

The background of the slide is a photograph of a modern, multi-story building with a grid-like facade of windows and concrete panels. To the left of the building, there are large, leafy trees. The image is partially covered by a white diagonal overlay on the left side, which contains the text.

LAKE COUNTY
Investing in People
and Our Communities

Clean Air Discussion

Energy & Environment Committee
December 4, 2019

Agenda

- Background
- Spatial Analysis
- Health Overview
- Waste Hauling Options
- Enforcement
- Overall Options
- Discussion/Questions

Background

- February 2019 – Energy & Environment Committee directed staff to research Clean Air Regulations (i.e., yard waste burning restrictions) per their adopted work plan
- June 2019 – Staff presented preliminary research and received further direction from the Committee
- Today – Presentation of research outcomes

Spatial Analysis

- Completed a mapping analysis to determine how residents would be impacted based on different landscape waste burning setbacks

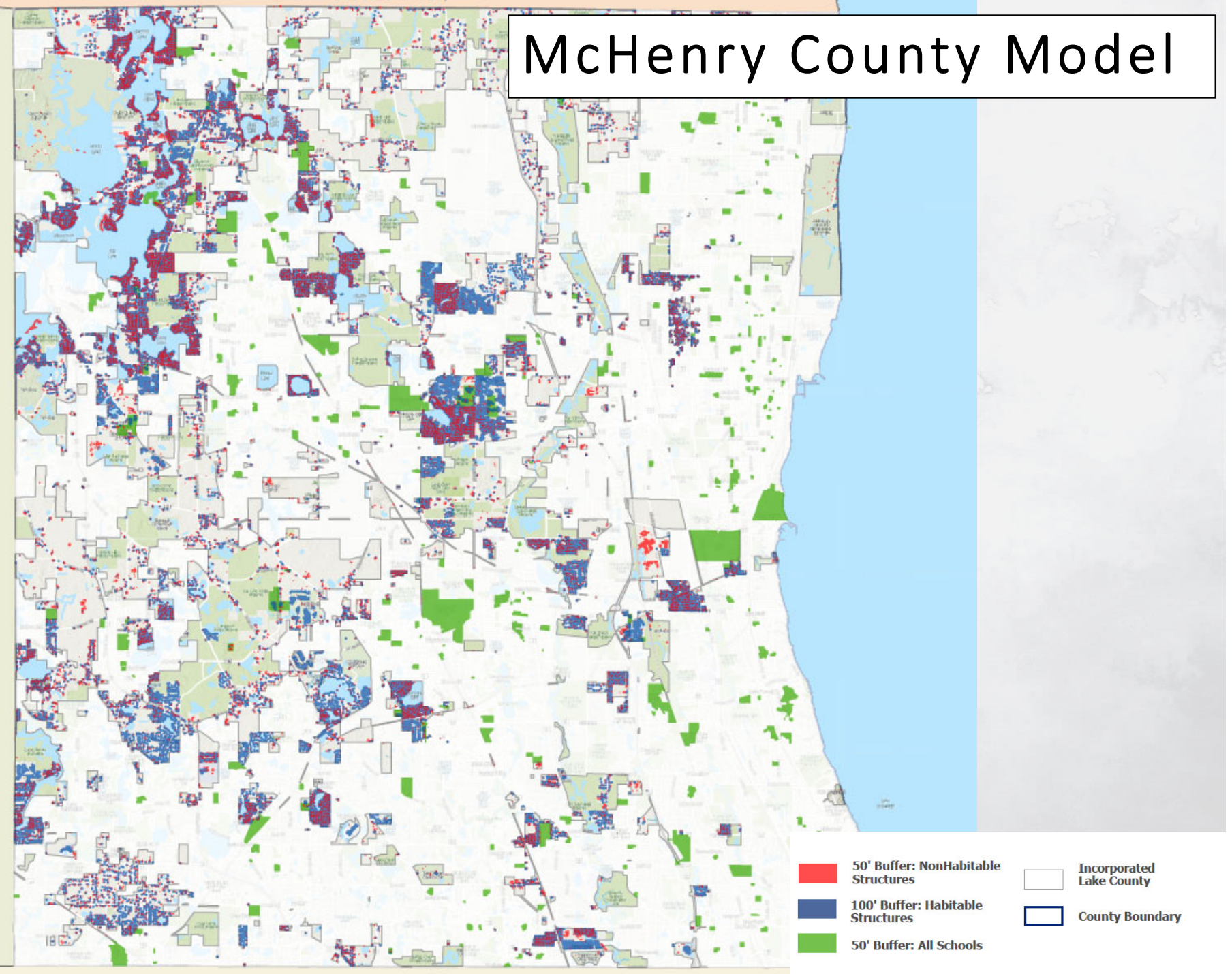


McHenry County Model

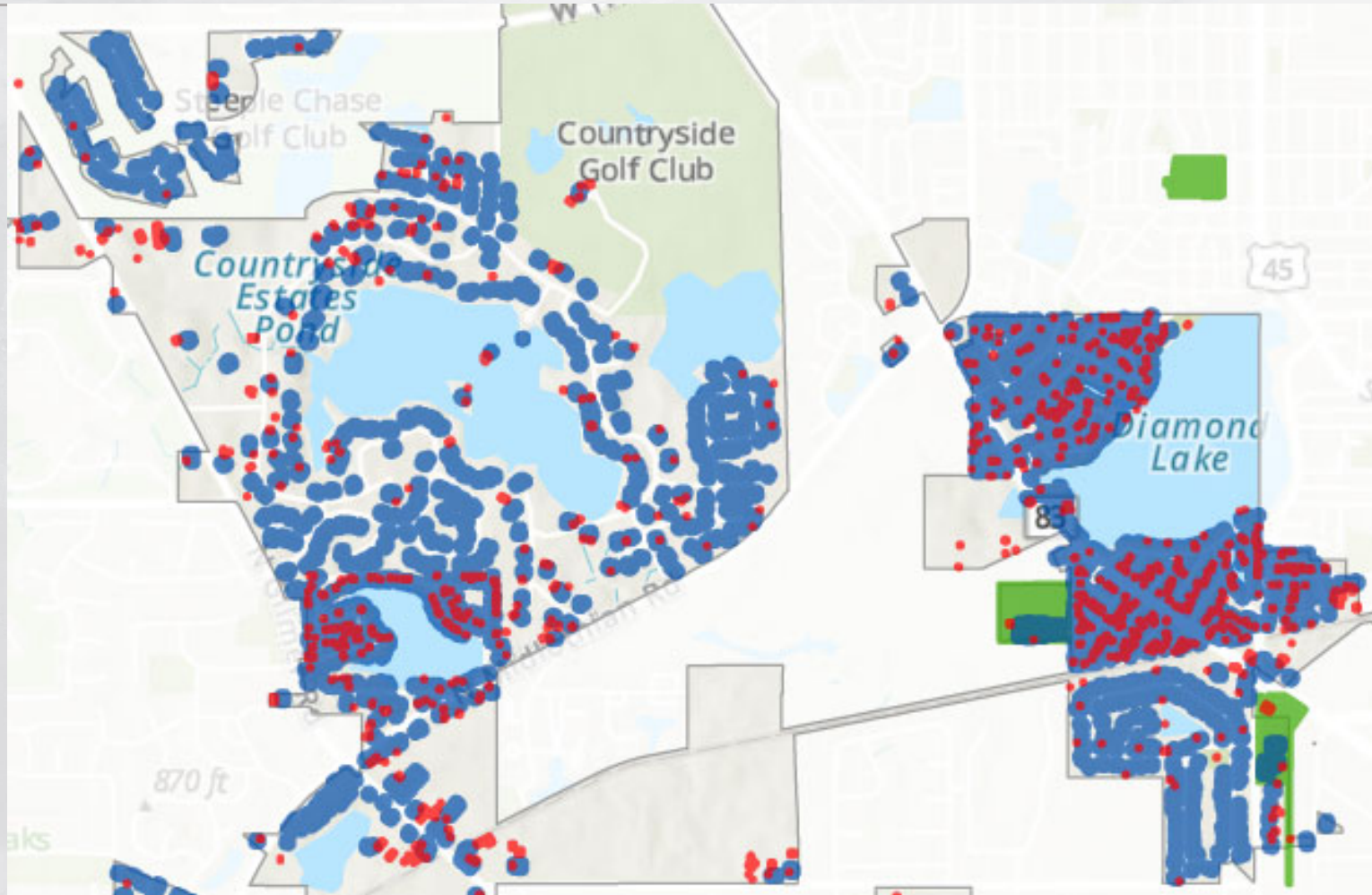
Includes various scenarios:

- No burning allowed within defined setbacks to structures
- Time, place, manner restrictions outside of setbacks:
 - 100' from habitable structures
 - 50' from non-habitable
 - 50' from school property (not in McHenry's regulations)
- NO time, place, manner restrictions:
 - 500' from habitable structures

McHenry County Model



McHenry Model Zoom in



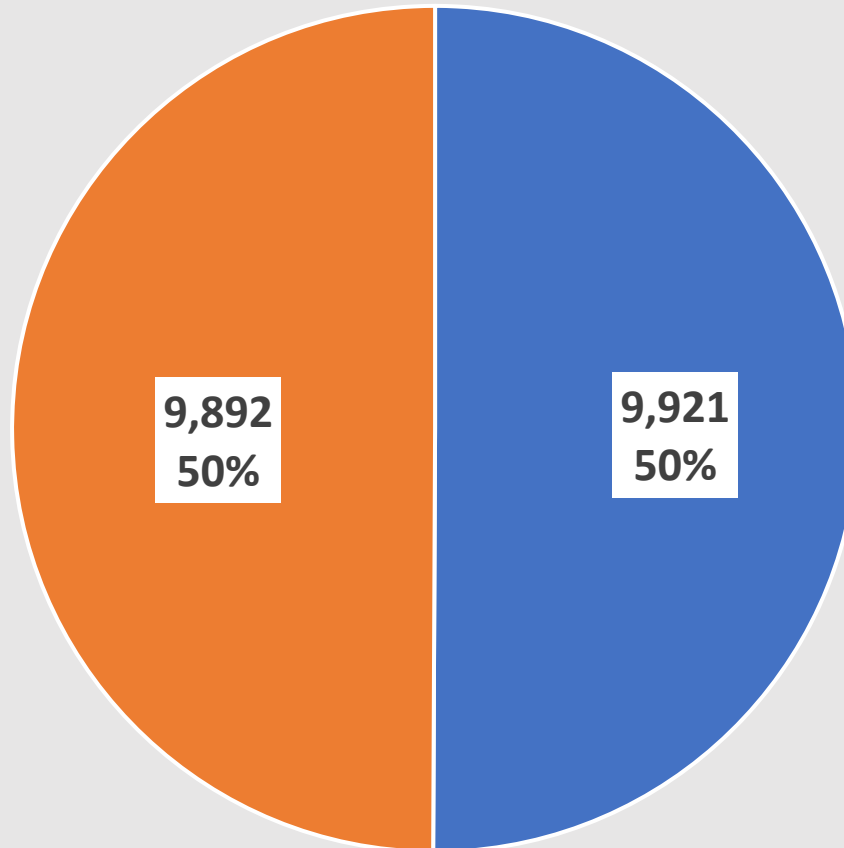
Parcels defined as being "within a buffer zone" have at least 50% of their area within a given buffer distance.

Residents' Yard Waste Service

McHenry Model

Total = 19,813
residential parcels
within buffer zone

46% of all
unincorporated
residential parcels



■ With Yard Waste Service

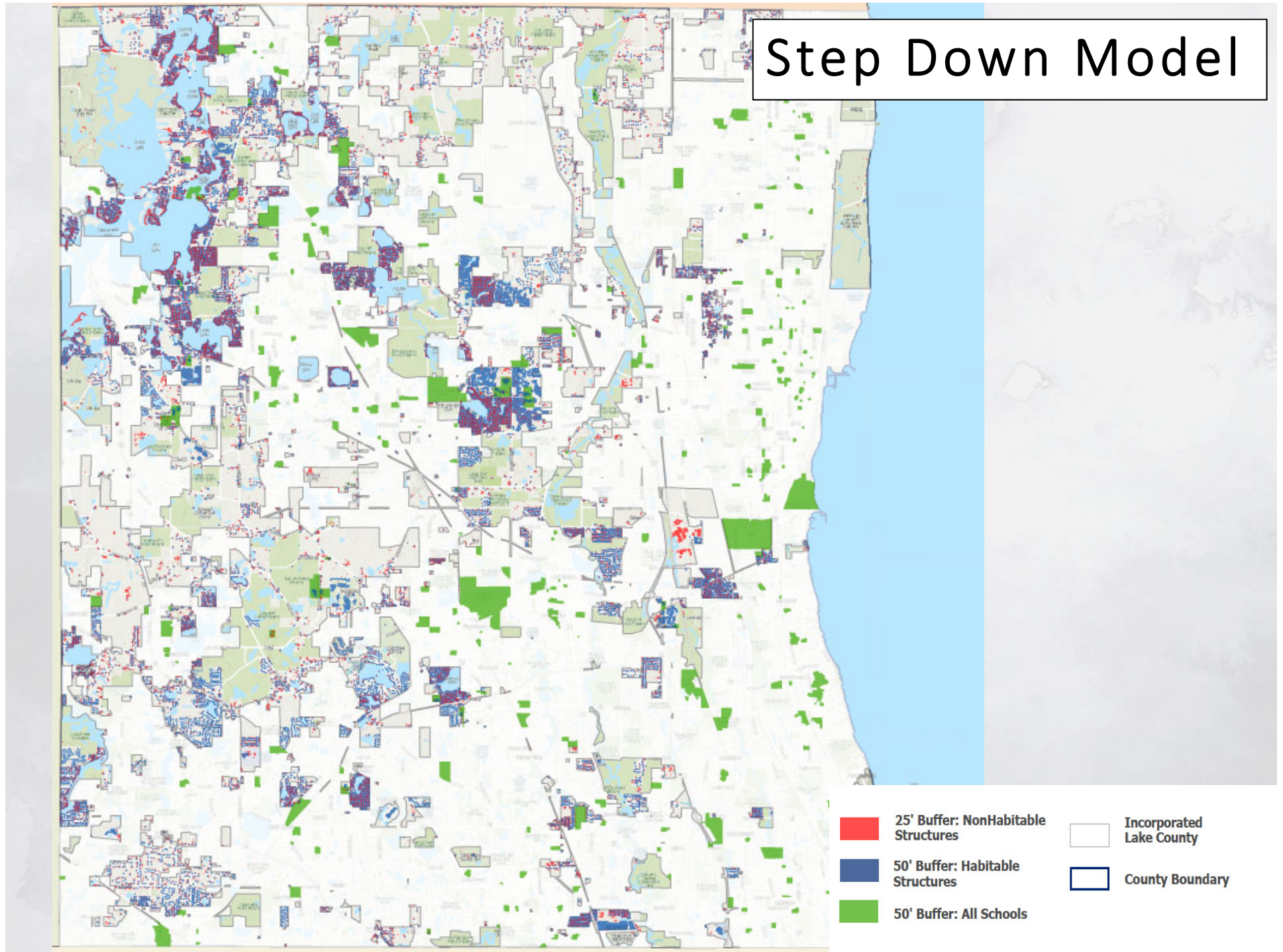
■ Without Yard Waste Service

“Step Down” Model

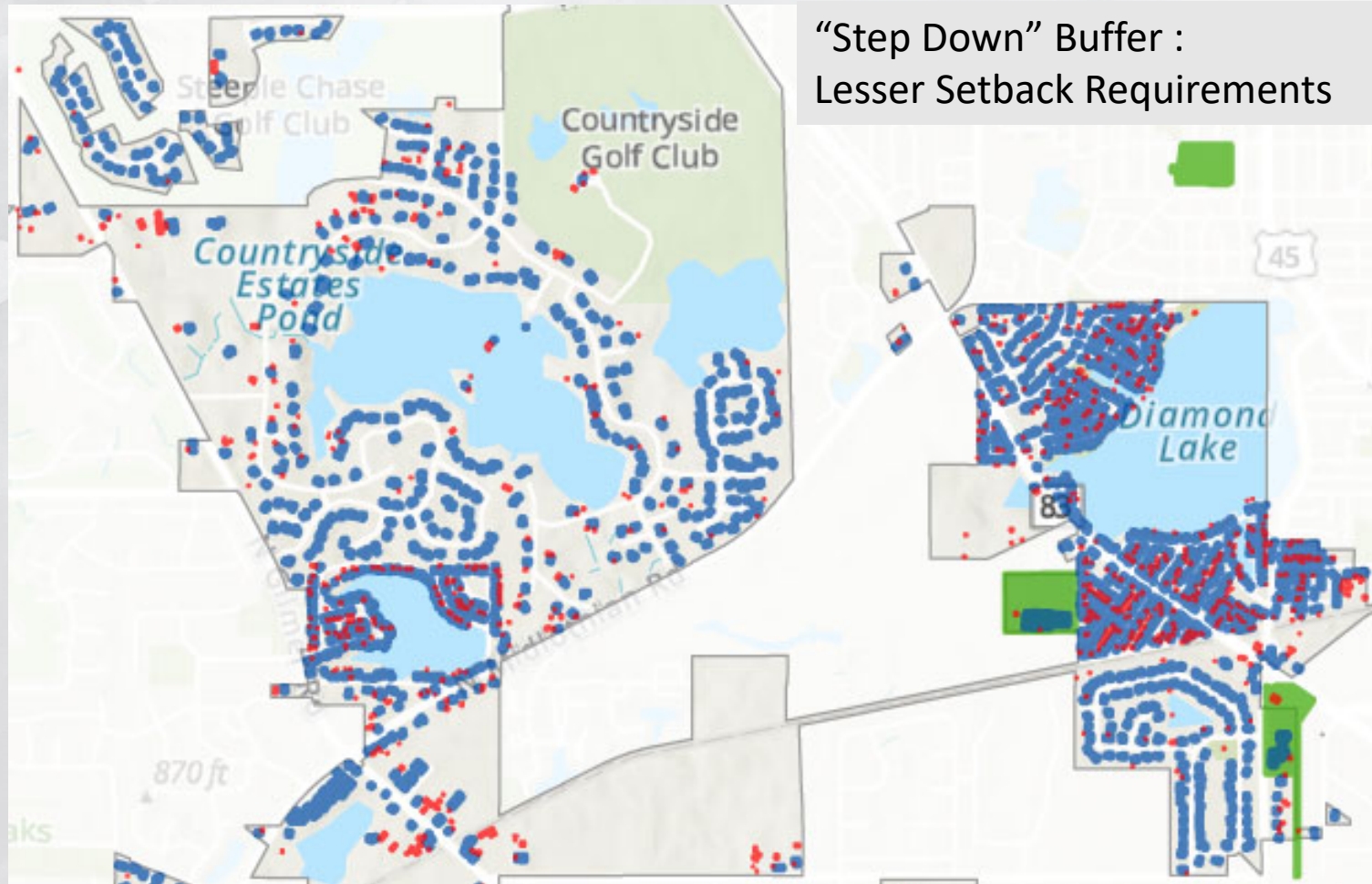
Modified analysis includes (more Lake County specific) scenarios:

- No burning within defined setbacks to structures
- Time, place, manner restrictions outside of setbacks:
 - 50' from habitable structures
 - 25' from non-habitable structures
 - 50' from school property
- NO time, place, manner restrictions:
 - 500' from habitable structures

Step Down Model



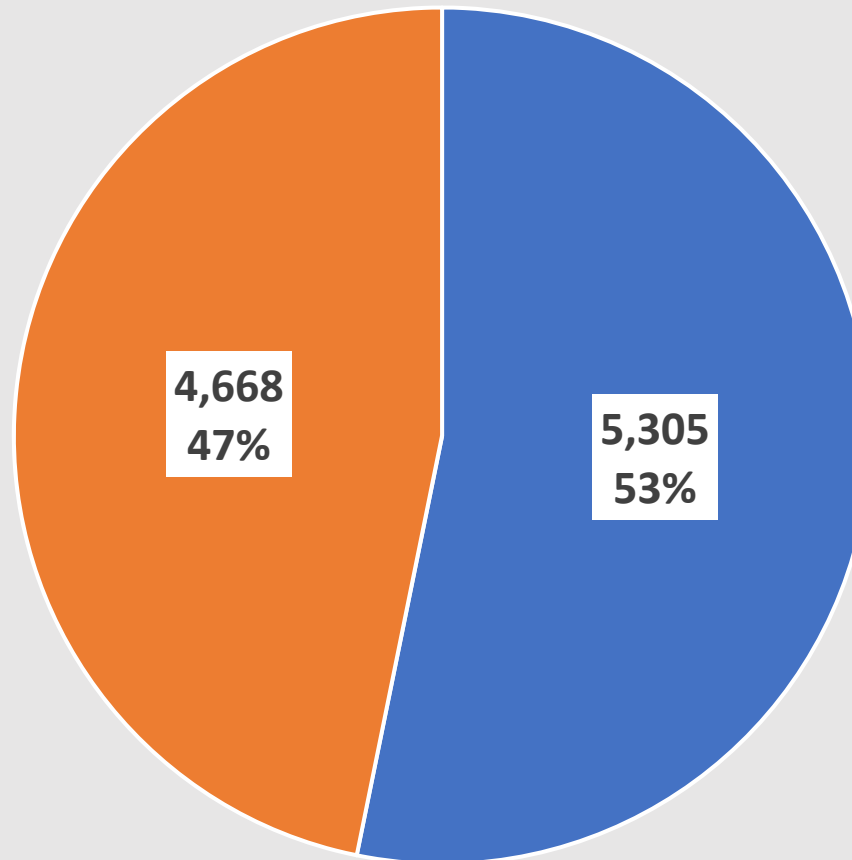
Step Down - Zoom in



Parcels defined as being "within a buffer zone" have at least 50% of their area within a given buffer distance.

Residents' Yard Waste Service

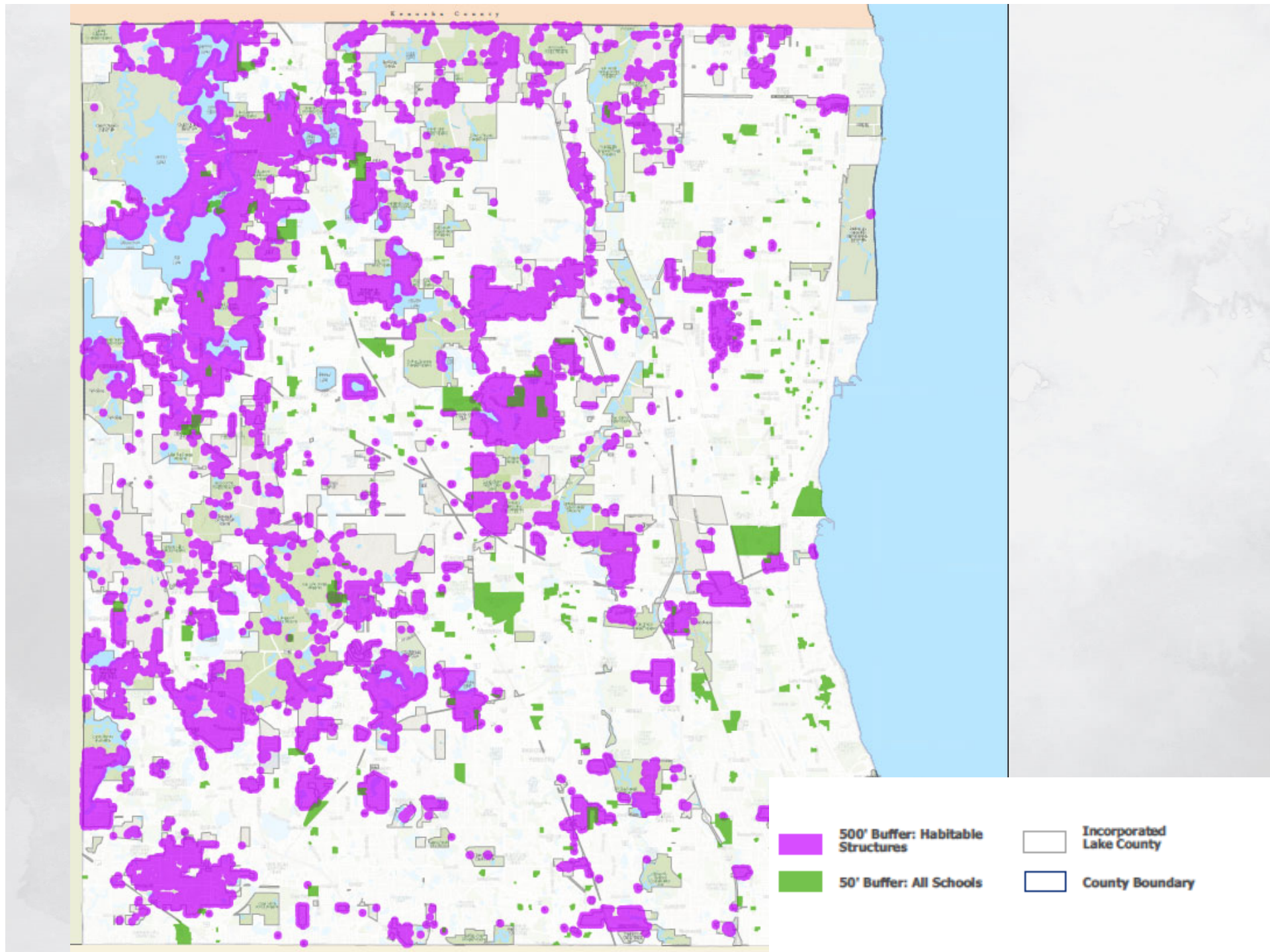
Step Down Model



Total = 9,973
residential parcels
in the buffer zone

23% of all
unincorporated
residential parcels

■ With Yard Waste Service ■ Without Yard Waste Service



500 Foot Buffer - Zoom in



Parcels defined as being "within a buffer zone" have at least 50% of their area within a given buffer distance.

Acreage Requirements

Model	Median Acreage of Parcels within Buffer	Median Acreage of Parcels outside Buffer
Step Down Model	0.23	0.28
McHenry Model:	0.22	0.37
McHenry 500' Model:	0.26	2

Parcels defined as being "within a buffer range" have at least 50% of their area within a given buffer distance.



Health Overview

Lake County Air Quality

- The American Lung Association gives Lake County a Grade of “F” for air quality, based on high ozone levels
- The single **ozone** monitor in Lake County is at Illinois Beach State Park
 - The monitor and location are federally mandated
 - The location was selected specifically to measure **peak** ozone levels in the Illinois portion of the Chicago Metropolitan Statistical Area
 - Due to meteorological conditions and the proximity to Lake Michigan, this location has some of the highest ozone levels in the State
 - Ozone levels at this location are not representative of levels throughout Lake County

Air Quality, Cont.

- There is currently no monitor for **particulates (PM2.5)** in Lake County
 - A monitor was present from 2000 to 2010
 - PM2.5 levels in Lake County were consistently among the lowest in Illinois
 - The monitor was removed in 2010 because the levels measured were 40% below the National Ambient Air Quality Standard (NAAQS)
 - All other monitors in Illinois are now currently below the NAAQS

Health Concerns

- Exposure to the smoke produced by burning yard waste is detrimental to the public's health
- Exposure to the components of this smoke can cause:
 - eye and respiratory tract irritation;
 - bronchitis and increased severity of asthma; and
 - in the most severe cases, premature death

Hazard + Exposure = Risk

Health Concerns, Cont.

- Sensitive groups such as the elderly and individuals with pre-existing heart and lung diseases are the most susceptible
- Restrictions on burning yard waste would reduce exposure to smoke and the health effects caused by that exposure
- The Lake County Health Department supports restrictions on yard waste burning in the unincorporated areas

Environmental Concerns

- The smoke emitted when yard waste is burned degrades the air and is detrimental to the environment
- There are alternative methods for managing yard waste such as mulching, residential composting and commercial waste pickup for large-scale composting
- These methods turn the leaves and their nutrients into a renewable resource that benefits the environment instead of a waste that is detrimental to it

Waste Hauling



Waste Hauling Options

- Options for yard waste typically includes 8 months of:
 - Subscription service (heavy users), and/or
 - Sticker service (light users), and/or
 - Additional Service: 6 weeks of leaf vacuuming from Oct – Nov (may not be economically viable in rural areas)
- Option 1: County franchises waste, recycling and yard waste services for unincorporated residents outside of townships offering service
- Option 2: County franchises for yard waste only for residents outside of townships offering yard waste services

Waste Hauling, Cont.

- Option 3: Amend County waste hauling ordinance to require that haulers offer yard waste service in addition to waste and recycling
- Option 4: Work to convene meetings with Townships to educate and assist them in passing referendum and setting up franchises
- Option 5: No uniform yard waste hauling services for unincorporated residents ahead of burning restrictions

Enforcement



Current Enforcement

- Planning, Building & Development (PB&D) is primary enforcement staff for nuisance violations
- Increased seasonal demand for violations and enforcement inspections (usually from April to Oct/Nov)
- No PB&D enforcement staff on nights and weekends
 - Sheriff's office currently responds to complaints on nights and weekends, based on availability
- Fire Protection Districts' response to open burning complaints is inconsistent across the County

Enforcement Considerations

- Enforcement mechanism for open burning would include:
 - Issuance of ticket - Handled through Administrative Adjudication (AA)
 - Notice of Violation - Handled through Circuit Court process
- Restrictions would place additional burden Administrative Adjudication staff and process
- Restrictions on open burning would also extend season for high volume of violations and complaints



Overall Options

Researched Options

- Regulatory Options
 - Option A: McHenry Model
 - With time, place, manner restrictions
 - Option B: Step Down Model
 - With time, place, manner restrictions
 - Option C: Ban open burning in unincorporated areas
- Waste Hauling Options
 - Option 1: Franchise all waste services (outside townships offering service)
 - Option 2: Franchise yard waste only (outside townships offering service)
 - Option 3: Amend waste ordinance requiring yard waste offering
 - Option 4: Township coordination
 - Option 5: No uniform waste service

The background of the slide features a faded, grayscale image. On the left, a modern multi-story building with a grid of windows is visible. On the right, a large, dark statue of Abraham Lincoln's head and shoulders is positioned on a tiered pedestal. The text 'DISCUSSION / QUESTIONS' is centered over the image, with a thin horizontal line extending from the left edge of the text.

DISCUSSION / QUESTIONS