

# Wake County One Water Update

June 10, 2019



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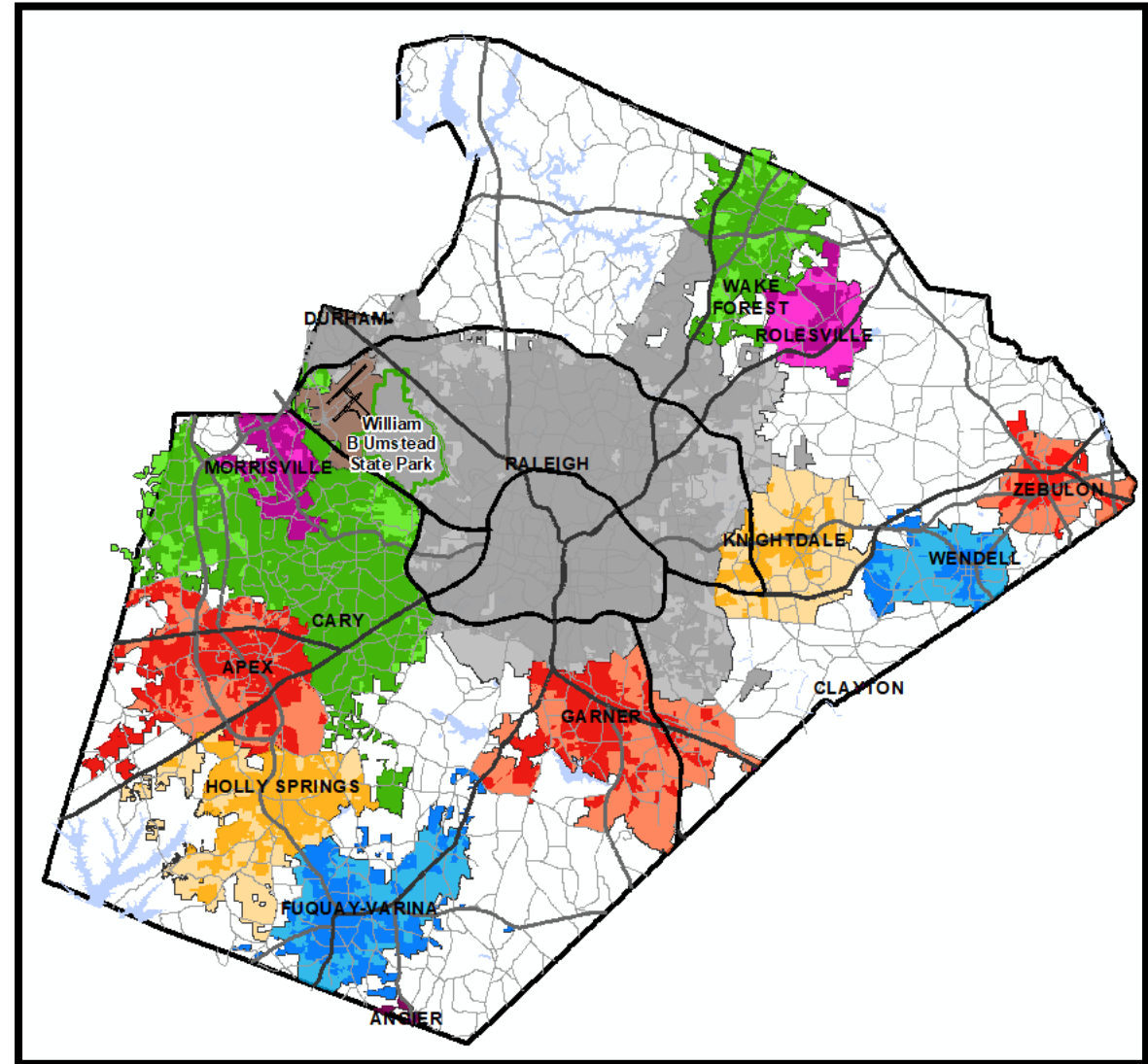


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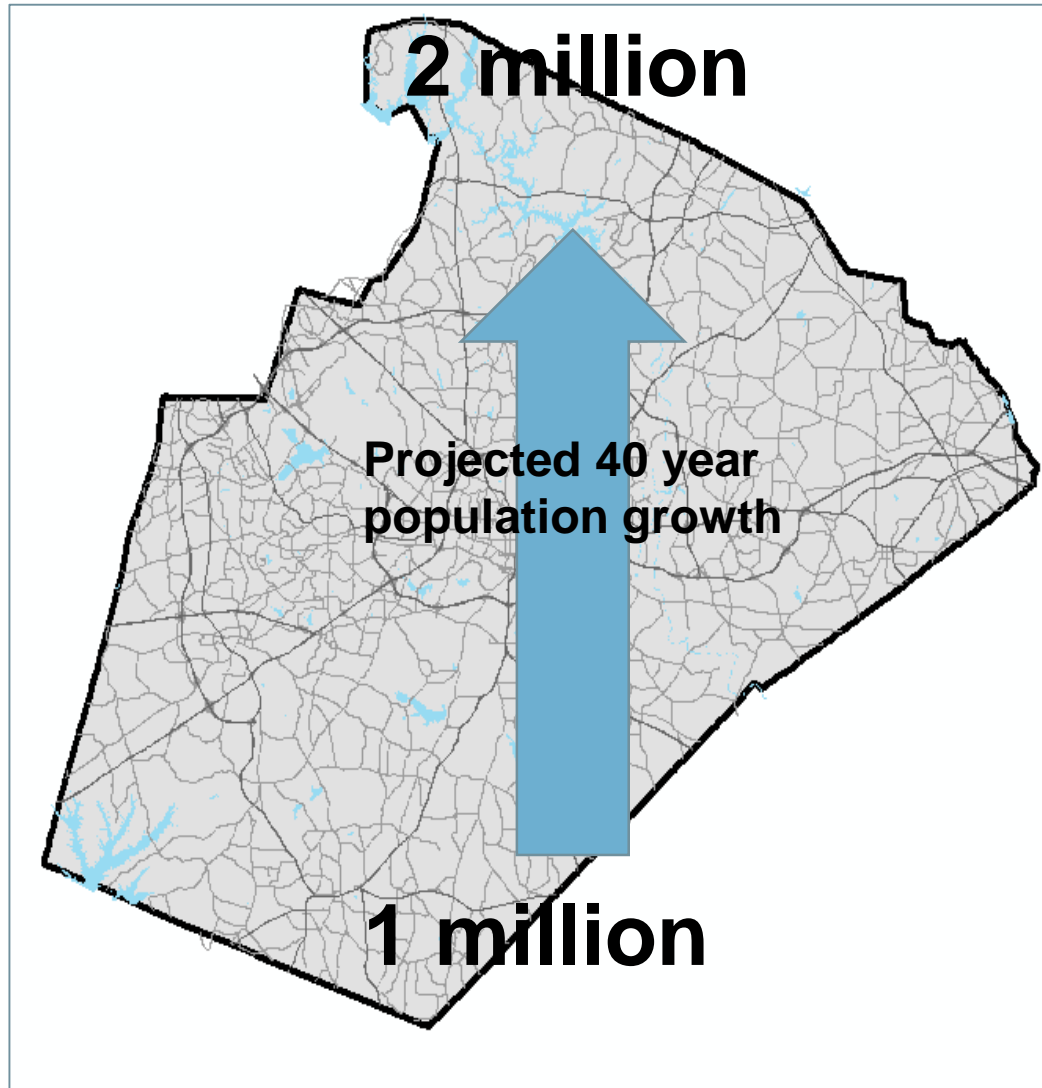
# Growth and Sustainability Goals

**Objective GS3:** Address quality and quantity issues associated with water resources.

- Create a One Water “50 year Supply Plan” for Wake County
- Plan for sustainable and resilient supply of clean drinking water for all residents



# Wake County Growth Projections



# One Water Study Overview

## Phase 1- Groundwater Study

United States Geological Survey (USGS)

Establish groundwater monitoring network

Develop groundwater model

Years 1-5

## Phase 2-Integrate Surface Water & Groundwater

Independent consultant

Combine local water supply and groundwater supply data

Develop 50-Year Water Supply Plan

Years 5-8

# Phase 1 -Timeline

May 2019:  
8 groundwater wells identified



**January  
2019**

- Board of Commissioner Approval

**March  
2019**

- USGS Agreement Signed
- Begin locating wells for monitoring network

**September  
2020**

- Soil and Water Balance Model
- Groundwater recharge Map

**December  
2020**

- USGS Scientific Report

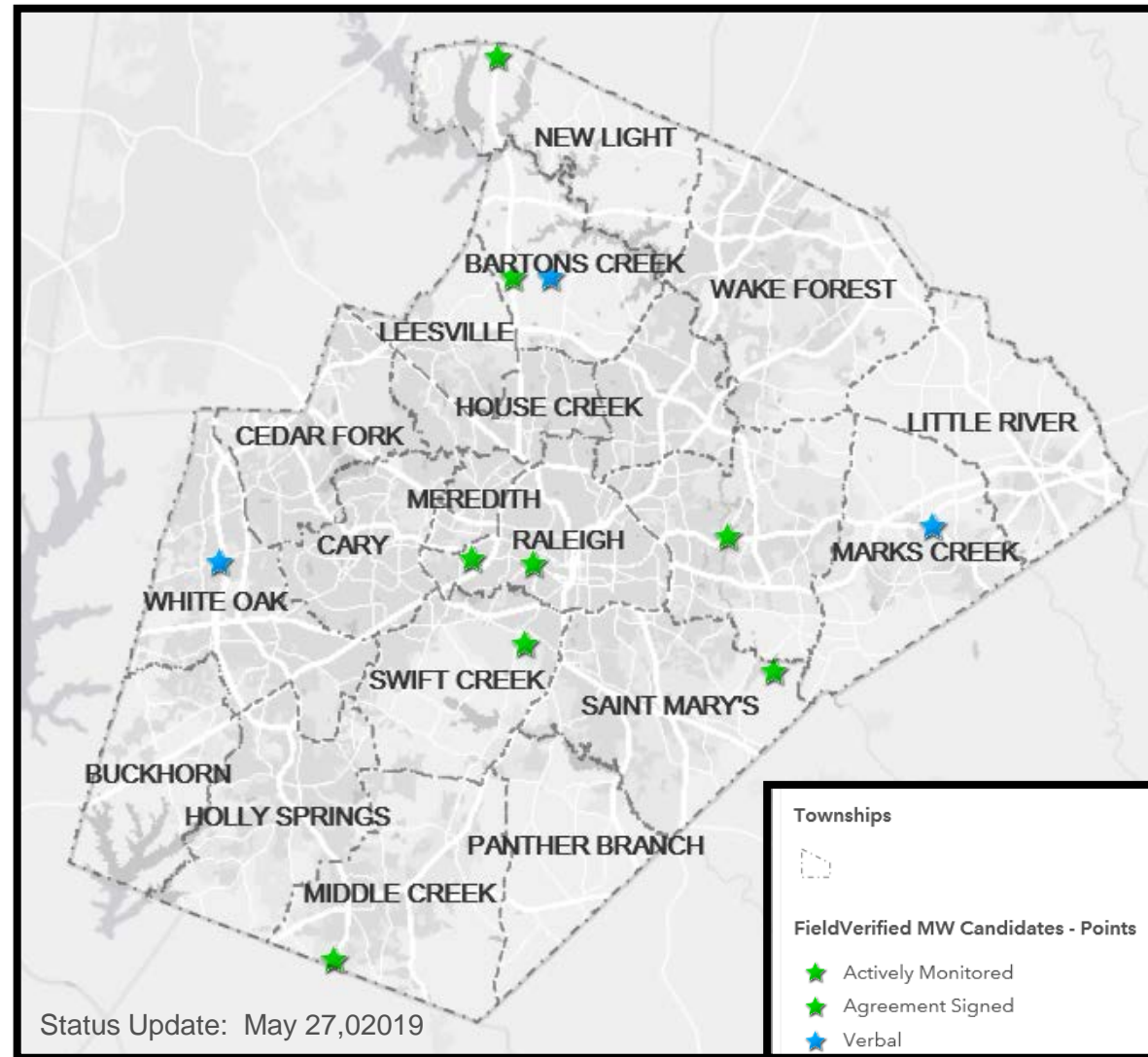
**January  
2021**

- Initiate MODFLOW model

**March  
2023**

- MODFLOW model complete
- USGS Scientific Report

# Groundwater Network Mapping



# Inter-department Collaboration

## **Parks, Recreation and Open Space**

Groundwater monitoring network

Southeast Park Planning

## **PlanWake**

Water quality priorities

Water Partnership survey

## **Wake County Public School System**

Green Schools Symposium

Green stormwater infrastructure

Groundwater monitoring network

## **Human Services**

Green stormwater infrastructure

Green infrastructure and health linkages

# External Collaboration





# Falls Lake Reallocation

Reallocation of water supply to meet City of Raleigh drinking water demands through 2047

Wake County recognized by Raleigh City Council, March 2019



# Green Schools Partnership

WCPSS coordination on sustainability

Environmental literacy linkages

Pilot project opportunities



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# Urban Tree Canopy Collaboration

City of Raleigh

Town of Cary

Triangle J Council of Governments

Conservation Trust of NC

NC Dept. of Environmental Quality

Town of Chapel Hill

City of Durham

Wake County

WakeUP Wake County



# Urban Tree Canopy Benefits

Stormwater management

Nutrient infiltration

Thermal regulation

Air quality

Carbon sequestration

Quality of life



Blue Jay Point Park

# Take Aways

Wake County Water Partnership is advancing a **One Water** approach to water resources in Wake County through:

Collaborative planning for the future of water supplies

Information sharing on innovative approaches to water resource planning

Establishing partnerships to implement green stormwater infrastructure