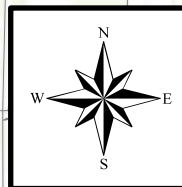


NE3115512

Time-of-travel (TOT) lines were created for each municipal well using the three dimensional numerical groundwater model MODFLOW. This model is based on the best known geologic, water level, and pumping information available. A number of model scenarios were run to examine the various potential capture zones for the wells. A composite capture zone, the area encompassing all modeled scenarios, was used to delineate the City's Wellhead Protection (WHP) area as it provides an adequate buffer to account for seasonal changes and natural variability in the aquifer. Additionally, property boundaries, section lines, and water bodies were used to draw the WHP boundaries to allow for easier land management and identification.

Wellhead Protection Area Boundary



G-086093
97515
Well 5 (95-1)

G-028273
34994
Well 4 (63-1)

G-156272
201688
Well 6 (09-1)

- 0-1 yr TOT
- 1-2 yr TOT
- 2-10 yr TOT
- 10-20 yr TOT
- WHP Boundary
- Composite Capture Area (20 yr)

0 0.75 1.5 3 4.5 6 Miles

Wahoo
SAUNDERS COUNTY, NE
Modeled by LRE Water
Approved by Nebraska Department
of Environment and Energy,
Jan 2022

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