

## Resources: Impacts of Agricultural Conservation Practices on Soil Health and Water Quality in Minnesota

West Central MN We Are Water

Minnesota Humanities Center; University of Minnesota Morris; CURE (Clean Up Our River Environment); Stevens Soil & Water Conservation District  
Southwest Regional and Sustainable Development Partnership  
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### Soil Health Information:

- **The Role of Healthy Soil:** Soil Health | NRCS Soils.  
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>
- **Managing Soil Health:** Soil Health Management | NRCS Soils.  
<https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/mgmt/>
- **Examining Soil Health Perceptions** | Soil Health Nexus.  
[https://soilhealthnexus.org/files/2019/06/soilhealthnexus-Examining-Soil-Health-Perceptions\\_FINAL.pdf](https://soilhealthnexus.org/files/2019/06/soilhealthnexus-Examining-Soil-Health-Perceptions_FINAL.pdf)
- **Soil Health Case Studies** | RSDP (2018, 2020)  
<https://conservancy.umn.edu/handle/11299/201784https://www.sfa-mn.org/wp-content/uploads/2020/03/2020-Case-Studies-Draft-FINAL.pdf>

### Water Quality Information:

- **The Agricultural BMPs Handbook for Minnesota** | MN Department of Agriculture, Clean Water Land and Legacy Amendment.
  - **2012, First Edition:** Miller, T. P. , J. R. Peterson, C. F. Lenhart, and Y. Nomura. 2012. The Agricultural BMP Handbook for Minnesota. Minnesota Department of Agriculture. <https://www.leg.mn.gov/docs/2013/other/130089.pdf>
  - **2017, Second Edition:** Lenhart, C., Gordon, B., Peterson, J., Eshenaur, W., Gifford, L., Wilson, B., Stamper, J., Krider, L., and Utt, N. 2017. Agricultural BMP Handbook for Minnesota, 2nd Edition. St. Paul, MN: Minnesota Department of Agriculture. <https://bbe.umn.edu/sites/bbe.umn.edu/files/agricultural-best-management-practices-handbook-for-minnesota-second-edition.pdf>
- **Minnesota Digital Water Research Library** <https://wrl.mnpals.net>

- **Minnesota Agricultural Water Resource Center & Webinars.** Available on Facebook at <https://www.facebook.com/MinnesotaAgriculturalWaterResourceCenter> or their website <https://mawrc.org/events/>

#### Minnesota Best Management Practices:

- **Best Management Practices (BMPs)** | Minnesota Department of Agriculture. <https://www.mda.state.mn.us/pesticide-fertilizer/best-management-practices-bmps>.
  - MN BMPs for nitrogen fertilizer, pesticides, turfgrass, potatoes, pollinator habitat and pest control without pesticides
- **Crop-Specific Needs** | UMN Extension <https://extension.umn.edu/nutrient-management/crop-specific-needs>.

#### Top Three Management Practices:

##### Cover Crops:

- **Cover Crops** | Sustainable Agriculture Research and Education <https://www.sare.org/Learning-Center/Topic-Rooms/Cover-Crops>
- **Minnesota Cover Crop Research.** University of Minnesota Office of Soil Health. <https://mosh.umn.edu/management/minnesota-cover-crop-research>

##### Conservation Tillage:

- **On-farm Comparison: Conservation Tillage Systems.** UMN Extension. <https://extension.umn.edu/soil-management-and-health/farm-comparison-conservation-tillage-systems>
- **Reduce Wind Erosion for Long Term Profitability.** UMN Extension. <https://extension.umn.edu/soil-management-and-health/reduce-wind-erosion-long-term-profitability>

##### Integrated Grazing:

- **“Farming with Well-Managed Grazing & Continuous Living Cover Enhances Soil Health & Addresses Climate Change,”** Land Stewardship Project. [https://landstewardshipproject.org/repository/1/3241/clc\\_mrg\\_climate\\_change\\_lsp\\_bd\\_6\\_11\\_20.pdf](https://landstewardshipproject.org/repository/1/3241/clc_mrg_climate_change_lsp_bd_6_11_20.pdf)
- **Integrating Livestock and Crops: Improving Soil, Solving Problems, Increasing Income** | ATTRA. <https://attra.ncat.org/viewhtml/?id=481#1>