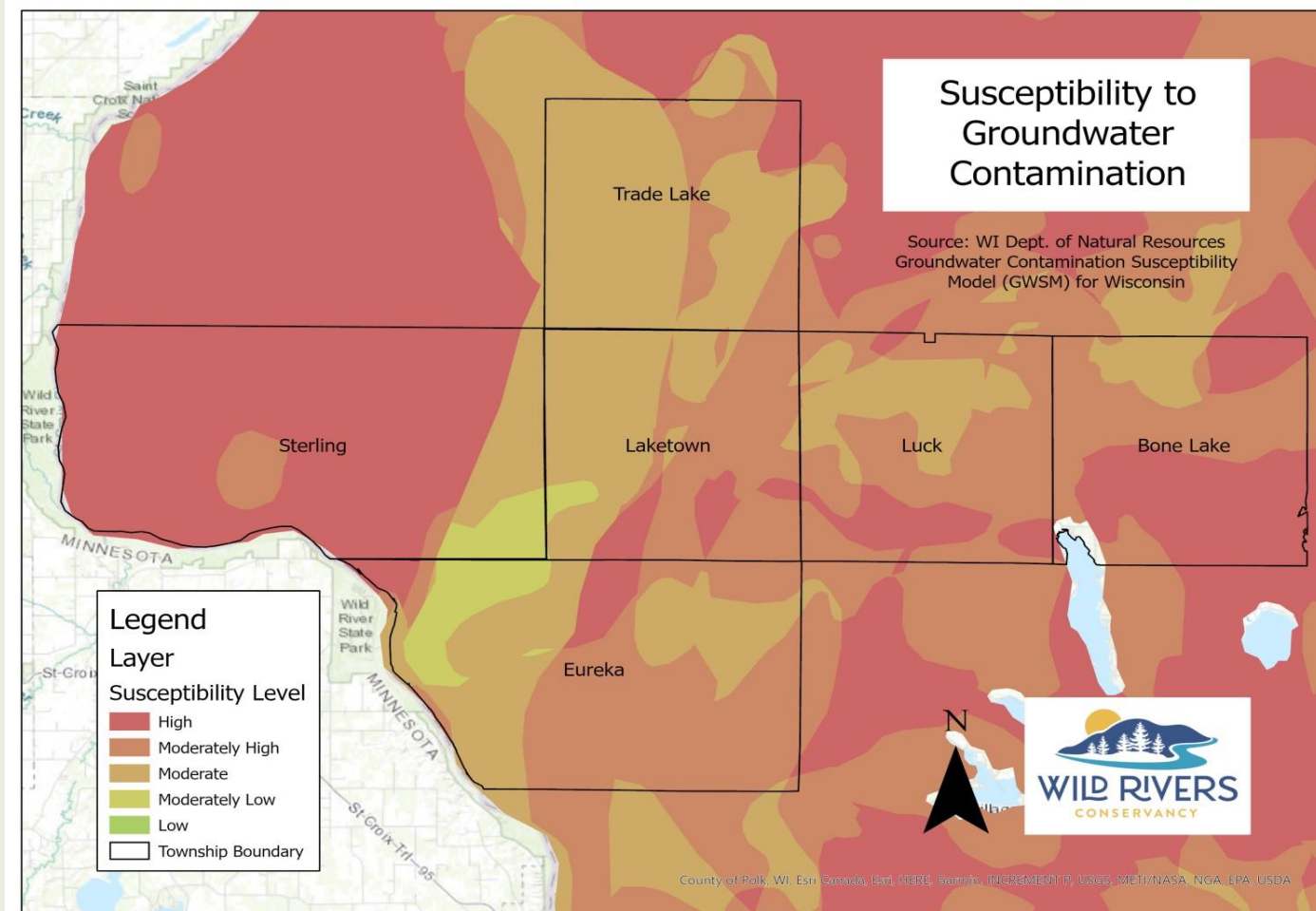


Town Partnership Committee

Bone Lake Concentrated Animal Feeding Operations (CAFO) Ordinance



Committee Members

Bone Lake – Andy Brown, Town Chair

Eureka – Dan Winterhalter, Resident

Laketown – Lisa Doerr, Resident

Luck – Dean Johansen, Town Chair

Sterling – Marcia Marquardt, Town Supervisor

Trade Lake – Ramona Moody, Town Chair

Town Partnership Goal

- Six towns covering 250 square miles with more than *6,000 citizens and property values of more than \$655 million*
- *Share expertise and resources to protect public and property values*
- Complete research & legal work needed for each town to develop the *strongest large livestock ordinance possible*

Town Partnership Goal

- State regulations do not address a wide range of concerns.

“These permits **apply only to water quality protection**. They do not give the DNR authority to address air, odor, traffic, lighting, land use nor any of the social concerns people may have about large farms.”

Wisconsin Department of Natural Resources CAFO web page

- Weak enforcement - Five of six CAFOs in Polk & Burnett operate on expired permits. Emerald Sky.
- *Towns board make decisions – not Partnership*

CAFO Industry Structure



Intergovernmental Agreement

I. Scope of Work

Concentrated Animal Feeding Operations (CAFO) Ordinance

Research

Findings of Fact – Local & General

Application Process

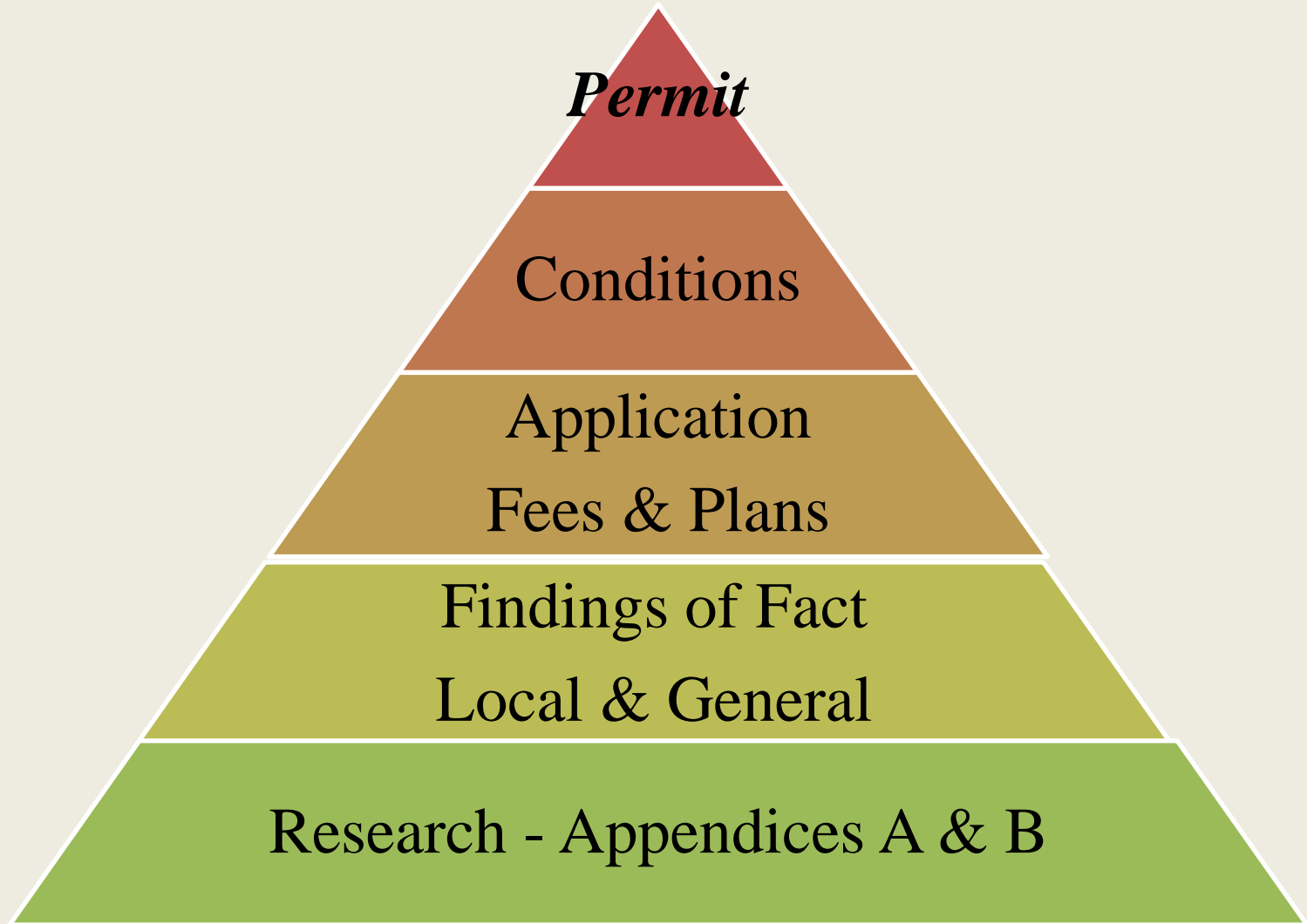
Conditions

Permit

II. Budget – not to exceed \$18,000

Legal fees, room rental, copies

CAFO Model Ordinance



CAFO Model Ordinance

- I. CAFO Ordinance – 114 Findings of Fact
19 Local & 95 General
- II. CAFO Ordinance – Appendix A
199 references
 - Scientific Journals
 - University Programs
 - Regulatory & Court Documents
 - Media Articles
- III. CAFO Ordinance – Appendix B
9 Maps of Local Findings

CAFO Model Ordinance

- Not a Ban
- Not a Siting Ordinance
- Operations Ordinance Permit
- Sets Requirements for Operation that Protect
 - Public health
 - Water & air quality
 - Property values

Ordinance Foundation

- **WHEREAS**, Bone Lake established a Moratorium on CAFOs so as to complete a review of the possible impacts of permit issuance;
- **WHEREAS**, Bone Lake signed an Intergovernmental Agreement to work in Partnership with five towns;
- **WHEREAS**, Partnership devoted time and expertise reviewing potential impacts of large livestock farming on Bone Lake's natural resources;
- **WHEREAS**, Partnership reviewed scientific literature and formulated ordinance recommendations provisions to address concerns raised CAFOs;
- **NOW, THEREFORE**, the Town Board of the Town of Bone Lake makes the following Findings of Fact and declarations in support of Ordinance.



Local Findings of Fact - 19

- *All 741 residents* rely on groundwater for drinking, cooking, bathing, irrigating and watering livestock.
- Some well owners test their water but there is no systematic or scientific effort by Bone Lake, Polk County or Wisconsin.
- All of Bone Lake is in the St. Croix River watershed. Lake St. Croix is classified as an impaired water due to phosphorous pollution.
- Two premier lakes – Ward and Bone Lake – are listed as impaired waters under the federal Clean Water Act for high levels of phosphorus.
- ***\$104,812,300*** total property value - ***\$41,191,500 (31%)*** in land and ***\$63,620,800 (69%)*** in homes and buildings.

Bone Lake Land Cover

Source: WI Dept. of Natural Resources Land Cover Data (WISCLAND 2.0)

Land Cover Class

-  Agriculture
-  Barren
-  Forest
-  Grassland
-  Open Water
-  Urban/Developed
-  Wetland



Bone Lake Susceptibility to Groundwater Contamination



Source: WI Dept. of Natural
Resources Groundwater
Contamination Susceptibility Model
(GWSM) for Wisconsin

Legend

 Bone Lake Boundary

Groundwater Susceptibility

Ranking





-  High
-  Moderately High
-  Moderate
-  Moderately Low
-  Low

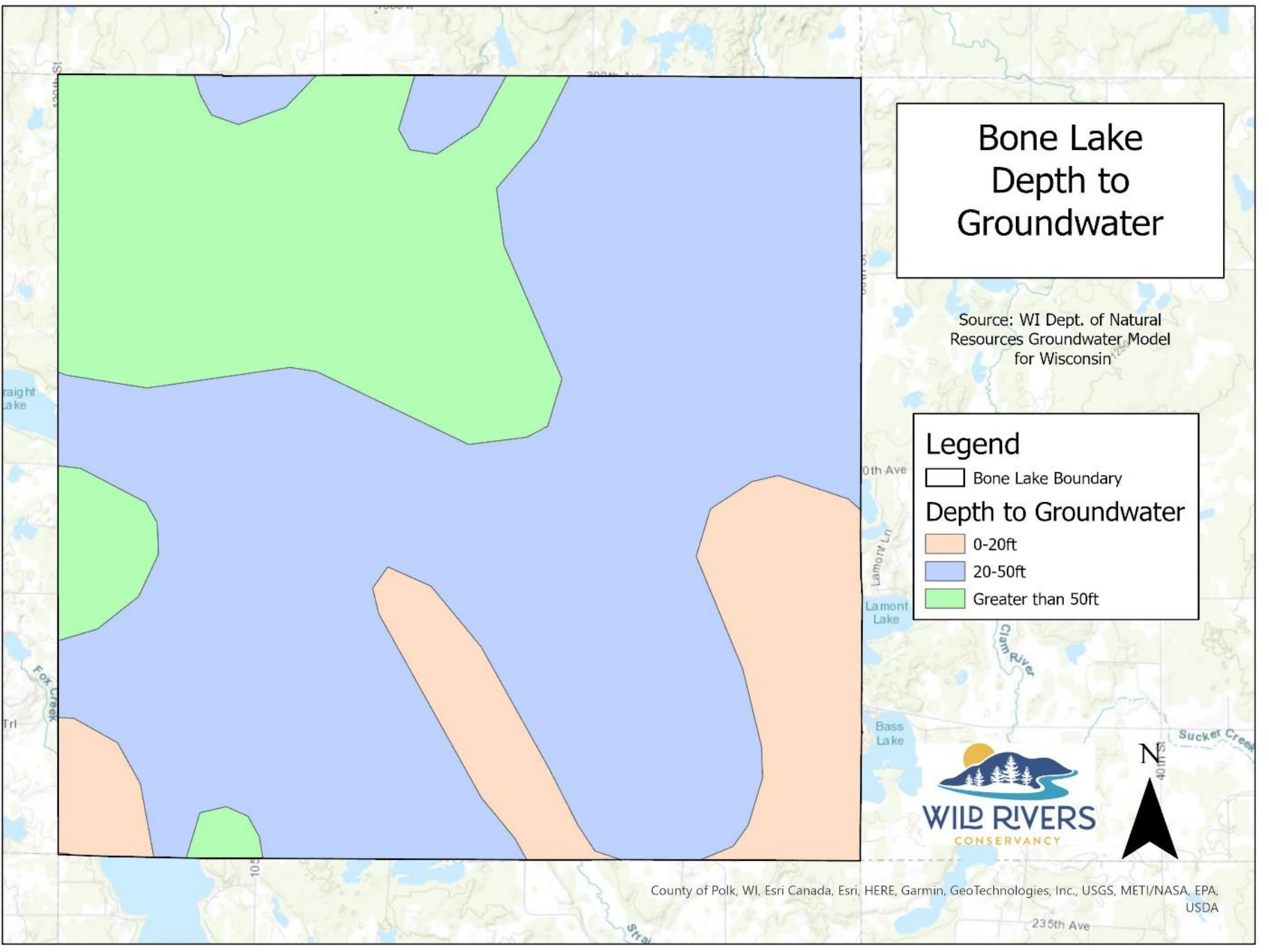


Bone Lake Depth to Groundwater

Source: WI Dept. of Natural
Resources Groundwater Model
for Wisconsin

Legend

-  Bone Lake Boundary
- Depth to Groundwater**
 -  0-20ft
 -  20-50ft
 -  Greater than 50ft



Bone Lake Shoreland Zone

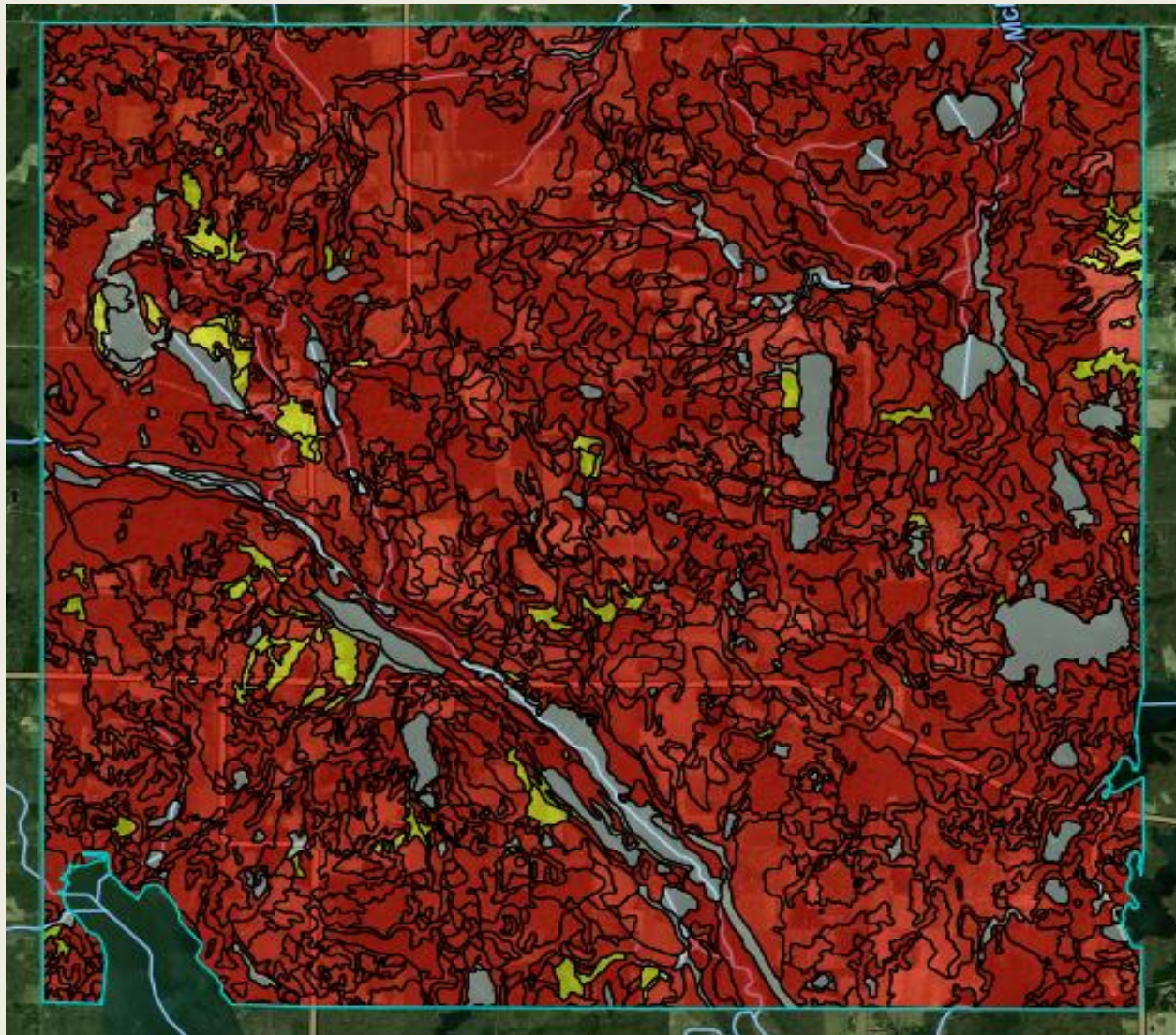
Source: Polk County Shoreland Zoning. The shorelands area shall be considered those lands within one thousand (1,000) feet of the OHWM of any navigable lake, pond, or flowage, and those lands within three hundred (300) feet of the OHWM of any navigable river or stream, or to the landward side of the flood plain, whichever is greater.

Legend

-  Lakes
-  Rivers/Streams
-  Shoreland Zone
-  Bone Lake Boundary







Manure Absorption Ability







Soils





Soil Rating Polygons

-  Very limited
-  Somewhat limited
-  Not limited
-  Not rated or not available


Soil Rating Lines

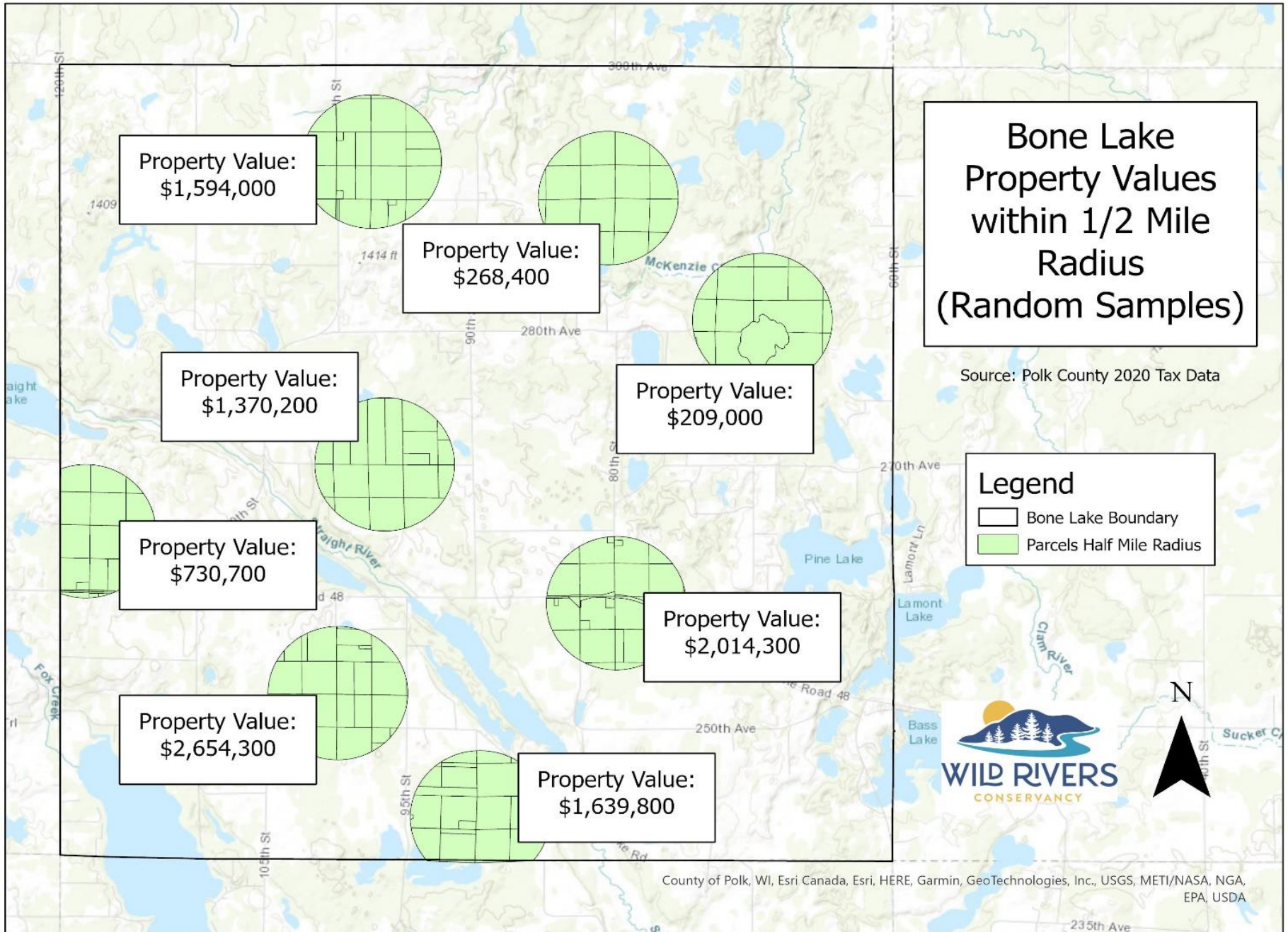
-  Very limited
-  Somewhat limited
-  Not limited
-  Not rated or not available

Soil Rating Points

-  Very limited
-  Somewhat limited
-  Not limited
-  Not rated or not available

Water Features

-  Streams and Canals



Bone Lake Property Values within 1 Mile Radius (Random Samples)

Source: Polk County 2020 Tax Data

Legend

-  Bone Lake Boundary
-  Parcels 1 Mile Radius

Property Value:
\$2,981,200

Property Value:
\$1,719,500

Property Value:
\$955,800

Property Value:
\$4,503,200

Property Value:
\$8,135,800

Property Value:
\$14,641,500

Property Value:
\$20,658,300

Property Value:
\$2,209,600



General Findings of Fact - 95

1. Operations & Public Health
2. Waste
3. Animal population & depopulation
- 4. Biosecurity & animal health – Avian Flu, PRRS, ASF**
5. Animal transportation
6. Private, public drinking & agricultural water wells
- 7. Air emissions– hydrogen sulfide, ammonia**
8. Private & public property rights & values
9. Compliance, enforcement
10. Monitoring
11. Quality of Life – Roads and Fire

Section 1- Authority

Authority includes but not limited to

- Wisconsin Constitution
- WI Statute 92.15 – Water quality protection
- WI Statute 60.22 - Village powers for protection of public health, safety and general welfare
- WI Statute 66.0415 – Towns may regulate “any industry, thing or place where any nauseous, offensive or unwholesome business is carried on.”

Section 3- Definitions

Concentrated Animal Feeding Operations (CAFO)

- 700 or more animal units
 - 87,500 Chickens
 - 38,500 Turkeys
 - 1,750 Swine
 - 700 Cattle
 - 500 Dairy cows
- Any facility using land in Town to manage waste

Section 4 – Permit Required

General

700 or more animal units

Existing Livestock Facilities

Does not apply to operations in Town on the Effective Date, provided no change in owner, operator or species or an expansion to exceed 1,000 animal units

Section 7 – Application Fee

- \$1 per animal unit
- Accompany application
- Offsets processing costs



Section 8 – Application Procedure

- Owner or officer must sign application
- Property owner must sign & agree to same standards as the owner or officer
- Professional licensed third party engineers or geoscientists must sign
- Professionals attest they prepared or reviewed plans & certify they meet performance requirements

Section 8 – Application Procedure

Application includes following plans

- a) Prevent the Spread of Infectious Diseases
- b) Waste Management
- c) Animal Population & Depopulation
- d) Biosecurity & Animal Health
- e) Animal Transportation
- f) Water Use

Section 8 – Application Process

Application includes following plans

- g) Odor & Toxic Air Pollution Prevention
- h) Community Economic, Land Use & Property Value Assessment
- i) Construction, Fire & Roads
- j) Compliance Testing, Sampling & Monitoring
- k) Compliance Assurance for all Plans

Section 9 – Financial Surety

- Surety required by applicant, all contractors, subcontractors, agents & representatives
- Ensure funds available for pollution clean-up, nuisance abatement & proper closure
- Closure, Cleanup, Decommissioning and Site Restoration Plan sealed by licensed engineer & based on typical cost estimates
- Town may adjust amount on an annual basis

Section 10 - Specific Conditions

Condition 2 - Waste Management Plan includes

- Scientifically significant data on water quality of human drinking & agricultural wells
- Amount of land used to spread waste based on spreadable acres, not total acres
- Manure Land Application Agreements, with a minimum contract period of 5 years

Section 10 - Specific Conditions

Condition 11 - Fire Safety Needs Analysis Plan based on National Fire Protection Association (NFPA)

- Standard for Fire Protection in Wildland, Rural & Suburban Areas - NFPA 1141& 1144
- Standard on Water Supplies for Suburban and Rural Fire Fighting - NFPA 1142
- Fire and Life Safety in Animal Housing Facilities Code - NFPA 150



Expertise

Research - *Monica Zachay*

- Director of Programs with Wild Rivers Conservancy, pro-bono
- 15 years of professional experience
- Nine years working in St. Croix River watershed
- Four years - Pelican River Watershed
- Two years - Three Rivers Park District
- Masters Public Affairs, B.S. Natural Resources



Legal - *Nicholas Vivian*

- Eckberg Lammers Law Firm
- Lead attorney for municipal, banking & finance, business, commercial real estate groups
- Works throughout Western Wisconsin
- Trade Lake town counsel
- Led development of the Trade Lake large livestock ordinance



Expertise

Research – *Richard Bost*

- Chief Engineer & Senior Expert in Water Resources, Ecological & Health Risk Assessments - I2M Associates
- 40+ years permitting, environmental planning, human & community health assessments, emergency response, catastrophic risk & safety consulting
- M.E. Engineering dual studies toxicity & public health - Rice University & U of Texas



Research – *Steve Oberle*

- CAFO environmental analysis & monitoring - current
- Taylor County, WI Conservationist & Land Conservation Department Head – 15 years
- Ph.D. & M.S., Soil Science - UW - Madison
- M.A., Ag Economics - Farming systems emphasis, UW-Madison



Expertise

Research – *Tom Scott*

- Distinguished Professor, University of California – Davis
- Post-Doc., Epidemiology, Yale University School of Medicine
- Pd.D. Ecology Pennsylvania State
- NIH, WHO, NSF, Gates Foundation
- Mosquito virus interactions, mosquito-borne disease
- Town of Luck resident



Research – *Andy Marshall*

- 36 years trial experience – in agribusiness, construction & personal injury claims
- More than 60 jury trials in Minnesota, Wisconsin & federal courts
- J.D., UMN Law School
- Eureka CAFO ordinance 1.0
- Trade Lake land owner



CAFO Model Ordinance

