

1 POPULATION AND DWELLING REVIEW FOR WATER RESOURCES PLAN

1.1 Introduction

Water undertakers have a statutory duty to prepare and maintain a water resources plan under new sections of the Water industry Act 1991, brought in by the Water Act 2003.

The current WRMP Guidance requires a comprehensive review of the forecast of population and numbers of households in the Company's supply area. The Company carries out these comprehensive reviews at five yearly intervals to match the periodic review cycle.

The previous review of forecasts was carried out in 2007/08. Since then, forecast trends in numbers of households have been checked annually against the Company's billing data, which is a reliable source.

The Company has followed the *Water Resources Planning Guidelines 2012* and has also taken account of local knowledge in developing the population and household projections.

This appendix describes the Company's investigations into sources of data for population and households and proposes population and household projections to be used in the Supply/Demand forecast.

2 CONSULTATIONS AND PLAN-BASED PROJECTIONS

2.1 Wrexham County Borough Council

The Wrexham County Borough Council (WCBC) area falls within the Wrexham Resource Zone (WRZ). It is therefore considered to be a very good indicators for the likely changes in population and dwellings for this resource zone.

All local authorities in the Company's area of supply were issued with a data collection template as provided in Section 7.3 of the *Methods of Estimating Population and Household Projections* report.

Only Wrexham County Borough Council completed the template and returned the information to the Company. We also met with the Planning Officer from WCBC to discuss the WRMP process and to determine if he was aware of any significant developments that we should consider in our plan. The returned submission identified a need for 11,786 new dwellings between 2006 and 2021 and a population increase from 135,100 in 2011 to 146,400 by 2026. The plan-based increase in dwellings equates to around 600 properties per year which compares closely to the trend based projection of 618 per year. However, it is noted that it is almost double the recent trend recorded in the Company's billing system.

2.2 Denbighshire County Council

Denbighshire County Council (DCC) covers a small percentage (4.28%) of the WRZ. Denbighshire did not return the generic spreadsheet and as a result we downloaded the latest Local Development Plan Examination (September 2012) and obtained the projected dwelling information from their web-site, which sets out a revised total requirement of 5,993 new dwellings by 2021.

2.3 Flintshire County Council

Flintshire County Council (FCC) covers a small percentage of the population of the Company (approximately 8.2% in the CRZ and 9.5% in the WRZ).

FCC did not return the generic spreadsheet but provided the Company with a copy of the Council's Unitary Development Plan (adopted 28 September 2011), which sets out their strategy for housing between 2000 and 2015. The UDP contained much of the information requested in the generic template.

2.4 Cheshire West and Chester Council

In 2006 the Department for Communities and Local Government considered reorganising Cheshire's administrative structure as part of the 2009 structural changes to local government in England. The decision to merge Vale Royal with the districts of Chester and Ellesmere Port and Neston to create a single unitary authority was announced on 25 July 2007. The Chester district was abolished on 1 April 2009, when the new Cheshire West and Chester (CWaC) unitary authority was formed.

For Cheshire West and Chester Council we met with the Principal Planning Officer and were provided with a Housing Requirement Background Paper (August 2012). For Chester the new dwellings required between 2010 to 2030 amounted to 4,500 (225/year) with a population increases of 5,950.

3 TREND-BASED POPULATION ESTIMATES AND PROJECTIONS

The ONS prepares annual mid-year estimates (MYE) of population for LAUA areas in England and Wales. The mid-year estimates are generally considered to be the best estimate of population at LAUA level because they utilise official measures of births and deaths along with estimates of migration and are recommended as the best sources for population estimates at LAUA level.

The ONS also prepares LAUA-level population projections for England and Wales. The latest long-term (25-year) sub-national projections are the 2008-based projections, which were published in May 2010. The projections use recent demographics data to inform assumptions about future demographic behaviour.

Local authority population projections for Wales are published by the Welsh Government. They were published for the first time (2006-based) in June 2008, and 2008-based LA projections were published in May 2010. Population projections provide estimates of the size of the future population, and are based on assumptions about births, deaths and migration. The assumptions are based on past trends. The local authority projections only indicate what may happen should the recent trends continue. Projections done in this way do not make allowances for the effects of local or central government policies on future population levels, distribution and change.

A new approach was used to develop the 2006-based local authority projections, and the same process has been used for the 2008-based projections.

The projections have been developed in close collaboration with local authorities and key users in Wales - through the Wales sub-national population working group (WASPP). The WASPP group was originally formed as a subgroup of the Welsh Statistical Liaison Committee. The WASPP group has met on a regular basis over the past four years, and has been a forum for technical discussion on the methodology, the base data, and the launch of the population projections. Members of WASPP include local authority representatives with knowledge of and/or experience of demographic data and population projections.

Usual residents away from home temporarily are included, but visitors are excluded. Students are counted at their term time address. It should also be noted that the UN definition of an international migrant is used – those changing country of residence for a period of at least 12 months. Short-term migrants (e.g. migrant workers from Eastern European countries) are not counted in the population estimates.

Mid-year population estimates use the Cohort Component method. The previous year's population is aged on by a year, births are added, deaths are subtracted and estimates of internal (within UK) and international migration are also included. Adjustments are made for certain special population groups such as prisoners, armed forces, school boarders and asylum seekers.

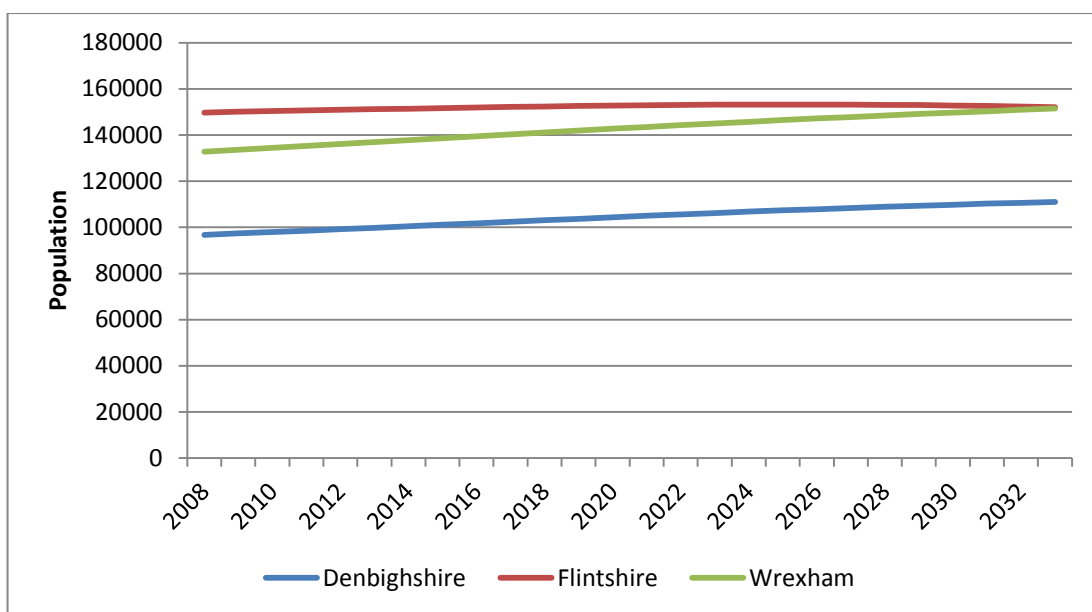


Figure 1: 2008 – based local authority population projections for Wales, 2008-2033

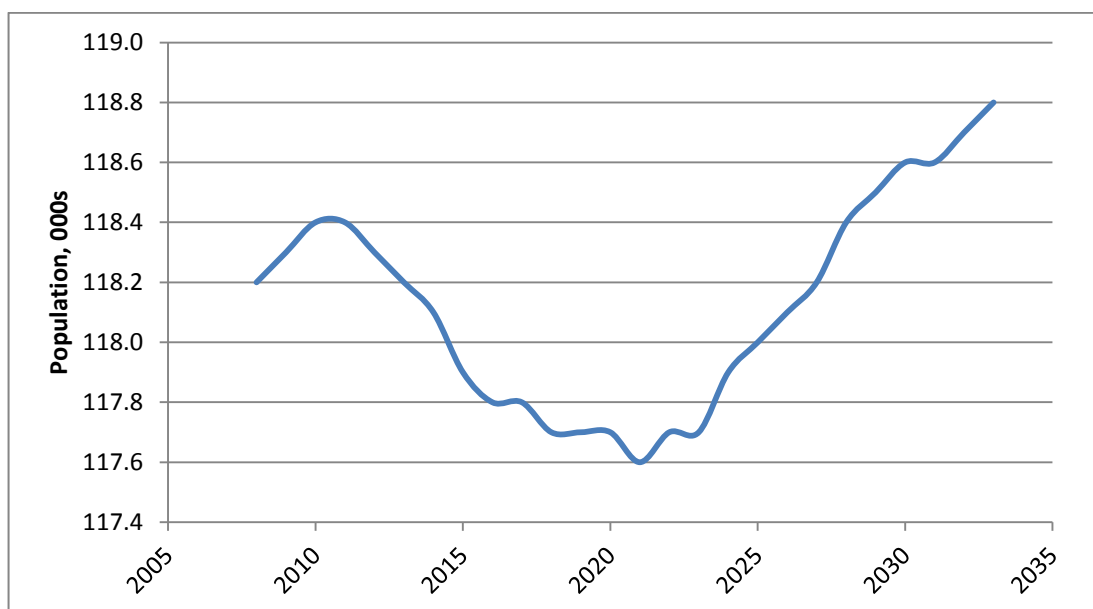


Figure 2: Chester – 2008 based subnational population projection population Table 5: all local authorities and higher administrative areas

It is noted that the projected population data for Chester above shows an unusual profile, with a decline in the population to 2021 followed by a recovery to 118,800 by 2035.

4 TREND-BASED HOUSEHOLD ESTIMATES AND PROJECTIONS

England

Trend –based household estimates and projections for England are based on the household projections data published by DCLG. The DCLG household projections are produced by applying projected household formation rates to the population projections published by the Office for National Statistics. The current round of projections are the 2008-based projections, which use the 2008-based sub-national projections published by ONS.

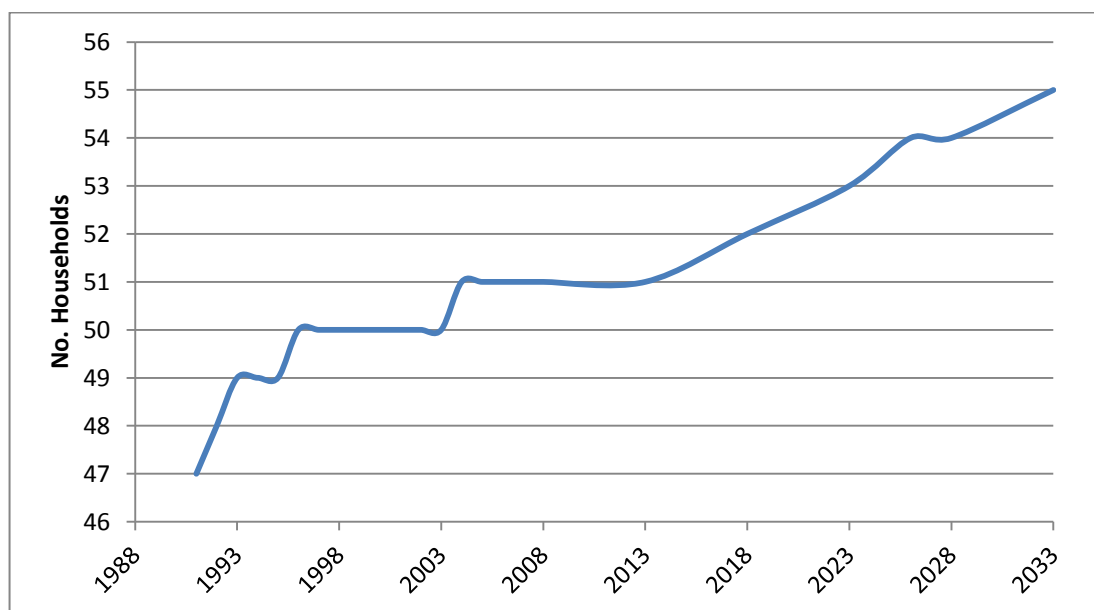


Figure 3: Table 406 household projections by district, England, 1991-2033 Chester

The trend-based projections illustrated above shows an annual increase of 166 for the Chester RZ.

Wales

The household projection figures by local authority are based on the 2006-based Local Authority Population Projections produced by the Welsh Assembly Government. The household projection figures provided on StatsWales for Wales as a whole are based on the 2006-based National Population Projections for Wales produced by the Office for National Statistics.

The 2006-based household projections use a different methodology to that used for the 2003 based sub-national household projections and are the first to be produced for the 22 unitary authorities in Wales. Previous household projections for Wales were produced together with those for England by Anglia Ruskin University.

The new methodology has been developed in conjunction with the Wales Sub-national Household Estimates and Projections Working Group (WASHP). Members of WASHP include representatives with experience of demographic and housing data from Welsh local authorities, the Data Unit and the Welsh Assembly Government.

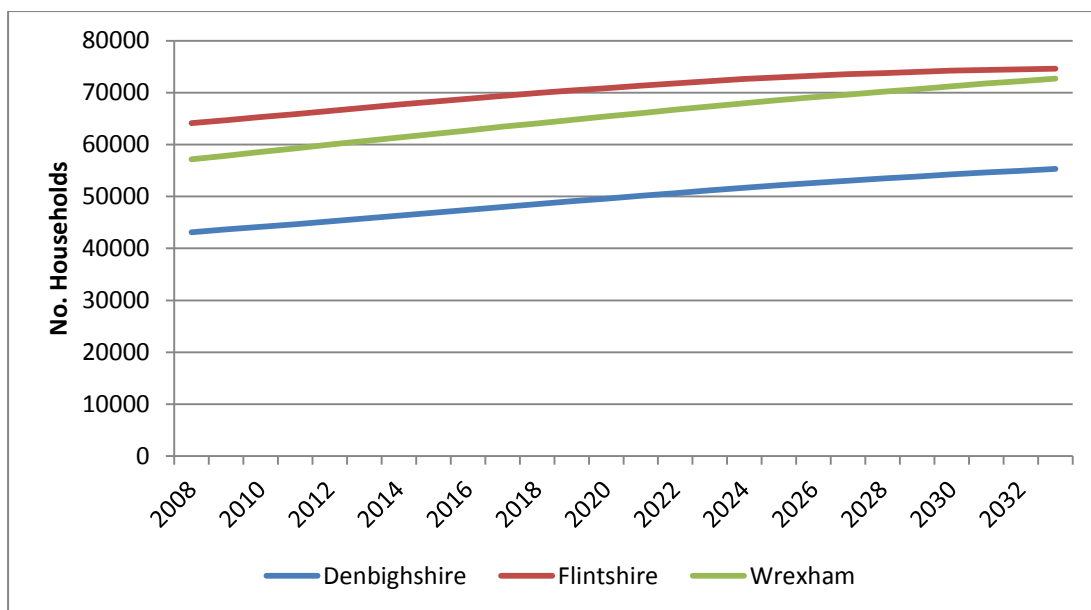


Figure 4: Household projection for Wales - All Households by local authority - 2008-2033

The trend-based projection illustrated above shows annual increase of 618 for the Wrexham RZ.

5 TREND-BASED INFORMATION FROM THE BILLING SYSTEM

Property counts from the Company billing system for the last five years were examined and the annual increase in households in Chester was found to be 334 properties per year. In Wrexham the corresponding figure was estimated to be 387 properties per year. The longer-term trend back to 2004/5 results in annual increases of 229 for Chester and 515 for Wrexham,

The longer term trends in Chester and Wrexham must be viewed with some caution as there was a planning moratorium on new properties in Chester in 2007/08 and 2008/09, which has now been lifted. At the same time there was a large increase in the number of properties being built in the Wrexham area (probably due to the ban in Chester).

In trend analysis, if 2007/08 and 2008/09 are excluded as untypical, then the annual increase in properties in Chester approximates to 225 and in Wrexham to 519.

6 SUMMARY – POPULATION FORECASTS

The previous Water Resources Management Plan population projection included a steady increase of 348 people per year in the Chester Resource Zone. This is slightly higher than the population increase included in CWaC's Housing requirements Paper of 298 people per year. However, the Chester Resource Zone includes a small proportion of the Flintshire County Council and an uplift to 348 people per year in the Resource Zone seems reasonable.

For sensitivity testing an increase of 375 and a slightly lower figure of 298 people per year have been used.

The Wrexham Resource Zone is heavily influenced by the plan-based forecasts of WCBC. In view of this the population increase is assumed to be about 699 per year.

Upper and lower limits of 750 and 650 respectively have been used in the sensitivity analysis.

7 SUMMARY - HOUSEHOLD FORECASTS

Based on the above, the trend-based analyses concurred fairly closely to the plan-based projections included by the Local Authorities in their Plans. For the Chester Resource Zone the projected increase in properties is 218 per year, with an upper limit of 334 and lower limit of 166.

For the Wrexham Resource Zone the projected increase in properties is estimated to be about 607 per year. Upper and lower limits of 650 and 550 respectively have been used in the sensitivity analysis.

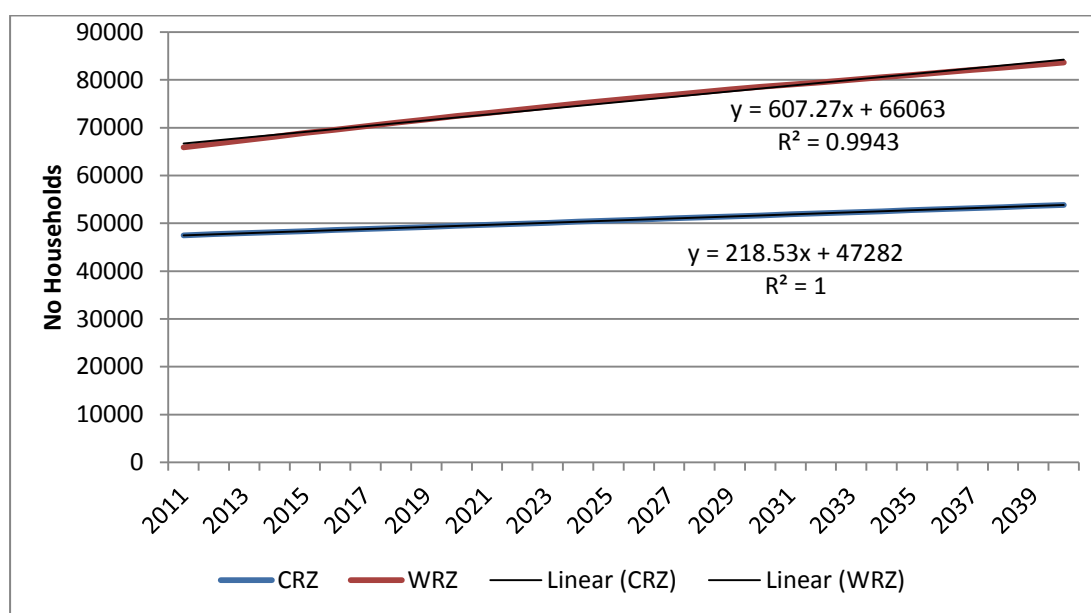


Figure 5: Summary chart of household projections