

APPENDIX A
ENG FORM 4345

U.S. Army Corps of Engineers (USACE) APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT 33 CFR 325. The proponent agency is CECW-CO-R.		Form Approved - OMB No. 0710-0003 Expires: 02-28-2022	
The public reporting burden for this collection of information, OMB Control Number 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil . Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR APPLICATION TO THE ABOVE EMAIL.			
PRIVACY ACT STATEMENT			
Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcl.dod.mil/Privacy/SORNs/Index/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx			
(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)			
1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
(ITEMS BELOW TO BE FILLED BY APPLICANT)			
5. APPLICANT'S NAME First - Eric Middle - M Last - Dahl Company - James River Water Authority E-mail Address - edahl@fluvannacounty.org		8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) First - Eli Middle - Last - Wright Company - Timmons Group E-mail Address - eli.wright@timmons.com	
6. APPLICANT'S ADDRESS: Address- 132 Main Street, PO Box 540 City - Palmyra State - VA Zip - 22963 Country - US		9. AGENT'S ADDRESS: Address- 1001 Boulders Parkway, Suite 300 City - Richmond State - VA Zip - 23225 Country - US	
7. APPLICANT'S PHONE NOs. w/AREA CODE a. Residence b. Business c. Fax (434) 591-1910		10. AGENTS PHONE NOs. w/AREA CODE a. Residence b. Business c. Fax (804) 200-6582	
STATEMENT OF AUTHORIZATION			
11. I hereby authorize, <u>Timmons Group</u> to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.			
 SIGNATURE OF APPLICANT		2020-03-17 DATE	
NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY			
12. PROJECT NAME OR TITLE (see instructions) James River Water Supply Project			
13. NAME OF WATERBODY, IF KNOWN (if applicable) James River, Rivanna River		14. PROJECT STREET ADDRESS (if applicable) Address Point of Fork Road	
15. LOCATION OF PROJECT Latitude: °N 37.749780 Longitude: °W -78.171072		City - Fluvanna County State- VA Zip- 23038	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID 61-A-4A Municipality Fluvanna County Section - Township - Range -			

Additional Info/Revision received
by VMRC on March 31, 2020 /lra

17. DIRECTIONS TO THE SITE

The proposed Project is primarily located in Fluvanna County, Virginia immediately southwest of Columbia within an area known as 'Point of Fork'.

The proposed intake is located on the north bank of the James River approximately 0.4 miles upstream of the confluence with the Rivanna River. The site can be accessed from the terminus of Route 624 (Point of Fork Road). See Support Document for Vicinity Map.

18. Nature of Activity (Description of project, include all features)

The infrastructure associated with this project includes a pump station, raw water intake, wet well influent pipe, pump station wet well, pump, piping and valve equipment, electrical and pump control equipment, a raw water pipeline, and improvements to an existing access road. Discharges of fill is proposed. See 'Project Description' section in Support Document for details.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

The purpose of the proposed project is to provide a new and reliable raw water supply of sufficient quantity to meet the short- and long-term needs of Fluvanna and Louisa Counties for delivery to an existing interconnection point planned for use by Fluvanna and Louisa Counties .

See 'Project Need' section in Support Document for additional details.

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

Due to the linear nature of the project impacts to jurisdictional features are unavoidable. Each impact of jurisdictional features has been strategically placed to minimize and/or avoid additional wetland and stream impacts. Where possible wetlands and streams were crossed perpendicularly to minimize impacts. See 'Proposed Jurisdictional Impact' section in Support Document for details.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type	Type	Type
Amount in Cubic Yards	Amount in Cubic Yards	Amount in Cubic Yards

See Support Document and Drawings

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres 0.11 acres (wetlands and streams)
or
Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

The Applicant has avoided and minimized impacts to greatest extent practicable given the project's purpose and need, including the utilization of a Preliminary Jurisdictional Determination (NAO-2014-0708) and a detail alternatives analysis. Compensatory mitigation for unavoidable permanent impacts are proposed to be achieved through the purchase of off-site mitigation credits from commercial wetland and stream mitigation banks. Wetland mitigation credits are proposed based on standard mitigation ratios for wetland impacts. Stream credits are proposed based on Unified Stream Methodology Stream Assessments. See the 'Avoidance, Minimization and Compensation' section of Support Document for additional details.

24. Is Any Portion of the Work Already Complete? Yes No IF YES, DESCRIBE THE COMPLETED WORK

N/A

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address- See 'Adjacent Property Owner' figure in Support Document

City - State - Zip -

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

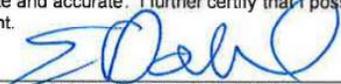
City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

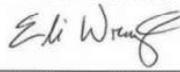
AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
See Support Doc. -	Project Authorization	Section			

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.


SIGNATURE OF APPLICANT

2020-03-17
DATE


SIGNATURE OF AGENT

2020-03-17
DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

APPENDIX B
REGULATORY COMPLIANCE CHECKLIST

REGULATORY COMPLIANCE CHECKLIST

Requirement	Citation	Reference Location	Note
Standard Application Requirements			
Pre-Application Meeting	33 CFR § 325.1(b)	Section 2.1	See referenced text for brief project history.
Application Form ENG Form 4345	33 CFR § 325.1(c)	App. A	
Proposed Activity Plan Drawings	33 CFR § 325.1(d)(1)	App. I-1 & I-4	
Purpose and Need	33 CFR § 325.1(d)(1)	Section 3	
Project Schedule	33 CFR § 325.1(d)(1)	Section 2.5	
Adjoining Property Owners	33 CFR § 325.1(d)(1)	Section 2.3	See Figure 4.
Adjacent Structures	33 CFR § 325.1(d)(1)	n/a	No adjacent structures.
Other Required Authorizations	33 CFR § 325.1(d)(1)	Section 2.2	See Table 1.
Related Activities	33 CFR § 325.1(d)(2)	n/a	None.
Mitigation	33 CFR § 325.1(d)(7)	Section 6.2	
Signature	33 CFR § 325.1(d)(8)	App. A	
Permit Fee	33 CFR § 325.1(f)	n/a	Applicant is local government authority.
Particular Permit Requirements			
CWA 401 Certification	33 CFR § 325.2(b)(1)	Section 2.2.2	Minor modification pending; see referenced text.
CZMA Consistency	33 CFR § 325.2(b)(2)	Section 2.2.1 & App. D-3	Federal consistency review not required
NHPA Consultation	33 CFR § 325.2(b)(3)	Sections 2.2.3 & 7.6	Pending; see referenced text.
ESA Consultation	33 CFR § 325.2(b)(5)	Section 2.2.4	Pending; see referenced text.
Related Laws			
CWA 401 Certification	33 CFR § 320.3(a)	Section 2.2.2	Minor modification pending; see referenced text.
CZMA Consistency	33 CFR § 320.3(b)	Section 2.2.1 & App. D-3	Federal consistency review not required
NEPA Review	33 CFR § 320.3(d)	Passim	Information provided throughout this document intended to support USACE's NEPA review.

NHPA Consultation	33 CFR § 320.3(g)	Sections 2.2.3 & 7.6	Pending; see referenced text.
ESA Consultation	33 CFR § 320.3(i)	Section 2.2.4	Pending; see referenced text.
Wild & Scenic Rivers	33 CFR § 320.3(l)	n/a	None with project area.
Permit Evaluation Factors			
Public Interest Review	33 CFR § 320.4(a)	Section 7	See referenced text for information to support review.
Effect on Wetlands	33 CFR § 320.4(b)	Sections 5.2 and 6.2	See referenced text for information to support review.
Fish & Wildlife	33 CFR § 320.4(c)	Sections 5.1.8 & 7.7	See referenced text for information to support review.
Water Quality	33 CFR § 320.4(d)	Sections 2.2.2 & 7.15	Minor modification pending; see referenced text.
Historic, Cultural, Scenic, & Recreational	33 CFR § 320.4(e)	Sections 2.2.3, 7.3, 7.7 & 7.13	See referenced text for information to support review.
CZMA Consistency	33 CFR § 320.4(e)	Section 2.2.1 & App. D-3	Federal consistency review not required
Other Required Authorizations	33 CFR § 320.4(j)	Section 2.2	See Table 1.
Floodplain Protection	33 CFR 320.4(l)	Sections 7.8 & 7.9	
State Water Supply Determination	33 CFR 320.4(m)	Section 7.14	
Environmental Benefits	33 CFR 320.4(p)	Section 5.2.3	
Economic Benefits	33 CFR 320.4(q)	Section 7.2	
Mitigation	33 CFR 320.4(q)	Section 6.2	
404(b)(1) Guidelines			
LEDPA Analysis	40 CFR § 230.10(a)	Section 4.3	
Discharge Prohibitions	40 CFR § 230.10(b)	Sections 2.2.2 & 2.2.4	
Significant Degradation Prohibition	40 CFR § 230.10(c)	Section 2.2.2	
Avoidance and Minimization	40 CFR § 230.10(d)	Section 6.1	
Short- and Long-Term Effects	40 CFR § 230.11	Sections 2.2.2, 5.2.1, & 7.15	See referenced text for information to support review.
Effects on Physical Substrates	40 CFR § 230.11(a)	Sections 2.2.2, 5.2.1, & 7.15	See referenced text for information to support review.
Effects on Water Circulation	40 CFR § 230.11(b)	Sections 2.2.2 & 5.2.1	See referenced text for information to support review.

Additional Info/Revision received
by VMRC on March 31, 2020 /lra

Effects of TSS/Turbidity	40 CFR § 230.11(c)	Sections 2.2.2, 5.1.8.4, & 7.15	
Contaminants	40 CFR § 230.11(d)	Sections 2.2.2 & 7.15	
Effects on Aquatic Ecosystem		Sections 2.2.2 & 7.7	
Cumulative Effects on Aquatic Ecosystem	40 CFR § 230.11(g)	Section 2.2.2	
Secondary Effects on Aquatic Ecosystem	40 CFR § 230.11(h)	Section 2.2.2 & 5.2.3	
Compensatory Mitigation	40 CFR § 230.93	Section 6.2	
Mitigation Plan	40 CFR § 230.94(c)	Section 6.2	
National Environmental Policy Act			
Purpose and Need	33 CFR § 230.10(b); 40 CFR § 1502.13	Section 3	
Impact Significance Review	33 CFR § 230.11; 40 CFR § 1508.13	Sections 4.3 & 7	See referenced text for information to support review.
Alternatives Analysis	33 CFR § 230.10(b); 40 CFR § 1502.14	Section 4	
Affected Environment	33 CFR § 230.10(b); 40 CFR § 1502.15	Section 5	
Environmental Consequences	33 CFR § 230.10(b); 40 CFR § 1502.16	Sections 4 - 7	
Limitation on Actions	33 CFR § 230.22; 40 CFR § 1506.1	n/a	No construction commenced.

APPENDIX C
COLLECTED INTERJURISDICTIONAL AGREEMENTS

APPENDIX C-1

MEMORANDUM OF UNDERSTANDING BETWEEN THE FLUVANNA COUNTY BOARD OF SUPERVISORS AND THE LOUISA COUNTY BOARD OF SUPERVISORS CONCERNING PROVISION OF PUBLIC WATER SERVICE

APPENDIX C-2

AN AGREEMENT BETWEEN LOUISA COUNTY, VIRGINIA, FLUVANNA COUNTY, VIRGINIA, THE LOUISA COUNTY WATER AUTHORITY, AND THE JAMES RIVER WATER AUTHORITY REGARDING THE JAMES RIVER WATER PIPELINE DOCUMENTS

APPENDIX C-2-1

AN AGREEMENT BETWEEN LOUISA COUNTY, VIRGINIA, FLUVANNA COUNTY, VIRGINIA, THE LOUISA COUNTY WATER AUTHORITY, AND THE JAMES RIVER WATER AUTHORITY REGARDING THE JAMES RIVER WATER PIPELINE

APPENDIX C-2-2

ADDENDUM NO. 1 TO "AGREEMENT BETWEEN LOUISA COUNTY, VIRGINIA, FLUVANNA COUNTY, VIRGINIA, THE LOUISA COUNTY WATER AUTHORITY, AND THE JAMES RIVER WATER AUTHORITY REGARDING THE JAMES RIVER WATER PIPELINE"

APPENDIX C-3

JAMES RIVER WATER AUTHORITY STANDARD TERMS AND CONDITIONS

APPENDIX C-4

PROCUREMENT POLICY OF JAMES RIVER WATER AUTHORITY

APPENDIX C-5

RESOLUTION SIGNIFYING THE INTENTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF FLUVANNA TO CREATE A JOINT WATER AUTHORITY UNDER THE VIRGINIA WATER AND WASTE AUTHORITIES ACT AND SETTING FORTH ITS ARTICLES OF INCORPORATION

APPENDIX C-6

ARTICLES OF INCORPORATION OF JAMES RIVER WATER AUTHORITY

APPENDIX C-7

JAMES RIVER WATER AUTHORITY BYLAWS

APPENDIX C-8

SERVICE AGREEMENT AMONG JAMES RIVER WATER AUTHORITY AND THE COUNTY OF FLUVANNA, VIRGINIA, AND THE COUNTY OF LOUISA, VIRGINIA

APPENDIX C-9

RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF FLUVANNA, VIRGINIA, APPROVING THE EXECUTION AND DELIVERY OF A SUPPORT AGREEMENT

APPENDIX C-10

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF LOUISA VIRGINIA APPROVING THE EXECUTION AND DELIVERY OF A SUPPORT AGREEMENT

APPENDIX C-11

RESOLUTION PROVIDING FOR THE ISSUANCE AND SALE OF A REVENUE BOND, SERIES 2016, OF THE JAMES RIVER WATER AUTHORITY AND PROVIDING FOR THE FORM, DETAILS AND PAYMENT THEREOF

APPENDIX C-12

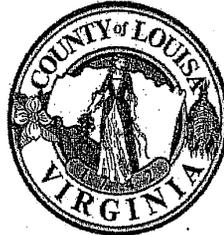
BOARD OF DIRECTORS JAMES RIVER WATER AUTHORITY RESOLUTION: RESOLUTION APPROVING PUBLIC USES AND AUTHORIZING ACQUISITION OF NECESSARY PROPERTY BY EMINENT DOMAIN

APPENDIX C-13

REIMBURSEMENT AGREEMENT BETWEEN JAMES RIVER WATER AUTHORITY AND THE COUNTY OF FLUVANNA, VIRGINIA

APPENDIX C-1

**MEMORANDUM OF UNDERSTANDING BETWEEN THE FLUVANNA COUNTY BOARD OF SUPERVISORS AND THE
LOUISA COUNTY BOARD OF SUPERVISORS CONCERNING PROVISION OF PUBLIC WATER SERVICE**



COPY

**MEMORANDUM OF UNDERSTANDING
BETWEEN THE
FLUVANNA COUNTY BOARD OF SUPERVISORS
AND THE
LOUISA COUNTY BOARD OF SUPERVISORS
CONCERNING PROVISION OF PUBLIC WATER SERVICE**

WHEREAS, both Counties have authorized, by action of the respective County Boards, for selected members of the Boards and staff to work together on the seven tasks outlined in Section 7.0 Next Step in the "Report of Recommended Water Supply Alternatives" dated October 2, 2002 (attached) and to negotiate toward an agreement between the Counties on joint water supply and service from the James River, and

WHEREAS, the Water Supply Work Group has met on a number of occasions beginning in November 2002, and

WHEREAS, both Counties have acknowledged needs for public water services, which the James River can satisfy, and

WHEREAS, the Counties find the best solution to their respective water needs is to provide service from the James River, and

WHEREAS, under this memorandum of understanding between the Fluvanna County Board of Supervisors and the Louisa County Board of Supervisors, hereinafter referred to as the Counties, the following understandings are acknowledged,

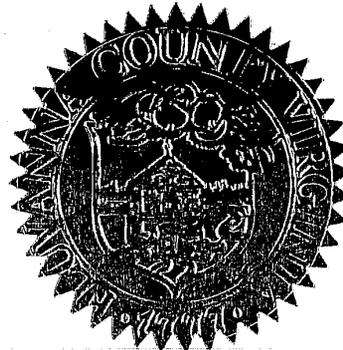
NOW THEREFORE BE IT RESOLVED THAT THE PARTIES INTEND AS FOLLOWS:

1. Each County will own and operate the lines and facilities within its boundaries.
2. The Counties each will have 50% of the capacity in the system, unless otherwise agreed and adjusted by contract at a later date.
3. The Counties each will invest in the system at a rate of 50% of the capital costs to build facilities needed to create the total capacity. This percentage corresponds with the percentage of capacity that will be reserved for each County.

4. It is recognized that the Louisa County Zion Cross Roads water tank is needed for pressure and storage and Fluvanna will credit Louisa County with 50% of the capital cost of the water tank.
5. Louisa County will purchase water at a wholesale rate. This wholesale rate will not include the capital cost of the original construction of the system.
6. Louisa County recognizes that the James River will be the primary source for water supply in the Zion Crossroads Area.
7. Both Counties agree that the water intake permitting process will be undertaken and started immediately in order to permit up to 6,000,000 gallons per day for withdrawal from the James River. The Counties will split the cost of this work equally. It is anticipated that the cost of permitting will be approximately \$30,000.
8. Both Counties agree to advertise for engineering services to commence design of the water system including detailed cost estimates. The Counties will split the cost of this work equally, except for those lines that serve only one County.
9. The initial phase of the water project is anticipated to be designed, permitted and constructed during the next 48 months. This phase of the project will include the water intake on the James River, a water treatment plant, and piping to deliver the water to the Fork Union Sanitary District, Zion Crossroads and the Fluvanna Correctional Facility.
10. It is anticipated that the water plant at the Fluvanna Correctional facility will continue to operate while the water system is being constructed. Louisa's water supply will be used for backup supply of the prison until the water supply from the James River is connected.
11. The joint Water Supply Work Group has drafted a three phase timetable and cost sharing plan for provision of the foregoing service.
12. It is the intent of the parties that the final agreement of the parties for the permanent implementation of the projects outlined hereinabove shall be set out in a formal contract to be negotiated between them. The parties agree to negotiate such agreement in good faith, but it is expressly understood that the parties do not intend to bind themselves with respect to the subject matter of this memorandum of understanding; that there are outstanding unresolved issues; and that there shall be no such final agreement unless and until the governing bodies of the parties shall have both agreed to all the terms and to the form thereof.

Witness the signatures of the respective authorized agents of the parties.

Board of Supervisors of Louisa County	Board of Supervisors of Fluvanna County
By <u><i>Lidgwood Adams</i></u> Its Chairman	By <u><i>[Signature]</i></u> Is Chairman
Date: <u>3/30/04</u>	Date: <u>3/30/04</u>



**Report of Recommended Water Supply Alternative
Water Supply Work Group
October 2, 2002**

1.0 Introduction

The Board of Supervisors created the water supply work group at their regular meeting on June 19, 2002 in order to develop a recommendation to provide a more reliable water supply source for the Fork Union Sanitary District (FUSD) and other County needs. The work group was directed to return a recommendation to the Board of Supervisors by October 2, 2002. A copy of the extract and the presentation made at the June 19, 2002 Board of Supervisors' meeting is attached in Appendix A.

The Board of Supervisors selected the work group members at this meeting. The members include: Cecil Cobb, Supervisor of the Fork Union District; Len Gardner, Supervisor of the Rivanna District; Macon Sammons, County Administrator; Pat Groot, Grants Administrator; and John Robins, Director of Public Works.

This group has met seven times in order to review options and make a recommendation for a course of action with which the County can proceed that will provide a more reliable water supply. During the course of investigation of the various options it became clear that one of the better options for water supply would be the James River. While reviewing the costs of the components of a water supply using the James River, it was also very clear that the FUSD could not financially support this without help. Using partners to defray the cost of construction and operations was included in order to make this a financially viable solution.

Many studies have been undertaken presenting possible scenarios to provide water to various parts of Fluvanna County. The data in these studies were used in portions of this report. The data presented in these studies were reviewed and updated or modified to better represent possible future conditions as seen by the Work Group. No new studies were undertaken to complete this report. This new report was developed and assembled solely by the Water Supply Work Group.

This report presents the results of the deliberations, discussions and recommendations of this work group. It briefly touches on some of the background information concerning the difficulties faced by FUSD and other well users in the County; the estimates for needs in the County over the next 25 years; a recommended course of action; the estimated costs associated with this course of action; possible partners to share in the costs for construction and operations; and recommendations on what to do next.

2.0 Background

Within Fluvanna County, there are several public water supply systems. These are supplied by both groundwater and surface water supplies. Some examples include the following:

- The water system at Lake Monticello is supplied using water from the Rivanna River.
- The water system at the Women's Prison is supplied using water from the Mechunk Creek.
- The FUSD system is supplied using water wells and filter plants.
- The systems in Palmyra and Columbia are also using water wells to supply water to their customers.

These systems are undergoing various stresses due to the prolonged and severe drought that the east coast is experiencing at the present.

The degree of stress that each water system is facing is dependent upon primarily the source supply of water. Overall, it appears that the larger the source of water that is supplying the water system the better the system is dealing with the conditions caused by the drought. The small water system in Palmyra and Columbia as well as in FUSD are faced with shortages of supply from their groundwater wells as well as the uncertainty of being able to accurately monitor the level of the water that provides this supply. This makes it difficult to face this severe drought not knowing when the wells may run dry.

The Mechunk Creek, which is a small tributary that runs into the Rivanna River and then eventually into the James River, supplies the women's prison. The women's prison during this drought has been down to only 30 days of stored water on hand. The stored water was their only source of water at that time because the creek did not have any running water in it. They have been able to weather the drought so far not because they use the Mechunk Creek, a relatively small source of water, as a supply source but because they have a 35,000,000-gallon raw water storage pond next to the prison. They have used this pond successfully to store water from the creek during rain events. Even with this storage capability they have been very low on water and are currently reviewing plans to find water from another source.

The Lake Monticello water system is in better shape since the Rivanna River is larger than the Mechunk Creek. However, as can be readily noticed the Rivanna River is also very low and the Lake Monticello water system may also feel the effects of this prolonged drought.

Systems in the area that have dealt better with the drought are those that have a reliable source of water and adequate storage for raw water. One such system is in Louisa County. Adequate storage in the form of a reservoir allows for collection of water when the rivers are running full. The stored water can be used during the dry periods, such as now.

3.0 Estimated Demands for Water

There have been several studies concerning water supply, storage, treatment and distribution over the last 25 years. Information in this section was obtained from projections of demand by Timmons in their report entitled "Water and Wastewater, Preliminary Engineering Report and Facility Master Plan" dated November 6, 1998.

The projections were based on the growth areas in the County and the historic growth rate trends. The projected demands shown in this report seemed high to the Work Group and were decreased to reflect what seems more probably in the foreseeable future. These projected demands for water are shown in the following table. The areas that are represented are voting districts and are the ones that could be served readily by the water system that will be discussed later in this report.

Table No. 1 – Projected Water Demands (in gallons/day)

Area	2005	2010	2015	2025	Comments
Fork Union	200,000	250,000	275,000	300,000	
Palmyra	50,000	250,000	500,000	1,000,000	Route 250 Corridor
Columbia	50,000	100,000	200,000	300,000	Route 250 Corridor
Women's Prison	150,000	150,000	150,000	150,000	No projects known at this time
Louisa County	50,000	250,000	750,000	1,200,000	Zion Cross Roads Area and Route 250 Corridor
TOTALS	500,000	1,000,000	1,875,000	2,950,000	

4.0 Recommended Project Scope

The Work Group reviewed and discussed options to develop a more reliable water supply. It was decided that the bottom line for almost any feasible option is to use the James River in conjunction with a storage facility or reservoir. In this way the high flow conditions of the James can be used as a resource and not simply watched as it passes by the County on its way to the Atlantic. The recommendation of the Work Group is as follows:

1. The source of the water will be the James River;
2. The water intake will be the existing (although unused) intake for the Fork Union Sanitary District that is located just downstream of the bridge at Bremono Bluff. (In addition, in the future, excess water during high flow conditions can be obtained

from the East Coast Transport Incorporated (ECTI) intake for storage in a possible future County reservoir);

3. The water can be transported using the ECTI pipeline, along with separate new pipelines built by the County primarily in road right-of-ways;
4. Water treatment would be built in the general vicinity of Routes 15 and 649. The water treatment plant would be developed so that it is modular and capable of being expanded. This reduces the cost of the initial phase while still allowing the expansion of the system as demand requires it to be increased in capacity;
5. Water storage in a reservoir can be made anywhere along the pipeline alignment from the James River to the water treatment plant (in the raw water transport leg of the system). The location of such a reservoir would be based on topography, soil and rock conditions, wetlands, historic and endangered species identification and availability of land. A study of the possible locations will need to be made if this course of action is chosen;

The system is made up of many components including the water intake, storage, treatment, conveyance and distribution lines.

5.0 Estimated Cost of Project

The costs of the system as presented in the recommendation above are estimated as follows:

TABLE 2 – Cost Estimate of Total Project

Component	Approximate Cost	Comments
Upgrade of Existing Water Intake for FUSD to accommodate up to 3,000,000 gal/day	\$1,500,000	
Pipeline on Route 649	\$600,000	16 inch pipeline
Reservoir	\$3,000,000	
Water Treatment Plant	\$9,000,000	Treatment Plant to treat up to 3,000,000 gal/day
Pipeline to connect water treatment plant to FUSD	\$500,000	16 inch pipeline
Pipeline to connect water treatment plant to Palmyra and Pleasant Grove	\$600,000	16 inch pipeline
Pipeline from Palmyra to Zion Cross Roads	\$2,500,000	16 inch pipeline
Pipeline from Zion Cross Roads to Women's Prison on Route 250	\$600,000	12 inch pipeline
TOTAL Cost of Project	\$18,300,000	

These are the overall costs for development of the full scale of this project. The system should be approached in phases to match the demands and to reduce both the capital costs and the operations costs. A phased approach costs estimate is as follows:

TABLE 3 – Cost Estimate of Phased Approach

Component	Phase One Cost (2003-2005)	Phase Two Cost (2005-2010)	Phase Three Cost (2010-2020)
Upgrade of Existing Water Intake for FUSD	\$1,500,000 Upgrade intake to withdraw 3,000,000 gal/day		
Pipeline on Route 649	\$600,000		
Reservoir			\$3,000,000
Water Treatment Plant	\$3,000,000 Build Plant to treat 1,000,000 gal/day	\$3,000,000 Expand Plant to treat 2,000,000 gal/day	\$3,000,000 Expand Plant to treat 3,000,000 gal/day
Pipeline to connect water treatment plant to FUSD	\$500,000		
Pipeline to connect water treatment plant to Palmyra and Pleasant Grove		\$600,000	
Pipeline from Palmyra to Zion Cross Roads		\$2,500,000	
Pipeline from Zion Cross Roads to Women's Prison on Route 250	\$1,000,000 Use Water from Louisa to Supply Prison Needs for Short Term		
TOTAL Cost of Project	\$6,600,000	\$6,100,000	\$6,000,000

Note: These estimates use today's dollars and are not adjusted to reflect changes in cost of living or inflation.

This is just one example of a phased approach to this project. Depending on how the project scope is developed and the actual water demands change in the future this phased approach will likely differ.

Funding for this project will likely be through low interest loans. Of course, any grant money that is available would be actively pursued. At this time it is low likelihood that grants will be available for this project. Therefore, the planning for funding this project is based on full funding with no grant money being included.

In preparation of this report, the Work Group has briefly explored the debt service that would be required using various scenarios of the project scope and partnerships. This was done in order to understand the order of magnitude of debt service that this project could require. The attached letter explains the debt services that were reviewed and what the annual cost would be for six different scenarios. The information on Debt Service is attached in Appendix C.

6.0 Possible Partnering to Share Costs

As can be seen from the estimates of cost for this recommendation, the costs are out of reach of Fluvanna County, alone. It is clear that the James River would provided the most reliable source of water for FUSD, but FUSD can not afford the costs to build or operate a surface water treatment plant with only 435 customers. As such the system was extended beyond FUSD to provide other customers and to spread out the costs to build and operate the water system.

In order to further reduce the burden of the capital and operating costs it is recommended that partners be brought into the project. These partners could share both the capital and operating costs. The share of these costs can be split in a number of different ways. One example is to make available a quantity of water to a partner proportional to the level of investment in the project. Some potential partners that were contacted for exploratory discussions during the work group's investigation and deliberations include Louisa County Board of Supervisors, the Department of Corrections, and the Fluvanna County Schools. There was some interest expressed at least unofficially by all parties. If the Board of Supervisors wishes to pursue this concept, it is important that a directive be made that these possible partners be contacted and a proposal presented to them so that the details of a partnership can be discussed and negotiated.

7.0 Next Step

If the Board of Supervisors desires to pursue the recommendations further it is recommended that the following steps be initiated:

1. Reactivate the FUSD intake on the James River. This could require permit application fees on the order of \$5000. Again this could be funded from the Capital Improvements Program budget for Water and Sewer development that was authorized for this fiscal year.
2. Direct the work Group to develop a plan and begin negotiations for potential partnerships with Louisa County Board of Supervisors, the Department of Corrections, and the Fluvanna County School Board.
3. Direct the Work Group to prepare a proposal of the management structure (e.g. County Department of Utilities, Sanitary District, multi-jurisdictional Authority, etc.) for the water system that can be returned to the Board of Supervisors for review;

4. Direct the Work Group to identify and recommend methods and policies that can be used to control growth along the pipeline alignments so that the work will be complete in accordance with the Adopted County Comprehensive Plan.
5. A preliminary engineering report be developed to provide design details of the project and a detailed phased approach to building it. This report should have detailed engineering cost estimates. This report could be used in securing financing and applications for grants, if any are available. The estimated cost for this work is nearly \$20,000. It can be funded from the Capital Improvements Program budget for Water and Sewer development that was authorized for this fiscal year.
6. Pursue low interest loans, grants and other financing strategies.
7. Revisit the decision process once these steps have been completed. This should be in the spring of 2003.

APPENDIX C-2

AN AGREEMENT BETWEEN LOUISA COUNTY, VIRGINIA, FLUVANNA COUNTY, VIRGINIA, THE LOUISA COUNTY WATER AUTHORITY, AND THE JAMES RIVER WATER AUTHORITY REGARDING THE JAMES RIVER WATER PIPELINE DOCUMENTS

APPENDIX C-2-1
AN AGREEMENT BETWEEN LOUISA COUNTY, VIRGINIA, FLUVANNA COUNTY, VIRGINIA, THE LOUISA COUNTY
WATER AUTHORITY, AND THE JAMES RIVER WATER AUTHORITY REGARDING THE JAMES RIVER WATER
PIPELINE

**AN AGREEMENT BETWEEN LOUISA COUNTY, VIRGINIA, FLUVANNA COUNTY,
VIRGINIA, THE LOUISA COUNTY WATER AUTHORITY, AND THE JAMES RIVER
WATER AUTHORITY REGARDING THE JAMES RIVER WATER PIPELINE**

Dated as of October 1, 2013

AGREEMENT

This Agreement ("Agreement") is made and entered into this first day of October, 2013, by and between LOUISA COUNTY, VIRGINIA, a political subdivision of the Commonwealth of Virginia with powers vested in its Board of Supervisors ("Louisa"), FLUVANNA COUNTY, VIRGINIA, a political subdivision of the Commonwealth of Virginia with powers vested in its Board of Supervisors ("Fluvanna"), the LOUISA COUNTY WATER AUTHORITY, a political subdivision of the Commonwealth of Virginia and a water authority created under the Virginia Water And Waste Authorities Act with powers vested in its Board of Directors ("LCWA"), and the JAMES RIVER WATER AUTHORITY, a political subdivision of the Commonwealth of Virginia and a water authority created under the Virginia Water and Waste Authorities Act with powers vested in its Board ("JRWA").

WHEREAS, Louisa, Fluvanna, LCWA, and JRWA (each a "Party" and collectively "the Parties") mutually desire to enter into this Agreement for the purpose of delineating their respective rights and duties regarding a water pipeline (the "James River Pipeline" or "Pipeline") from a point on the James River near the Town of Columbia to a point in Louisa County;

WHEREAS, the Parties wish to work cooperatively to provide a reliable public water supply to the citizens of Louisa and Fluvanna Counties;

WHEREAS, the Parties recognize that the current Virginia Department of Environmental Quality ("DEQ") water withdrawal permit held by JRWA for the Brems Bluff area ("the Brems Bluff Permit") should be moved to an area near the Town of Columbia ("the Columbia Permit");

WHEREAS, the planning, design, acquisition of real property, and construction of the James River Pipeline will require, among other things, a great deal of planning, engineering work, and site acquisition;

WHEREAS, the cost of the James River Pipeline may run into the tens of millions of dollars, and bonds may be necessary; and

WHEREAS, LCWA and JRWA have authority to enter this Agreement with one another and with each of the Counties, under Va. Code §§ 15.2-5114(11), 15.2-5115, and 15.2-5147, Fluvanna and Louisa may enter into this agreement pursuant to Va. Code § 15.2-5147 as regarding the authorities, and with each other pursuant to Va. Code § 15.2-2148;

NOW THEREFORE, in consideration of \$10.00, cash in hand paid, as well as the mutual covenants, warranties, and agreements set forth herein, and intending to be legally bound, the Parties agree as follows:

1. Covenants Of The Parties

Subject to the terms and conditions of this Agreement, the Parties mutually covenant and agree that:

1.1 Funding of Property Acquisition, Design, and Construction

(a) *JRWA.*

- i. JRWA agrees to fund, construct, operate, and maintain the James River intake and associated structures, the James River pipeline from the intake facility to a point near Route 6 west or north of the Columbia Community Planning Area (CPA), as the CPA is shown on the Fluvanna County Comprehensive Plan at the date of execution of this Agreement, as well as “T” connections and valves to allow Fluvanna and Louisa/LCWA connection to the JRWA system. The precise location of the point will be determined and agreed by the Parties at a later date based on engineering, planning, legal, and other considerations. JRWA will also bear the cost of the acquisition of all real property rights necessary to build the portion of the James River Pipeline that it will own, as laid out in Section 1.2(a), below.
- ii. JRWA may fund its portion of the cost of the activities set out in Section 1.1(a)(i), above, through any lawful means including by issuance of bonds, through a direct contribution from Fluvanna and Louisa, or charge a connection fee and/or periodic water reservation charge to Fluvanna and Louisa proportional to its flow reservation. The amount of the charge which will be fairly and reasonably calculated to amortize the cost of constructing, operating, and maintaining the portion of the James River Pipeline referenced in Section 1.1(a)(i), above. JRWA is encouraged to apply for grants, gifts, subsidized loans, and other sources of funding.
- iii. The fixed baseline operations and maintenance (“O&M”) costs of JRWA property, incurred in the absence or regardless of flow, will be split evenly between Fluvanna and Louisa/LCWA. The variable O&M costs which can be attributed to water flows will be proportionally split based on actual water flow to each party, regardless of each party’s actual customer location.

(b) *Fluvanna.*

- i. If, after the effective date of this Agreement but prior to the start of final design of the Pipeline, Fluvanna identifies a location on the Louisa portion of the James River Pipeline at which Fluvanna desires to make a “T” connection, Louisa agrees to construct such “T” connection and the necessary increased pipe capacity, including any associated design, construction, and acquisition costs, at no cost to Fluvanna. The precise location of the point will be determined and agreed by the Parties at a later date based on engineering, planning, legal, and other considerations.

- ii. In the event that Fluvanna decides to make additional connections to the James River Pipeline beyond the ones described in Sections 1.1(a)(i) and 1.1(b)(i) above, Fluvanna agrees to pay the incremental increase in costs of design, construction, and property acquisition up to the location of the additional "T" connections, plus the marginal cost of the additional "T" connections over the cost of a straight pipe, to that location.
 - iii. If, after design of the Pipeline has begun, Fluvanna identifies additional locations at which it desires to make a "T" connection to the James River Pipeline, Fluvanna agrees to pay Louisa/LCWA a fair and reasonable periodic reservation fee for the conveyance of the water to that point on the line. The amount of the fee will be fairly and reasonably calculated to amortize the incremental costs of design, construction, and property acquisition and ongoing O&M costs proportional to the flow capacity of the water reserved to Fluvanna.
- (c) *Louisa & LCWA.*
- i. Louisa and LCWA agree to fund, construct, operate, and maintain the James River Pipeline from a point near Route 6 west or north of the Columbia Community Planning Area (CPA), as the CPA is shown on the Fluvanna County Comprehensive Plan at the date of execution of this Agreement (*see* Section 1.1(a), above).
 - ii. Louisa and LCWA agree that they will fund and acquire all real property rights necessary to build the portion of the James River Pipeline that they will own, as laid out in Sections 1.2(a) and (b), below.
- (d) *Route of the Pipeline.* The Parties agree that Attachment A to this Agreement shows the general or approximate location of the James River Pipeline. The specific location will be determined by the Parties in accordance with engineering, planning, legal, and other considerations at a later date. The Party that is contemplated to have responsibility for O&M under this Agreement will have final responsibility for choosing the specific route of the Pipeline. The specific route must substantially conform to the general or approximate location shown on Attachment A unless otherwise specifically agreed by the Parties.

1.2 Ownership

- (a) *In General.* The Parties agree that they will each own such real and personal property as they each acquire or construct, subject to the limitations and specific procedures set forth in this subsection.
- (b) *Property of Louisa/LCWA.* All real and personal property to be acquired, constructed, operated, and maintained by either Louisa or LCWA under

this Agreement may be acquired, constructed, operated, maintained, and owned by either Louisa or LCWA under the terms of whatever operating agreement(s) may be operative between them.

1.3 Reservation of Capacity

- (a) *In General.* This Agreement contemplates that allocation of water between Fluvanna and Louisa will be in accordance with the needs of each county as established and agreed in the Columbia Permit water withdrawal application and DEQ's summary findings of need regarding the Columbia Permit.
- (b) *Temporary Reallocation.* Raw water capacity may be reallocated on a temporary basis. Costs and terms for such temporary reallocations will be fair and reasonable in accordance with law and will be determined by JRWA on request by any of the Parties.
- (c) *Bulk Purchases.* In lieu of or in addition to the procedures laid out in Section 1.2 above for allocation of ownership of the Pipeline, Fluvanna may purchase raw or finished water from Louisa/LCWA, or Louisa/LCWA may purchase raw or finished water from Fluvanna, at a mutually agreed bulk rate. Such rates will be fair and reasonable in accordance with law and will be determined by JRWA on request by any of the Parties.
- (d) *Future Expansion to Columbia Permit.* Unless otherwise agreed by the Parties, if at any time any Party seeks an expansion of the Columbia Permit, JRWA will make such application and be reimbursed by the Party or Parties seeking an expansion. The expansion in the withdrawal permitted by the Columbia Permit will then be reserved to the Party or Parties seeking the expansion.

1.4 Comprehensive Planning, Zoning, and Other Approvals.

- (a) *Fluvanna County Comprehensive Plan.* Fluvanna will take all necessary and legally permissible steps to determine consistency with and/or amend its Comprehensive Plan so as to make the James River Pipeline shown on Attachment A to this Agreement a feature whose general or approximate location, character, and extent are shown on its Comprehensive Plan in accordance with Va. Code Ann. § 15.2-2232 (2012). A determination of substantial conformance or appropriate amendments to the Fluvanna Comprehensive Plan will be completed by November 30, 2013.
- (b) *Fluvanna County Zoning Ordinance.* Fluvanna will take all necessary and legally permissible steps to ensure that the James River Pipeline and its facilities are and remain permitted under its Zoning Ordinance.

- (c) *Local Permits.* JRWA and Louisa/LCWA will obtain construction permits for their portions of the intake, supporting structures, and the James River Pipeline and will make all reasonable efforts to restore all property to its condition prior to the construction or maintenance of the Pipeline.
- (d) *Conservation Easements and Agricultural & Forestal Districts.* To the extent the James River Pipeline passes through an area that is subject to a County conservation easement or an agricultural and forestal district, all Parties agree to take all necessary and legally permissible steps necessary to permit the Pipeline in said area or district.
- (e) *Consent to Use of Property and Power of Eminent Domain.* By executing this Agreement, Fluvanna authorizes JRWA and LCWA to establish, construct, use and maintain the facilities contemplated in this Agreement, and to use the power of eminent domain within its jurisdiction for the purposes contemplated in this Agreement, as required by Va. Code Ann. § 15.2-5114(6) (2012).

1.5 Cooperation on State and Federal Regulatory Approvals.

- (a) *Withdrawal Permit.* JRWA agrees that it will apply for, and pay all costs associated with acquiring, the Columbia Permit. The Parties mutually agree that in pursuit of such permit, JRWA may relinquish the Brems Bluff Permit. The Parties agree to take all reasonable and legally permissible steps to support JRWA's application.
- (b) *State Board of Health.* The Parties mutually agree to take all necessary and legally permissible steps to obtain the permit from the State Board of Health required by Va. Code Ann. § 32.1-172 (2011).
- (c) *Further Cooperation.* The Parties mutually agree to take all necessary and legally permissible steps to obtain any other local, state, or federal approvals necessary for the James River Pipeline and related facilities.

1.6 Litigation Cooperation.

- (a) *Third Parties.* Notwithstanding anything to the contrary contained in this Agreement, if any action or proceeding by any third party is instituted or threatened to be instituted challenging any transaction or action contemplated by this Agreement, the Parties will mutually use their reasonable best efforts to (i) contest, resist, or resolve any such proceeding or action and (ii) have vacated, lifted, reversed, or overturned any injunction adverse to the Parties or any one thereof resulting from such proceeding or action.
- (b) *Eminent Domain.* The Parties agree that they will mutually use all necessary and legally permissible means for the acquisition of property,

including, but not limited to, easement rights as contemplated in this Agreement at the lowest reasonable price.

- (c) *Obtaining Permits.* If litigation becomes reasonably necessary in order to obtain any of the permits necessary for the objects contemplated in this Agreement, the Parties will mutually use their reasonable best efforts and take all necessary and legally permissible steps to prosecute such litigation to a successful conclusion.

2. Representations And Warranties.

Each of the Parties represents and warranties to the other Parties as follows:

- (a) *Organization in Good Standing.* Each of the Parties is a political subdivision of the Commonwealth duly organized, validly existing, and in good standing under the laws of the Commonwealth of Virginia. In particular, and without limitation, Fluvanna, Louisa, and JRWA stipulate and agree that the rights and obligations of the Parties set forth in this Agreement are consistent with JRWA's purpose and powers as set forth in Paragraph 4 of its Articles of Incorporation.
- (b) *Authorization and Enforceability.* Each of the Parties has the full power and lawful authority, through its governing body, to execute this Agreement and perform its obligations contemplated herein and has duly and validly authorized the execution of this Agreement.

This Agreement constitutes the legal, valid, and binding obligation of each of the Parties, enforceable against each of the Parties in accordance with its terms, except as such enforceability may be limited by applicable laws relating to bankruptcy, insolvency, fraudulent conveyance, reorganization, or affecting creditor's rights generally.

- (c) *Noncontravention.* The Parties' performance of the obligations contemplated by this Agreement will not (i) require any further approvals or consents from any third party other than those approvals or consents mandated by law, ordinance, or regulation in effect as of the date of this Agreement; (ii) violate any law, ordinance, or regulation; or (iii) conflict with or result in a breach of, or constitute a default under, any contract, lease, permit, or other agreement or commitment to which any of the Parties is a party; except where the approvals, consents, violations, or conflicts would have no effect on the ability of any Party to fully consummate all terms of this Agreement.
- (d) *Budgets.* Each of the Parties is responsible for keeping its own budgets relating to this Agreement.

3. **Termination.**

3.1 This Agreement may be terminated only as follows:

- (a) By mutual written consent of all Parties;
- (b) By any Party, if any state or federal approval necessary to its performance under the terms of this Agreement is refused by a final decision not subject to appeal following diligent pursuit thereof; or
- (c) By any Party, upon a material breach by any other Party of any covenant, warranty, representation, agreement, or provisions of this Agreement that has not been (i) cured within 30 days after a non-breaching Party gives written notices of said breach to the breaching Party; or (ii) waived by the non-breaching Party.

3.2 The effect of termination of this Agreement will be as follows:

- (a) Each Party's right of termination under Section 3.1 of this Agreement is in addition to any other rights it may have under this Agreement or otherwise, and the exercise of a right of termination will not be an election of remedies.
- (b) If this Agreement is terminated pursuant to Section 3.1 of this Agreement, all further obligations of the Parties under this Agreement will terminate.

4. **Remedies.**

4.1 Specific Performance.

- (a) The Parties agree that irreparable damage would occur in the event that any of the provisions of this Agreement is not performed in accordance with its specific terms or is otherwise breached.
- (b) The Parties agree that, in the event that there is a disagreement between them regarding compliance with the terms and conditions of this Agreement, prior to filing any suit the disagreement will be submitted by the Parties to a neutral mediator for at least 60 days for assistance in reaching a resolution of the disagreement satisfactory to all Parties.
- (c) Each Party agrees that, in the event of any breach or threatened breach by any other Party of any covenant, warranty, or obligation contained in this agreement, the non-breaching Parties will be entitled (in addition to any other remedy that may be available, whether in law or equity) to seek and obtain (i) a decree or order of specific performance to enforce the observation and performance of such covenant, warranty, or obligation, and (ii) an injunction restraining such breach or threatened breach.

5. Miscellaneous.

- 5.1 Entire Agreement. This Agreement constitutes the entire agreement between the Parties concerning its subject matter and supersedes all prior oral or written agreements, understandings, representations, and warranties, as well as courses of dealing among the Parties.
- 5.2 Amendment. This Agreement may be amended or modified only by a writing executed by all Parties.
- 5.3 Extension or Waiver of Performance. The Parties may jointly extend the time or waive the performance of any of the obligations of any other, waive any inaccuracies in the warranties or representations made by the other, or waive compliance with any of the covenants, conditions, or agreements contained in this Agreement, provided that any such extension or waiver must be in writing and signed by all other Parties in the case of a waiver, or by all Parties in the case of an extension.
- 5.4 Assignment or Delegation. No Party shall assign, delegate, or otherwise transfer any of its duties, rights, or obligations under this Agreement without the prior written consent of all other Parties.
- 5.5 Successors and Assigns; Binding Effect. This Agreement is binding on, and inures to the benefit of, the Parties and their respective successors and permitted assigns.
- 5.6 Governing Law. This Agreement is to be governed and construed under the laws of the Commonwealth of Virginia.
- 5.7 Notices. All notices provided in this Agreement must be in writing, and may be delivered in person; sent by U.S. registered and certified mail, return receipt requested; or sent by Federal Express or other nationally-recognized overnight courier from which a receipt may be obtained to the chief administrative officer and chief legal counsel of each of the other Parties.
- 5.8 Construction. In the event of any ambiguity or question of intent or interpretation arises, this Agreement will be construed as if drafted jointly by the Parties, and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement.

Any reference to any federal, state, local, or foreign statute shall be deemed to refer to all statutes, rules, and regulations referenced therein or promulgated thereunder, unless the context requires otherwise.

Words used herein, regardless of the number and gender specifically used, shall be deemed and construed to include any other number, singular or plural, and any other gender, masculine, feminine, or neuter, as the context may require. The word "including" means included, without limitation.

- 5.9 Remedies. The remedies afforded in this Agreement are cumulative to each other and to all other remedies provided by law.
- 5.10 Time of the Essence. Where a specific date or time is stated in this Agreement, time is of the essence of this Agreement.
- 5.11 Waiver. Except as otherwise provided herein, no delay of or omission in the exercise of any right, power or remedy accruing to any Party as a result of any breach or default by any other Party under this Agreement will impair any such right, power, or remedy; nor shall it be construed as a waiver of or acquiescence in such breach or default, or any similar breach or default occurring later; nor shall any waiver of a single breach or default be deemed a waiver of any other breach or default occurring before or after the waiver.
- 5.12 Jurisdiction and Venue. Each Party irrevocably submits to the exclusive jurisdiction of the Circuit Courts for Louisa County and Fluvanna County, at the option of the plaintiff in such suit, and the appellate courts therefrom, for the purposes of any suit or action arising out of this Agreement.
- 5.13 Third-Party Beneficiaries. Nothing herein expressed or implied is intended or should be construed to confer on or give to any person other than the Parties any rights or remedies under or by reason of this Agreement.
- 5.14 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original copy of this Agreement and all of which, when taken together, shall be deemed to constitute one and the same agreement.

[Signatures Appear on Next Page]

FOR LOUISA COUNTY, VIRGINIA:

[Signature] Date: Oct 1, 2013
Chairman, Board of Supervisors

FOR FLUVANNA COUNTY, VIRGINIA:

[Signature] Date: 02 Oct 2013
Chairman, Board of Supervisors

FOR THE LOUISA COUNTY WATER
AUTHORITY:

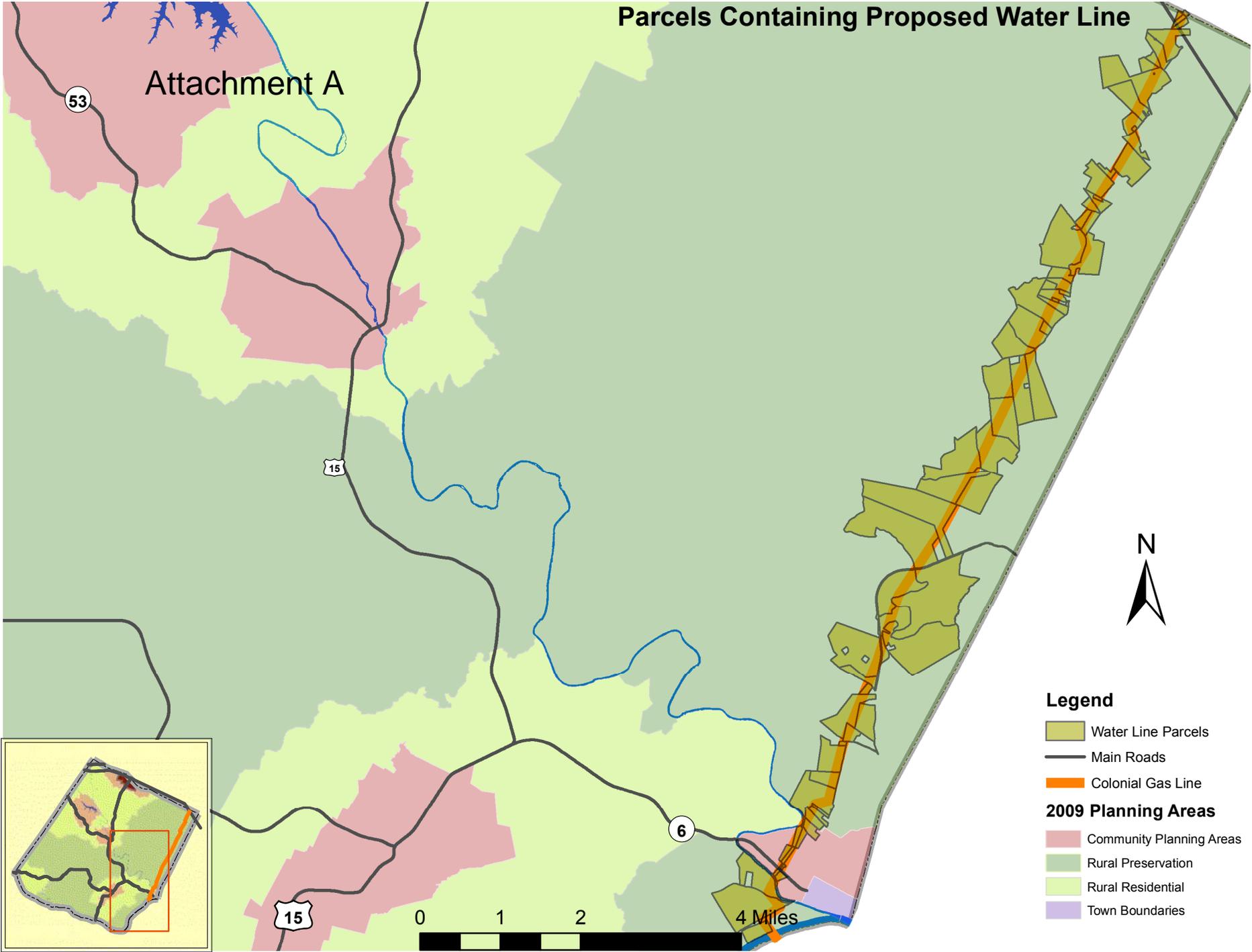
[Signature] Date: 10.9.13
Chairman, Board of Directors

FOR THE JAMES RIVER WATER
AUTHORITY:

[Signature] Date: 15 Oct 13
Chairman, Board of Directors



Parcels Containing Proposed Water Line



Additional Info/Revision received by VMRC on March 31, 2020 /Ira

APPENDIX C-2-2

**ADDENDUM NO. 1 TO "AGREEMENT BETWEEN LOUISA COUNTY, VIRGINIA, FLUVANNA COUNTY, VIRGINIA,
THE LOUISA COUNTY WATER AUTHORITY, AND THE JAMES RIVER WATER AUTHORITY REGARDING THE JAMES
RIVER WATER PIPELINE"**