

POTABLE WATER

Intent

The intent of the Water Plan is to facilitate the provision of adequate potable water and cost-effective water facilities in a manner consistent with development, as reflected by the Long-Range Land Use Plan Map; to address existing and potential conditions that could otherwise adversely impact the natural environment and public health, safety, and welfare; and to implement the Safe Drinking Water Act.

Public water is planned and mapped for the Development and Rural Areas. Extension of public water shall not be used as a justification for increasing the residential densities that are shown on the Long-Range Land Use Plan Map for a given area.

The Water Plan includes the following components:

- Intent, Goal, Policies, and Action Strategies
- Existing and Projected Potable Water Facilities Map (Figure 1)

GOAL: Provide economically feasible and environmentally sensitive systems of high quality public drinking water supply, transmission, storage, and distribution to serve existing and proposed development as reflected in the Long-Range Land Use Plan Map.

WA-POLICY 1: Continue regional water supply planning so that the costs of system expansion and increases in system capacity will continue to be borne by new development in coordination with the Prince William County Service Authority.

ACTION STRATEGIES:

1. Recognize the Prince William County Service Authority and the Virginia-American Water Company as the primary providers of water facilities within the County.
2. Continue private sector financing – in coordination with the Prince William County Service Authority – of all capital costs associated with the expansion of water facilities necessary to serve new development.
3. Continue to monitor the total capacity needs of areas supplied by the Fairfax Water Authority and the City of Manassas, in order to ensure a sufficient water supply to meet projected demands within Prince William County.
4. Continue to support the Occoquan Monitoring Laboratory, the Northern Virginia Planning District Commission's technical studies, and the multi-jurisdictional Occoquan watershed program. Obtain annual reports for presentation to the Board of County Supervisors.

5. Continue to negotiate economically feasible expansions of capacity rights – by and through the Prince William County Service Authority – with the Fairfax Water Authority and the City of Manassas, in order to provide for the projected needs of the County.
6. Continue to reduce the use of groundwater resources for public water supply sources where public surface water supply sources can be utilized effectively.
7. Continue to identify types of point/non-point pollution sources upstream from the reservoirs, and to suggest ways that non-point source pollution can be eliminated or controlled.

WA-POLICY 2: Ensure adequate water supplies and system capacities needed to support planned growth in accordance with the densities and intensities of the Long-Range Land Use Plan and Map, and in a cost-effective manner.

ACTION STRATEGIES:

1. Design water facilities according to the densities and intensities reflected in the Long-Range Land Use Plan and Map.
2. Require all future development within the Development Area – as reflected by the Long-Range Land Use Plan Map – to connect to public water facilities. Permit all future development within the Rural Area – as reflected by the Long-Range Land Use Plan Map – to connect to public water facilities.
3. Require new development utilizing public water systems to fund – in coordination with the Prince William County Service Authority – the capital costs associated with expanding the water facility, including line extensions and plant capacity expansions.
4. Prepare the necessary standards and regulations to require existing and future water users – including those in the Rural Area – to connect to public water facilities if such development is or may cause a public health hazard.
5. Determine the extent of groundwater contamination throughout the County.
6. Develop a Wellhead Protection Program – utilizing procedural guidelines and information available from the U.S. Environmental Protection Agency and the Virginia Ground Water Protection Steering Committee – to protect or improve the groundwater quality of Prince William County.
7. In coordination with the Health Department and the Virginia Department of Environmental Quality identify critical groundwater and groundwater recharge areas throughout the County, as well as the developments that abut or are located within those areas. Once these areas have been identified, require applicants for rezonings, special use permits and/or Comprehensive Plan amendments – where appropriate – to consider this information consistent with the Environment Chapter.

8. Under existing laws and regulations, require industries and utilities to monitor and report chemical leaks.
9. Locate non-residential activities that use, store, or manufacture significant quantities of toxic substances away from the County's water bodies and critical groundwater areas.
10. Encourage the use of semi-pervious or pervious surfaces where appropriate for purpose of groundwater recharge in accordance with the Environment Chapter.
11. Promote the use of secondary containment storage tanks for petroleum products and other hazardous material.
12. Ensure the lowest allowable density/intensity of development – as reflected by the appropriate land use classification shown on the Long-Range Land Use Plan Map – around the shore of the reservoirs located in the County.
13. Conduct a study and map the upper reaches of the Occoquan Reservoir – the County's primary public water supply – and evaluate the option of creating an overlay district for the area. Cooperate with the Fairfax County Water Authority to ensure protection of this water supply source.
14. Where not otherwise required as part of the Chesapeake Bay Preservation Act for designated resource protection areas (RPAs), require a minimum 100-foot setback from the shorelines of public water sources for development-related ground disturbance activities. Preclude disturbance activities on any area where contiguous slopes greater than 20 percent are adjacent to shorelines, and extend beyond the 100-foot setback.
15. In cooperation with Fairfax County, evaluate the option of restricting – by ordinance – the use of internal combustion engines on the Occoquan Reservoir.
16. Utilize Existing and Projected Potable Water Facilities Map (Figure 1) to identify the general or approximate location, character, and extent of the features shown thereon. Such features shall be planned, sited, and buffered in a manner so as to provide compatibility with surrounding existing and planned land uses, and shall meet the appropriate policies and action strategies of the Long-Range Land Use Plan.

WA-POLICY 3: Provide for a combination of safe, efficient, and affordable public water systems and private wells in the Rural Area, while maintaining the land use densities delineated in the Long-Range Land Use Plan Map and upholding the policies and action strategies outlined in the Comprehensive Plan.

ACTION STRATEGIES:

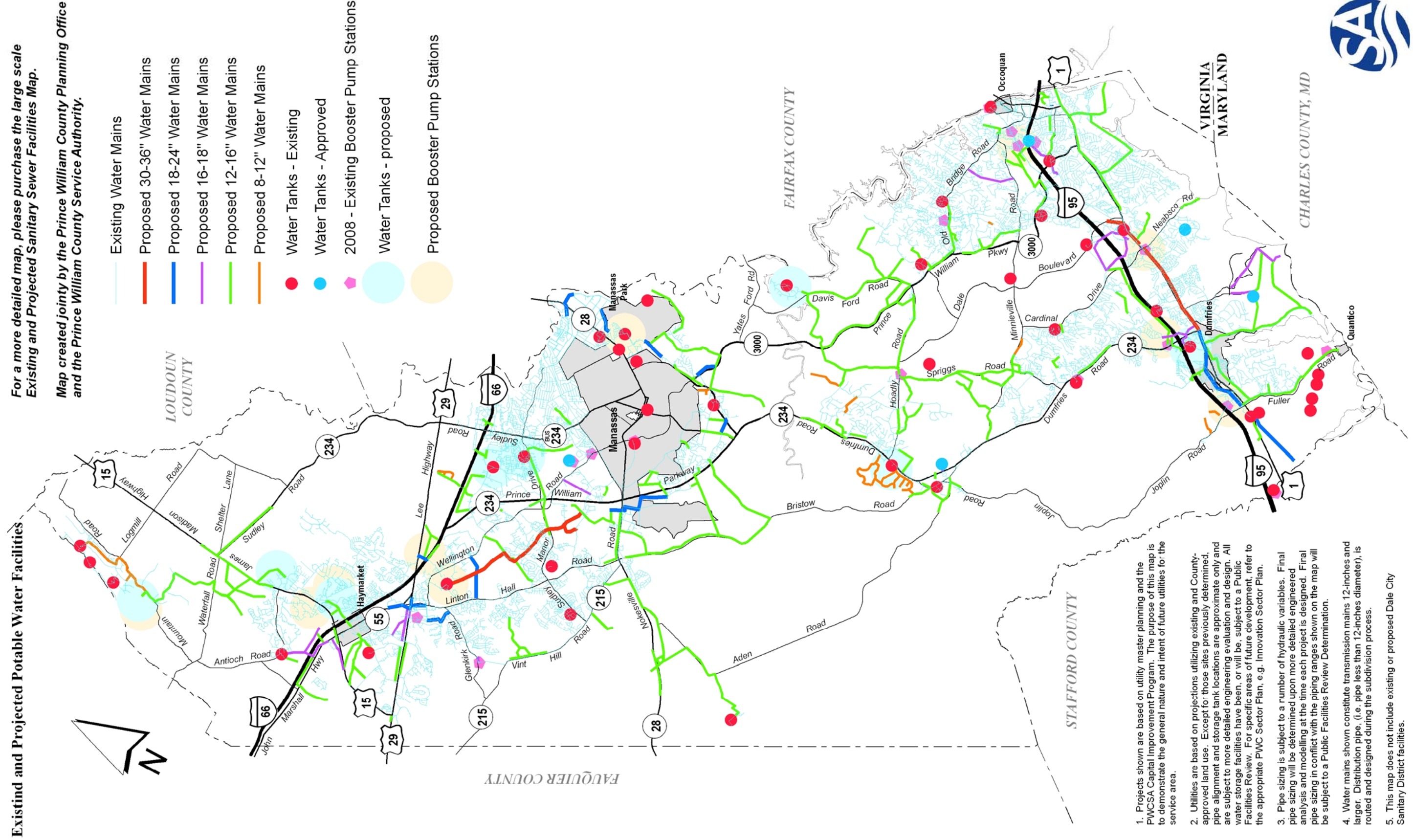
1. Allow private well systems within the Rural Area where public water systems will not or cannot be provided, so long as natural environmental conditions and system design characteristics are conducive to their efficient operation.
2. The existence or extension of a public water system in the Rural Area shall not promote increased densities which would not otherwise be allowed nor provide justification for altering the land use classifications in the Long-Range Land Use Plan and Map.
3. Investigate the feasibility of obtaining grant funds for use by the County for water extension to areas with a high potential for well contamination or inadequate supply of groundwater.

POTABLE WATER PLAN MAP

The Existing and Projected Potable Water Facilities Map (Figure 1) reflects existing potable water facilities and proposed facility improvements. The data shown on the map include the range of pipe sizes planned by the Prince William County Service Authority for that particular system or area.

Figure 1 - Existing and Projected Potable Water Facilities Map

From the Piedmont to the Potomac



For a more detailed map, please purchase the large scale Existing and Projected Sanitary Sewer Facilities Map.

Map created jointly by the Prince William County Planning Office and the Prince William County Service Authority.

- Existing Water Mains
- Proposed 30-36" Water Mains
- Proposed 18-24" Water Mains
- Proposed 16-18" Water Mains
- Proposed 12-16" Water Mains
- Proposed 8-12" Water Mains
- Water Tanks - Existing
- Water Tanks - Approved
- 2008 - Existing Booster Pump Stations
- Water Tanks - proposed
- Proposed Booster Pump Stations

Existing and Projected Potable Water Facilities

1. Projects shown are based on utility master planning and the PWCSA Capital Improvement Program. The purpose of this map is to demonstrate the general nature and intent of future utilities for the service area.
2. Utilities are based on projections utilizing existing and County-approved land use. Except for those sites previously determined, pipe alignment and storage tank locations are approximate only and are subject to more detailed engineering evaluation and design. All water storage facilities have been, or will be, subject to a Public Facilities Review. For specific areas of future development, refer to the appropriate PWC Sector Plan, e.g. Innovation Sector Plan.
3. Pipe sizing is subject to a number of hydraulic variables. Final pipe sizing will be determined upon more detailed engineering analysis and modelling at the time each project is designed. Final pipe sizing in conflict with the piping ranges shown on the map will be subject to a Public Facilities Review Determination.
4. Water mains shown constitute transmission mains 12-inches and larger. Distribution pipe, (i.e. pipe less than 12-inches diameter), is routed and designed during the subdivision process.
5. This map does not include existing or proposed Dale City Sanitary District facilities.