

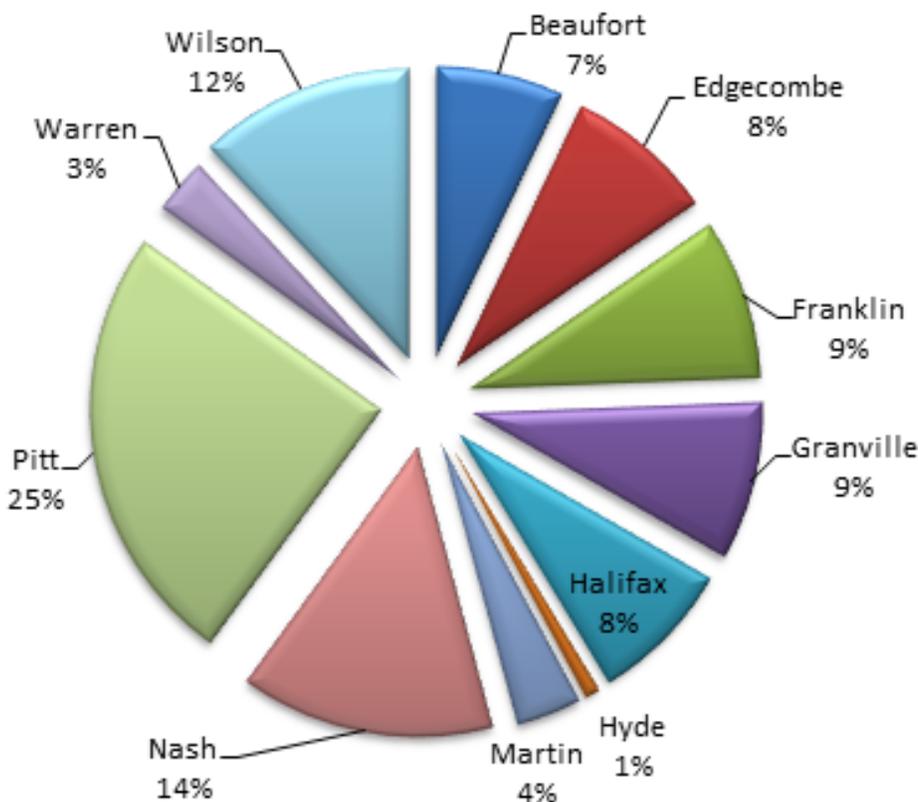
POPULATION & WATER NEEDS

TAR-PAMLICO RIVER BASIN

OVERVIEW

The US 2010 Census data was published in 2011. Figure 1, based on the 2010 census, shows the relative proportion of the total population of the counties that have some area within the Tar-Pamlico River Basin. Since many counties have portions outside of the Tar-Pamlico river basin, this data does not reflect the population within this basin only. To estimate the population within the basin the data were summarized by subwatersheds (HUC 12) and total population for Tar Pamlico river basin was estimated as 449,164 in 2010. This is about 66% of the total county population, an increase by 6% from 2000 census data and by 11% from 1990 census data.

FIGURE 1: COUNTY TOTAL POPULATION PERCENT DATA - 2010 CENSUS DATA



County	2010 Census
Beaufort	47,759
Edgecombe	56,552
Franklin	60,619
Granville	59,916
Halifax	54,691
Hyde	5,810
Martin	24,505
Nash	95,840
Pitt	168,148
Warren	20,972
Wilson	81,234
County Total	676,046

Figure 2 providing the distribution of 2010 population data by HUC 12 shows that the subwatersheds with the highest population densities are near Greenville, Rocky Mount, Beaufort County, Washington, Tarboro and Edgecombe County. Pamlico and Pamlico sounds are mostly coastal and tidal sound areas with fewer populated communities than Tar basin. Figure 3 shows the projected populations for counties within the Tar-Pamlico River Basin.

FIGURE 2: GEOGRAPHICAL DISTRIBUTION OF POPULATION BY HUC12

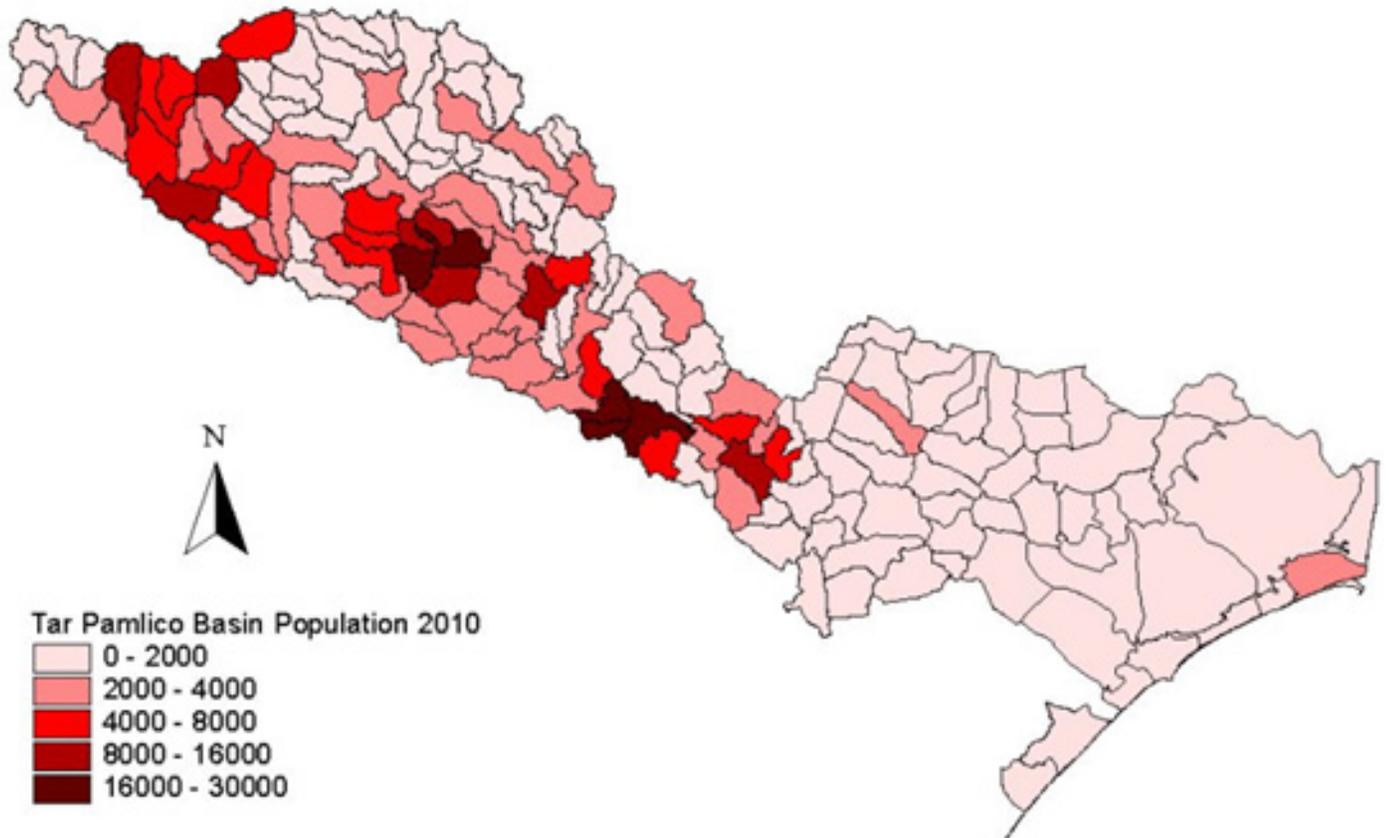
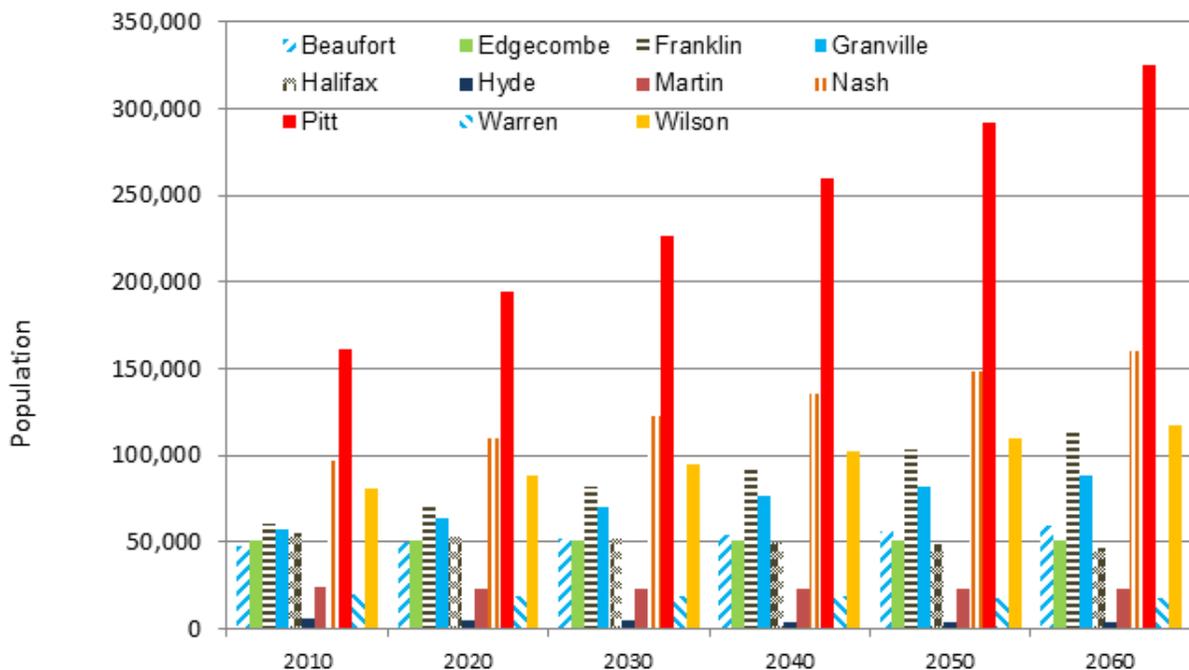


FIGURE 3: POPULATION PROJECTIONS FOR COUNTIES IN THE TAR-PAMLICO RIVER BASIN



OSBM - Office of State Budget and Management, 2010 data upto 2030, DWR projection for 2040-2060

COUNTY AND SERVICE AREA POPULATION PROJECTIONS (WATER SYSTEM'S POPULATION)

Local governments that provide public water service are required to prepare local water supply plans. These plans contain vital information for planning sustainable use and the allocation of water. The data from each plan are compiled by the state Division of Water Resources and include water system characteristics, population projections and water demand projections.

The population projections and water demand data for this document are taken from the 2010 Local Water Supply Plan (LWSP) data. The 2010 plans were based on actual water supply and demand conditions during calendar year 2010 and include estimates of service population through 2060. For systems with missing data, the service population projection for 2060 is a linear projection of the population data contained in the plans, from 2010 to 2050. This methodology assumes that population growth will continue in the same pattern reflected in the local water supply plans. Many unforeseeable factors may influence population growth. For instance, if continued growth results in higher costs of living, reduced quality of life or inadequate public infrastructure including water, sewer, school and transportation capacities then the figures may overestimate future population.

Table 1 shows the estimated population projection from 2010 through 2060 for the service areas covered by the local water supply plans in the Tar Pamlico River Basin grouped by county. The population projections show an increase in population from 305,312 in 2010 to 533,973 by 2060. Notice Tarboro expected to decrease in population by small numbers in 2030. DWR assumes that the rest of the projection year values to be same. Table 2 shows the same population projections by Public Water Supply Systems (PWSS) that submitted LWSP. These tables indicate most current high population densities along with future growth are in Rocky Mount and Greenville areas in Nash and Pitt Counties respectively. Counties in the upper to lower Tar basin such as Franklinton, Nash, Edgecombe and Pitt Counties show significant growth. The highest % of growth will be in Franklinton; around 300% population growth is expected over the next 50 years. Pitt County is expecting little less than 250%. Coastal counties are not expecting high growth because of their seasonal population other than Hyde County. This growth will increase water supply demands as well as wastewater discharges.

TABLE 1: POPULATION PROJECTIONS BY COUNTY BASED ON PERCENT OF AREA SERVED BY WATER SYSTEMS IN THE TAR-PAMLICO RIVER BASIN SUBMITTING A LOCAL WATER SUPPLY PLAN

COUNTY	PWSS [SUBMITTED LWSP]	ID	2010	2020	2030	2040	2050	2060
Beaufort	Aurora	04-07-020	685	710	725	740	750	750
	Bath	04-07-030	304	320	330	340	350	360
	Beaufort Co (Northside)	04-07-035	19,900	21,200	21,500	22,000	22,500	23,000
	Beaufort Co (Southside)	04-07-040	9,900	10,000	10,100	10,200	10,300	10,400
	Belhaven	04-07-015	2,350	2,475	2,600	2,678	2,758	2,800
	Chocowinity	04-07-025	2,400	2,600	2,800	3,000	3,200	3,400
	Washington	04-07-010	11,664	12,072	12,494	12,931	13,383	13,851
	County Total		47,203	49,377	50,549	51,889	53,241	54,561

TABLE 1: POPULATION PROJECTIONS BY COUNTY BASED ON PERCENT OF AREA SERVED BY WATER SYSTEMS IN THE TAR-PAMLICO RIVER BASIN SUBMITTING A LOCAL WATER SUPPLY PLAN

COUNTY	PWSS [SUBMITTED LWSP]	ID	2010	2020	2030	2040	2050	2060
Edgecombe	Hobgood	04-42-035	731	770	847	932	1,025	1,128
	Scotland Neck	04-42-015	2,238	2,250	2,275	2,300	2,350	2,365
	Edgecombe Co WSD	04-33-050	10,000	12,500	13,500	14,000	14,000	14,000
	Macclesfield	04-33-020	863	777	697	626	562	555
	Pinetops	04-33-015	1,481	1,400	1,400	1,400	1,400	1,400
	Princeville	04-33-045	2,441	2,842	3,410	4,092	4,910	5,892
	Tarboro	04-33-010	10,796	10,416	9,923	9,923	9,923	9,923
Edgecombe 18%	Sharpsburg	04-64-040	503	613	735	882	1,059	1,059
Edgecombe 28%	Rocky Mount	04-64-010	16,304	17,068	17,922	18,818	19,758	20,747
Edgecombe 50%	Whitakers	04-33-040	401	409	417	426	434	439
Edgecombe	County Total		45,758	49,045	51,126	53,399	55,421	57,507
Franklin	Bunn	02-35-025	410	426	435	440	450	460
	Franklin Co PU	02-35-030	8,000	18,293	28,930	36,160	45,000	50,000
	Franklinton	02-35-010	3,000	3,200	3,400	3,400	3,400	3,400
	Lake Royale	02-35-108	2,800	3,400	4,000	4,000	4,000	4,000
	Louisburg	02-35-015	3,750	3,950	4,500	4,680	4,870	5,500
	County total		17,960	29,269	41,265	48,680	57,720	63,360
Granville	Oxford	02-39-010	12,843	10,800	11,700	12,600	13,600	14,700
	County Total		12,843	10,800	11,700	12,600	13,600	14,700
Halifax	Enfield	04-42-025	3,031	3,055	3,042	3,029	3,016	3,020
	County Total		3,031	3,055	3,042	3,029	3,016	3,020
Hyde	Hyde County Water System	04-48-010	5,475	6,000	6,500	7,500	8,000	8,500
	Ocracoke SD	04-48-020	780	770	770	800	800	810
	County Total		6,255	6,770	7,270	8,300	8,800	9,310
Martin	Everetts	04-59-114	349	349	349	350	350	350
	Parmeles	04-59-113	325	330	335	340	350	355
	Robersonville	04-59-015	2,376	2,381	2,350	2,325	2,300	2,300
	County Total		3,050	3,060	3,034	3,015	3,000	3,005
Nash	Castalia	04-64-055	373	389	431	467	503	534
	Dortches	04-64-060	50	50	50	50	50	55
	Nash Co. II	40-64-010	230	400	500	600	700	700
	Nash Co. III	40-64-025	350	400	500	600	700	800
	Nashville	04-64-020	6,000	7,150	7,865	8,650	9,516	10,396
	Spring Hope	04-64-025	1,350	1,485	1,635	1,975	2,475	3,094
Nash 72%	Rocky Mount	04-64-010	41,925	43,890	46,084	48,388	50,808	53,348
Nash 50%	Whitakers	04-33-040	401	409	417	426	434	439
Nash 49%	Sharpsburg	04-64-040	1,370	1,668	2,002	2,402	2,882	2,882
Nash	County Total		52,049	55,841	59,484	63,558	68,068	72,248

TABLE 1: POPULATION PROJECTIONS BY COUNTY BASED ON PERCENT OF AREA SERVED BY WATER SYSTEMS IN THE TAR-PAMLICO RIVER BASIN SUBMITTING A LOCAL WATER SUPPLY PLAN

COUNTY	PWSS [SUBMITTED LWSP]	ID	2010	2020	2030	2040	2050	2060
Pitt	Bell Arthur WC	04-74-045	9,025	9,300	9,300	10,000	10,500	10,550
	Bethel	04-74-030	1,886	2,123	2,390	2,691	3,030	3,281
	Greenville UC	04-74-010	90,000	108,000	129,000	154,000	184,000	219,844
	Grimesland	04-74-055	632	688	750	816	889	910
	Stokes RWC	04-74-060	3,266	3,690	4,169	4,711	5,324	6,016
	County Total		104,809	123,801	145,609	172,218	203,743	240,601
Warren	Norlina	02-93-020	506	550	550	550	550	550
	Warren County	02-93-015	8,520	7,850	8,450	9,050	9,650	10,250
	Warrenton	02-93-010	1,000	1,000	1,025	1,050	1,075	1,100
	County Total		10,026	9,400	10,025	10,650	11,275	11,900
Wilson	Elm City	04-98-020	1,405	1,514	1,620	1,683	1,747	1,819
Wilson 33%	Sharpsburg	04-64-040	923	1,123	1,348	1,618	1,941	1,941
Wilson	County Total		2,328	2,637	2,968	3,301	3,688	3,760
TAR Basin Total			305,312	343,055	386,072	430,638	481,572	533,973

TABLE 2: POPULATION PROJECTION BY PUBLIC WATER SUPPLY SYSTEM (PWSS) IN TAR PAMLICO RIVER BASIN SUBMITTING A LOCAL WATER SUPPLY PLAN

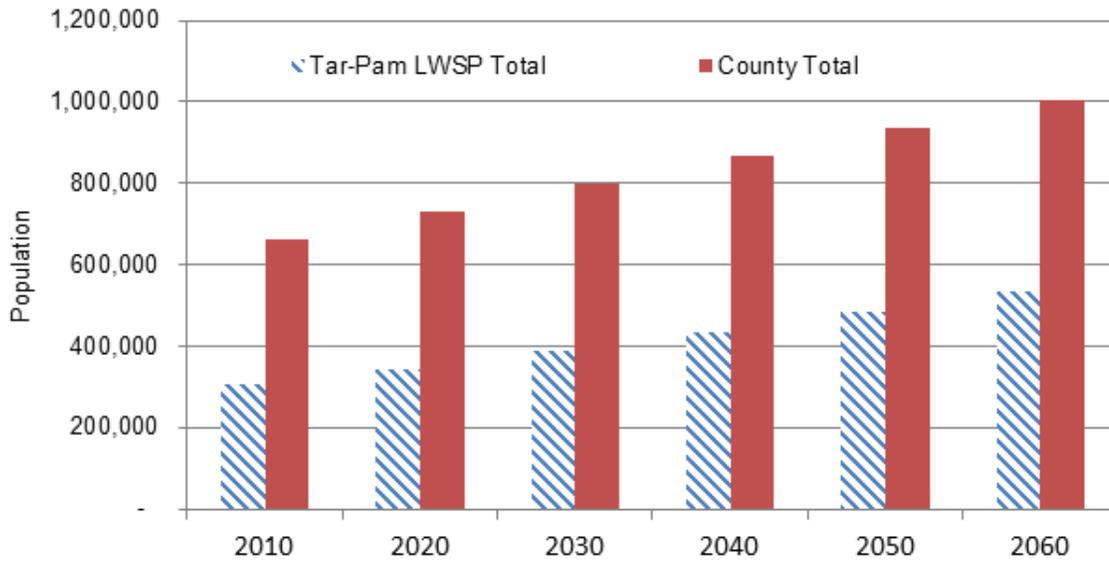
PWSS	ID	2010	2020	2030	2040	2050	2060
Bunn	02-35-025	410	426	435	440	450	460
Castalia	04-64-055	373	389	431	467	503	534
Dortches	04-64-060	50	50	50	50	50	55
Franklin Co PU	02-35-030	8,000	18,293	28,930	36,160	45,000	50,000
Franklinton	02-35-010	3,000	3,200	3,400	3,400	3,400	3,400
Lake Royale	02-35-108	2,800	3,400	4,000	4,000	4,000	4,000
Louisburg	02-35-015	3,750	3,950	4,500	4,680	4,870	5,500
Nash Co. II	40-64-010	230	400	500	600	700	700
Nash Co. III	40-64-025	350	400	500	600	700	800
Nashville	04-64-020	6,000	7,150	7,865	8,650	9,516	10,396
Oxford	02-39-010	12,843	10,800	11,700	12,600	13,600	14,700
Rocky Mount	04-64-010	58,229	60,958	64,006	67,206	70,566	74,095
Spring Hope	04-64-025	1,350	1,485	1,635	1,975	2,475	3,094
Whitakers	04-33-040	802	818	834	851	868	878
Enfield	04-42-025	3,031	3,055	3,042	3,029	3,016	3,020
Hobgood	04-42-035	731	770	847	932	1,025	1,128
Norlina	02-93-020	506	550	550	550	550	550
Scotland Neck	04-42-015	2,238	2,250	2,275	2,300	2,350	2,365
Warren County	02-93-015	8,520	7,850	8,450	9,050	9,650	10,250

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PWSS	ID	2010	2020	2030	2040	2050	2060
Warrenton	02-93-010	1,000	1,000	1,025	1,050	1,075	1,100
Bell Arthur WC	04-74-045	9,025	9,300	9,300	10,000	10,500	10,550
Bethel	04-74-030	1,886	2,123	2,390	2,691	3,030	3,281
Edgecombe Co WSD	04-33-050	10,000	12,500	13,500	14,000	14,000	14,000
Elm City	04-98-020	1,405	1,514	1,620	1,683	1,747	1,819
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Aurora	04-07-020	685	710	725	740	750	750
Bath	04-07-030	304	320	330	340	350	360
Beaufort Co (Northside)	04-07-035	19,900	21,200	21,500	22,000	22,500	23,000
Beaufort Co (Southside)	04-07-040	9,900	10,000	10,100	10,200	10,300	10,400
Belhaven	04-07-015	2,350	2,475	2,600	2,678	2,758	2,800
Chocowinity	04-07-025	2,400	2,600	2,800	3,000	3,200	3,400
Washington	04-07-010	11,664	12,072	12,494	12,931	13,383	13,851
Hyde County Water System	04-48-010	5,475	6,000	6,500	7,500	8,000	8,500
Ocracoke SD	04-48-020	780	770	770	800	800	810
TAR Basin Total		305,312	343,055	386,072	430,638	481,572	533,973

To compare the projection data from several different perspectives, more figures are presented for the breakdown of the counties and decades in Figure 4 and Figure 5. County population projection data are collected from North Carolina Office of State Budget and Management. This data are projected for 2030, DWR used linear projections to extend the estimates through 2060

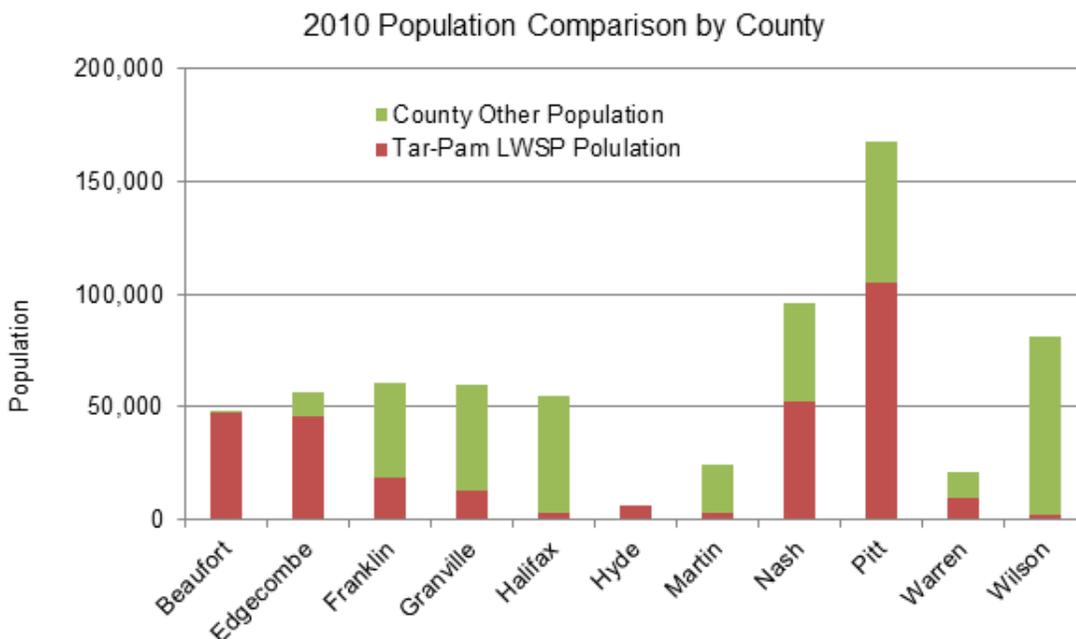
FIGURE 4: POPULATION PROJECTION FOR TAR PAMLICO BASIN LWSP AND COUNTIES



LWSP - Local Water Supply Plan, May 2010 Data

County Total - Office of State Budget and Management 2010 Data upto 2030, DWR projection for 2040-2060

FIGURE 5: POPULATION COMPARISON BY COUNTY FOR 2010



LWSP - Local Water Supply Plan, May 2010 Data

County Total - North Carolina Office of State Budget and Management 2010 Data