

Wellhead Protection Reference Links

Source Water Protection: <https://www.nirpc.org/wp-content/uploads/2016/12/sourcewaterprotection.pdf>

A Template for Preparing Wellhead Protection Plans for Municipal Wells (WI DNR).
<https://dnr.wi.gov/files/PDF/pubs/dg/DG0053.pdf>

Michigan Wellhead Protection Program Guide: https://protectyourwater.net/files/2021/12/deq-wb-dwehs-swpu-whpguidebook_256483_7.pdf

Source Water Contacts in EPA's Regional Office: <https://www.epa.gov/sourcewaterprotection/source-water-contacts-epas-regional-offices#region4>

Representative Values of Hydraulic Properties: http://www.aqtesolv.com/aquifer-tests/aquifer_properties.htm

Contaminant Fate and Transport - EPA TCE Report: <https://www.epa.gov/sites/default/files/2015-06/documents/nbsect5.pdf>

Principles of groundwater flow: <https://web.viu.ca/earle/geol304/geol-304-c.pdf>

Groundwater Transmissivity Calculator: <https://www.lmnoeng.com/Groundwater/transmissivity.php>

Estimation of the Recharge Area Contributing Water to a Pumped Well In a Glacial-Drift, River-Valley Aquifer: <https://pubs.usgs.gov/wsp/2338/report.pdf>

Determining Groundwater Flow Directions: <https://books.gw-project.org/hydrogeologic-properties-of-earth-materials-and-principles-of-groundwater-flow/chapter/determining-groundwater-flow-directions/>

Estimating Areas Contributing Recharge to Wells - Lessons from Previous Studies (USGS):
<https://water.usgs.gov/ogw/pubs/Circ1174/circ1174.pdf>

Learning Module: Ground-Water Hydrology- Constructing a Potentiometric Profile:
[https://serc.carleton.edu/woburn/student-modules/hydrology/potent-profile.html#:~:text=Vertical%20hydraulic%20gradients%20are%20computed,screens%20\(see%20digram%20below\).](https://serc.carleton.edu/woburn/student-modules/hydrology/potent-profile.html#:~:text=Vertical%20hydraulic%20gradients%20are%20computed,screens%20(see%20digram%20below).)

Groundwater Flow and Solute Transport:
https://www.enviro.wiki/index.php?title=Groundwater_Flow_and_Solute_Transport

Basics of Pump-and-Treat Ground-Water Remediation Technology:
<https://semspub.epa.gov/work/11/174485.pdf>

Wellhead Protection Area (WHPA) Model (USEPA): <https://www.epa.gov/water-research/wellhead-protection-area-whpa-model>

Drinking Water Mapping Application to Protect Source Waters (DWMAPS) USEPA:
<https://www.epa.gov/sourcewaterprotection/drinking-water-mapping-application-protect-source-waters-dwmaps>

Assess, Plan, and Protect Source Water (USEPA): <https://www.epa.gov/sourcewaterprotection/assess-plan-and-protect-source-water>

Source Water Protection (USEPA): <https://www.epa.gov/sourcewaterprotection>

Resources for Source Water Protection (USEPA):

<https://www.epa.gov/sourcewaterprotection/resources-source-water-protection#tab-3>

Simulation of Ground-Water Flow and Areas Contributing Ground Water to Production Wells, Cadillac, Michigan (USGS): https://pubs.usgs.gov/sir/2004/5175/MIsir2004-5175_report.pdf

Wellhead protection plan Battle Creek MI: <https://www.bcwater.org/wp-content/uploads/2020/03/City-of-BC%E2%80%9393Wellhead-Protection-Plan-2019.pdf>

METHODS FOR THE DELINEATION OF WELLHEAD PROTECTION AREAS (WHPAs):

<http://www.wrds.uwyo.edu/wrds/deq/whp/whpappd.html>

Sample wellhead protection ordinances and guidance

<http://www.wrds.uwyo.edu/wrds/deq/whp/whpappl-0.html>

<https://www.avcog.org/DocumentCenter/View/48/Model-Wellhead-Protection-Ordinance-PDF?bidId=>

<https://www.in.gov/idem/cleanwater/information-about/groundwater-monitoring-and-source-water-protection/wellhead-protection-program/local-wellhead-protection-ordinances/>

<https://www.epa.gov/nps/urban-runoff-model-ordinances-source-water-protection>

<https://www.lawrencevillega.org/DocumentCenter/View/201/Article-IX---Wellhead-Protection-Ordinance-PDF>