



AGENDA ITEM FORM

TYPE OF AGENDA ITEM:

- CONSENT AGENDA
- PRESENTATION
- ACTION ITEM
- TOWN MANAGER & STAFF COMMENTS
- PUBLIC HEARING
 - Duly Advertised

PURPOSE OF ITEM:

- INFORMATION ONLY
- DISCUSSION ONLY
- DISCUSSION AND/OR DECISION
 - Introduction Resolution
 - Ordinance Grant/MOU
 - By Motion Bylaws

PRESENTER: Greg Tkac

PRESENTER TITLE: Director of Public Works

AGENDA ITEM:

Resolution Approving the Northern Virginia Regional Water Supply Plan

BACKGROUND / SUMMARY:

See Background Attachment

A public hearing was held on January 31 at Town Hall.

ATTACHMENTS:

- Memo
- Northern Virginia Regional Water Supply Plan Background
- PowerPoint Presentation
- Public Hearing Notice
- Resolution Approving the Northern Virginia Regional Water Supply Plan

REQUESTED ACTION:

NO ACTION REQUESTED

Approve the Resolution.

FOR MORE INFORMATION, CONTACT: Name: Richard West

Phone#: 703 221-3400

E-mail: rwest@dumfriesva.gov

FOR USE DURING MEETING

- | | | |
|--------------------------|--------------------------|-----------|
| Y | N | |
| <input type="checkbox"/> | <input type="checkbox"/> | Barr |
| <input type="checkbox"/> | <input type="checkbox"/> | Jurgensen |
| <input type="checkbox"/> | <input type="checkbox"/> | West |

VOTE:

- | | | |
|--------------------------|--------------------------|---------|
| Y | N | |
| <input type="checkbox"/> | <input type="checkbox"/> | Foreman |
| <input type="checkbox"/> | <input type="checkbox"/> | Toney |

PASSED

- | | |
|--------------------------|--------------------------|
| Y | N |
| <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> |

NOT PASSED

- | | | |
|--|--|------------|
| | | |
| | | Forrester |
| | | Washington |



DUMFRIES, VIRGINIA

Virginia's Oldest Continuously Chartered Town
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17755 Main Street
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Tel: 703-221-3400 / Fax: 703-221-3544
www.dumfriesva.gov

To: Mayor West, Vice-Mayor Toney, Council Members,
Daniel Taber, Town Manager

Through: Gregory Tkac, Director of Public Works

From: Richard West, Assistant Director of Public Works

Date: 11 January 2012

Re: Water Supply Plan

Effective September 2005, all counties, cities and towns in the Commonwealth of Virginia were required to submit a local water supply plan or participate in a regional planning unit, in compliance with 9 VAC 25-780, Local and Regional Water Supply Planning. The purpose of the regulation is to establish a comprehensive water supply planning process for the development of local, regional and state water supply plans. A Public Hearing is also required by the regulation.

The Town of Dumfries opted to participate in the Northern Virginia Regional Commission's (NVRC) Northern Virginia Regional Water Supply Plan. Although water is supplied to the Town through the Prince William County Service Authority, the Town must still participate in a water supply plan. NVRC has developed a draft plan, which is available on-line at <http://www.novaregion.org/index.aspx?NID=1214>, or at the Department of Public Works in Town Hall.

This memo and attachments are intended to introduce the plan to Council, and to advise of the proposed schedule for approval of the plan, which is:

17 and 24 January – Advertise Public Hearing
31 January – Public Hearing
7 February – Present to Council for approval

Either Tammy Stephenson of DEQ or Normand Goulet of NVRC will be present at the Public Hearing. We have already printed a copy of the draft plan (over 700 pages).

The advertisement and draft resolution to adopt the plan are attached. Please contact me or Greg Tkac if there are any questions or comments.

Northern Virginia Regional Water Supply Plan

Background

In November 2005, the Commonwealth of Virginia enacted the Local and Regional Water Supply Planning (WSP) Regulation (9 VAC 25-780-10)

- The purpose of the Regulation is to:
 - ensure adequate and safe drinking water
 - encourage, promote, and protect all other beneficial uses of the Commonwealth's water resources; and
 - encourage, promote, and develop incentives for alternative water sources
- Establishes required planning process and criteria that local governments shall use in the development of local or regional WSPs
- WSPs must encompass a planning horizon of 30 to 50 years and address both surface and groundwater use
- After a WSP is submitted to and reviewed by DEQ, the State Water Control Board will make a determination as to its compliance with the regulation
- WSPs must be reviewed by the locality every 5 years and revised and resubmitted if necessary; all WSP's must be reviewed, revised, and resubmitted to DEQ every 10 years

At the request of the local governments in northern Virginia, the Regional Commission has been coordinating the development of the Northern Virginia Regional Water Supply Plan:

- Plan Participants:
 - Every County, City and Town within Northern Virginia with the exception of the Town of Hillsboro. The Plan is a partnership between Jurisdictions, local Water Authorities and the Regional Commission
 - Water Authorities are the lead for data collection within Jurisdictions service areas
 - The Regional Commission is lead for data collection for Non-municipal Community Water Systems and Wells
- The Regional Commission obtained assistance from the MWCOG and the ICPRB by aligning the Regional Population Projections and the Co-op Potomac River Forecasts to meet the local government's planning horizon date needs
- Components of the Regional Water Supply Plan are required to include:
 - ☞ An inventory of existing water sources
 - ☞ An assessment of existing water use
 - ☞ An assessment of projected water demand
 - ☞ A statement of need if water supply demands exceed source availability within the planning horizon
 - ☞ An analysis of alternatives to address projected source water deficits if they existing
 - ☞ A description of water demand management actions
 - ☞ A drought Response and Contingency Plan

Town of Dumfries

Northern Virginia Regional Water Supply Plan

Northern Virginia Regional Commission
Normand Goulet

Background

- VA Code Section 62.1-44.38:1 requires a water supply plan
- Designated PWCSA agent and NVRC lead agency (Dec. 2006)
- Assistance by MWCOG and ICPRB for aligning schedules for Regional Population Projections and Potomac River Forecasts to Jurisdictional date requirements.
- Draft Northern Virginia Regional Plan submitted to the Virginia Department of Environmental Quality in November 2011.
- To be updated every five years.



Background

- Plan Participants:
 - ◆ Every County, City and Town within Northern Virginia.
 - ◆ Partnership between Jurisdictions, Authorities and Regional Commission.
 - ◆ Authorities lead for data collection within Jurisdictions service area's.
 - ◆ Commission lead for data collection for Non-municipal Community Water Systems and Wells.



Components of the Regional Plan

- Inventory of existing water sources.
- Assessment of existing water use.
- Assessment of projected water demand.
- Statement of need if demands exceed source availability within the planning horizon.
- Analysis of alternatives to address projected source water deficits if existing.
- Description of water demand management actions.
- Drought Response and Contingency Plan.



Town of Dumfries's Water Supply

- Public Community Water System
 - ◆ Owned and Operated by Prince William County Service Authority (PWCSA)
- PWCSA purchases water from two (2) water supply systems within the geographic boundaries of the planning area:
 - ◆ Fairfax Water
 - Potomac River and the Occoquan River
 - ◆ City of Manassas
 - Lake Manassas



Town of Dumfries's Water Supply

- Non-Agricultural, Self-Supplied Users of More than 300,000 Gallons per Month of Surface Water or Ground Water
 - ◆ No known in Dumfries
- Agricultural Self-Supplied Users of More than 300,000 Gallons per Month of Surface Water or Ground Water
 - ◆ No known in Dumfries
- Residents and Businesses that are Self-supplied and Individual Wells Withdrawing Less than 300,000 Gallons per Month

| Jurisdiction | Total Population | Population Served by Public CWS | Population Served by Private CWS | Population Served by Self-Supplied Businesses | Population Served by Individual Wells |
|------------------|------------------|---------------------------------|----------------------------------|---|---------------------------------------|
| Town of Dumfries | 4,848 | 4,848 | 0 | 0 | 0 |

PWCSA Demand vs. Capacity

Projected PWCSA Daily Water Demand vs. Purchased Water Capacity (7.2 COG Average Day Demand Projections)

| | 2010 (MGD) | 2020 (MGD) | 2030 (MGD) | 2040 (MGD) |
|---|---------------|---------------|---------------|---------------|
| Total Daily PWC Public Water System Demand | 42.01 | 50.47 | 57.13 | 62.11 |
| Total Daily PWC Public Water Purchased Capacity | 67.80 | 67.80 | 80.80* | 80.80 |

(*In 2020, PWCSA plans to purchase additional capacity of 12-14 MGD, which is reflected in 2030 capacity.)

| | | | | |
|--|-----|-----|-----|-----|
| PWC Percent Public Water Capacity Utilized | 62% | 74% | 71% | 77% |
|--|-----|-----|-----|-----|

Note: Projections assume 350 gallons per day/household



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CO-Op Water Supply

- Regional public water supply surplus anticipated by 2040
- Periods of drought could strain water supply
- Conclusions of ICPRB 2010 Phase I Report:
 - 20-year forecast period (2030): 100% system reliability and no water supply deficits.*
 - 30-year forecast period (2040): Regional system likely to be strained during serious drought.
 - Summertime outdoor water use may be increasing.

*Assuming that the range of hydrologic conditions experienced during past 78 years is representative of future conditions.



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Demand Management Strategies

- Report and Appendix discuss Policies and Programs in place for PWCSA and Town of Dumfries.
 - ◆ Conservation Practices
 - Uniform Statewide Building Code Sections
 - ◆ Conservation Measures
 - Technical, Education and Financial Programs
 - ◆ Conservation Policies
 - Distribution Line Replacement Program
 - ◆ Rate Structure



Alternative Evaluations

- Regional Plan defers to CO-Op Plan:
 - ◆ Intake/pumping station on the Potomac estuary near head-of-tide below Little Falls, with discharge to Washington Aqueduct's Dalecarlia Reservoir
 - ◆ Reverse osmosis membrane treatment plant on the Occoquan estuary
 - ◆ Use of two quarries located in Fairfax County to augment Fairfax Water storage
 - ◆ Use of Loudoun County quarries to augment system storage, serving as pumped storage reservoirs.

- Small discussion on reuse and recycle potential options

Drought Response Plan

- DEQ requires every jurisdiction to have both a ***Plan and Ordinance***.
 - Regulation Requirements of ***Plan***:
 - ◆ Structured to address *unique characteristics of water source(s)*.
 - ◆ Contain graduated stages:
 - Watch Stage: Increase awareness
 - Warning Stage: Conservation activities to reduce use 5-10%
 - Emergency Stage: Mandatory activities to reduce use 10-15%
 - ◆ Shall include references to local *ordinances*.
 - ◆ Specific triggers for government/citizen actions.
 - Metropolitan Washington COG Drought Awareness Response Plan adopted as part of Regional Water Supply Plan
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Drought Response Plan

- As PWCSA owns and operates the water system serving the Town of Dumfries the users in the town follow any drought-related restrictions imposed by the PWCSA.
 - PWCSA follows the Metropolitan Washington COG Drought Awareness Response Plan.
 - ◆ Meets the intent of the regulation;
 - ◆ Is incorporated into the Northern Virginia Regional Plan
-
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Regional WSP Adoption

- Dumfries's Resolution for WSP adoption to be considered tonight;
- Final Report to be submitted to DEQ following adoption by all Jurisdictions (late February);
- DEQ reviews and provides comment.

- Regional WSP can be viewed at:
<http://www.novaregion.org/wsp>



Thank You.
Questions?

TOWN OF DUMFRIES

NOTICE OF PUBLIC HEARING

**BY THE TOWN COUNCIL
OF THE TOWN OF DUMFRIES, VIRGINIA ON**

JANUARY 31, 2012 AT 7:00 PM

The Town Council of the Town of Dumfries hereby gives notice of a Public Hearing to consider the adoption of the Northern Virginia Regional Water Supply Plan, which includes the following:

- * Existing Water Source Information,;
- * Existing Water Use Information;
- * Existing Resource Information;
- * Water Demand Management, or current conservation practices;
- * Drought Response and Contingency Plans;
- * Projected Water Demand Information;
- * Statement of Need based on the adequacy of existing water sources to meet current and projected water demand over the planning period (a minimum of 30 years to a maximum of 50 years).

All supporting material is available for public inspection at the Office of the Town Clerk at 17755 Main Street, Dumfries, Virginia 22026 between the hours of 8:30 AM and 5:00 PM; M-F. The public hearing is being held in a public facility believed to be accessible to persons with disabilities. Any person with questions on the accessibility of the facility should contact the Town Clerk at normal working hours.

**BY NANCY H. WEST, MAYOR
TOWN OF DUMFRIES, VIRGINIA**

Instruction to Publisher: Run this notice one time on January 18 and one time on January 25, 2012.

AT A MEETING OF THE DUMFRIES TOWN COUNCIL, HELD ON FEBRUARY 7, 2012, AT 7:00 P. M., IN COUNCIL CHAMBERS, LOCATED AT 17755 MAIN STREET, DUMFRIES, VIRGINIA: ON A MOTION DULY MADE BY _____, AND SECONDED BY _____, THE FOLLOWING RESOLUTION WAS ADOPTED BY THE FOLLOWING VOTE:

Dorothea D. Barr, _____
Gerald M. Foreman, _____
Kristin W. Forrester, _____
Michelle D. Jurgensen, _____
Willie J. Toney, _____
Gwen P. Washington, _____
Nancy H. West, _____

**RESOLUTION APPROVING THE NORTHERN VIRGINIA
REGIONAL WATER SUPPLY PLAN**

WHEREAS, the Town of Dumfries (“Town”) is a participant in the Northern Virginia Regional Water Supply Planning Group; and

WHEREAS, Virginia State Water Control Board Regulation 9 VAC 25-780, Local and Regional Water Supply Planning, requires all counties, cities and towns in the Commonwealth of Virginia to prepare and submit a water supply plan to the Department of Environmental Quality (DEQ); and

WHEREAS, on January 31, 2012, the Town held a public hearing to accept public comment on the Regional Water Supply Plan; and

WHEREAS, the adopted Regional Water Supply Plan will be submitted to the DEQ upon adoption by the participating jurisdictions;

NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Dumfries this 7 day of February, 2012, does hereby adopt the Regional Water Supply Plan as it pertains to the Town. Approval and adoption of this regional plan indicates support for and general agreement with the regional planning approach, but does not indicate approval or disapproval of conclusions and recommendations presented in the plan as they pertain to other localities. The Town reserves the right to comment on specific water supply alternatives in the future even though such alternatives may be recommended in this adopted plan. The Town will not be limited to specific water supply alternatives in this adopted plan and reserves the right to recommend additional alternatives for consideration in the future.

BE IT FURTHER RESOLVED that the Town Council of the Town of Dumfries intends that the Regional Water Supply Plan shall be revised to reflect changes in relevant data at least once every five years and resubmitted to DEQ every ten years in accordance with the regulation and sound planning practice.

By Order of Council:

Nancy H. West, Mayor

ATTEST:

Dawn M. Hobgood, Town Clerk