

TABLE OF CONTENTS

1.0	INTRODUCTION	1-1
1.1	Purpose of the Study and Regulations	1-1
1.2	Background and Regional Nature of the Study.....	1-2
1.3	General Location and Description.....	1-4

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FIGURES

FIGURE 1-1: REGIONAL OVERVIEW MAP.....1-6

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1.0 INTRODUCTION

The northern Virginia regional water supply planning group is made up of 22 local governments. Participating jurisdictions include the counties of Arlington, Fairfax, Loudoun, and Prince William; the cities of Alexandria, Fairfax, Falls Church, Manassas, Manassas Park; and the towns of Clifton, Dumfries, Hamilton, Haymarket, Herndon, Leesburg, Lovettsville, Middleburg, Occoquan, Purcellville, Quantico, Round Hill, and Vienna.

1.1 Purpose of the Study and Regulations

The Northern Virginia Regional Water Supply Plan (Plan) complies with the State Water Control Board's regulation 9 VAC 25-780, Local and Regional Water Supply Planning, and is a functional plan supporting sustainable growth and economic development. The purpose of the regulation is to establish a comprehensive process for the development of local, regional, and state water supply plans. This process is designed to:

- Ensure that adequate and safe drinking water is available to all citizens within the region;
- Encourage, promote, and protect all other beneficial uses of the region's water resources;
- Encourage, promote, and develop incentives for alternative water sources; and
- Promote conservation.

Local governments participating in the regional plan notified VDEQ of their intent to participate in the Plan before the November 2, 2008 deadline. The Plan was submitted to the VDEQ prior to the November 2, 2011 deadline. A public hearing was held by each participating jurisdiction and the local governments passed resolutions approving the Plan as well as adopting other policies or ordinances that were developed during the planning process.

1.2 Background and Regional Nature of the Study

Washington Metropolitan Area

Northern Virginia and the Washington Metropolitan Area (WMA) began the first regional approaches to water supply planning in the 1960s. In 1978, the United States, Virginia, Maryland, the District of Columbia, and the WMA water suppliers, which include Fairfax Water, the Washington Aqueduct Division of the U.S. Army Corps of Engineers (Washington Aqueduct), and the Washington Suburban Sanitary Commission (WSSC) formalized this cooperative approach in a set of agreements signed in the late 1970s and early 1980s. These agreements include the Low Flow Allocation Agreement (LFAA) and the Water Supply Coordination Agreement (WSCA). The LFAA allocates the amount of water each water supplier can withdraw from the Potomac River, the major water source for the region, when the total flow is not sufficient to meet all needs. In 1982, the WMA water suppliers and the Interstate Commission on the Potomac River Basin (ICPRB) signed the WSCA, which provides for coordination of all the major supply facilities in the region during periods of low flow in the Potomac River.

The WMA water suppliers cooperate on water supply operations in the Potomac, essentially operating as one entity in sharing water across the Potomac, Patuxent, and Occoquan basins during periods of low flow. The cooperative work is coordinated by a special section of ICPRB, the “Section for Cooperative Water Supply Operations on the Potomac” (CO-OP). In the WSCA, the ICPRB CO-OP agreed to assume a direct role in managing water supply resources and withdrawals in the WMA. The agreement provides for an Operations Committee that is responsible for overseeing the CO-OP activities and consisting of representatives from the Washington Aqueduct, Fairfax Water, and WSSC.

The LFAA requires that “In April 1990 and in April of each fifth year thereafter...the [WMA water suppliers and the District of Columbia] shall evaluate the adequacy of the then available water supplies to meet the water demand in the WMA which may then be expected to occur during the succeeding twenty year period.” Pursuant to that Agreement, the ICPRB CO-OP has been preparing a Water Supply Reliability Forecast for the region.

The three major regional water suppliers' decision to a regional approach to water supply planning through the ICPRB CO-OP has made it possible to provide adequate water supply for the WMA as well as provide significant cost savings for the region.

Northern Virginia Region

As discussed above, the ICPRB CO-OP has previously been responsible for water supply planning efforts for the WMA, which includes the District of Columbia and portions of Maryland and Northern Virginia. The Local and Regional Water Supply Planning Regulations, 9 VAC 25-780, which became effective in November 2005, however, only applies to the Commonwealth of Virginia. Since the majority of Northern Virginia water customers receive water as part of the CO-OP system, it made sense for the localities in the NVRC to work together on a regional water supply plan. On May 18, 2006, the Northern Virginia Chief Administration Officers (CAOs) Committee met to determine how each of the jurisdictions intended to proceed to meet the water supply plan requirements. Representatives from many of the region's water supply utilities attended this meeting as well. After considerable discussion, the CAOs asked that the Northern Virginia Regional Commission (NVRC) form a committee to further discuss this matter and to determine which jurisdictions would like to participate in a regional initiative. Moreover, the CAOs asked that NVRC serve as the coordinating mechanism for the regional initiative if such an approach is utilized.

Following the CAO Committee meeting, representatives from NVRC and the local utilities met to discuss how to proceed. It was decided that a Northern Virginia Water Supply Work Group would be formed to further investigate the feasibility of developing the water supply plans on a regional basis. The consensus of those in attendance was to begin meeting immediately to discuss the particulars of the legislation, to investigate the specific requirements for developing the water supply plans, and to determine which jurisdictions would like to participate in a regional initiative.

Although the state law stipulates that the localities are responsible for developing the water supply plan, it was discussed that there needed to be considerable input and

involvement of the local water utilities in this initiative. For instance, in Fairfax County, the Board of Supervisors has already passed a resolution that identifies Fairfax Water as the lead agency in developing the County's plan. Likewise, Prince William County designated the Prince William County Service Authority (PWCSA) as the lead agency. Similar approaches may be applicable in other jurisdictions.

These issues and others were discussed at the initial meeting of the Northern Virginia Water Supply Workgroup on June 19, 2006, at the NVRC office. At this meeting the Workgroup reviewed the legislation and associated regulations and further discussed the concept of a regional WSP. The Workgroup affirmed the recommendation that NVRC take the lead for the region to develop a regional WSP for those participating jurisdictions; and had requested an affirmation from each jurisdiction in their willingness to participate. The workgroup further recommended that the development of the regional WSP should be overseen by an Executive Committee comprised of the CAO's and Water Utility CEO's and that a Technical Advisory Committee (TAC) comprised of staff from the appropriate County agencies, Water Utilities be developed to facilitate the exchange of required information, review the regional WSP, and to shepherd the WSP through the public hearing process.

1.3 General Location and Description

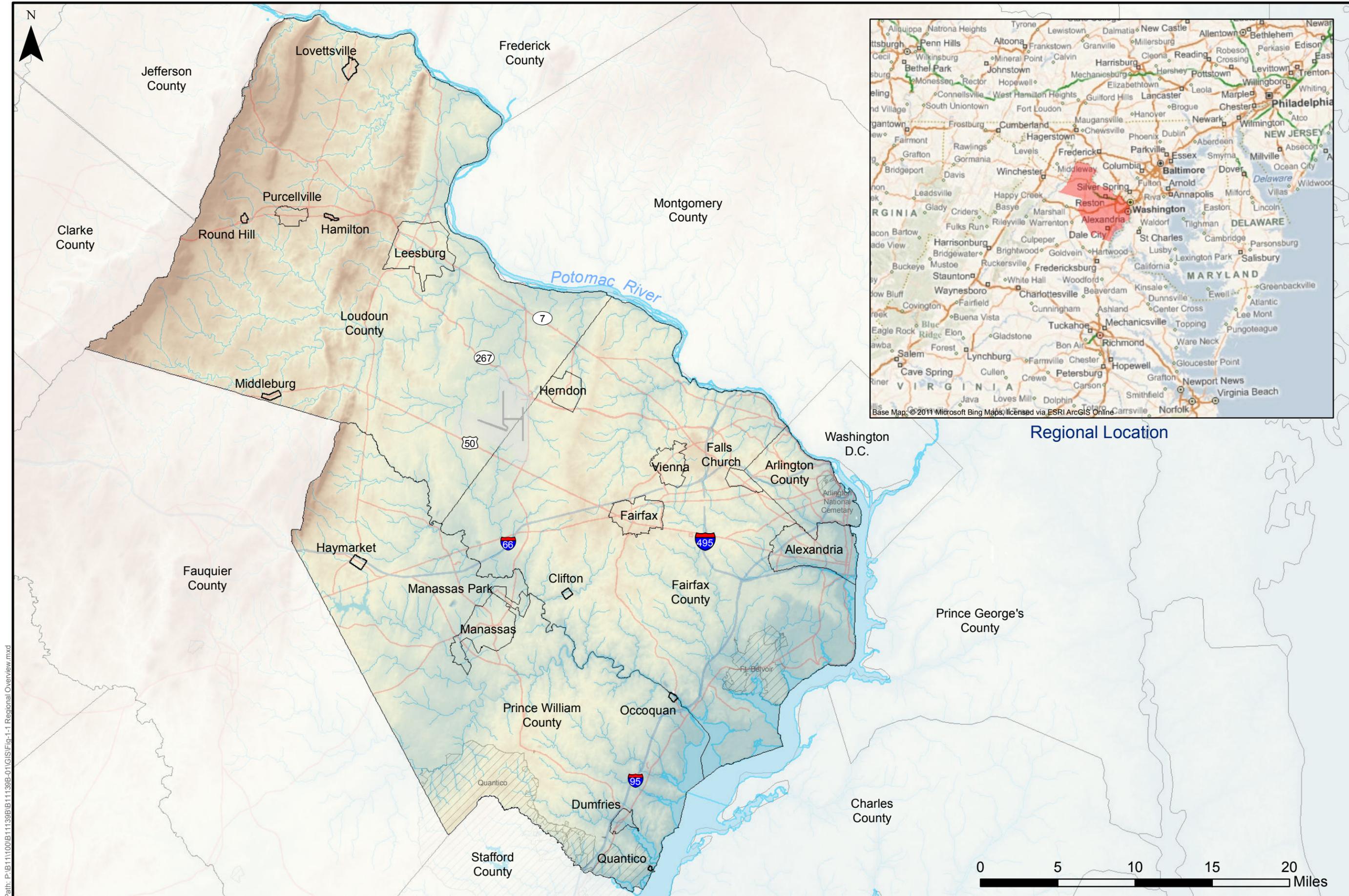
The northern Virginia region is located in the northern portion of Virginia in the Blue Ridge, Piedmont, and Coastal Plain Physiographic Provinces. According to the U.S. Census Bureau, the total population of the region in 2007 was estimated to be 2,201,645. The region is served by both surface water and groundwater sources. The major streams utilized in the region as water sources include the Potomac River, Occoquan River, and Goose Creek. The major reservoirs in the region utilized as water sources include Occoquan Reservoir, Lake Manassas, Hirst Reservoir/Cooper Spring Impoundment, and the Breckenridge-Lunga Reservoir. The region is also dependent upon groundwater and several springs. Fairfax Water is one of the major water providers in the region selling water to Prince William County Service Authority (PWCSA), Loudoun Water, Virginia American Water (Alexandria and Dale City), Town of Herndon, Dulles Airport, and Fort

Belvoir. Figure 1-1 identifies the location of each jurisdiction in the northern Virginia regional water supply planning group.

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Figure 1-1: Regional Overview Map

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Regional Overview

Northern Virginia Regional Commission
Regional Water Supply Plan

DESIGNED CNB
 DRAWN SMF
 CHECKED MDL
 DATE 05-20-11

Scale: 1:366,000
 Plan No. B11139B-01

Figure
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