 7-16.

Byrd, K. B., Ballanti, L. R., Thomas, N. M., Nguyen, D. K., Holmquist, J. R., Simard, M., Windham-Myers, L., Schile, L. M., Parker, V. T., ... and Castaneda-Moya, E. (2017) Biomass/Remote Sensing dataset: 30m resolution tidal marsh biomass samples and remote sensing data for six regions in the conterminous United States: U.S. Geological Survey data release, <https://doi.org/10.5066/F77943K8>.

Byrd, K. B., Ballanti, L., Thomas, N., Nguyen, D., Holmquist, J.R., Simard, M., and Windham-Myers, L. (2018) A remote sensing-based model of tidal marsh aboveground carbon stocks for the conterminous United States. *ISPRS Journal of Photogrammetry and Remote Sensing* 139: 255-271.

Callaway, J. C., Borgnis, E. L., Turner, R. E. & Milan, C. S. (2012a) Carbon sequestration and sediment accretion in San Francisco Bay tidal wetlands. *Estuaries and Coasts* 35(5): 1163-1181.

Callaway, J. C., Borgnis, E. L., Turner, R. E., Milan, C. S., Goodfriend, W., & Richmond, S. (2012b). "Wetland Sediment Accumulation at Corte Madera Marsh and Muzzi Marsh". San Francisco Bay Conservation and Development Commission.

Church, T. M., Sommerfield, C. K., Velinsky, D. J., Point, D., Benoit, C., Amouroux, D. & Donard, O. F. X. (2006). Marsh sediments as records of sedimentation, eutrophication and metal pollution in the urban Delaware Estuary. *Marine Chemistry* 102(1-2): 72-95.

Craft, C. B., & Richardson, C. J. (1998). Recent and long-term organic soil accretion and nutrient accumulation in the Everglades. *Soil Science Society of America Journal* 62(3): 834-843.

Crooks, S., Rybczyk, J., O'Connell, K., Devier, D.L., Poppe, K., Emmett-Mattox, S. (2014) *Coastal Blue Carbon Opportunity Assessment for the Snohomish Estuary: The Climate Benefits of Estuary Restoration*. Report by Environmental Science Associates, Western Washington University, EarthCorps, and Restore America's Estuaries.

Hussein, A. H., Rabenhorst, M. C. & Tucker, M. L. (2004) Modeling of carbon sequestration in coastal marsh soils. *Soil Science Society of America Journal* 68(5): 1786-1795.

IPCC (2000) *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*. Quantifying Uncertainties in Practice, Chapter 6. Penman, J and Kruger, D and Galbally, I and Hiraishi, T and Nyenzi, B and Emmanuel, S and Buendia, L and Hoppaus, R and Martinsen, T and Meijer, J and Miwa, K and Tanabe, K (eds). Institute of Global Environmental Strategies (IGES), on behalf of the Intergovernmental Panel on Climate Change (IPCC): Hayama, Japan.

IPCC (2003) *Good Practice Guidance for Land Use, Land-Use Change and Forestry*. LUCF Sector Good Practice Guidance, Chapter 3. Jim Penman, Michael Gytarsky, Taka Hiraishi, Thelma Krug, Dina Kruger, Riitta Pipatti, Leandro Buendia, Kyoko Miwa, Todd Ngara, Kiyoto Tanabe and Fabian Wagner (eds). Institute of Global Environmental Strategies (IGES), on behalf of the Intergovernmental Panel on Climate Change (IPCC): Hayama, Japan.

Kearney, M. S. & Stevenson, J. C. (1991) Island land loss and marsh vertical accretion rate evidence for historical sea-level changes in Chesapeake Bay. *Journal of Coastal Research* 7(2): 403-415.

Köster, D., Lichter, J., Lea, P. D., & Nurse, A. (2007). Historical eutrophication in a river–estuary complex in mid-coast Maine. *Ecological Applications* 17(3): 765-778.

Lu, M & Megonigal, J.P. (2017) Final Report for RAE Baseline Assessment Project. Memo to Silvestrum Climate Associates by Smithsonian Environmental Research Center, Maryland.

Lynch, J. C., *Sedimentation and nutrient accumulation in mangrove ecosystems of the Gulf of Mexico*, M.S. thesis, Univ. of Southwestern Louisiana, Lafayette, La., 1989.

Marchio, D.A., Savarese, M., Bovard, B., & Mitsch, W.J. (2016) Carbon sequestration and sedimentation in mangrove swamps influenced by hydrogeomorphic conditions and urbanization in Southwest Florida. *Forests* 7: 116-135.

McCombs, J.W., Herold, N.D., Burkhalter, S.G. and Robinson C.J., (2016) Accuracy Assessment of NOAA Coastal Change Analysis Program 2006-2010 Land Cover and Land Cover Change Data. *Photogrammetric Engineering & Remote Sensing*. 82:711-718.

Merrill, J. Z. 1999. Tidal Freshwater Marshes as Nutrient Sinks: particulate Nutrient Burial and Denitrification. Ph.D. Dissertation, University of Maryland, College Park, MD, 342pp.

Noe, G. B., Hupp, C. R., Bernhardt, C. E., & Krauss, K. W. (2016) Contemporary deposition and long-term accumulation of sediment and nutrients by tidal freshwater forested wetlands impacted by sea level rise. *Estuaries and Coasts* 39(4): 1006-1019.

Orson, R. A., Simpson, R. L., & Good, R. E. (1990) Rates of sediment accumulation in a tidal freshwater marsh. *Journal of Sedimentary Research* 60(6): 859-869.

Orson, R., Warren, R. & Niering, W. (1998) Interpreting sea level rise and rates of vertical marsh accretion in a southern New England tidal salt marsh. *Estuarine, Coastal and Shelf Science* 47(4): 419-429.

Roman, C., Peck, J., Allen, J., King, J. & Appleby, P. (1997) Accretion of a New England (USA) salt marsh in response to inlet migration, storms, and sea-level rise. *Estuarine, Coastal and Shelf Science* 45(6): 717-727.

Villa, J. A. & Mitsch W. J. (2015) "Carbon sequestration in different wetland plant communities of Southwest Florida". *International Journal for Biodiversity Science, Ecosystems Services and Management* 11: 17-28.

Weston, N. B., Neubauer, S. C., Velinsky, D. J., & Vile, M. A. (2014) Net ecosystem carbon exchange and the greenhouse gas balance of tidal marshes along an estuarine salinity gradient. *Biogeochemistry* 120: 163-189.

Settlements Remaining Settlements: Soil Carbon Stock Changes

Armentano, T. V., and E.S. Menges (1986). Patterns of change in the carbon balance of organic soil-wetlands of the temperate zone. *Journal of Ecology* 74: 755-774.

Brady, N.C. and R.R. Weil (1999) *The Nature and Properties of Soils*. Prentice Hall. Upper Saddle River, NJ, 881.

- Brockwell, Peter J., and Richard A. Davis (2016) *Introduction to time series and forecasting*. Springer.
- Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and J. Wickham. (2011) Completion of the 2006 National Land Cover Database for the Conterminous United States, *PE&RS* 77(9):858-864.
- Homer, C., J. Dewitz, J. Fry, M. Coan, N. Hossain, C. Larson, N. Herold, A. McKerrow, J.N. VanDriel and J. Wickham. (2007) Completion of the 2001 National Land Cover Database for the Conterminous United States. *Photogrammetric Engineering and Remote Sensing* 73(4): 337-341.
- Homer, C.G., Dewitz, J.A., Yang, L., Jin, S., Danielson, P., Xian, G., Coulston, J., Herold, N.D., Wickham, J.D., and Megown, K. (2015) Completion of the 2011 National Land Cover Database for the conterminous United States-Representing a decade of land cover change information. *Photogrammetric Engineering and Remote Sensing* 81(5):345-354.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- NRCS (1999) *Soil Taxonomy: A basic system of soil classification for making and interpreting soil surveys*, 2nd Edition. Agricultural Handbook Number 436, Natural Resources Conservation Service, U.S. Department of Agriculture, Washington, D.C.
- Nusser, S.M. and J.J. Goebel (1997) The national resources inventory: a long-term multi-resource monitoring programme. *Environmental and Ecological Statistics* 4:181-204.
- Ogle, S.M., M.D. Eve, F.J. Breidt, and K. Paustian (2003) Uncertainty in estimating land use and management impacts on soil organic carbon storage for U.S. agroecosystems between 1982 and 1997. *Global Change Biology* 9:1521-1542.
- Soil Survey Staff (2011) *State Soil Geographic (STATSGO) Database for State*. Natural Resources Conservation Service, United States Department of Agriculture. Available online at: <<http://www.ncgc.nrcs.usda.gov/products/datasets/statsgo/index.html>>.
- USDA-NRCS (2015) *Summary Report: 2012 National Resources Inventory*. Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd396218.pdf>.

Settlements Remaining Settlements: Changes in Carbon Stocks in Settlement Trees

- deVries, R.E. (1987) *A Preliminary Investigation of the Growth and Longevity of Trees in Central Park*. M.S. thesis, Rutgers University, New Brunswick, NJ.
- Fleming, L.E. (1988) *Growth Estimation of Street Trees in Central New Jersey*. M.S. thesis, Rutgers University, New Brunswick, NJ.
- Frelich, L.E. (1992) *Predicting Dimensional Relationships for Twin Cities Shade Trees*. University of Minnesota, Department of Forest Resources, St. Paul, MN, p. 33.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- MRLC (2013) *National Land Cover Database 2001 (NLCD2001)*. Available online at: <<http://www.mrlc.gov/nlcd2001.php>>. Accessed August 2013.
- Nowak, D.J. (1986) *Silvics of an Urban Tree Species: Norway maple (Acer platanoides L.)*. M.S. thesis, College of Environmental Science and Forestry, State University of New York, Syracuse, NY.
- Nowak, D.J. (1994) *Atmospheric carbon dioxide reduction by Chicago's urban forest*. In: *Chicago's Urban Forest Ecosystem: Results of the Chicago Urban Forest Climate Project*. E.G. McPherson, D.J. Nowak, and R.A. Rowntree (eds.). General Technical Report NE-186. U.S. Department of Agriculture Forest Service, Radnor, PA. pp. 83–94.

- Nowak, D.J. (2012) Contrasting natural regeneration and tree planting in 14 North American cities. *Urban Forestry and Urban Greening*. 11: 374– 382.
- Nowak, D.J. and D.E. Crane (2002) Carbon storage and sequestration by urban trees in the United States. *Environmental Pollution* 116(3):381–389.
- Nowak, D.J. and E. Greenfield (2010) Evaluating the National Land Cover Database tree canopy and impervious cover estimates across the conterminous United States: A comparison with photo-interpreted estimates. *Environmental Management*. 46: 378-390.
- Nowak, D.J. and E.J. Greenfield (2018a) U.S. urban forest statistics, values and projections. *Journal of Forestry*. 116(2):164–177
- Nowak, D.J. and E.J. Greenfield (2018b) Declining urban and community tree cover in the United States. *Urban Forestry and Urban Greening*. 32:32-55.
- Nowak, D.J., D.E. Crane, J.C. Stevens, and M. Ibarra (2002) Brooklyn’s Urban Forest. General Technical Report NE-290. U.S. Department of Agriculture Forest Service, Newtown Square, PA.
- Nowak, D.J., R.E. Hoehn, D.E. Crane, J.C. Stevens, J.T. Walton, and J. Bond (2008) A ground-based method of assessing urban forest structure and ecosystem services. *Arboric. Urb. For.* 34(6): 347-358.
- Nowak, D.J., E.J. Greenfield, R.E. Hoehn, and E. Lapoint (2013) Carbon storage and sequestration by trees in urban and community areas of the United States.” *Environmental Pollution* 178: 229-236.
- Nowak, D.J. A.R. Bodine, R.E. Hoehn, C.B. Edgar, D.R. Hartel, T.W. Lister, T.J. Brandeis (2016) Austin’s Urban Forest, 2014. USDA Forest Service, Northern Research Station Resources Bulletin. NRS-100. Newtown Square, PA. 55 p.
- Nowak, D.J. A.R. Bodine, R.E. Hoehn, C.B. Edgar, G. Riley, D.R. Hartel, K.J. Dooley, S.M. Stanton, M.A. Hatfield, T.J. Brandeis, T.W. Lister (2017) Houston’s Urban Forest, 2015. USDA Forest Service, Southern Research Station Resources Bulletin. SRS-211. Newtown Square, PA. 91 p.
- Smith, W.B. and S.R. Shifley (1984) Diameter Growth, Survival, and Volume Estimates for Trees in Indiana and Illinois. Research Paper NC-257. North Central Forest Experiment Station, U.S. Department of Agriculture Forest Service, St. Paul, MN.
- U.S. Department of Interior (2018) National Land Cover Database 2011 (NLCD2011). Accessed online August 16, 2018. Available online at: <https://www.mrlc.gov/nlcd11_leg.php>.

Settlements Remaining Settlements: N₂O Emissions from Soils

- Brockwell, Peter J., and Richard A. Davis (2016) Introduction to time series and forecasting. Springer.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- Ruddy B.C., D.L. Lorenz, and D.K. Mueller (2006) *County-level estimates of nutrient inputs to the land surface of the conterminous United States, 1982-2001*. Scientific Investigations Report 2006-5012. U.S. Department of the Interior.
- Soil Survey Staff (2016) State Soil Geographic (STATSGO) Database for State. Natural Resources Conservation Service, United States Department of Agriculture. Available online at: <<http://www.ncgc.nrcs.usda.gov/products/datasets/statsgo/index.html>>.
- USDA-NRCS (2015) *Summary Report: 2012 National Resources Inventory*. Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd396218.pdf>.

Settlements Remaining Settlements: Changes in Yard Trimmings and Food Scrap Carbon Stocks in Landfills

Barlaz, M.A. (2008) “Re: Corrections to Previously Published Carbon Storage Factors.” Memorandum to Randall Freed, ICF International. February 28, 2008.

Barlaz, M.A. (2005) “Decomposition of Leaves in Simulated Landfill.” Letter report to Randall Freed, ICF Consulting. June 29, 2005.

Barlaz, M.A. (1998) “Carbon Storage during Biodegradation of Municipal Solid Waste Components in Laboratory-Scale Landfills.” *Global Biogeochemical Cycles* 12:373–380.

De la Cruz, F.B. and M.A. Barlaz (2010) “Estimation of Waste Component Specific Landfill Decay Rates Using Laboratory-Scale Decomposition Data” *Environmental Science & Technology* 44:4722–4728.

Eleazer, W.E., W.S. Odle, Y. Wang, and M.A. Barlaz (1997) “Biodegradability of Municipal Solid Waste Components in Laboratory-Scale Landfills.” *Environmental Science & Technology* 31:911–917.

EPA (2018) *Advancing Sustainable Materials Management: Facts and Figures 2015*. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C. Available online at <<https://www.epa.gov/smm/advancing-sustainable-materials-management-facts-and-figures-report>>.

EPA (2016) *Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures*. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C. Available online at <<https://archive.epa.gov/epawaste/nonhaz/municipal/web/html/msw99.html>>.

EPA (1995) *Compilation of Air Pollutant Emission Factors*. U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC. AP-42 Fifth Edition. Available online at <<http://www3.epa.gov/ttnchie1/ap42/>>.

EPA (1991) *Characterization of Municipal Solid Waste in the United States: 1990 Update*. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C. EPA/530-SW-90-042.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.

IPCC (2003) *Good Practice Guidance for Land Use, Land-Use Change, and Forestry*. The Intergovernmental Panel on Climate Change, National Greenhouse Gas Inventories Programme, J. Penman et al. (eds.). Available online at <<http://www.ipcc-nggip.iges.or.jp/public/gpglulucf/gpglulucf.htm>>.

Oshins, C. and D. Block (2000) “Feedstock Composition at Composting Sites.” *Biocycle* 41(9):31–34.

Tchobanoglous, G., H. Theisen, and S.A. Vigil (1993) *Integrated Solid Waste Management, 1st edition*. McGraw-Hill, NY. Cited by Barlaz (1998) “Carbon Storage during Biodegradation of Municipal Solid Waste Components in Laboratory-Scale Landfills.” *Global Biogeochemical Cycles* 12:373–380.

Land Converted to Settlements

Birdsey, R. (1996) “Carbon Storage for Major Forest Types and Regions in the Conterminous United States.” In R.N. Sampson and D. Hair, (eds.). *Forest and Global Change, Volume 2: Forest Management Opportunities for Mitigating Carbon Emissions*. American Forests. Washington, D.C., 1-26 and 261-379 (appendices 262 and 263).

Brockwell, Peter J., and Richard A. Davis (2016) *Introduction to time series and forecasting*. Springer. Domke, G.M., Perry, C.H., Walters, B.F., Woodall, C.W., and Smith, J.E. (2016) A framework for estimating litter carbon stocks in forests of the United States. *Science of the Total Environment* 557–558: 469–478.

Domke, G.M., J.E. Smith, and C.W. Woodall. (2011) Accounting for density reduction and structural loss in standing dead trees: Implications for forest biomass and carbon stock estimates in the United States. *Carbon Balance and Management*. 6:14.

- Domke, G.M., Woodall, C.W., Walters, B.F., Smith, J.E. (2013) From models to measurements: comparing down dead wood carbon stock estimates in the U.S. forest inventory. *PLoS ONE* 8(3): e59949.
- Domke, G.M., Perry, C.H., Walters, B.F., Woodall, C.W., and Smith, J.E. (2016) A framework for estimating litter carbon stocks in forests of the United States. *Science of the Total Environment* 557–558: 469–478.
- Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and Wickham, J. (2011) Completion of the 2006 National Land Cover Database for the Conterminous United States, PE&RS, Vol. 77(9):858-864.
- Harmon, M.E., C.W. Woodall, B. Fasth, J. Sexton, M. Yatkov. (2011) Differences between standing and downed dead tree wood density reduction factors: A comparison across decay classes and tree species. Res. Paper. NRS-15. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 40 p.
- Homer, C., Dewitz, J., Fry, J., Coan, M., Hossain, N., Larson, C., Herold, N., McKerrow, A., VanDriel, J.N., and Wickham, J. (2007) Completion of the 2001 National Land Cover Database for the Conterminous United States. *Photogrammetric Engineering and Remote Sensing*, Vol. 73, No. 4, pp 337-341.
- Homer, C.G., Dewitz, J.A., Yang, L., Jin, S., Danielson, P., Xian, G., Coulston, J., Herold, N.D., Wickham, J.D., and Megown, K. (2015) Completion of the 2011 National Land Cover Database for the conterminous United States-Representing a decade of land cover change information. *Photogrammetric Engineering and Remote Sensing*, v. 81, no. 5, p. 345-354.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change, H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan.
- Jenkins, J.C., D.C. Chojnacky, L.S. Heath, and R.A. Birdsey (2003) “National-scale biomass estimators for United States tree species.” *Forest Science* 49(1):12-35.
- Ogle, S.M., M.D. Eve, F.J. Breidt, and K. Paustian (2003) “Uncertainty in estimating land use and management impacts on soil organic carbon storage for U.S. agroecosystems between 1982 and 1997.” *Global Change Biology* 9:1521-1542.
- Ogle, S.M., F.J. Breidt, and K. Paustian (2006) “Bias and variance in model results due to spatial scaling of measurements for parameterization in regional assessments.” *Global Change Biology* 12:516-523.
- Schimel, D.S. (1995) "Terrestrial ecosystems and the carbon cycle." *Global Change Biology* 1: 77-91.
- Smith, J.E.; Heath, L.S.; Skog, K.E.; Birdsey, R.A. (2006) Methods for calculating forest ecosystem and harvested carbon with standard estimates for forest types of the United States. Gen. Tech. Rep. NE-343. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. 216 p.
- Tubiello, F. N., et al. (2015). "The Contribution of Agriculture, Forestry and other Land Use activities to Global Warming, 1990-2012." *Global Change Biology* 21:2655-2660.
- USDA Forest Service (2018) Forest Inventory and Analysis National Program: FIA Data Mart. U.S. Department of Agriculture Forest Service. Washington, DC; 2015. Available online at <<http://apps.fs.fed.us/fiadb-downloads/datamart.html>>. Accessed 1 November 2018.
- USDA-NRCS (2015) Summary Report: 2012 National Resources Inventory, Natural Resources Conservation Service, Washington, D.C., and Center for Survey Statistics and Methodology, Iowa State University, Ames, Iowa. <http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcseprd396218.pdf>.
- USDA-NRCS (1997) “National Soil Survey Laboratory Characterization Data,” Digital Data, Natural Resources Conservation Service, U.S. Department of Agriculture. Lincoln, NE.
- Woodall, C.W., L.S. Heath, G.M. Domke, and M.C. Nichols. (2011) Methods and equations for estimating aboveground volume, biomass, and carbon for trees in the U.S. forest inventory, 2010. Gen. Tech. Rep. NRS-88. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 30 p.
- Woodall, C.W., and V.J. Monleon (2008) Sampling protocol, estimation, and analysis procedures for the down woody materials indicator of the FIA program. Gen. Tech. Rep. NRS-22. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 68 p.

Waste

Landfills

40 CFR Part 60, Subpart WWW (2005) Standards of Performance for Municipal Solid Waste Landfills, 60.750--60.759, Code of Federal Regulations, Title 40. Available online at: http://www.access.gpo.gov/nara/cfr/waisidx_05/40cfr60_05.html.

40 CFR Part 258, Subtitle D of RCRA (2012) Criteria for Municipal Solid Waste Landfills, 258.1—258.75, Code of Federal Regulations, Title 40. Available online at: <https://www.ecfr.gov/cgi-bin/text-idx?node=pt40.25.258>.

BioCycle (2010) "The State of Garbage in America" By L. Arsova, R. Van Haaren, N. Goldstein, S. Kaufman, and N. Themelis. *BioCycle*. December 2010. Available online at: <https://www.biocycle.net/2010/10/26/the-state-of-garbage-in-america-4/>.

BioCycle (2006) "The State of Garbage in America" By N. Goldstein, S. Kaufman, N. Themelis, and J. Thompson Jr. *BioCycle*. April 2006. Available online at: <https://www.biocycle.net/2006/04/21/the-state-of-garbage-in-america-2/>.

Bronstein, K., Coburn, J., and R. Schmeltz (2012) "Understanding the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks and Mandatory GHG Reporting Program for Landfills: Methodologies, Uncertainties, Improvements and Deferrals." Prepared for the U.S. EPA International Emissions Inventory Conference, August 2012, Tampa, Florida. Available online at: <http://www.epa.gov/ttnchie1/conference/ei20/session3/kbronstein.pdf>.

Czepiel, P., B. Mosher, P. Crill, and R. Harriss (1996) "Quantifying the Effect of Oxidation on Landfill Methane Emissions." *Journal of Geophysical Research*, 101(D11):16721-16730.

EIA (2007) Voluntary Greenhouse Gas Reports for EIA Form 1605B (Reporting Year 2006). Available online at: <ftp://ftp.eia.doe.gov/pub/oiaf/1605/cdrom/>.

EPA (2018a) Landfill Methane Outreach Program (LMOP). 2018 Landfill and Project Level Data. September 2018. Available online at: <https://www.epa.gov/lmop/landfill-gas-energy-project-data>.

EPA (2018b) Greenhouse Gas Reporting Program (GHGRP). 2018 Envirofacts. Subpart HH: Municipal Solid Waste Landfills and Subpart TT: Industrial Waste Landfills. Available online at: <http://www.epa.gov/enviro/facts/ghg/search.html>.

EPA (2018c) Advancing Sustainable Materials Management: Facts and Figures 2015. July 2018. Available online at: https://www.epa.gov/sites/production/files/2018-07/documents/smm_2015_tables_and_figures_07252018_fnl_508_0.pdf.

EPA (2016a) Industrial and Construction and Demolition Landfills. Available online at: <https://www.epa.gov/landfills/industrial-and-construction-and-demolition-cd-landfills>.

EPA (2016b) *Landfill Gas-to-Energy Project Database*. Landfill Methane and Outreach Program. August 2015.

EPA (2015a) Greenhouse Gas Reporting Program (GHGRP). 2015 Envirofacts. Subpart HH: Municipal Solid Waste Landfills. Available online at: <http://www.epa.gov/enviro/facts/ghg/search.html>.

EPA (2015b) Advancing Sustainable Materials Management: Facts and Figures 2013. June 2015. Available online at: https://www.epa.gov/sites/production/files/2015-09/documents/2013_advncng_smm_rpt.pdf.

EPA (2008) *Compilation of Air Pollution Emission Factors, Publication AP-42*, Draft Section 2.4 Municipal Solid Waste Landfills. October 2008.

EPA (1993) *Anthropogenic Methane Emissions in the United States, Estimates for 1990: Report to Congress*, U.S. Environmental Protection Agency, Office of Air and Radiation. Washington, D.C. EPA/430-R-93-003. April 1993.

EPA (1988) *National Survey of Solid Waste (Municipal) Landfill Facilities*, U.S. Environmental Protection Agency. Washington, D.C. EPA/530-SW-88-011. September 1988.

EREF (The Environmental Research & Education Foundation) (2016). *Municipal Solid Waste Management in the United States: 2010 & 2013*.

ERG (2018) Draft Production Data Supplied by ERG for 1990-2017 for Pulp and Paper, Fruits and Vegetables, and Meat. August.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Mancinelli, R. and C. McKay (1985) "Methane-Oxidizing Bacteria in Sanitary Landfills." *Proc. First Symposium on Biotechnical Advances in Processing Municipal Wastes for Fuels and Chemicals*, Minneapolis, MN, 437-450. August.

RTI (2018a) Methodological changes to the scale-up factor used to estimate emissions from municipal solid waste landfills in the Inventory. Memorandum prepared by K. Bronstein and M. McGrath for R. Schmeltz (EPA). In progress.

RTI (2018b) Comparison of industrial waste data reported under Subpart TT and the Solid Waste chapter of the GHG Inventory. Memorandum prepared by K. Bronstein, B. Jackson, and M. McGrath for R. Schmeltz (EPA). In progress.

RTI (2017) Methodological changes to the methane emissions from municipal solid waste landfills as reflected in the public review draft of the 1990-2015 Inventory. Memorandum prepared by K. Bronstein and M. McGrath for R. Schmeltz (EPA). March 31, 2017.

RTI (2013) Review of State of Garbage data used in the U.S. Non-CO₂ Greenhouse Gas Inventory for Landfills. Memorandum prepared by K. Weitz and K. Bronstein (RTI) for R. Schmeltz (EPA). November 25, 2013.

RTI (2011) Updated Research on Methane Oxidation in Landfills. Memorandum prepared by K. Weitz (RTI) for R. Schmeltz (EPA). January 14, 2011.

Shin, D. (2014) *Generation and Disposition of Municipal Solid Waste (MSW) in the United States – A National Survey*. Master of Science thesis submitted to the Department of Earth and Environmental Engineering, Foundation School of Engineering and Applied Science, Columbia University. January 3, 2014. Available online at: <http://www.seas.columbia.edu/earth/wtert/sofos/Dolly_Shin_Thesis.pdf>.

U.S. Census Bureau (2018) *Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017*. Available online at <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2017_PEPANNRES&prodType=table>.

Waste Business Journal (WBJ) (2016) *Directory of Waste Processing & Disposal Sites 2016*.

WBJ (2010) *Directory of Waste Processing & Disposal Sites 2010*.

Wastewater Treatment

AF&PA (2016) "2016 AF&PA Sustainability Report: Advancing U.S. Paper and Wood Products Industry Sustainability Performance." American Forest & Paper Association. Available online at: <http://afandpa.org/docs/default-source/sust-toolkit/af-amp-pa-2016-sustainability-report_final.pdf?sfvrsn=2> Accessed May 2017.

AF&PA (2014) "2014 AF&PA Sustainability Report." American Forest & Paper Association. Available online at: <http://afandpa.org/docs/default-source/sust-toolkit/2014_sustainabilityreport_final.pdf?sfvrsn=2>. Accessed June 2017.

Ahn et al. (2010) N₂O Emissions from Activated Sludge Processes, 2008-2009: Results of a National Monitoring Survey in the United States. *Environ. Sci. Technol.* 44: 4505-4511.

Beecher et al. (2007) "A National Biosolids Regulation, Quality, End Use & Disposal Survey, Preliminary Report." Northeast Biosolids and Residuals Association, April 14, 2007.

Beer Institute (2011) Brewers Almanac. Available online at: <<http://www.beerinstitute.org/multimedia/brewers-almanac/>>.

Benyahia, F., M. Abdulkarim, A. Embaby, and M. Rao. (2006) Refinery Wastewater Treatment: A true Technological Challenge. Presented at the Seventh Annual U.A.E. University Research Conference.

BIER (2017) Beverage Industry Environmental Roundtable. 2016 Trends and Observations. Available online at: <<https://www.bieroundtable.com/benchmarking-coeu>>. Accessed April 2018.

Brewers Association (2018) Statistics: Number of Breweries. Available online at: <<https://www.brewersassociation.org/statistics/number-of-breweries/>>. Accessed July 2018.

Brewers Association (2017). 2016 Sustainability Benchmarking Update. Available online at: <<https://www.brewersassociation.org/best-practices/sustainability/sustainability-benchmarking-tools>>. Accessed April 2018.

Brewers Association (2016a) 2015 Sustainability Benchmarking Report. Available online at: <<https://www.brewersassociation.org/best-practices/sustainability/sustainability-benchmarking-tools>>. Accessed March 2018.

Brewers Association (2016b) Wastewater Management Guidance Manual. Available online at: <<https://www.brewersassociation.org/educational-publications/wastewater-management-guidance-manual>>. Accessed September 2017.

Climate Action Reserve (CAR) (2011) Landfill Project Protocol V4.0, June 2011. Available online at: <<http://www.climateactionreserve.org/how/protocols/us-landfill/>>.

Chandran, K. (2012) Greenhouse Nitrogen Emissions from Wastewater Treatment Operation Phase I: Molecular Level Through Whole Reactor Level Characterization. WERF Report U4R07.

Cooper (2018) Email correspondence. Geoff Cooper, Renewable Fuels Association to Kara Edquist, ERG. "Wet Mill vs. Dry Mill Ethanol Production." May 18, 2018.

DOE (2013) U.S. Department of Energy Bioenergy Technologies Office. Biofuels Basics. Available online at: <<http://energy.gov/eere/bioenergy/biofuels-basics>>. Accessed September 2013.

Donovan (1996) Siting an Ethanol Plant in the Northeast. C.T. Donovan Associates, Inc. Report presented to Northeast Regional Biomass Program (NRBP). (April). Available online at: <<http://www.nrbp.org/pdfs/pub09.pdf>>. Accessed October 2006.

EIA (2018) Energy Information Administration. U.S. Refinery and Blender Net Production of Crude Oil and Petroleum Products (Thousand Barrels). Available online at: <https://www.eia.gov/dnav/pet/pet_pnp_refp_dc_nus_mbbbl_m.htm>. Accessed May 2018.

EPA (2013) U.S. Environmental Protection Agency. *Report on the Performance of Secondary Treatment Technology*. EPA-821-R-13-001. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. March 2013. Available online at: <https://www.epa.gov/sites/production/files/2015-11/documents/npdes_secondary_treatment_report_march2013.pdf>.

EPA (2012) U.S. Environmental Protection Agency. Clean Watersheds Needs Survey 2012 – Report to Congress. U.S. Environmental Protection Agency, Office of Wastewater Management. Washington, D.C. Available online at: <<https://www.epa.gov/cwns/clean-watersheds-needs-survey-cwns-2012-report-and-data#access>>. Accessed February 2016.

EPA (2008a) U.S. Environmental Protection Agency. Municipal Nutrient Removal Technologies Reference Document: Volume 2 – Appendices. U.S. Environmental Protection Agency, Office of Wastewater Management. Washington, D.C.

EPA (2008b) U.S. Environmental Protection Agency. Clean Watersheds Needs Survey 2008 – Report to Congress. U.S. Environmental Protection Agency, Office of Wastewater Management. Washington, D.C. Available online at: <<https://www.epa.gov/cwns/clean-watersheds-needs-survey-cwns-2008-report-and-data>>. Accessed December 2015.

EPA (2004) U.S. Environmental Protection Agency. Clean Watersheds Needs Survey 2004 – Report to Congress. U.S. Environmental Protection Agency, Office of Wastewater Management. Washington, D.C.

EPA (2002) U.S. Environmental Protection Agency. Development Document for the Proposed Effluent Limitations Guidelines and Standards for the Meat and Poultry Products Industry Point Source Category (40 CFR 432). EPA-821-B-01-007. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. January 2002.

EPA (2000) U.S. Environmental Protection Agency. Clean Watersheds Needs Survey 2000 - Report to Congress. Office of Wastewater Management, U.S. Environmental Protection Agency. Washington, D.C. Available online at: <<https://www.epa.gov/cwns/clean-watersheds-needs-survey-cwns-2000-report-and-data>>. Accessed July 2007.

EPA (1999) U.S. Environmental Protection Agency. Biosolids Generation, Use and Disposal in the United States. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency. Washington, D.C. EPA530-R-99-009. September 1999.

EPA (1998) U.S. Environmental Protection Agency. “AP-42 Compilation of Air Pollutant Emission Factors.” Chapter 2.4, Table 2.4-3, page 2.4-13. Available online at: <<http://www.epa.gov/ttn/chief/ap42/ch02/final/c02s04.pdf>>.

EPA (1997a) U.S. Environmental Protection Agency. Estimates of Global Greenhouse Gas Emissions from Industrial and Domestic Wastewater Treatment. EPA-600/R-97-091. Office of Policy, Planning, and Evaluation, U.S. Environmental Protection Agency. Washington, D.C. September 1997.

EPA (1997b) U.S. Environmental Protection Agency. Supplemental Technical Development Document for Effluent Guidelines and Standards (Subparts B & E). EPA-821-R-97-011. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. October 1997.

EPA (1996) U.S. Environmental Protection Agency. 1996 Clean Water Needs Survey Report to Congress. Assessment of Needs for Publicly Owned Wastewater Treatment Facilities, Correction of Combined Sewer Overflows, and Management of Storm Water and Nonpoint Source Pollution in the United States. Office of Wastewater Management, U.S. Environmental Protection Agency. Washington, D.C.

EPA (1993a) U.S. Environmental Protection Agency, "Anthropogenic Methane Emissions in the U.S.: Estimates for 1990, Report to Congress." Office of Air and Radiation, Washington, DC. April 1993.

EPA (1993b) U.S. Environmental Protection Agency. Development Document for the Proposed Effluent Limitations Guidelines and Standards for the Pulp, Paper and Paperboard Point Source Category. EPA-821-R-93-019. Office of Water, U.S. Environmental Protection Agency. Washington, D.C. October 1993.

EPA (1993c) Standards for the Use and Disposal of Sewage Sludge. 40 CFR Part 503.

EPA (1992) U.S. Environmental Protection Agency. Clean Watersheds Needs Survey 1992 – Report to Congress. Office of Wastewater Management, U.S. Environmental Protection Agency. Washington, D.C.

EPA (1975) U.S. Environmental Protection Agency. Development Document for Interim Final and Proposed Effluent Limitations Guidelines and New Source Performance Standards for the Fruits, Vegetables, and Specialties Segment of the Canned and Preserved Fruits and Vegetables Point Source Category. United States Environmental Protection Agency, Office of Water. EPA-440/1-75-046. Washington D.C. October 1975.

EPA (1974) U.S. Environmental Protection Agency. Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Apple, Citrus, and Potato Processing Segment of the Canned and Preserved Fruits and Vegetables Point Source Category. Office of Water, U.S. Environmental Protection Agency, Washington, D.C. EPA-440/1-74-027-a. March 1974.

ERG (2018a) Updates to Domestic Wastewater BOD Generation per Capita. August 2018.

ERG (2018b) Inclusion of Wastewater Treatment Emissions from Breweries. July 2018.

ERG (2016) Revised Memorandum: Recommended Improvements to the 1990-2015 Wastewater Greenhouse Gas Inventory. November 2016.

ERG (2013a) Revisions to Pulp and Paper Wastewater Inventory. October 2013.

ERG (2013b) Revisions to the Petroleum Refinery Wastewater Inventory. October 2013.

- ERG (2008) Planned Revisions of the Industrial Wastewater Inventory Emission Estimates for the 1990-2007 Inventory. August 10, 2008.
- ERG (2006) Memorandum: Assessment of Greenhouse Gas Emissions from Wastewater Treatment of U.S. Ethanol Production Wastewaters. Prepared for Melissa Weitz, EPA. 10 October 2006.
- FAO (2018a) FAOSTAT-Forestry Database. Available online at: <<http://faostat3.fao.org/home/index.html#DOWNLOAD>>. Accessed May 2018, August 2018.
- FAO (2018b) “Pulp and Paper Capacities Report.” United States. From 1998 – 2003, 2000 – 2005, 2001 – 2006, 2002 – 2007, 2003 – 2008, 2010 – 2015, 2011 – 2016, 2012 – 2017, 2013 – 2018, 2014 – 2019, 2015 – 2020, and 2016 – 2021 reports. Available online at: <<http://www.fao.org/forestry/statistics/81757/en/>> Accessed August 2018.
- FAO (2018c) FAOSTAT-Food Balance Sheets. Available online at: <<http://faostat3.fao.org/home/index.html#DOWNLOAD>>. Accessed May 2018.
- Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers. (2004) Recommended Standards for Wastewater Facilities (Ten-State Standards).
- IPCC (2014) *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*. [Hiraishi, T., Krug, T., Tanabe, K., Srivastava, N., Baasansuren, J., Fukuda, M. and Troxler, T.G. (eds.)]. Published: IPCC, Switzerland.
- IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.
- Leverenz, H.L., G. Tchobanoglous, and J.L. Darby (2010) “Evaluation of Greenhouse Gas Emissions from Septic Systems”. Water Environment Research Foundation. Alexandria, VA.
- Malmberg, B. (2018) *Draft Pulp and Paper Information for Revision of EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks, Waste Chapter*. National Council for Air and Stream Improvement, Inc. Prepared for Rachel Schmeltz, EPA. June 13, 2018.
- McFarland (2001) *Biosolids Engineering*, New York: McGraw-Hill, p. 2.12.
- Merrick (1998) Wastewater Treatment Options for the Biomass-to-Ethanol Process. Report presented to National Renewable Energy Laboratory (NREL). Merrick & Company. Subcontract No. AXE-8-18020-01. October 22, 1998.
- Metcalf & Eddy, Inc. (2014) *Wastewater Engineering: Treatment and Resource Recovery*, 5th ed. McGraw Hill Publishing.
- Metcalf & Eddy, Inc. (2003) *Wastewater Engineering: Treatment, Disposal and Reuse*, 4th ed. McGraw Hill Publishing.
- Nemerow, N.L. and A. Dasgupta (1991) *Industrial and Hazardous Waste Treatment*. Van Nostrand Reinhold. NY. ISBN 0-442-31934-7.
- NRBP (2001) Northeast Regional Biomass Program. An Ethanol Production Guidebook for Northeast States. Washington, D.C. (May 3). Available online at: <<http://www.nrbp.org/pdfs/pub26.pdf>>. Accessed October 2006.
- Rendleman, C.M. and Shapouri, H. (2007) *New Technologies in Ethanol Production*. USDA Agricultural Economic Report Number 842.
- Ruocco (2006a) Email correspondence. Dr. Joe Ruocco, Phoenix Bio-Systems to Sarah Holman, ERG. “Capacity of Bio-Methanators (Dry Milling).” October 6, 2006.
- Ruocco (2006b) Email correspondence. Dr. Joe Ruocco, Phoenix Bio-Systems to Sarah Holman, ERG. “Capacity of Bio-Methanators (Wet Milling).” October 16, 2006.
- Scheehle, E.A., and Doorn, M.R. (2001) “Improvements to the U.S. Wastewater Methane and Nitrous Oxide Emissions Estimate.” July 2001.

Stier, J. (2018) Personal communications between John Stier, Brewers Association Sustainability Mentor and Amie Aguiar, ERG. Multiple dates.

Sullivan (SCS Engineers) (2010) The Importance of Landfill Gas Capture and Utilization in the U.S. Presented to SWICS, April 6, 2010. Available online at:

<http://www.scsengineers.com/Papers/Sullivan_Importance_of_LFG_Capture_and_Utilization_in_the_US.pdf>.

Sullivan (SCS Engineers) (2007) Current MSW Industry Position and State of the Practice on Methane Destruction Efficiency in Flares, Turbines, and Engines. Presented to Solid Waste Industry for Climate Solutions (SWICS). July 2007. Available online at:

<http://www.scsengineers.com/Papers/Sullivan_LFG_Destruction_Efficiency_White_Paper.pdf>.

TTB (2018) Alcohol and Tobacco Tax and Trade Bureau. Beer Statistics. Available online at:

<<https://www.ttb.gov/beer/beer-stats.shtml>>. Accessed May 2018.

UNFCCC (2012) CDM Methodological tool, Project emissions from flaring (Version 02.0.0). EB 68 Report. Annex 15. Available online at: <http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-06-v1.pdf/history_view>.

U.S. Census Bureau (2018) International Database. Available online at:

<<https://www.census.gov/population/international/data/idb/informationGateway.php>>. Accessed May 2018.

U.S. Census Bureau (2015) “American Housing Survey.” Table 1A-4: Selected Equipment and Plumbing--All Housing Units. From 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, and 2009 reports. Table C-04-AO Plumbing, Water, and Sewage Disposal--All Occupied Units. From 2011, 2013, and 2015 reports. Available online at <<http://www.census.gov/programs-surveys/ahs/data.html>>. Accessed May 2018.

USDA (2018a) U.S. Department of Agriculture. National Agricultural Statistics Service. Washington, D.C.

Available online at: <http://www.nass.usda.gov/Publications/Ag_Statistics/index.asp> and <<https://quickstats.nass.usda.gov/>>. Accessed May 2018.

USDA (2018b) U.S. Department of Agriculture. Economic Research Service. Nutrient Availability. Washington D.C. Available online at:

<http://www.ers.usda.gov/datafiles/Food_Availabilty_Per_Capita_Data_System/Nutrient_Availability/nutrients.xls>. Accessed May 2018.

USDA (2018c) U.S. Department of Agriculture. National Agricultural Statistics Service. Vegetables 2017 Summary. Available online at: <http://usda.mannlib.cornell.edu/usda/current/VegeSumm/VegeSumm-02-22-2017_revision.pdf>. Accessed May 2018.

U.S. Poultry (2006) Email correspondence. John Starkey, USPOULTRY to D. Bartram, ERG. 30 August 2006.

White and Johnson (2003) White, P.J. and Johnson, L.A. Editors. Corn: Chemistry and Technology. 2nd ed. AACC Monograph Series. American Association of Cereal Chemists. St. Paul, MN.

World Bank (1999) Pollution Prevention and Abatement Handbook 1998, Toward Cleaner Production. The International Bank for Reconstruction and Development, The World Bank, Washington, D.C. ISBN 0-8213-3638-X.

Composting

BioCycle (2010) *The State of Garbage in America*. Prepared by Rob van Haaren, Nickolas Themelis and Nora Goldstein. Available online at <http://www.biocycle.net/images/art/1010/bc101016_s.pdf>.

Cornell Waste Management Institute (2007) *The Science of Composting*. Available online at

<<http://cwmi.css.cornell.edu/chapter1.pdf>>.

EPA (2018) *Advancing Sustainable Materials Management: 2015 Tables and Figures*. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Available online at

<https://www.epa.gov/sites/production/files/2018-07/documents/smm_2015_tables_and_figures_07252018_fnl_508_0.pdf>.

EPA (2016) *Advancing Sustainable Materials Management: Facts and Figures 2014*. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Available online at <https://www.epa.gov/sites/production/files/2016-11/documents/2014_smm_tablesfigures_508.pdf>.

EPA (2014) *Municipal Solid Waste in the United States: 2012 Facts and Figures*. Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Available online at <http://epa.gov/epawaste/nonhaz/municipal/pubs/2012_msw_dat_tbls.pdf>.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. Volume 5: Waste, Chapter 4: Biological Treatment of Solid Waste, Table 4.1. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change, H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.). Hayama, Kanagawa, Japan. Available online at <http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/5_Volume5/V5_4_CH4_Bio_Treat.pdf>.

Institute for Local Self-Reliance (ILSR) (2014). *State of Composting in the US: What, Why, Where & How*. Available at <<http://ilsr.org/wp-content/uploads/2014/07/state-of-composting-in-us.pdf>>.

U.S. Census Bureau (2018) Population Estimates: Vintage 2017 Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico, April 1, 2010 to July 1, 2017. Available online at <<https://www2.census.gov/programs-surveys/popest/tables/2010-2017/state/totals/nst-est2017-01.xlsx>>.

U.S. Census Bureau (2017) Population Estimates: Vintage 2016 Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico, April 1, 2010 to July 1, 2016. Available online at <<https://www2.census.gov/programs-surveys/popest/tables/2010-2016/state/totals/nst-est2016-01.xlsx>>.

U.S. Census Bureau (2016) Population Estimates: Vintage 2015 Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico, April 1, 2010 to July 1, 2015. Available online at <<http://www.census.gov/popest/data/national/totals/2015/index.html>>.

U.S. Composting Council (2010) *Yard Trimmings Bans: Impact and Support*. Prepared by Stuart Buckner, Executive Director, U.S., Composting Council. Available online at <<http://recyclingorganizations.org/webinars/RONA-YT-Ban-impacts-and-support-8.19.pdf>>.

Waste Incineration

RTI (2009) Updated Hospital/Medical/Infectious Waste Incinerator (HMIWI) Inventory Database. Memo dated July 6, 2009. Available online at: <<https://nepis.epa.gov/Exe/ZyPDF.cgi/P1009ZW6.PDF?Dockey=P1009ZW6.pdf>>.

Waste Sources of Precursor Greenhouse Gas Emissions

EPA (2018) “1970 - 2017 Average annual emissions, all criteria pollutants in MS Excel.” National Emissions Inventory (NEI) Air Pollutant Emissions Trends Data. Office of Air Quality Planning and Standards, March 2018. Available online at: <<https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>>.

EPA (2003) Email correspondence containing preliminary ambient air pollutant data. Office of Air Pollution and the Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. December 22, 2003.

Recalculations and Improvements

Byrd, K. B., Ballanti, L. R., Thomas, N. M., Nguyen, D. K., Holmquist, J. R., Simard, M., Windham-Myers, L., Schile, L. M., Parker, V. T., and Castaneda-Moya, E. (2017) Biomass/Remote Sensing dataset: 30m resolution tidal marsh biomass samples and remote sensing data for six regions in the conterminous United States: U.S. Geological Survey data release, <https://doi.org/10.5066/F77943K8>.

Byrd, K. B., Ballanti, L., Thomas, N., Nguyen, D., Holmquist, J.R., Simard, M., and Windham-Myers, L. (2018) A remote sensing-based model of tidal marsh aboveground carbon stocks for the conterminous United States. *ISPRS Journal of Photogrammetry and Remote Sensing* 139: 255-271.

DrillingInfo (2018) July 2018 Download. DI Desktop® DrillingInfo, Inc.

EIA (2019) *Monthly Energy Review, February 2019*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0035(2019/02).

EIA (2018) *Monthly Energy Review, February 2018*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. DOE/EIA-0035(2018/02).

EIA (2017) *International Energy Statistics 1980-2014*. Energy Information Administration, U.S. Department of Energy. Washington, D.C. Available online at: <<https://www.eia.gov/beta/international/>>.

EPA (2018) Acid Rain Program Dataset 1996-2017. Office of Air and Radiation, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Washington, D.C.

EPA (1997) Compilation of Air Pollutant Emission Factors, AP-42. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency. Research Triangle Park, NC. October 1997.

Homer, C.G., Dewitz, J.A., Yang, L., Jin, S., Danielson, P., Xian, G., Coulston, J., Herold, N.D., Wickham, J.D., and Megown, K. (2015) Completion of the 2011 National Land Cover Database for the conterminous United States-Representing a decade of land cover change information. *Photogrammetric Engineering and Remote Sensing*, v. 81, no. 5, p. 345-354.

IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. The National Greenhouse Gas Inventories Programme, The Intergovernmental Panel on Climate Change. [H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.)]. Hayama, Kanagawa, Japan.

Lu, M & Megonigal, J.P. (2017) Final Report for RAE Baseline Assessment Project. Memo to Silvestrum Climate Associates by Smithsonian Environmental Research Center, Maryland.

Ruefenacht, B., M.V. Finco, M.D. Nelson, R. Czaplewski, E.H. Helmer, J.A. Blackard, G.R. Holden, A.J. Lister, D. Salajanu, D. Weyermann, K. Winterberger (2008) Conterminous U.S. and Alaska Forest Type Mapping Using Forest Inventory and Analysis. USDA Forest Service - Forest Inventory and Analysis Program & Remote Sensing Applications Center. Available online at: <http://data.fs.usda.gov/geodata/rastergateway/forest_type/>. Accessed 8 September 2015.

USDA Forest Service (2018) Forest Inventory and Analysis National Program: Program Features. U.S. Department of Agriculture Forest Service. Washington, D.C. Available online at: <<http://fia.fs.fed.us/program-features/>>. Accessed 1 November 2018.