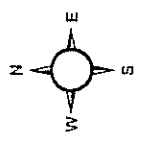


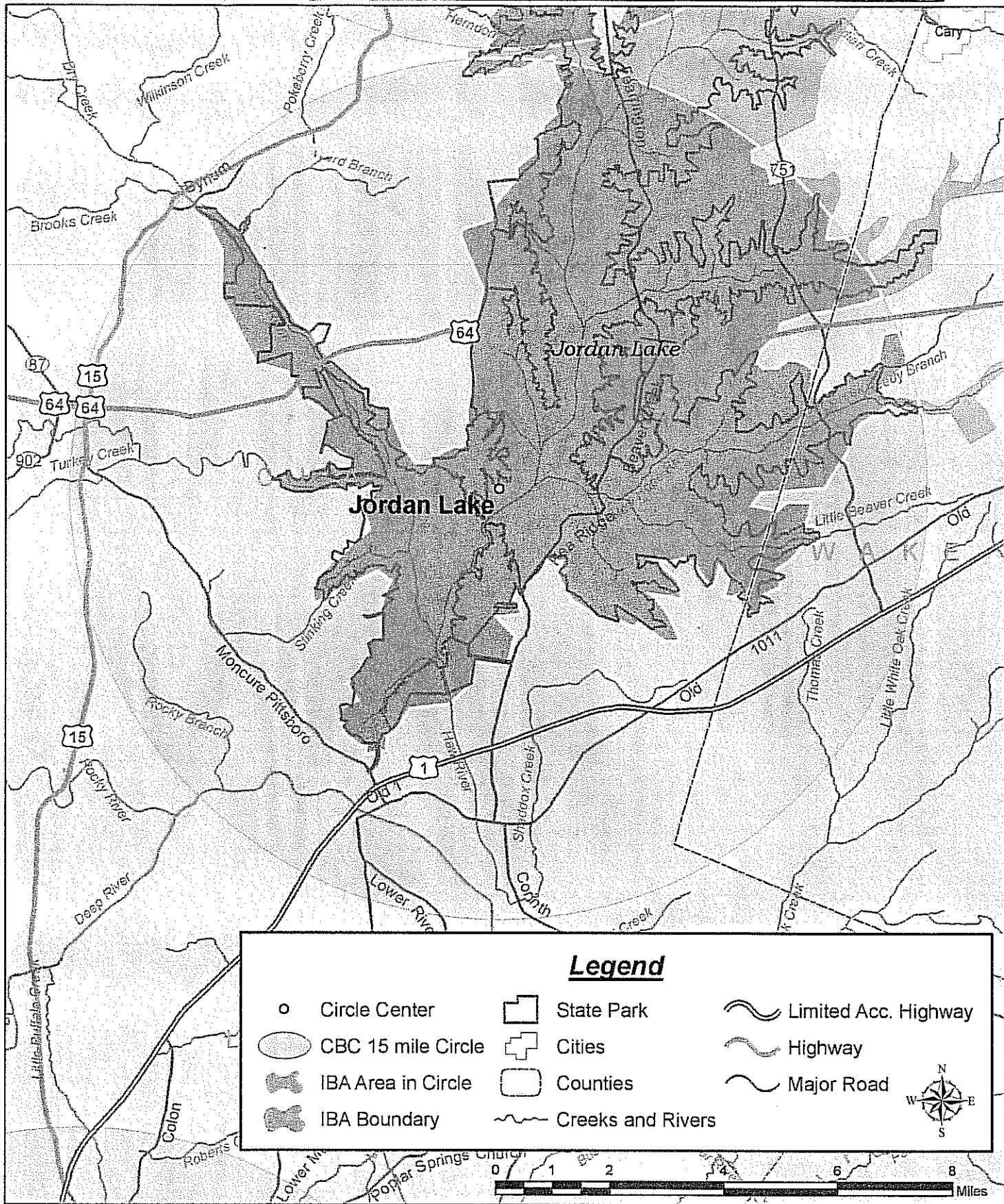
Cell Tower proposed for Big Woods Road Chatham County, NC



- Legend**
- Primary Roads
 - Roads
 - Secondary Roads
 - Elevation
 - Value
 - High
 - Low
 - Streams
 - Significant Natural Heritage Area (SNHA)
 - Parcels
 - Developments
 - Other developments
 - Name of Development
 - LEGEND OAKS Ph. I & II
 - BOOTH MTH
 - BRIAR CHAPEL
 - CAROLINA MEADOWS
 - FEARRINGTON VILLAGE
 - GALLOWAY RIDGE
 - GOVS CLUB
 - HOMESTEAD/LEGACY
 - THE HARPIONS
 - THE PRESERVE
 - WILLIAMS CORNER
 - WILLIAMS POND
 - WINDFALL CREEK
 - CHATHAM LAND
 - COOPER
 - HARRISON POND
 - NIGHTERRANE PH IV
 - PENNINGTON
 - PENNINGTON SOUTH
 - NHP Element Occurrence
 - Category
 - Animal/Assemblage
 - Invertebrate Animal
 - General Community
 - Nonvascular Plant
 - Vascular Plant
 - Vertebrate Animal



Jordan Lake Important Bird Area in the Jordan Lake CBC Circle



Site Name: B. Everett Jordan Lake

Status: Identified

Species Criteria:

Site Criteria: D3, D4i, D5

State: North Carolina

Country: US

Counties:
Chatham, Wake

Latitude: 35.71667
Longitude: -79.01667

Area (ha): 19063.0

Elevation (m):
Min 0.0 Max 0.0 Avg 0.0

Bird Conservation Region:
Piedmont

Endemic Bird Area:

Site Description:

B. Everett Jordan Dam and Lake is located in central North Carolina with much of the state's population living within a 75-mile radius of the project. The Jordan Lake Project preserves 46,768 acres in the midst of an expanding urban area. Of this total, 13,900 acres have been flooded to form the lake and 32,868 acres are being managed for recreation and wildlife management. The dam impounds the waters of the Haw River and its largest tributary, the New Hope River, which joins the Haw 0.3-mile above the dam site. The Haw joins the Deep River 4.2 miles downstream of the dam to form the Cape Fear River. Although the lower portions of the project area remain rural in character, the rapidly expanding urban and suburban growth areas of Raleigh and Cary surround the upper reaches of the project to the east and Chapel Hill and Durham to the north. The site also includes the New Hope Experimental Forest, approximately 336 acres located at on either side of the of SR1129/SR 1178 on the Mason Peninsula. This area is owned by NC State University and is the site of ongoing forestry studies.

Ornithological Significance:

Largest population of Bald Eagles in NC (4 active nests and 10-20 individuals). Jordan Lake is one of only 2 nesting sites for Double-crested Cormorants known in North Carolina. Bottomland hardwood forest comprises approximately 20% of the total area and support a significant suite of species typically associated with this habitat type (Criteria 3). In addition, long-term monitoring of birds has occurred on this site for more than 20 years (Criteria 5).

Species Data and Criteria :

Common Name	Seasonal/ Date Daily	# Season Observed	Density (/km2)	Proposed Units Criteria	Confirmed Criteria
Osprey					
Bald Eagle					
Double-crested Cormorant					

Ownership

The site is protected and managed by the US Army Corps of Engineers and NC Wildlife resources Commission.

% of IBA Ownership

Habitat

Habitats: Lake, bottomland hardwood forest, mixed forest, coniferous forest The pine forest includes medium and high-density stands of predominantly loblolly pine. The bottomland hardwoods forest (8,845 acres) are dominated by species such as maple, black gum, oak, sweetgum, sycamore, birch, elm, and ash. Hardwood stands are dominated by oak, hickory, elm, and maple.

% of IBA Habitat

Land Use

wildlife conservation, recreation/tourism, forestry

% of Total Use of IBA Land Use

- forestry / Extrac. of Timber/Non-timber Frst Prod
- nature conservation and research / Conservation/ Natural Area
- nature conservation and research / Park

tourism/recreation / Hiking

tourism/recreation / Swimming

Conservation Issues

Increasing development adjacent to project boundaries is a problem for birds and other types of wildlife. Development results in an increase in edge communities, fragmentation of habitat, and interruption of natural corridors for wildlife movement. Introduced plant species identified at Jordan Lake include wisteria, Japanese honeysuckle, *Microstegium*, autumn olive, multiflora rose, privet, and bamboo. Disturbance of the bald eagles during the nesting season is a concern.

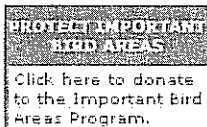
Level Threat

- 4 Disturbance to birds / Boats
- 4 Industrialization/Urbanization / Energy development
- 7 Industrialization/Urbanization / Residential development
- 4 Invasive species / Non-native plants

Citation: National Audubon Society 2005. The Important Bird Areas Historical Results.
Available at <http://www.audubon.org/bird/iba> 06/2007



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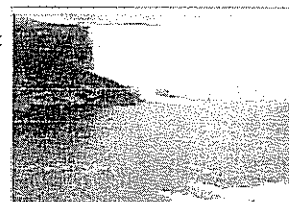
What is an Important Bird Area?

Blank

"Celebrating the Centennial with Important Bird Areas" - [Click to download this brochure, highlighting the history of Audubon's site conservation efforts. \(file in "zip" format, 500k\)](#)

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Important Bird Areas, or IBAs, are sites that provide essential habitat for one or more species of bird. IBAs include sites for breeding, wintering, and/or migrating birds. IBAs may be a few acres or thousands of acres, but usually they are discrete sites that stand out from the surrounding landscape. IBAs may include public or private lands, or both, and they may be protected or unprotected.



Important Bird Areas often support a significant proportion of one or more species' total population. In winter, the Niagara River hosts up to 20% of the entire population of Bonaparte's Gulls, making it a globally significant IBA.

To qualify as an IBA, sites must satisfy at least one of the following criteria. The site must support:

- Species of conservation concern (e.g. threatened and endangered species)
- Restricted-ranges species (species vulnerable because they are not widely distributed)
- Species that are vulnerable because their populations are concentrated in one general habitat type or biome
- Species, or groups of similar species (such as waterfowl or shorebirds), that are vulnerable because they occur at high densities due to their congregatory behavior

Identification of a site as an IBA indicates its unique importance for birds. Nonetheless, some IBAs are of greater significance than others. A site may be important at the global, continental, or state level. The IBA identification process provides a data-driven means for cataloging the most important sites for birds throughout the country and the world. The use of a hierarchical classification system further helps to establish priorities for conservation efforts.

Throughout the IBA process, the status of sites are characterized by the following terms: *Potential, Nominated, Identified, Recognized, Pending, Rejected, Delisted, Merged*. See [definitions](#) of Status Terms.

by Harry LeGrand

The Piedmont physiographic province occupies roughly 35% of the state, extending from the Coastal Plain Fall Line on the east to the Blue Ridge escarpment on the west at the base of the mountain region.

The Piedmont is considered a "plateau," though it is really a gradually descending (in elevation) plain from west to east, generally about 1500 feet at the base of the escarpment ranging down to 200-300 feet above sea level near the Fall Line. Metamorphic rocks underlie nearly all of the Piedmont, though a few regions known as Triassic Basins contain younger sediments (now sedimentary rocks). As one would expect, the Piedmont does have irregular landforms. In the western section are outlier "mountain ranges," from north to south being the Sauratowns, the Brushies, and the South Mountains. East of these are other distinct montane outliers, such as Kings Mountain, the Uwharrie Mountains, and a scattering of other exposed hills, such as Occoneechee Mountain.

RED-SHOULDERED HAWK

DERRICK HAMRICK

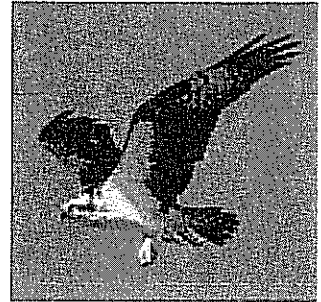


These outliers, called "monadnocks," consist of areas of more resistant rocks than are the surrounding sediments.

The Piedmont is drained by numerous rivers and streams, generally flowing eastward and southward. Quite a few of them have been dammed in recent decades such that many dozens of reservoirs now cover the region's floodplains.

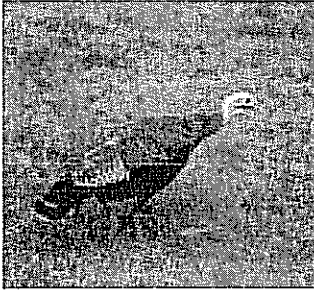
The province's climate is generally one of warm to hot summers (high temperatures in the upper 80s in midsummer) and cool winters, with midwinter temperatures averaging 50 degrees for highs and 30 degrees for low temperature. Rainfall is rather evenly distributed throughout the year, typically 40-50 inches per year. Snowfall is light, typically averaging close to 4 inches near the fall line to 10-12 inches near the mountains.

The Piedmont contains, by far, the largest human population of the state's three provinces. The Piedmont Crescent extends from Raleigh on the east and runs through Greensboro, Winston-Salem, and Charlotte, continuing through upper South Carolina to Atlanta, Georgia. Fortunately, other areas of the state's Piedmont are more thinly settled, and the southeastern Piedmont, centered on the Uwharrie Mountains and the Pee Dee River valley, is heavily forested. The western and northwestern Piedmont also have extensive



OSPREY

SHAWN CAREY



TURKEY

WALKER GOLDER

forests, particularly as these areas contain foothill ranges that are difficult to develop.

The Piedmont is not as critical to breeding birds in

North Carolina as is

the mountain region or the coastal plain, in terms of providing habitat for rare or other sensitive species. This is due in part to the fact that the province is rather homogeneous from northern Virginia to eastern Alabama. Because it is situated between the mountains and the coastal plain, it has practically no species that do not nest in either of the adjacent provinces. Nonetheless, because it is sandwiched between the other provinces, it does have a wide array of nesting birds, especially sharing breeders with the coastal plain.

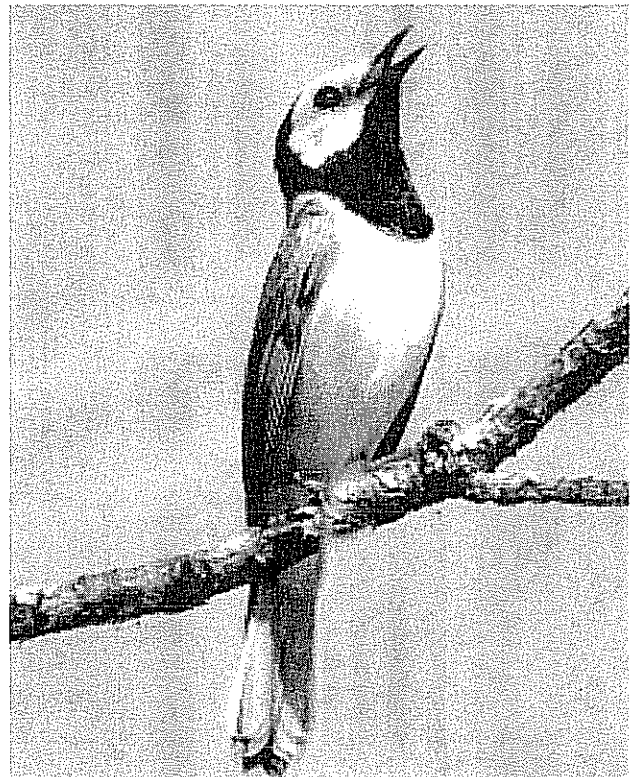
The most important habitats for breeding birds in the province are various hardwood forests, especially extensive upland forests found in the foothills. Such forests are home to Neotropical migrant breeders such as Worm-eating Warbler, Swainson's Warbler (near the escarpment), Broad-winged Hawk, Hooded Warbler, Ovenbird, Scarlet Tanager, Wood Thrush, and many others. Bottomland hardwood forests in the Piedmont are home to other Neotropical migrant breeders such as Louisiana Waterthrush, Acadian Flycatcher, Kentucky Warbler, American Redstart, and Prothonotary Warbler. Of course, extensive hardwood forests provide habitat for permanent residents, such as a variety of woodpeckers, in particular the Pileated and Hairy, and raptors such as Barred Owl and Red-shouldered Hawk.

The Piedmont receives its share of logging activity and large amounts of land exist in seral stages of

forests. Pine forests are common across the Piedmont and host species such as Pine Warbler, Brown-headed Nuthatch, and Eastern Wood-Pewee in summer, and mixed species flocks (Carolina Chickadees, Tufted Titmice, kinglets, and others) in winter. Early succession clearcuts are important habitats for Neotropical species such as Prairie Warbler, Yellow-breasted Chat, and Blue Grosbeak, and the abundant forest edges and openings are home to large numbers of Indigo Buntings. For poorly-known reasons, several permanent resident species are decreasing drastically in our old-field habitats, in particular the Northern Bobwhite and Field Sparrow. However, no birds are in more serious trouble in the Piedmont than are the grassland species, which rely on pastures, airports, and other mowed grassy areas for survival. Breeding Bird Surveys have shown steep declines in the Piedmont for the Loggerhead Shrike,

HOODED WARBLER

JAMES F. PARNELL



Grasshopper Sparrow, and Eastern Meadowlark. Other birds that use open lands such as farmyards, groves, and orchards share mixed Breeding Bird Survey trends. Eastern Kingbirds are declining, whereas Eastern Bluebirds are increasing, thanks to an increase in nesting boxes erected for their use.

Because the Piedmont is the most urban of the provinces in the state, a number of birds dependent on man-created habitats occur in large numbers. Some species are clearly increasing, such as American Robin and Chipping Sparrow, whereas most other “suburban” species such as Northern Mockingbird, Northern Cardinal, and Common Grackle appear to be stable or even declining. Nonetheless, there is little concern for the overall populations of such urban species.

Another key habitat in the Piedmont is reservoirs and other bodies of water. The province is devoid of natural lakes, with beaver ponds being the only natural source of open standing water. For better or worse, dozens of reservoirs, some up to 20 or more miles in length, have been created in the past few decades. This reservoir construction has drastically affected local birdlife. A few decades ago, wintering waterfowl were scarce in the Piedmont, but now ducks and other waterbirds winter in often large numbers as habitat has become available. Migrating shorebirds frequently drop in at reservoirs with exposed mudflats, particularly in late summer and fall. Waterbirds such as Bald Eagle, Osprey, and Double-crested Cormorant now nest at scattered lakes. A few birds nest under bridges and dams, and the Cliff Swallow is practically limited in the state to nesting at Piedmont reservoirs.

As the human population continues to expand in the Piedmont, more and more bird habitats are being lost. Former croplands and pastures are now rapidly



PILEATED WOODPECKER

DERRICK HAMRICK

being covered with homes. Upscale developments now place homes widely scattered within extensive forests, further fragmenting the forests. Powerlines and new highways bisect forested areas, reducing populations of birds such as Wood Thrush, now in rapid decline in the region. Fortunately, in the past few decades we have seen a major thrust in conservation, with a number of national and regional land trusts assisting local, state, and national agencies and organizations in protecting lands. The Piedmont now has major areas of protected lands, such as Uwharrie National Forest, South Mountains State Park and Game Land, Umstead State Park, Caswell Game Land, and lands surrounding reservoirs such as Jordan Lake and Falls Lake. Many of the monadnocks are protected, such as Hanging Rock and Pilot Mountain. But, more protection work is needed, particularly in the foothills region, where there are still extensive forest lands that are unprotected. ■

Jordan Lake

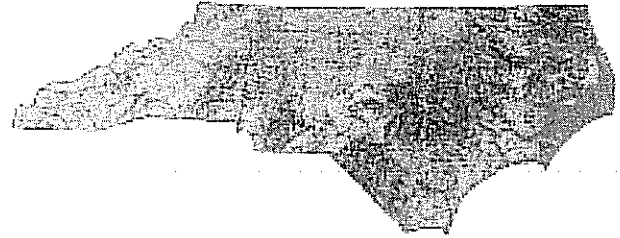
Location: Chatham and Wake Counties
(detailed map on page 141)

Total Size: 29,582.0 ha (73,067.5 acres)

Site Description: B. Everett Jordan Dam and Lake is located in central North Carolina with much of the state's population living within a 75-mile radius of the site. The Jordan Lake Project, a project of the US Army Corps of Engineers, preserves 46,768 acres in the midst of an expanding urban area. Of this total, 13,900 acres have been flooded to form the lake and 32,868 acres are being managed for recreation and wildlife management. The dam impounds the waters of the Haw River and its largest tributary, the New Hope River, which joins the Haw 0.3-mile above the dam site. The Haw joins the Deep River 4.2 miles downstream of the dam to form the Cape Fear River. Although the lower portions of the site area remain rural in character, the rapidly expanding urban and suburban growth areas of Raleigh and Cary surround the upper reaches of the project to the east and Chapel Hill and Durham to the north.

The site also includes the New Hope Experimental Forest, approximately 336 acres located on either side of SR 1129/SR 1178 on the Mason Peninsula. This area is owned by North Carolina State University and is the site of ongoing forestry studies.

Habitats: lake, bottomland hardwood forest, mixed forest, coniferous forest. The pine forest includes medium and high-density stands of predominantly loblolly pine. The bottomland hardwoods forest (8,845 acres) are dominated by species such as maple, black gum, oak, sweetgum, sycamore, birch, elm, and ash. Hardwood stands are dominated by oak, hickory, elm, and maple.



Land Use: wildlife conservation, recreation/tourism, forestry

Primary Threats: residential/commercial development, introduced plants, disturbance to birds

Protection Status: The site is protected and managed by the US Army Corps of Engineers, North Carolina Wildlife Resources Commission, and North Carolina State University. Adjacent property is in private ownership.

Conservation Issues: Increasing development adjacent to project boundaries is a problem for birds and other types of wildlife. Development results in an increase in edge communities, fragmentation of habitat, and interruption of natural corridors for wildlife movement. Disturbance of the Bald Eagles during the nesting season is a concern. Surveys of landbirds during breeding, migration and winter are needed.

Birds: The site supports one of the largest populations of Bald Eagles in North Carolina (4 active nests and 10-20 individuals). Jordan Lake is one of only 2 nesting sites for Double-crested Cormorants known in North Carolina. Bottomland hardwood forest comprises approximately 20% of the total area and supports a significant suite of species typically associated with this habitat type (Criteria NC4).

KEY BIRD SPECIES

Criteria		Season	Number	Year
1	Bald Eagle	All (NB)	10-20	2002
1	Bald Eagle	B	4 prs.	2002
2a	Double-crested Cormorant	B	50 prs.	2002
3a	Osprey	B	12 prs.	2002
3ei	American Coot	W	1,066	2003
3eii	Ring-billed Gull	W	12,284	2003

B=Breeding FM=Fall Migration SM=Spring Migration W=Winter NB=non-breeding