

US EPA ARCHIVE DOCUMENT



Ozone Early Action Plan

Northern Shenandoah Valley

December 31, 2007

Mr. James E. Sydnor
Director, Air Division
Virginia Department of Environmental Quality
629 East Main Street, 8th Floor
Richmond, VA 23219

**RE: Ozone Early Action Plan for Northern Shenandoah Valley
December 2007 Progress Report Submittal to US EPA**

Dear Mr. Sydnor:

This submittal represents the 9th semi-annual Early Action Compact status report for The Northern Shenandoah Valley Region in the Commonwealth of Virginia. Documentation of the progress from the period July 1, 2007 – December 31, 2007 is reported and includes the following elements:

- Major events and meetings that have taken place;
- Status of control measures that have already been implemented;
- Any impediments to implementation; and
- An updated summary chart depicting the status of the implemented control measures of the Northern Shenandoah Valley Early Action Compact Area.

The Winchester-Frederick County Economic Development Commission has administered and continues to administer the overall Ozone Early Action Plan (EAP) for the Northern Shenandoah Valley. If you have any questions regarding our submittal, please contact me at (540) 665-0973.

Sincerely,

Patrick Barker, AICP
Executive Director



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

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L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

December 17, 2007

Ms. Judith M. Katz
Air Protection Division Director
US EPA - Region III (3AP00)
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Judy:

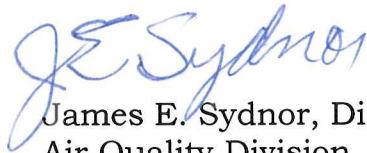
The purpose of this letter is to provide the air quality and program documentation required to make an affirmative clean air determination for the Northern Shenandoah Valley (NSV) area under the EPA Early Action Compact (EAC) program for the 8-hour ozone National Ambient Air Quality Standard (NAAQS). The necessary documentation was identified in your September 13, 2008 on this subject.

In order to provide the necessary quality assured and certified air quality data, the VADEQ Division of Air Quality has completed the early certification of all 2007 ozone data from monitors in Virginia that are owned and operated by the Department. This certification and supporting reports are being submitted to you under a separate cover letter, and a data summary is provided in Enclosure I. Based on this certified data and using EPA approved calculation methodologies, the official 8-hour ozone design value for the NSV area during the 2005 to 2007 period is 0.073 parts per million (ppm). Therefore, this area has demonstrated full compliance with the ozone NAAQS by the December 31, 2007 milestone date.

According to the previously approved State Implementation Plan (SIP) for the NSV area, a number of actions and measures were identified as part of a comprehensive air quality improvement plan. At this time, we reaffirm that the Commonwealth and the local jurisdictions involved have fully implemented all the measures contain in the early action SIP. A summary of these measures is provided in Enclosure II for further documentation.

Thank you again for the opportunity to participate in this innovative and successful program, and for your support in achieving the desired outcome. We look forward to the formal EPA action and attainment determination for this area. If you have any question or need additional information on this submittal, please contact Tom Ballou of my staff at (804) 698-4406 or at trballou@deq.virginia.gov.

Sincerely,

A handwritten signature in blue ink, reading "J E Sydnor".

James E. Sydnor, Director
Air Quality Division

Enclosure

ENCLOSURE I

Virginia Department of Environmental Quality 2005-2007 Fourth Highest Daily Maximum Ozone 8-hour Averages Units, ppm

Monitoring Sites	AIRS ID	2005	2006	2007	3-year average
Wythe Co.	511970002	0.075	0.069	0.072	0.072
Rockbridge Co.	511630003	0.074	0.068	0.065	0.069
Page Co.	511390004	0.077	0.073	0.069	0.073
Fauquier Co.	510610002	0.073	0.076	0.069	0.072
Caroline Co.	510330001	0.082	0.085	0.078	0.081
Rockingham Co.	511650003	NA	NA	0.069	NA
Roanoke EAC Area:					
Roanoke Co.	511611004	0.076	0.076	0.076	0.076
Frederick County EAC Area:					
Frederick Co.	510690010	0.075	0.074	0.072	0.073
Richmond Area:					
Chesterfield Co.	510410004	0.078	0.077	0.077	0.077
Henrico Co.	510870014	0.084	0.086	0.085	0.085
Hanover Co.	510850003	0.083	0.082	0.079	0.081
Charles City Co.	510360002	0.083	0.081	0.084	0.082
Hampton Roads Area:					
Hampton	516500004	0.078	0.076	0.076	0.076
Suffolk - TCC	518000004	0.077	0.077	0.076	0.076
Suffolk - Holland	518000005	0.078	0.071	0.078	0.075
Fredericksburg Area:					
Stafford Co.	511790001	0.079	0.091	0.085	0.085
Northern Virginia Area:					
Loudoun Co.	511071005	0.077	0.084	0.086	0.082
Prince William Co.	511530009	0.074	0.086	0.076	0.078
Arlington Co.	510130020	0.088	0.085	0.088	0.087
Alexandria	515100009	0.081	0.084	0.084	0.083
Fairfax Co. - Lee Park	510590030	0.088	0.087	0.085	0.086

Early Action Compacts December Progress Summary Table

A. Control Measure	B. Summary Description of Measure	C. Program/Measure Status	D. Specific Implementation Date	E. VOC Reduction	F. NOx Reduction	G. Resources (FTE's, \$\$)	H. Additional Information
27 Northern Shenandoah Valley, VA (Effective date of nonattainment designation deferred)							
Ozone action days/public awareness -multiple activities	Comprehensive local ozone action days program - Program strategy includes a combination of individual measures	Program and individual measures have been fully implemented under the Valley AIRNOW program - Completed	Apr-05	0.3 TPD	0.02 TPD	70,000/year	Additional information on Valley AIRNOW can be found at www.valleyairnow.com
VMT Reduction programs - multiple activities	Implementation of a comprehensive local VMT reduction program	Program and individual measures have been fully implemented - Completed	Sep-05	0.15 TPD	0.3 TPD		See Appendix I-K in NSV Dec 2005 status report
Open burning restrictions	Open burning bans/restrictions during predicted high ozone days and /or during the ozone season	Both jurisdictions issued memorandums in June 2005 on restrictions on open burning during air quality action days. Replaced with mandatory state restriction by regulation in 20007 - Completed	Sep-05	0.28 TPD	0.12 TPD		See Appendix E in NSV Dec 2005 status report
Engine idling restrictions -truck/school bus	Restrictions on diesel idling of government vehicles	Both jurisdictions adopted policies regarding idling restrictions of government vehicles during action days - Completed	Sep-05	0	0.1 TPD		See Appendix L in NSV Dec 2005 status report
School bus/heavy duty diesel retrofit	Voluntary diesel retrofit program for school buses	A total of 142 school buses have been retrofitted with oxidation catalysts - Completed	Sep-05	0.002 TPD	0.001 TPD	475,000-DEQ	See Appendix L in NSV Dec 2005 status report
Voluntary industrial reductions	Voluntary reductions from local industries	Established the AIRCorps program to establish voluntary programs - to date 6 petroleum companies and 1 manufacturing company has joined this program - Completed	Spring 2005	NQ	NQ		See the Valley AIRNOW site for more information
Regional Reduction of NOx Emissions	Regional program to reduce ozone transport by reducing NOx emissions from power plants.	Implemented by state regulation during 2004 ozone season - Completed	May 31, 2004	NQ	NQ		113000 tons/per season reduced in VA between 2002 and 2006. Over 170,000 tps in VA and adjacent states
National Low Emission Vehicle Program	Requirement for the sale of low emissions vehicles	Program fully implemented by state regulation - Completed	1999	NQ	NQ		
RACT Controls – VOC only, no NOx reductions	Expansion of existing source VOC control regulations and non-CTG RACT for major NOx sources	Implemented region-wide by state regulation - Completed	Nov-05	0.792 TPD	0		
Enhanced Ozone Forecasting tool	Preparing daily ozone forecasts during the ozone	Program fully implemented - Completed	May-05	NQ	NQ	70,000 & 1 FTE	
State Cutback Asphalt Regulation	Restriction on the use of cutback asphalt	Implemented region-wide by state regulation - Completed	Nov-05	0.001 TPD	0		
Comments:							



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L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

December 17, 2007

Mr. Walter Wilkie
U.S. EPA Region III
1650 Arch Street
Mail Code: 3AP22
Philadelphia, PA 19103-2029

Dear Mr. Wilkie:

The 2007 ambient ozone concentration and quality assurance data collected by the Virginia Department of Environmental Quality have been submitted to AQS, and the ambient concentration data are accurate to the best of my knowledge, taking into consideration the quality assurance findings. All data were collected using EPA-approved methods and procedures.

Copies of the AMP450 and AMP255 reports for these data are enclosed. If you have any questions, please contact Chuck Turner at (804) 527-5178 or clturner@deq.virginia.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "J.E. Sydnor".

James E. Sydnor
Director, Air Quality Division

Enclosures

cc: Pauline Devose, EPA Region III

User ID: SQW

QUICKLOOK CRITERIA PARAMETERS

Report Request ID: 488857 Report Code: AMP450 Dec. 11, 2007

Tribal	GEOGRAPHIC SELECTIONS														
	State	County	Site	Parameter	POC	City	AQCR	UAR	MSA	CMSA	EPA Region	Method	Duration	Begin Date	End Date
	51			44201										2007	2007

SELECTED OPTIONS		SORT ORDER		SCR GROUP SELECTIONS
Option Type	Option Value	Order	Column	VIRGINIA
EVENTS PROCESSING	EXCLUDE REGIONALLY CONCURRED EVENTS	1	PARAMETER_CODE	
MERGE PDF FILES	YES	2	STATE_CODE	
		3	COUNTY_CODE	
		4	SITE_ID	
		5	POC	
		6	DATES	
		7	EDT_ID	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 11, 2007

EXCEPTIONAL DATA TYPES

EDT	DESCRIPTION
0	NO EVENTS
1	EVENTS EXCLUDED
2	EVENTS INCLUDED
3	EXCEPTIONAL EVENTS EXCLUDED
4	NATURAL EVENTS EXCLUDED
5	EVENTS WITH CONCURRENCE EXCLUDED
6	EXCEPTIONAL EVENTS WITH CONCURRENCE EXCLUDED
7	NATURAL EVENTS WITH CONCURRENCE EXCLUDED

Note: The * indicates that the mean does
not satisfy summary criteria.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 11, 2007

Ozone (44201)

Virginia

Parts per million (007)

1-HOUR

SITE ID	P O C	PQAO	CITY	COUNTY	ADDRESS	YEAR	METH	VALID	NUM	1ST	2ND	3RD	4TH	DAY	EST	MISS	CERT	EDT
								DAYS	DAYS	MAX	MAX	MAX	MAX	MAX>/=	DAYS>/=	DAYS<		
								MEAS	REQ	1-HR	1-HR	1-HR	1-HR	0.125	.125	0.125		
51-013-0020	1	1127	Not in a city	Arlington	S 18TH AND HAYES ST	2007	047	213	214	.110	.108	.103	.102	0	0.0	1	0	
51-033-0001	1	1127	Not in a city	Caroline	U.S. GEODETIC SURVEY, OFF RT.2, CORBIN	2007	047	213	214	.102	.097	.095	.089	0	0.0	1	0	
51-036-0002	1	1127	Not in a city	Charles	SHIRLEY PLANTATION, ROUTE 5	2007	047	214	214	.105	.103	.099	.097	0	0.0	0	0	
51-041-0004	1	1127	Not in a city	Chesterfield	BEACH,INTERSECT ION OF CO.ROADS 655 & 654	2007	047	213	214	.093	.091	.090	.084	0	0.0	1	0	
51-059-0030	1	1127	Franconia	Fairfax	STA. 46-B9, LEE PARK, TELEGRAPH ROAD	2007	047	213	214	.108	.104	.103	.098	0	0.0	1	0	
51-061-0002	1	1127	Not in a city	Fauquier	RT651 C PHELPS WILDLIFE MANAGEMENT AREA	2007	047	212	214	.079	.075	.075	.074	0	0.0	2	0	
51-069-0010	1	1127	Not in a city	Frederick	RTE 669, BUTLER MANUF. CO NEAR REST VA	2007	047	213	214	.087	.086	.086	.084	0	0.0	1	0	
51-085-0003	1	1127	Not in a city	Hanover	7345 MCCLELLAN RD MECHANICSVILLE VA	2007	047	210	214	.118	.104	.101	.098	0	0.0	2	0	
51-087-0014	1	1127	Not in a city	Henrico	2401HARTMAN STREET MATH & SCIENCE CTR	2007	047	213	214	.114	.108	.103	.098	0	0.0	1	0	
51-107-1005	1	1127	Not in a city	Loudoun	38-I, BROAD RUN HIGH SCHOOL, ASHBURN	2007	047	214	214	.112	.104	.094	.094	0	0.0	0	0	
51-139-0004	1	1127	Not in a city	Page	LURAY CAVERNS AIRPORT, ROUTE 647	2007	047	206	214	.088	.079	.078	.076	0	0.0	0	0	

Note: The * indicates that the mean does
not satisfy summary criteria.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 11, 2007

Ozone (44201)

Virginia

Parts per million (007)

1-HOUR

SITE ID	P O C	PQAO	CITY	COUNTY	ADDRESS	YEAR	METH	VALID DAYS MEAS	NUM DAYS REQ	1ST MAX 1-HR	2ND MAX 1-HR	3RD MAX 1-HR	4TH MAX 1-HR	DAY MAX>/= 0.125	EST DAYS>/= .125	MISS DAYS< 0.125	CERT	EDT
51-153-0009	1	1127	Not in a city	Prince William	JAMES S. LONG PARK	2007	047	209	214	.093	.093	.092	.089	0	0.0	1	0	
51-161-1004	1	1127	Vinton	Roanoke	EAST VINTON ELEMENTARY SCHOOL	2007	047	184	214	.099	.094	.091	.086	0	0.0	1	0	
51-163-0003	1	1127	Not in a city	Rockbridge	21-C, GLENWOOD- PEDLAR DISTRICT RANGER STA	2007	047	207	214	.091	.083	.073	.073	0	0.0	1	0	
51-165-0003	1	1127	Not in a city	Rockingham	VDOT RESIDENCY SHOP, 3536 NORTH VALLEY PIKE, HARRISONBURG, VA	2007	047	213	214	.097	.082	.082	.080	0	0.0	1	0	
51-179-0001	1	1127	Not in a city	Stafford	WIDEWATER ELEM. SCH., DEN RICH ROAD	2007	047	212	214	.109	.103	.102	.097	0	0.0	2	0	
51-197-0002	1	1127	Not in a city	Wythe	16-B RURAL RETREAT SEWAGE DISPOSAL	2007	000	214	214	.085	.081	.075	.075	0	0.0	0	0	
51-510-0009	1	1127	Alexandria	Alexandria City	517 N SAINT ASAPH ST, ALEXANDRIA HEALTH	2007	047	212	214	.105	.103	.100	.098	0	0.0	2	0	
51-650-0004	2	1127	Hampton	Hampton City	700 SHELL ROAD	2007	047	213	214	.098	.093	.092	.091	0	0.0	1	0	
51-800-0004	1	1127	Suffolk	Suffolk City	TIDEWATER COMM. COLLEGE, FREDERIC CAMPUS	2007	047	208	214	.103	.097	.091	.090	0	0.0	2	0	
51-800-0005	1	1127	Suffolk	Suffolk City	TIDEWATER RESEARCH STATION, HARE ROAD	2007	047	214	214	.089	.086	.086	.085	0	0.0	0	0	

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 11, 2007

Ozone (44201)

Virginia

Parts per million (007)

8-HOUR

SITE ID	P O C	PQAO	CITY	COUNTY	ADDRESS	YEAR	METH	%OBS	VALID DAYS MEAS	NUM DAYS REQ	1ST MAX 8-HR	2ND MAX 8-HR	3RD MAX 8-HR	4TH MAX 8-HR	DAY MAX>/= 0.085	CERT EDT
51-013-0020	1	1127	Not in a city	Arlington	S 18TH AND HAYES ST	2007	047	100	213	214	.095	.088	.088	.088	8	0
51-033-0001	1	1127	Not in a city	Caroline	U.S. GEODETIC SURVEY, OFF RT.2, CORBIN	2007	047	99	212	214	.086	.085	.079	.078	2	0
51-036-0002	1	1127	Not in a city	Charles	SHIRLEY PLANTATION, ROUTE 5	2007	047	100	214	214	.090	.087	.085	.084	3	0
51-041-0004	1	1127	Not in a city	Chesterfield	BEACH, INTERSECT ION OF CO.ROADS 655 & 654	2007	047	100	214	214	.094	.081	.081	.077	1	0
51-059-0030	1	1127	Franconia	Fairfax	STA. 46-B9, LEE PARK, TELEGRAPH ROAD	2007	047	100	213	214	.094	.090	.088	.085	4	0
51-061-0002	1	1127	Not in a city	Fauquier	RT651 C PHELPS WILDLIFE MANAGEMENT AREA	2007	047	99	212	214	.073	.070	.070	.069	0	0
51-069-0010	1	1127	Not in a city	Frederick	RTE 669, BUTLER MANUF. CO NEAR REST VA	2007	047	99	212	214	.082	.074	.073	.072	0	0
51-085-0003	1	1127	Not in a city	Hanover	7345 MCCLELLAN RD MECHANICSVILLE VA	2007	047	98	209	214	.097	.084	.084	.079	1	0
51-087-0014	1	1127	Not in a city	Henrico	2401 HARTMAN STREET MATH & SCIENCE CTR	2007	047	99	211	214	.095	.089	.088	.085	4	0
51-107-1005	1	1127	Not in a city	Loudoun	38-I, BROAD RUN HIGH SCHOOL, ASHBURN	2007	047	100	213	214	.091	.087	.087	.086	5	0
51-139-0004	1	1127	Not in a city	Page	LURAY CAVERNS AIRPORT, ROUTE 647	2007	047	96	205	214	.074	.072	.071	.069	0	0
51-153-0009	1	1127	Not in a city	Prince William	JAMES S. LONG	2007	047	97	207	214	.082	.078	.076	.076	0	0

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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QUICK LOOK REPORT (AMP450)

Dec. 11, 2007

Ozone (44201)

Virginia

Parts per million (007)

8-HOUR

SITE ID	P O C	PQAO	CITY	COUNTY	ADDRESS	YEAR	METH	%OBS	VALID	NUM	1ST	2ND	3RD	4TH	DAY	CERT	EDT
									DAYS	DAYS	MAX	MAX	MAX	MAX	MAX>/=		
									MEAS	REQ	8-HR	8-HR	8-HR	8-HR	0.085		
51-161-1004	1	1127	Vinton	Roanoke	EAST VINTON ELEMENTARY SCHOOL	2007	047	86	183	214	.086	.079	.077	.076	1		0
51-163-0003	1	1127	Not in a city	Rockbridge	21-C, GLENWOOD- PEDLAR DISTRICT RANGER STA	2007	047	96	206	214	.073	.070	.066	.065	0		0
51-165-0003	1	1127	Not in a city	Rockingham	VDOT RESIDENCY SHOP, 3536 NORTH VALLEY PIKE, HARRISONBURG, VA	2007	047	99	211	214	.081	.072	.071	.069	0		0
51-179-0001	1	1127	Not in a city	Stafford	WIDEWATER ELEM. SCH., DEN RICH ROAD	2007	047	99	212	214	.089	.088	.085	.085	4		0
51-197-0002	1	1127	Not in a city	Wythe	16-B RURAL RETREAT SEWAGE DISPOSAL	2007	000	100	214	214	.077	.076	.072	.072	0		0
51-510-0009	1	1127	Alexandria	Alexandria City	517 N SAINT ASAPH ST, ALEXANDRIA HEALTH	2007	047	99	212	214	.090	.085	.085	.084	3		0
51-650-0004	2	1127	Hampton	Hampton City	700 SHELL ROAD	2007	047	98	210	214	.092	.086	.077	.076	2		0
51-800-0004	1	1127	Suffolk	Suffolk City	TIDEWATER COMM. COLLEGE, FREDERIC CAMPUS	2007	047	97	208	214	.095	.085	.080	.076	2		0
51-800-0005	1	1127	Suffolk	Suffolk City	TIDEWATER RESEARCH STATION, HARE ROAD	2007	047	100	214	214	.081	.079	.078	.078	0		0

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AIR QUALITY SYSTEM
QUICK LOOK REPORT (AMP450)

Dec. 11, 2007

METHODS USED IN THIS REPORT

PARAMETER	METHOD CODE	COLLECTION METHOD	ANALYSIS METHOD
44201	000	MULTIPLE METHODS	MULTIPLE METHODS
44201	047	INSTRUMENTAL	ULTRA VIOLET

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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QUICK LOOK REPORT (AMP450)

Dec. 11, 2007

PQAOS USED IN THIS REPORT

PQAO	AGENCY DESCRIPTION
1127	Virginia Department of Environmental Quality

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Table PP. PQAQ, 2007:Q2-Q4.

Region	State	PQAQ	PQAQ Name
3	VA	745	National Park Service
3	VA	1127	Virginia Department of Environmental Quality

Table E. Single Point Quality Check Completeness for O3, 2007:Q2-Q4.

Region	State	PQAO	Monitor Type	Site ID	Start Date	End Date	Number Required	Number Submitted	Comp. %	% Sites <50% Complete
3	VA	745	N-EPA FEDEF	511130003	4/1/2007	10/31/2007	15	148	100	NA
3	VA	745	All - Other	NA	NA	NA	15	148	100	0
3	VA	1127	SLAMS	510130020	4/1/2007	10/31/2007	15	21	100	NA
3	VA	1127	OFFICIAL PA	510330001	4/1/2007	10/31/2007	15	25	100	NA
3	VA	1127	SLAMS	510360002	4/1/2007	10/31/2007	15	15	100	NA
3	VA	1127	SLAMS	510410004	4/1/2007	10/31/2007	15	19	100	NA
3	VA	1127	SLAMS	510590005	4/1/2007	10/31/2007	15	15	100	NA
3	VA	1127	SLAMS	510590018	4/1/2007	10/31/2007	15	14	93	NA
3	VA	1127	OFFICIAL PA	510590030	4/1/2007	10/31/2007	15	24	100	NA
3	VA	1127	SLAMS	510591005	4/1/2007	10/31/2007	15	14	93	NA
3	VA	1127	SLAMS	510595001	4/1/2007	10/31/2007	15	16	100	NA
3	VA	1127	SLAMS	510610002	4/1/2007	10/31/2007	15	19	100	NA
3	VA	1127	SLAMS	510690010	4/1/2007	10/31/2007	15	29	100	NA
3	VA	1127	SLAMS	510850003	4/1/2007	10/31/2007	15	16	100	NA
3	VA	1127	SLAMS	510870014	4/1/2007	10/31/2007	15	16	100	NA
3	VA	1127	SLAMS	511071005	4/1/2007	10/31/2007	15	21	100	NA
3	VA	1127	SLAMS	511390004	4/1/2007	10/31/2007	15	31	100	NA
3	VA	1127	SLAMS	511530009	4/1/2007	10/31/2007	15	20	100	NA
3	VA	1127	SLAMS	511611004	4/1/2007	10/31/2007	15	16	100	NA
3	VA	1127	SLAMS	511630003	4/1/2007	10/31/2007	15	30	100	NA
3	VA	1127	SLAMS	511650003	4/1/2007	10/31/2007	15	30	100	NA
3	VA	1127	SLAMS	511790001	4/1/2007	10/31/2007	15	18	100	NA
3	VA	1127	SLAMS	511970002	4/1/2007	10/31/2007	15	30	100	NA
3	VA	1127	SLAMS	515100009	4/1/2007	10/31/2007	15	27	100	NA
3	VA	1127	SLAMS	516500004	4/1/2007	10/31/2007	15	17	100	NA
3	VA	1127	SLAMS	518000004	4/1/2007	10/31/2007	15	17	100	NA
3	VA	1127	SLAMS	518000005	4/1/2007	10/31/2007	15	19	100	NA
3	VA	1127	All - NSP	NA	NA	NA	375	519	99	0

Table F. Performance Evaluation Check Completeness for O3, 2007:Q2-Q4.

Region	State	PQAO	Monitor Type	Site ID	Start Date	End Date	Number Required	Number Submitted	Comp. %	Tot. # of Sites	Audits in Quarters 1/2/3/4
3	VA	745	N-EPA FEDEF	511130003	4/1/2007	10/31/2007	1(3)	1(4)	100(100)	NA	NA
3	VA	745	All - Other	NA	NA	NA	3(9)	1(4)	100(100)	1	0/1/0/0
3	VA	1127	SLAMS	510130020	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	OFFICIAL PA	510330001	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	510360002	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	510410004	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	510590005	4/1/2007	10/31/2007	1(3)	3(9)	100(100)	NA	NA
3	VA	1127	SLAMS	510590018	4/1/2007	10/31/2007	1(3)	3(9)	100(100)	NA	NA
3	VA	1127	OFFICIAL PA	510590030	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	510591005	4/1/2007	10/31/2007	1(3)	2(6)	100(100)	NA	NA
3	VA	1127	SLAMS	510595001	4/1/2007	10/31/2007	1(3)	2(6)	100(100)	NA	NA
3	VA	1127	SLAMS	510610002	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	510690010	4/1/2007	10/31/2007	1(3)	2(8)	100(100)	NA	NA
3	VA	1127	SLAMS	510850003	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	510870014	4/1/2007	10/31/2007	1(3)	2(10)	100(100)	NA	NA
3	VA	1127	SLAMS	511071005	4/1/2007	10/31/2007	1(3)	2(8)	100(100)	NA	NA
3	VA	1127	SLAMS	511390004	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	511530009	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	511611004	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	511630003	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	511650003	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	511790001	4/1/2007	10/31/2007	1(3)	2(8)	100(100)	NA	NA
3	VA	1127	SLAMS	511970002	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	515100009	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	516500004	4/1/2007	10/31/2007	1(3)	2(8)	100(100)	NA	NA
3	VA	1127	SLAMS	518000004	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	SLAMS	518000005	4/1/2007	10/31/2007	1(3)	1(5)	100(100)	NA	NA
3	VA	1127	All - NSP	NA	NA	NA	25(75)	36(152)	100(100)	25	0/12/15/9

Table PP. PQAQ, 2007:Q2-Q4.

Region	State	PQAQ	PQAQ Name
3	VA	745	National Park Service
3	VA	1127	Virginia Department of Environmental Quality

Table U. Single Point Precision and Bias Estimates for O3 NSP Sites, 2007:Q2-Q4.

Region	State	PQAO	Site	CFR Lower Limit	CFR Upper Limit	Bias UB	CV UB
3	VA	1127	510130020	NA	NA	3.03	3.96
3	VA	1127	510330001	NA	NA	4.68	5.66
3	VA	1127	510360002	NA	NA	5.02	5.73
3	VA	1127	510410004	NA	NA	1.98	2.41
3	VA	1127	510590005	NA	NA	2.84	1.15
3	VA	1127	510590018	NA	NA	-1.4	1.33
3	VA	1127	510590030	NA	NA	1.82	2.33
3	VA	1127	510591005	NA	NA	1.28	1.39
3	VA	1127	510595001	NA	NA	1.4	1.58
3	VA	1127	510610002	NA	NA	6.38	6.27
3	VA	1127	510690010	NA	NA	2.85	3.05
3	VA	1127	510850003	NA	NA	4.05	5.51
3	VA	1127	510870014	NA	NA	4.45	5.19
3	VA	1127	511071005	NA	NA	8.31	10.36
3	VA	1127	511390004	NA	NA	4.58	5.31
3	VA	1127	511530009	NA	NA	3.94	4.35
3	VA	1127	511611004	NA	NA	2.47	3.31
3	VA	1127	511630003	NA	NA	4.8	5.71
3	VA	1127	511650003	NA	NA	-3.07	3.27
3	VA	1127	511790001	NA	NA	5.53	6.92
3	VA	1127	511970002	NA	NA	3.05	3.9
3	VA	1127	515100009	NA	NA	3.19	3.56
3	VA	1127	516500004	NA	NA	1.83	2.34
3	VA	1127	518000004	NA	NA	4.2	5.2
3	VA	1127	518000005	NA	NA	6.52	4.72
3	VA	1127	All - NSP	-7.47	8.5	3.07	4.24

Table Y. PQAQ Accuracy Summary for O3 NSP Sites, 2007:Q2-Q4.

Region	State	PQAQ	I	II	III	IV				
3	VA	1127	(-5.0	+3.8)	(-2.7	+2.1)	(-2.1	+2.5)	(-1.7	+1.4)

Table W. Single Point Precision and Bias Estimates for O3 Non-NSP Sites, 2007:Q2-Q4

Region	State	PQAO	Site	CFR Lower Limit	CFR Upper Limit	Bias UB	CV UB
3	VA	745	511130003	NA	NA	2.55	2.18
3	VA	745	All - Other	-1.79	6.1	2.55	2.18

Table Z. PQAQ Accuracy Summary for O3 Non-NSP Sites, 2007:Q2-Q4.

Region	State	PQAQ	I	II	III	IV
3	VA	745				



Ozone Early Action Plan **Northern Shenandoah Valley**

9th Semi-Annual Status Report **for** **The Northern Shenandoah Valley** **Ozone Early Action Compact Area**

December 31, 2007



Ozone Early Action Plan

Northern Shenandoah Valley

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I. Introduction

Project Organization and Summary to Date

This report represents the 9th semi-annual status report for the Northern Shenandoah Valley (NSV) Early Action Compact Area in Virginia, which consists of the City of Winchester and Frederick County. As such, this report documents the status and progress made towards the development and implementation of an Early Action Plan (EAP) to address ground-level ozone air pollution in the area. Specifically, this report covers the period from July 1, 2007 to December 31, 2007.

The EAC process in the Northern Shenandoah Valley (NSV) area began in the fall of 2002, with the establishment of the NSV Air Quality Improvement Task Force and the formal development and signing of the Early Action Compact in December 2002. Moving forward, a series of required documents has been produced, culminating in the submission of the official EAP in March 2004. Provided below is a listing and timeline of the products and documents provided by the NSV EAC effort:

- **December 31, 2002** – Early Action Compact for the Northern Shenandoah Valley Area.
- **June 16, 2003** – Potential local control list submission.
- **June 30, 2003** – 1st Semi-Annual Status Report, January to June 2003.
- **December 31, 2003** – 2nd Semi-Annual Status Report, July to December 2003.
- **March 31, 2004** – Ozone Early Action Plan for the Northern Shenandoah Valley Area.
- **June 30, 2004** – 3rd Semi-Annual Status Report, January to June 2004.
- **December 31, 2004** – State Implementation Plan.
- **June 30, 2005** – 4th Semi-Annual Status Report, January to June 2005.
- **December 30, 2005** – 5th Semi-Annual Status Report.
- **June 30, 2006** – 6th Semi-Annual Status Report.
- **December 31, 2006** – 7th Semi-Annual Status Report.
- **June 30, 2007** – 8th Semi-Annual Status Report.

All these documents, along with other information concerning the EAC program and other EAC areas, can be viewed at and retrieved from the following Web sites:

EPA - <http://www.epa.gov/ttn/naaqs/ozone/eac/index.htm>

Valley AIRNow - <http://www.valleyairnow.com/Reports&Meetings.htm#Submittals>

Efforts on the state and local levels have now moved towards the maintenance and enforcement of the emissions control measures and other actions committed to in the EAP.

The remainder of this status report documents the major actions, milestones, and events that have occurred since the submission of the 8th Semi-Annual Status Report on June 30, 2007.

Summary of Events (July 2007 to December 2007)

Provided below is a listing of major events held and actions taken during the period covered by this status report toward the implementation and maintenance of the local ozone air quality improvement plan and associated non-attainment implications.

July 2, 2007 – Valley AIRNow staff participated in a meeting with a community involvement representative from Clear Channel Communications of Winchester. Clear Channel is a national media company which operates four, well-recognized radio broadcast companies in the area—WFQX FM, WKSI FM, WTFX AM, and WUSQ FM. During the meeting, several items were discussed as a means to cost-effectively promote the Valley AIRNow program, including public service announcements and the availability of radio remotes during community events.

August 1, 2007 – The Northern Shenandoah Valley Air Quality Improvement Task Force meeting was administered by Valley AIRNow.

August 17, 2007 – The Top of Virginia Regional Chamber promoted the Valley AIRNow idle reduction sign initiative in the Announcements section of its *Business Agenda Update*. Refer to Appendix B-1 for additional information.

August 30, 2007 – Valley AIRNow was interviewed by *Blue Ridge Outdoors Magazine* for its monthly reader survey regarding air quality forecasts and recreational outdoor activities.

September 1 - 30, 2007 – The Top of Virginia Regional Chamber promoted the Valley AIRNow idle reduction sign initiative in the Partner Updates section of its *Business Agenda*—a monthly publication that is distributed to over 2,400 businesses and individuals in the Northern Shenandoah Valley area. Refer to Appendix B-2 for additional information on the September edition of the *Business Agenda*.

September 5, 2007 – Valley AIRNow met with a community specialist representative from the Girl Scouts of Shawnee Council. Potential collaborative opportunities were discussed, including the adoption and development of an air quality badge for the Girl Scouts merit badge system.

September 5, 2007 – The Northern Shenandoah Valley Air Quality Improvement Task Force meeting was administered by Valley AIRNow.

September 12, 2007 – Valley AIRNow participated in an hour-long radio interview on The Valley Today—a popular radio show on Oldies 95.3 FM, which serves the Northern Shenandoah Valley area.

September 14, 2007 – Valley AIRNow launched a media campaign to promote its idle reduction sign initiative and to recognize participating partners. Refer to Appendix C-2 for the official press release.

September 17, 2007 – WINC-FM, a popular radio station serving the Northern Shenandoah Valley area, interviewed the Valley AIRNow outreach coordinator regarding the idle reduction sign initiative.

September 28, 2007 – The success of the Valley AIRNow outreach program, particularly the idle reduction sign and Virginia Clean Air Champions campaigns, was highlighted during Faculty Research Day at James Madison University. Refer to Appendix D for the James Madison University poster presentation.

October 2, 2007 – Valley AIRNow staff presented to a James Madison University HTH 352 (Environmental Health) class on its current outreach programs and activities, including the idle reduction initiative, Clean Air Champions, clean air art contest, and K – 12 education.

October 15 - 16, 2007 – Valley AIRNow attended the Shenandoah Valley Natural Systems Symposium held at Shenandoah University in Winchester, VA. The theme of the symposium was taking care of the water plus air and land relationships. The purpose of the conference was to help develop a science plan for the Shenandoah Valley that will inform decision makers. During a poster session on October 15th, Valley AIRNow presented a poster which highlighted the success of the idle reduction sign initiative. For more information on the Shenandoah Valley Natural Systems Symposium, refer to page 11 or Appendix E.

October 19 & 26, 2007 – The Top of Virginia Regional Chamber promoted the Valley AIRNow *Thankful for Clean Air* art contest in its October 19th and 26th *Business Agenda Update*. Refer to Appendix B-5 – B-6 for additional information.

November 1 - 30, 2007 – During the month of November, Valley AIRNow invited young artists (pre-K – 12) to celebrate Thanksgiving and clean air in the first annual *Thankful for Clean Air* art contest. Students were asked to address the theme “What *you* can do to protect the air that we breathe!” Prizes were awarded to three grand prize winners and three honorable mentions. For more information on the *Thankful for Clean Air* art contest and the official press release, refer to page 11 or Appendix F.

November 1, 2007 – Valley AIRNow submitted a public service announcement to area radio stations announcing its *Thankful for Clean Air* art contest (Appendix F).

November 5, 2007 – WINC-FM, a popular radio station serving the Northern Shenandoah Valley area, interviewed the Valley AIRNow outreach coordinator regarding the *Thankful for Clean Air* art contest (Appendix F).

November 9, 2007 – The Top of Virginia Regional Chamber promoted the Valley AIRNow *Thankful for Clean Air* art contest in its *Business Agenda Update*. Refer to page 11 or Appendix B-7 for additional information.

November 7, 2007 – The Northern Shenandoah Valley Air Quality Improvement Task Force meeting was administered by Valley AIRNow.

November 14 - 17, 2007 – Valley AIRNow staff attended the North American Association for Environmental Education’s (NAAEE) 36th Annual Conference held in Virginia Beach, VA. The conference consisted of over 300 concurrent sessions and presentations in a variety of strands such as community and conservation education and sustainability education. On November 15th, Valley AIRNow presented on several of its outreach programs during the Alternative Fuels and Advanced Technology Vehicles symposium. For more information on the 2007 NAAEE conference, refer to page 11 or Appendix G.

II. Implementation Status of Early Action Control Measures

This section describes the status of each emission-control measure included in the Northern Shenandoah Valley Early Action Plan. Appendix A includes a tabular summary of each emission-control measure along with implementation dates, emissions reduction measures, and applicable resources.

Local Phase I Controls

The Phase I strategies were implemented as of December 2005 and have since been maintained. These measures have the greatest public acceptance and will provide an important foundation for continued efforts.

1. Ozone Action Days/Public Awareness

Valley AIRNow is an education and outreach program supported financially by the localities of Winchester City and Frederick County and by the SHENAIR Institute at James Madison University. The SHENAIR Institute administers Valley AIRNow under the advice and consent of the Task Force. Valley AIRNow staff primarily conducts activities falling under this control measure.

Control Strategies:

❖ General Public Awareness Program/Education and Promotion Campaign

Valley AIRNow Air Quality Hotline: Ongoing 2007 - 2008

The air quality hotline provides: 1) daily air quality forecasts during ozone season, 2) information about how to contact Valley AIRNow, and 3) messaging-service capabilities. The hotline number is (540) 450-2207. During the off season (October – April), the hotline is operable only in its messaging-service capabilities. Although the forecasting service is suspended during this time, the hotline continues to provide the community with a message center to voice any questions or concerns.

Valley AIRNow Email System: Ongoing 2007

The community can contact Valley AIRNow via email at: info@valleyairnow.com. The system is checked for messages every weekday, and responses are returned promptly within one business day or less.

Valley AIRNow Web site: Ongoing 2007 - 2008

The Valley AIRNow web site can be accessed at: www.valleyairnow.com. Air quality information is added on a weekly basis to keep local residents informed of the most current and up-to-date news on ground-level ozone. In addition, the community can stay informed of recent and upcoming Valley AIRNow events by visiting the “News & Updates” page at <http://www.valleyairnow.com/newsandupdates.html>. Photographs from these events are made available to the public at <http://www.valleyairnow.com/pictures.htm>. Other staples of the Valley AIRNow Web site include Task Force meeting materials, EPA submittals, congestion and haze web cameras, and a local air quality Media Center.

The newest informational feature to the Valley AIRNow Web site is Air Update—an online tool developed by Sonoma Technology that allows registered organizations to display Air Quality Index forecasts on their web sites (Figure 1). For the Winchester-Frederick County area, the Air

Update console automatically updates with the most current air quality forecast based on data from the Virginia Department of Environmental Quality.



Figure 1: Air Update console for Winchester, VA can be found on the Valley AIRNow homepage

Valley AIRNow also continues to partner with the Federal Highway Administration's *It All Adds Up to Cleaner Air* initiative to make seasonal air quality web content available at www.valleyairnow.com. This content can be viewed by clicking the "What Can We Do" tab or by pasting <http://www.valleyairnow.com/whatcanwedo.html> into a web browser.

News Coverage (PRINT): Ongoing 2007

The *Winchester Star* and *Northern Virginia Daily* have published several articles related to Valley AIRNow events, transportation, land use, green space preservation, and air quality issues in the area (Appendix H).

- August 8, 2007: "Summer's Sweltering Wrath: Ozone Levels are Climbing" (*The Winchester Star*, Appendix H-1).
- August 28, 2007: "Bike Plan, Sans Funding, Gets Nod" (*The Winchester Star*, Appendix H-3).
- September 14, 2007: "Supervisors Endorse Paths for Bicycles, Pedestrians" (*Northern Virginia Daily*, Appendix H-5).
- September 18, 2007: "Planning for Future Growth" (*The Winchester Star*, Appendix H-7).
- September 25, 2007: "Second Biking-Walking Path Grant Sought" (*The Winchester Star*, Appendix H-10).
- October 17, 2007: "So Scant a Resource, So Vital it be Pure Now, In the Future" (*The Winchester Star*, Appendix H-11).
- October 18, 2007: "MPO Adopts Unfunded Biking/Walking Plan" (*The Winchester Star*, Appendix H-13).
- October 23, 2007: "Land Preservation Event Set" (*The Winchester Star*, Appendix H-14).
- October 24, 2007: "City Begins Review of Comprehensive Plan" (*The Winchester Star*, Appendix H-15).
- November 28, 2007: "Comprehensive Plan Getting a Makeover" (*The Winchester Star*, Appendix H-17).
- December 6, 2007: "Panel Considers Future Projects" (*The Winchester Star*, Appendix H-18).
- December 10, 2007: "Easements Are Seen as Way of Protecting Look of Frederick" (*Northern Virginia Daily*, Appendix H-20).

Other related articles, press releases, and reports from various resources, include:

- August 29, 2007: The VDEQ *Virginia Ambient Air Monitoring 2006 Data Report* was made available to the public on-line at:

<http://www.deq.virginia.gov/airmon/publications.html>.

- September 2007: Air quality forecast reader survey, *Blue Ridge Outdoors Magazine*
- September 2007: "Area Industries Work to Maintain Good Air Quality", Top of Virginia Regional Chamber *Business Agenda*, Volume 21, No.8 (Appendix B-4).
- September 2007: Valley AIRNow informational article, *Partner Updates*, Top of Virginia Regional Chamber *Business Agenda*, Volume 21, No.8 (Appendix B-3).
- September 14, 2007: "Valley AIRNow Announces New Clean Air Campaign" (Valley AIRNow Idle Reduction Sign Press Release, Appendix C-2).
- October 31, 2007: "Clean Air Art Contest for Area Students Announced" (Valley AIRNow Press Release, Appendix F-3).
- November 2007: "Thankful for Clean Air Art Contest" (Virginia Naturally News, Appendix H-22).

News Coverage (RADIO): Ongoing 2007

On September 12, Valley AIRNow was invited on The Valley Today—a weekly show on Oldies 95.3 FM serving the Northern Shenandoah Valley area. Valley AIRNow and the Winchester-Frederick County Economic Development Commission answered questions on the creation of Valley AIRNow, the basics of ground-level ozone, and the educational and business programs that are available through Valley AIRNow.

WINC-FM, a popular contemporary music radio station in the area, interviewed Valley AIRNow on several occasions regarding the launch of its newest campaigns. On September 17, the Valley AIRNow outreach coordinator was interviewed on the idle reduction sign campaign and again on November 5 regarding the *Thankful for Clean Air* art contest.

Public Service Announcements (RADIO): Ongoing 2007

In July, Valley AIRNow staff met with Clear Channel Communications of Winchester. Clear Channel is a national media company which operates four, well-recognized radio broadcast companies in the area—WFQX FM, WKSI FM, WTFX AM, and WUSQ FM. As a result of the meeting, Clear Channel agreed to enter several 10 and 15-second public service announcements (Appendix I) into their existing rotation.

Air Quality Action Day Program: Maintained and Promoted 2007

The Air Quality Action Day Program (AQAD) is a five-dimension network created by Valley AIRNow in 2005. The groups in this network that are alerted of an Air Quality Action Day are: 1) Business (via the Valley AIRCorps program), 2) Education, 3) Government, 4) Health, and 5) Media. If enacted, the AQAD protocol is as follows. When the Virginia Department of Environmental Quality forecasts ozone levels for the next day to reach the Code Orange level or higher, the Valley AIRNow team alerts the AQAD Network by sending an email or fax press release. The general public is then alerted mainly through the media, business, and health dimensions. Local newspapers run stories, while area radio stations run public service announcements. Businesses, health-care providers, and local government offices share the alert with all employees and—if applicable—customers, by displaying informative posters in high-visibility areas, offering incentives for participation in emissions-reduction activities, displaying the AQAD Alert on their message boards, etc.

Expanded Ozone Forecasting (INTERNET): Ozone Season 2007

Winchester City and Frederick County air quality forecasts are made available through several notification systems—1) the American Lung Association's (ALA) Smog Alert system and 2) the Virginia Department of Environmental Quality's newest communication tool, *DEQcast—Info on Demand*. Links for the general public to join the ALA or VDEQ notification systems are available year-round at the Valley AIRNow web site by following the "Current Air Quality" navigation bar (www.valleyairnow.com/currentairquality.html).

In addition, real-time ozone data for Winchester-Frederick County are available during ozone season from the sources listed below. Updated links and information to these sources can be found on the Valley AIRNow Web site at www.valleyairnow.com/currentairquality.html.

- An online tool, Air Update (Figure 1), automatically updates with the most current air quality forecast for Winchester-Frederick County based on data from the Virginia Department of Environmental Quality: www.valleyairnow.com.
- Hourly ozone levels measured daily from the Frederick County ozone monitor – VA DEQ: www.deq.virginia.gov/airquality/510690010.html.
- Current air-quality conditions for Virginia and two-day forecasts by region – VA DEQ: www.deq.virginia.gov/airquality.
- Current air-quality conditions and one-day forecast for Winchester – EPA AIRNow: <http://cfpub.epa.gov/airnow/index.cfm?action=airnow.showlocal&cityid=376>.
- Animated regional ozone map for Virginia and North Carolina – EPA AIRNow: www.airnow.gov/index.cfm?action=airnow.showmap. Visitors must follow the links for local air quality to view an AQI map for Virginia/North Carolina.
- Current air-quality conditions and one-day forecast for the Mid-Atlantic Region, including Winchester – The Weather Channel: www.weather.com/outlook/health/airquality/?state=VA&from=36hr_outlet_aq.
- Current air-quality conditions and four-day forecasts for Winchester – Weather Underground: <http://www.wunderground.com/US/VA/Winchester.html>.
- Regional (Northeast) current air-quality map – Weather Underground: <http://www.wunderground.com/US/Region/Northeast/AirQuality.html>.
- Air-quality hotline for Winchester-Frederick County – Valley AIRNow: (540) 450-2207.
- Air-quality hotline – VA DEQ: (804) 698-4444.

Air quality index forecasts and current conditions on Google Earth are the newest tools available on the Valley AIRNow web site. A link on the web site directs visitors to download the AIRNow Keyhole Markup Language (KML) files that are needed to display the data on the virtual globe. Once downloaded, the information tool accesses the AIRNow database hourly so that the Air Quality Index displays the most current air quality conditions for Winchester-Frederick County.

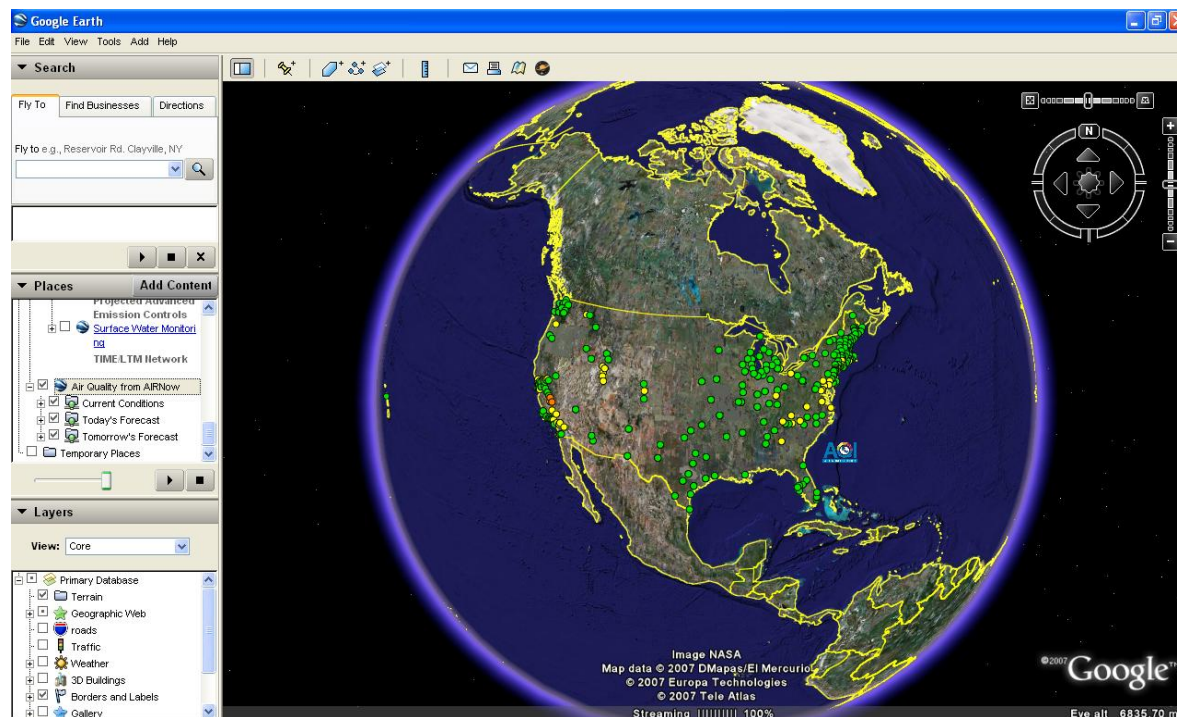


Figure 2: Initial view of the Air Quality Index in Google Earth

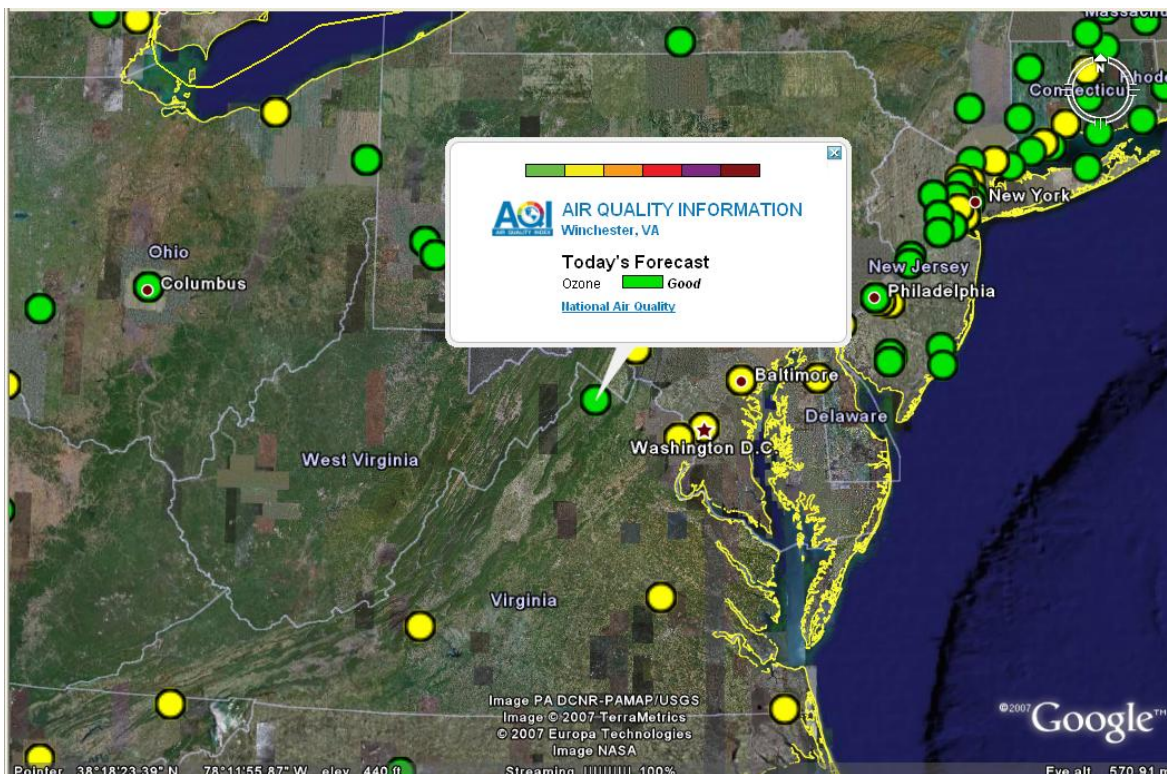


Figure 3: On Google Earth, users can zoom in on Winchester, VA to view daily forecasts and current conditions

Winchester-Frederick County residents are also given the option to contact the Valley AIRNow team at info@valleyairnow.com to join the AQAD email distribution list and receive alerts on Code Orange days or higher.

Expanded Ozone Forecasting (TELEVISION): Ozone Season 2007

Valley AIRNow continued to work with TV-3 Winchester and WAZT-TV to provide local air quality information and forecasts. TV-3 Winchester—an ABC affiliate serving the Winchester-Frederick County area—agreed to provide alerts to the community on pending Air Quality Action Days. WAZT-TV, a Christian television network serving the entire Shenandoah Valley, continued to integrate daily ozone forecasts for Winchester-Frederick County into a local cutaway during its “CBN Newscast” program.

Additionally, The Weather Channel agreed to display the words “Valley AIRNow Air Quality Outreach Program” on its “Local on the 8’s” segment in the event of a forecasted Action Day.

Expanded Ozone Forecasting (PRINT): Ozone Season 2007

During ozone season, *The Winchester Star* published air quality forecasts in its daily edition.

Materials Development, Adaptation, and Revision: Ongoing 2007 - 2008

Valley AIRNow continues to adapt and revise existing air quality materials as needed for Winchester-Frederick County businesses, government, schools, media resources, health-care providers, and community members. This includes Valley AIRNow posters, brochures, memorandums, public service announcements, as well as air quality curricula for public and private schools.

In addition to existing materials, new air quality materials will be developed on an ongoing basis. Recent material development for 2007 includes:

For media: Valley AIRNow, in collaboration with the It All Adds Up To Cleaner Air initiative, submitted several 10- and 15-second public service announcements for Clear Channel Communications of Winchester. Clear Channel is a national media company which operates four well-recognized radio broadcast companies in the area—WFQX FM, WKSJ FM, WTFX AM, and WUSQ FM. These public service announcements, located in Appendix I, were inserted into the PSA rotation at Clear Channel Winchester during ozone season 2007.

For schools: In September, Valley AIRNow formally announced its idle reduction sign initiative—a campaign in which metal, 12” x 18” street signs are installed at public and private schools to encourage parents to turn off their engines while parked in school zones. Valley AIRNow developed several informational materials for the campaign, including a press release, engine idling fact sheet, and sample article to print in the school newsletter. For more information on these materials, refer to Appendix C.

During the month of November, Valley AIRNow held an art contest for local pre-K – 12 students in celebration of Thanksgiving and clean air. Young artists were asked to address the theme “What *you* can do to help improve the air that we breathe!” Valley AIRNow staff developed a promotional flyer (Figure 4) that was distributed to Frederick County and Winchester Public Schools. The flyer in its entirety can be viewed in Appendix F.



Figure 4: The front cover of the *Thankful for Clean Air* promotional flyer

Valley AIRNow staff also developed a “What’s Your PSI?” checklist (Appendix J) to be distributed to high school Drivers Education students during Clean Air Champions presentations. Clean Air Champions is a car care curriculum that was developed by the Virginia Department of Education to educate drivers on the relationship between proper car maintenance and air quality. During an evaluation phase earlier this year, Valley AIRNow discovered that a significant majority of high school students do not know how to properly

measure tire pressure. Thus, a step-by-step tire pressure checklist was created. The checklist, located in Appendix J, is laminated and sized appropriately for glove compartment storage.

For general public: During the month of November, Valley AIRNow held an art contest for local pre-K – 12 students in celebration of Thanksgiving and clean air. Young artists were asked to address the theme “What *you* can do to help improve the air that *we* breathe!” Valley AIRNow staff developed a press release (Appendix F) and a promotional flyer (Figure 4, Appendix F) that was distributed to various community groups and organizations, including: Girl Scouts of Shawnee Council, Shenandoah Area Council Boy Scouts, Winchester Wheelmen, Winchester Green Circle, and Valley Health.

Valley AIRNow, in collaboration with The SHENAIR Institute, developed a research poster to present at various conferences and workshops throughout the state. The poster (Appendix D) highlights recent work in air quality Education, Scholarship, Decision Maker Support, and Stewardship. One of Valley AIRNow’s most successful programs—the idle reduction sign initiative—is highlighted under the Stewardship dimension.

For business and health: Valley AIRNow developed and submitted various partner updates, announcements, and articles to the Top of Virginia Regional Chamber Business Agenda. Approximately 2,400 copies of this business newsletter are printed and mailed to key community business leaders and distributed at high traffic locations in the area every month. Refer to Appendix B for additional information on the Valley AIRNow submissions.

In September, Valley AIRNow formally announced its idle reduction sign initiative—a campaign in which metal, 12” x 18” street signs are installed at targeted locations (e.g., day care centers, travel plazas, gas stations and convenience stores) to encourage drivers to turn off their engines while parked. Valley AIRNow developed several informational materials for the campaign, including a press release and engine idling fact sheet. For more information on these materials, refer to Appendix C.

In November, Valley AIRNow held a clean air art contest for local pre-K – 12 students. Young artists were asked to address the theme “What *you* can do to help improve the air that *we* breathe!” Valley AIRNow staff developed a press release (Appendix F) and a promotional flyer (Figure 4, Appendix F) that was distributed to all members of the Valley AIRCorps program in addition to various health-providers in the area.

Conferences and Presentations: Ongoing 2007

Valley AIRNow continued to present to various groups, organizations, and conferences in 2007. These presentations, along with a brief description of each, are listed below.

- September 28, 2007: Valley AIRNow, in collaboration with The SHENAIR Institute, presented a poster during James Madison University’s Faculty Research Day. The poster (Appendix D) highlighted JMU’s recent work in air quality Education, Scholarship, Decision Maker Support, and Stewardship. One of Valley AIRNow’s most successful programs—the idle reduction sign initiative—is highlighted under the Stewardship dimension. This poster will continue to be presented throughout the state at various conferences and workshops in 2008.
- October 2, 2007: Valley AIRNow staff presented to a James Madison University HTH 352 (Environmental Health) class on its current outreach programs and activities as they relate to public health awareness. In particular, Valley AIRNow’s idle reduction initiative, Clean Air Champions, clean air art contest, and K – 12 lessons were highlighted.

- October 15 - 16, 2007: Valley AIRNow attended the Shenandoah Valley Natural Systems Symposium held at Shenandoah University in Winchester, VA. The theme of the symposium was “taking care of the water, plus air and land relationships,” to help develop a science plan for the Shenandoah Valley that will inform decision makers. Experts in the field from federal and state agencies, research universities, and organizations were in attendance. For the Shenandoah Valley Natural Systems Symposium agenda, refer to Appendix E.

During a poster session on the evening of October 15th, Valley AIRNow presented a poster that was developed in collaboration with The SHENAIR Institute. The poster (Appendix D) highlighted JMU’s recent work in air quality Education, Scholarship, Decision Maker Support, and Stewardship. One of Valley AIRNow’s most successful programs—the idle reduction sign initiative—highlighted under the Stewardship dimension, was promoted.

- November 14 - 17, 2007: Valley AIRNow attended the North American Association for Environmental Education’s (NAAEE) 36th Annual Conference held in Virginia Beach, VA. The conference consisted of over 300 concurrent sessions and presentations in a variety of strands such as community and conservation education and sustainability education.

On November 15, Valley AIRNow was invited to present on several of its outreach programs during the Alternative Fuels and Advanced Technology Vehicles symposium. The overview of the symposium stated that:

“As repercussions of our fossil-fueled economy become clearer, the need to develop renewable alternatives is some of society’s most important work. This panel examines alternative transportation choices, and why energy literacy is key in helping society move in a new direction.”

In addition to technological advances, Valley AIRNow discussed the need to promote sustainable behavior and conservation choices such as those promoted in its idle reduction sign initiative and Clean Air Champions program. Other speakers on the panel included Virginia Clean Cities, Homeland Energy, and National Energy Education and Development Project.

On November 17, Valley AIRNow participated in the Virginia Naturally Partners Meeting administered by the Virginia Department of Environmental Quality. For more information on the 2007 NAAEE conference, refer to Appendix G.

Clean Air Art Contest: November 2007

During the month of November, Valley AIRNow invited local young artists in grades pre-K – 12 to celebrate Thanksgiving and clean air in the first annual *Thankful for Clean Air* art contest. Participating artists were asked to address the theme “What you can do to protect the air that we breathe!” Suggested artwork ideas included carpooling, refueling in the evening, checking tire pressure, keeping your car properly maintained, and reducing vehicle idling.

A promotional flyer (Figure 4, Appendix F) was developed by Valley AIRNow and distributed to the general public via the Valley AIRNow website, public and private schools, and various businesses and organizations in the Northern Shenandoah Valley, including: the Girl Scouts of Shawnee Council, Shenandoah Area Council Boy Scouts, Winchester Green Circle, Winchester Wheelmen, Valley AIRCorps members, and various health-providers.

Judging for the contest was provided by the Organization of Arts Management Students (OAMS) at Shenandoah University. Approximately 100 submissions were judged on originality,

technical rendition, overall aesthetics, and personification of the clean air message that was addressed. Three primary winners and three honorable mentions were awarded. Refer to Figure 5 below to view the winning submissions.



Figure 5: Valley AIRnow *Thankful for Clean Air* art contest winners: A) 1st place, Grade 3; B) 2nd place, Grade 4; C) 3rd place, Grade Kindergarten; D) Honorable mention, Grade 4; E) Honorable mention, Grade 4; F) Honorable mention, Grade 2

A variety of local businesses generously provided sponsorship for the *Thankful for Clean Air* art contest. Over \$1,500 was donated by:

- **Executive Protection Systems**, Primary Sponsor
- NetTech Center of Winchester
- **Northern Virginia Petroleum Association**, Primary Sponsor
 - Emmart Oil Company
 - Griffith Energy Services, Inc.
 - H.N. Funkhouser & Co.
 - Holtzman Corp.
 - Morgan Oil Corporation
 - Quarles Petroleum Inc.
 - Roach Energy
 - Skyline Oil Inc.
 - Southern States Cooperative
- Wal-Mart – Winchester location

This sponsorship allowed for prizes to be awarded to three grand prize winners, three honorable mentions, and art supply gift baskets for exemplary day care centers and/or schools that participated. Valley AIRNow is currently working with the above art contest sponsors to recognize the winning artists early next year.

For more information on the *Thankful for Clean Air* art contest, refer to Appendix F or visit www.valleyairnow.com/artcontest.htm.

❖ School-based Public Awareness Program

Educators Air Quality Action Day Program: Ozone Season 2007

Winchester Public Schools and Frederick County Public Schools again participated in the Air Quality Action Day program for the 2007 ozone season. Each school system supported a designated clean air coordinator who was responsible for receiving and disseminating Action Day Alerts throughout the schools.

Idle Reduction Outreach Program: Ongoing 2007 - 2008

Valley AIRNow worked with local public and private schools on the launch of a program to help educate parents, teachers, and students on the health and environmental effects associated with vehicle engine idling in school zones. The idle reduction initiative is centered on the installation of *Healthy Air Zone* street signs (Figure 6) to encourage parents to turn off their engines while parked.

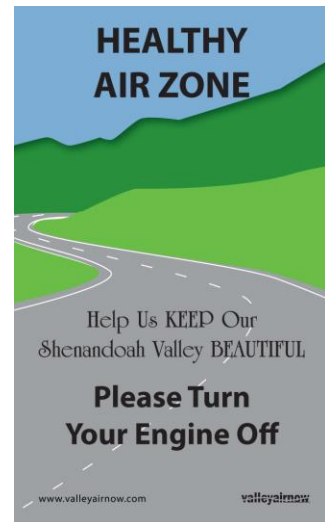


Figure 6: Idle street sign

To date, Valley AIRNow has provided a total of 39 signs for free to the Winchester and Frederick County Public School systems and several private schools in the area, including: Mountain View Christian Academy, Rosedale Christian Academy, and the Winchester Academy. Valley AIRNow, in collaboration with area businesses, assisted these schools to complete installation by September 2007. Figure 7 below shows two school locations at which the *Healthy Air Zone* signs are currently being displayed.



Figure 7: Frederick County Public Schools worked with Valley AIRNow to install at least one sign at each of its schools, including: A) James Wood Middle School, and B) James Wood High School

In September, Valley AIRNow ran a publicity campaign to promote the school idle reduction street signage. A press release (Appendix C) was distributed to Winchester-Frederick County news media on September 14. As a result, an announcement of the idle reduction initiative was published in the September edition of the Top of Virginia Regional Chamber *Business Agenda* (Appendix B) and Valley AIRNow was interviewed by WINC-FM radio.

Other materials that were developed for the school idle reduction initiative in addition to the press release include:

- An introductory article to be published in school newsletters or web sites to inform parents of the project;
- An engine idling fact sheet highlighting the effects of idling on health, sensitive groups, and the environment; and,
- A bumper sticker to help raise awareness of the campaign.

In 2008, Valley AIRNow plans to target private schools in the area to increase participation in the school idle reduction program. For more information on the Valley AIRNow idle reduction initiative, visit www.valleyairnow.com/idlereduction.htm.

Clean Air Art Contest: November 2007

During the month of November, Valley AIRNow invited local young artists in grades K – 12 to celebrate Thanksgiving and clean air in the first annual *Thankful for Clean Air* art contest. Participating artists were asked to address the theme “What *you* can do to protect the air that *we* breathe!” Suggested artwork ideas included carpooling, refueling in the evening, checking tire pressure, keeping your car properly maintained, and reducing vehicle idling.

A promotional flyer (Figure 4, Appendix F) was developed by Valley AIRNow and distributed to all Winchester Public Schools, all Frederick County Public Schools, and several private schools in the area. In addition to schools, other businesses and organizations were targeted in the Northern Shenandoah Valley. Judging for the contest was provided by the Organization of Arts Management Students (OAMS) at Shenandoah University. Approximately 100 drawings were submitted and three primary winners and three honorable mentions were awarded. Refer to Figure 5 above to view the winning submissions.

For more information on the clean air art contest, refer to page 11, Appendix F, or visit www.valleyairnow.com/artcontest.htm.



Figure 8: Smog Dog

Smog Dog: Ongoing 2007 - 2008

Valley AIRNow continued to explore ways to promote its program mascot, Smog Dog (Figure 8), at community events and presentations.

❖ Employer-based Ozone Action Days/Ozone Action Days for Area Sources

Valley AIRCorps program: Ongoing 2007 - 2008

Valley AIRCorps is the business outreach and promotions program of the Northern Shenandoah Valley ozone Early Action Plan. Valley AIRCorps is a no-cost, voluntary program that seeks to create, nurture, and promote clean air partnerships with businesses in the Winchester-Frederick County area. The program spreads the word about our air quality challenges and provides valuable public health networking as discussed below.

The center of the AIRCorps program is membership in the Air Quality Action Day Network (AQAD)—a network to inform the community of health risks on Code Orange Action Days and to take simple steps to reduce smog-inducing emissions. Businesses participate by appointing a Clean Air Coordinator (CAC), who subscribes to the AQAD email or fax notification system. When ozone levels are predicted to be Code Orange or higher, Valley AIRNow then sends out a media release to each CAC. In return, each AIRCorps member agrees to disseminate the AQAD information to all employees and/or customers. This informational dispersion may take the form of one or more of the following methods: email notification to all employees, a media release or AQAD poster displayed on employee message boards, personalized AQAD poster displayed in heavily trafficked areas (e.g., waiting rooms, lobbies, store windows, checkout registers, etc.), or verbal announcements to employees and/or customers throughout the day. Additional methods of AQAD dissemination continue to be explored with AIRCorps Clean Air Coordinators.

As of December 2007, 31 Winchester-Frederick County businesses have enlisted in the Valley AIRCorps program to receive Air Quality Action Day alerts. A current list of these businesses can be viewed on the Valley AIRNow Web site at <http://www.valleyairnow.com/aircorpsmembers.htm>.

AIRCorps Program Recruitment Campaign: Ongoing 2007 - 2008

Valley AIRNow continues to recruit new members for the AIRCorps program and AQAD network by partnering with the Top of Virginia Regional Chamber of Commerce. This fall, a recruitment letter was distributed via fax to 1,000+ Chamber members explaining the AIRCorps program and encouraging businesses to register online at <http://www.valleyairnow.com/aircorpsregistration.htm>.

Other methods of recruitment for Valley AIRCorps are currently being explored for 2008.

Top of Virginia Regional Chamber Business Agenda: Ongoing 2007 - 2008

Since 2005, Valley AIRNow has partnered with the Top of Virginia Regional Chamber of Commerce to submit informational air quality articles for inclusion in the monthly *Business Agenda*. Over 2,400 copies of this business newsletter are printed every month and mailed to key community business leaders and distributed at high traffic locations.

Valley AIRNow partner updates and announcements can be found in the following editions of the Chamber *Business Agenda* and *Business Agenda Update* (Appendix B):

- August 17, 2007; *Business Agenda Update*
- September 2007; *Business Agenda*
- October 19, 2007; *Business Agenda Update*
- October 26, 2007; *Business Agenda Update*
- November 9, 2007; *Business Agenda Update*

Idle Reduction Outreach Program: Ongoing 2007 - 2008

Last fall, Valley AIRNow developed a program to educate area businesses and community members on the health and environmental effects associated with vehicle engine idling. A variety of free, educational tools were developed to promote the initiative, including an idle-reduction street sign (Figure 6) that can be displayed in parking lots and other commercial areas where idling occurs.

The idle reduction signs are metal, 12" x 18" in dimension, and may be mounted on u-channel posts or installed directly on the sides of buildings. All signs and u-channel posts are provided for free to targeted businesses in the Northern Shenandoah Valley area. Those businesses that have been targeted by the NSV Air Quality Improvement Task Force include day care centers, gas stations and convenience stores, and other locations that provide services to the mobile freight industry (e.g., travel plazas, rest areas, inland ports).

In addition to the 39 signs at area schools, Valley AIRNow has provided a total of 47 signs for free to the targeted businesses as listed in Table 1 (day care centers) and Table 2 (mobile freight) below. The newest partner to the idle reduction sign initiative is Flying J Travel Plaza—one of the most highly trafficked travel plazas on Interstate-81, located near Winchester, VA. Flying J has agreed to install at least two signs in the spring of 2008. Refer to Figures 9 and 10 below for photographs of business locations where the *Healthy Air Zone* signs are currently being displayed.

Table 1: Idle reduction signs at day care centers

Business Name	# Signs
Abundant Life Daycare & Preschool	1
Apple Tree Club House	1
Apple Valley Montessori School	1
Fremont Street Nursery	2
Heritage Clubhouse	1
Heritage Child Development Center	1
Little ME Daycare	1
Mountain View Training His Tots	2
Rosedale Baptist Church Kiddie Kollege	2
Shenandoah Child Care Center	2
Winchester Day Nursery	1
Total	15



Figure 9: Examples of idle reduction signs at local day care centers: A) Abundant Life Daycare & Preschool, Stephens City; B) Shenandoah Child Care Center, Winchester

Table 2: Idle reduction signs at mobile freight industry

Business Name	# Signs
Emmart Oil Company	4
Flying J Travel Plaza – Winchester	2
H.N. Funkhouser & Co.	20
Morgan Oil Corporation	4
Virginia Inland Port	2
Total	32



Figure 10: A total of 32 idle reduction signs have been installed by local businesses servicing the mobile freight industry. To date, area petroleum companies have led the charge with H.N. Funkhouser & Co. currently displaying a sign at each of its Handy Mart convenience store locations (A and B)

In September, Valley AIRNow ran a publicity campaign to promote the idle reduction street signage. A press release (Appendix C) was distributed to Winchester-Frederick County news media on September 14. As a result, an announcement of the idle reduction initiative was published in the September edition of the Top of Virginia Regional Chamber *Business Agenda* and Valley AIRNow was interviewed by WINC-FM radio. Valley AIRNow continues to explore new ways to promote the idle reduction initiative and to increase partnership with those businesses deemed most effective (e.g., schools, day care centers, travel plazas, gas stations). Valley AIRNow hopes to reach a goal of 200 signs installed in the Northern Shenandoah Valley by the end of 2008.

For more information on the Valley AIRNow idle reduction initiative, visit www.valleyairnow.com/idlereduction.htm.

Clean Air Art Contest: November 2007

During the month of November, Valley AIRNow invited local young artists in grades pre-K – 12 to celebrate Thanksgiving and clean air in the first annual *Thankful for Clean Air* art contest. Participating artists were asked to address the theme “What *you* can do to protect the air that we breathe!” A variety of local businesses generously provided sponsorship for this contest. Over \$1,500 was donated by:

- **Executive Protection Systems**, Primary Sponsor
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 - Holtzman Corp.
 - Morgan Oil Corporation
 - Quarles Petroleum Inc.
 - Roach Energy
 - Skyline Oil Inc.
 - Southern States Cooperative
- Wal-Mart – Winchester location

This sponsorship allowed for prizes to be awarded to three grand prize winners, three honorable mentions, and art supply gift baskets for exemplary day care centers and/or schools that participated. Valley AIRNow is currently working with the above art contest sponsors to recognize the winning artists early next year.

For more information on the *Thankful for Clean Air* art contest, refer to page 11, Appendix F, or visit www.valleyairnow.com/artcontest.htm.

❖ Dynamic Message Signs

Episodic Ozone Program: Ozone Season 2007

The Virginia Department of Transportation (VDOT) activates highway variable message signs when VDEQ forecasts an Air Quality Action Day. The message signs display the words “Air Action Day” to inform motorists of a potential 8-hour ozone exceedance.

VDOT currently operates two variable message signs in Northern Shenandoah Valley at the following locations:

1. I-81 Northbound, mile marker 287.5 (#17, Figure 11), and
2. I-81 Southbound, mile marker 323.1 (#18, Figure 11).

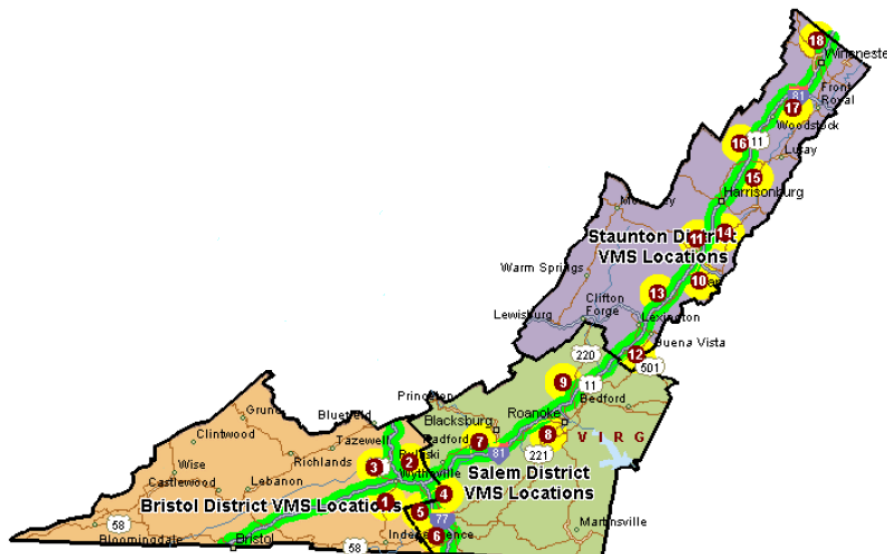


Figure 11: VDOT variable message sign locations for Bristol, Salem, and Staunton districts
(Source: Virginia Department of Transportation)

❖ Video Monitor System Deployment

Traffic and Visibility Web Cameras: Maintained 2007

Traffic and visibility webcams are made available to the public year round on the Valley AIRNow homepage. In 2004, VDOT initiated a closed circuit television (CCTV) pilot by placing various models of IP-addressable cameras at several positions along the I-81 corridor at New Market, Strasburg, and Woodstock. In 2006, VDOT expanded the project and installed approximately 30 additional IP-addressable cameras throughout the District along I-81, I-64, and I-66. Current I-81 locations for cameras in the Northern Shenandoah Valley area are listed in Table 3 below. A link to these webcams, as well as a visibility camera overlooking the Potomac River in Washington, D.C., is also available on the Valley AIRNow homepage.

Table 3: Locations of VDOT traffic cameras in the Northern Shenandoah Valley

(Source: Virginia Department of Transportation, Smart Traffic Center)

Camera Location	Mile Post
New Market	I-81, Exit 264
Mount Jackson	I-81, Exit 273
Woodstock	I-81, Exit 283
Toms Brook	I-81, Exit 291
Strasburg	I-81, Exit 298
Strasburg	I-81, Exit 300 (westerly view)
Strasburg	I-81, Exit 300 (southerly view)
Middletown	I-81, Exit 302
Stephens City	I-81, Exit 307
South Winchester	I-81, Exit 310
Winchester	I-81, Exit 313
Winchester	I-81, Exit 313
Winchester	I-81, Exit 315
Clearbrook	I-81, Exit 321
WV State Line	I-81, Exit 323
Shenandoah Farms	I-66, Exit 13
Front Royal	I-66, Exit 6
Frederick County	Route 55 West

On December 18, the Frederick County Sanitation Authority agreed with a request from TV-3 to place a web camera on the Authority's water tower to provide a live feed of traffic and visibility conditions. Once available to the public in 2008, a link to this webcam will be posted on the Valley AIRNow web site.

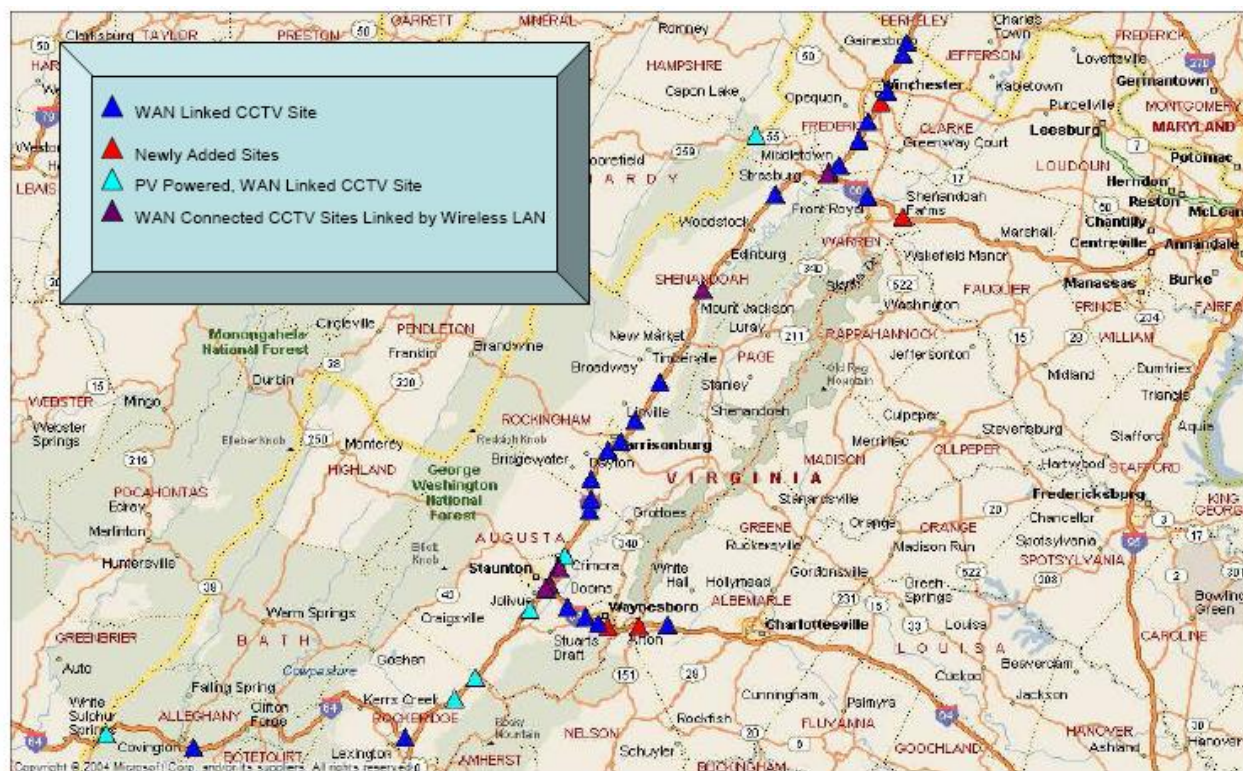


Figure 12: Shenandoah Valley map of IP-addressable traffic camera locations
(Source: Virginia Department of Transportation, Smart Traffic Center)

❖ Lawn & Garden Equipment Usage Restrictions

Local Government Air Quality Action Day Program: Ozone Season 2007

Winchester City and the County of Frederick each issued a memorandum regarding local government actions on Air Quality Action Days during this year's ozone season. These memorandums specified the postponement of mowing on Air Quality Action Days, which included the use of publicly owned gasoline and diesel powered mowers, weed eaters, and other similar gasoline engines. Other AQAD actions specified in the memorandum included postponement of the use of oil-based paints and solvents, restrictions on engine idling, restrictions on any burning associated with county land clearing and construction, as well as the limitation of prolonged outdoor exertion by government employees.

VDOT Episodic Ozone Program: Ozone Season 2007

VDOT issued a memorandum for employees that outlined 2007 VDOT actions on Air Quality Action Days. These actions, which are recommended on Code Orange Days and are mandatory on Code Red days, included the following ozone alert procedures:

- Travel reduction;
- Postponement of mowing;
- Fueling restrictions;
- Use of variable message signs;
- Reduction of electricity usage;
- Postponement of painting;
- Limitations on prolonged physical exertion.

VDOT also issued a memorandum for employees regarding 2007 VDOT gas restrictions on Code Red Action Days. This memorandum specified that on these days, gasoline pumps operated by VDOT in early action compact areas that do not have vapor recovery systems would be closed from 8:30 a.m. to 5:00 p.m. Travelers needing to refuel state cars in Winchester-Frederick County would be required to do so before 8:30 a.m. or else make other refueling arrangements. According to the memo, "this measure has been implemented by VDOT since 1996 and is intended to reduce air pollutant emissions from VDOT facilities and improve the air quality for the citizens of the Commonwealth."

2. VMT Reduction Programs

This strategy combines a number of individual programs/activities designed to reduce vehicle miles of travel (VMT).

Control Strategies:

❖ Enhance/Expand existing Northern Shenandoah Valley Regional Commission (NSVRC) Ridesharing Program

From July to December 2007, the NSVRC, operating through its Valley Commuter Assistance Program (VCAP), has been involved with the following programs and activities to promote ridesharing and improve air quality in the Northern Shenandoah Valley area. For additional information on the Northern Shenandoah Valley Regional Commission's Rideshare Program, visit <http://www.vcapride.virginia.gov/>.

Conferences and Presentations

NSVRC staff attended the Virginia TDM/Ridesharing Conference in Charlottesville, VA from July 11 – 13 where information and ideas were exchanged with other rideshare programs from across the state.

On September 9 – 13, NSVRC staff attended the Association for Commuter Transportation (ACT) International Conference in Seattle, Washington. Again, the primary purpose of participating in this conference was to network with other rideshare programs from across the U.S.

Media Advertising

NSVRC regularly published *The Key* Newsletter—an electronic newsletter that is distributed to all persons registered with VCAP. This newsletter provides a wealth of traffic and rideshare information, including where to obtain updated VDOT highway construction alerts, openings in existing vanpool and carpools, and details on commuter bus operations.

Earlier this year, VCAP reached an agreement with S&W Tours—the company which operates the Washington, D.C. commuter bus service—to place large transit ads on its Northern Shenandoah Valley bus advertising the commuter assistance program.



Figure 13: A VCAP transit ad displayed on a commuter bus servicing the Northern Shenandoah Valley area (Source: VCAP website: <http://www.vcapride.virginia.gov/>)

This fall and winter, VCAP ran a media campaign on Comcast Cable Television in which a series of crawl advertisements were played on the Weather Channel early weekday mornings and evenings to promote the commuter bus service.

Employer Outreach

NSVRC staff is currently working with RGS TITLE, LLC, a Mid-Atlantic residential real estate settlement company, to provide their employees with a commuter bus to the RGS TITLE Winchester Office. In addition, NSVRC is in communications with two large federal government agencies—Federal Emergency Management Agency (FEMA) and the Federal Bureau of Investigation (FBI). FEMA and the FBI are scheduled to build facilities in the Frederick County area and are interested in a commuter bus which will operate between the metropolitan area and the County.

NSVRC staff continues to work with employers in the Westfields Business Park located in Chantilly, Virginia to determine whether enough demand exists to establish a second commuter bus. To date, only one bus runs between the Business Park and the Northern Shenandoah Valley.

Materials Development

S&W Tours produced two informational documents for VCAP that were recently posted on the VCAP web site:

- A commuter bus pool schedule outlining the routes and stops of the Woodstock-Front Royal-Linden to Vienna metro-Rosslyn metro-Pentagon-Washington D.C. bus service;
- A cost analysis spreadsheet comparing the cost of bus pool, omni ride, and VRE ridership.

Rideshare Programs

NSVRC continued to support several private commuter bus services. One is a commuter bus traveling to Westfields Business Park in Fairfax County. Twenty-nine riders currently use this service. The second service is a bus traveling between the Woodstock-Front Royal-Linden area and Rosslyn metro-Pentagon-Washington, D.C. on the I-66 corridor. Additionally, NSVRC is working to establish a second private bus to Rosslyn-Pentagon-Washington, D.C. that will operate on a later time schedule than the existing service.

Finally, NSVRC staff is currently in the process of working to establish a commuter bus service operating between the Winchester/Clarke County area and Rosslyn metro-Pentagon-Washington D.C.

Park and Ride Lots

To date, NSVRC has identified 11 park and ride lots in the Northern Shenandoah Valley area, totaling 1,050 parking spaces available for commuters. A list of these lots is included in Table 4 below. Discussions with VDOT, Clarke County, and Berryville to explore available options for the creation of a park and ride lot within the Town of Berryville continue. Additionally, NSVRC is working with VDOT and Warren County to find ways to increase park and ride lot capacity at the Front Royal and Linden lots. These lots are currently operating at 100% capacity and additional spaces are required.

Table 4: NSVRC Park and Ride Lots in the Northern Shenandoah Valley area(Data compiled from <http://www.vcapride.virginia.gov/>)

County	Lot Name	Location	# of Spaces
Clarke	Double Tollgate	US 340 / US 522	17
Clarke	Waterloo	VA 340 at US 50	160
Fauquier	Markham	Rt. 688 & I-66	15
Fauquier	Marshall	Frost Road	75
Fauquier	Remington	VA 651 & US 15 / 29 / 17	16
Fauquier	Warrenton	US 29 / 211 & VA 605	212
Page	Luray	Rt. 340 & Rt. 211 Bypass	103
Page	Shenandoah	Off Rt. 602	30
Shenandoah	Strasburg	Rt. 11	30
Warren	Front Royal	I-66 & US 340 / 522	262
Warren	Linden	I-66 & Rt. 647	130

In addition, NSVRC is currently in negotiations with a church located in Clarke County to obtain 20 – 30 parking spaces for commuter vehicles during weekdays (Monday – Friday).

Although no park and ride lots currently exist within the Winchester-Frederick County MPO area, the 2030 Transportation Plan (refer to Bicycle and Pedestrian Accommodation) includes the development of two future park and ride facilities at:

- US Route 522 near Tasker Road (Route 642) and
- Route 7 between I-81 and the Clarke County Line.

Rideshare Matching Services

NSVRC continues to provide rideshare matching services to the Northern Shenandoah Valley area. A rideshare match application can be completed and submitted online at:

<http://www.vcapride.virginia.gov/>.

❖ Bicycle and Pedestrian Accommodation

Winchester-Frederick County Metropolitan Planning Organization (MPO) Bicycle and Pedestrian Mobility Plan

A study to provide a connected and comprehensive network of bicycle and pedestrian facilities in the MPO study area (Winchester-Frederick County Urbanized Area) began in 2005. The goals of the plan are to provide new facilities that will create logical connections to existing facilities; enhance recreational opportunities; improve access to schools, libraries, and other public facilities; and provide an alternative to using a personal automobile.

The final Bicycle and Pedestrian Mobility Plan for the Winchester-Frederick County MPO, developed by Toole Design of Hyattsville, MD, was formally approved by the MPO Policy Committee on October 17. This seven chapter document includes introductory information on the importance of an alternative mobility infrastructure, vision, goals, and objectives, existing bicycling and walking conditions in the area, major online questionnaire results, bicycle and pedestrian facility design guidelines, facility recommendations, policy and program recommendations, an implementation plan, and draft maps for proposed bicycle and pedestrian networks. A specific reference to improved regional air quality is included in Chapter One.

Frederick County Planning & Development was recently directed by the county Board of Supervisors to begin work on incorporating the recommendations of the Bicycle and Pedestrian Mobility Plan into the county's comprehensive plan. These efforts will continue into 2008.

For additional information or to view the final plan, visit www.winfredmpo.org.

Winchester-Frederick County Metropolitan Planning Organization (MPO) 2030 Transportation Plan

The Winchester-Frederick County MPO 2030 Transportation Program consists of a multi-modal transportation plan that addresses existing and current transportation needs of the Winchester-Frederick County MPO area. Among the many goals and objectives of the plan are:

- Encourage the use of alternate modes of transportation such as bicycle, pedestrian, carpooling and ridesharing, public transit, air, and rail.
- Provide a transportation network that is sensitive to the region's environment.
- Provide land use patterns that maximize the efficiency of the transportation network.

The 2030 Final Transportation Plan is currently available for public access by visiting the MPO web site at http://www.winfredmpo.org/transplan_final.asp.

Bike and Pedestrian Safety Program Grant: Ongoing 2007

In 2006, Winchester City was awarded a Bike and Pedestrian Safety grant from VDOT to incorporate pedestrian signals and crosswalks to key intersections along the Winchester Green Circle route. Earlier this year, the City of Winchester contracted with a consultant to begin work on this grant. In October, construction began on two of the seven intersection projects, including pedestrian crossing improvements at Warrior Drive and Route 277.

Route 11 Corridor Access Management Study

The Northern Shenandoah Valley Regional Commission (NSVRC) and Virginia Department of Transportation (VDOT) are currently involved in a study of the U.S. Route 11 corridor spanning for eight miles from Bellview Avenue in the City of Winchester to south of the Town of Stephens City. The purpose of the study is to assess proposed improvements, policies and regulations that will reduce congestion, safely and efficiently manage access to adjacent properties, and increase roadway capacity, including bicycle and pedestrian transportation. The study was slightly delayed this fall but is scheduled to be completed in 2008.

Route 11/Route 37/Shady Elm Drive Interchange Study

NSVRC, VDOT, and a private consulting firm from Arlington, Virginia, are currently studying a complex interchange configuration located adjacent to Exit 310 of I-81. Due to private development near this area, congestion, accidents, and other traffic problems have increased significantly. The purpose of this study is to assess proposed improvements, policies and regulations that will reduce congestion, safely and efficiently manage access to adjacent properties, and increase roadway capacity, including bicycle and pedestrian transportation.

The MPO Policy Committee appointed a management team composed of two individuals from the city, two from the county, and one from VDOT to lead the procurement effort for this study. A public meeting regarding the interchange study was held on September 10, and a final draft of the study's report is expected to be completed in the next few months.

For more information on the Route 11/Route 37/Shady Elm Drive Interchange Study, or to view graphics of the three interchange alternatives, visit <http://www.winfredmpo.org/>.

Virginia Department of Transportation Enhancement Grant

Earlier this year, Frederick County applied for a Virginia Department of Transportation Enhancement Grant to implement bicycle and pedestrian improvements in the vicinity of Senseny Elementary School. The county was recently awarded the grant for \$145,000 and intends to construct multi-use asphalt paths along a section of Senseny Road near Senseny Elementary.

On September 24, the Frederick County Transportation Committee announced that it would apply for a second VDOT enhancement grant to expand this project (Appendix H-10). If awarded, the additional funding will enhance bicycle and pedestrian paths near the school that will serve as a cornerstone of the larger Winchester-Frederick County Bicycle and Pedestrian Mobility Plan. Figure 14 below depicts the potential multi-use trail location as applied for in this grant cycle's enhancement grant.

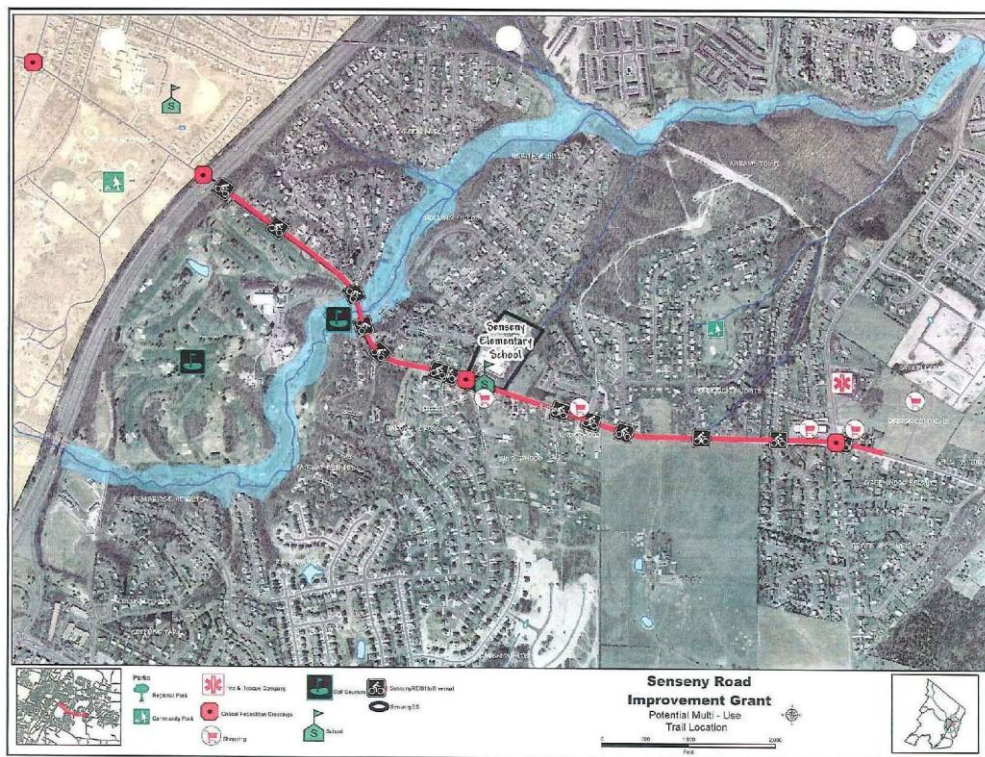


Figure 14: Potential Senseny Road multi-use trail location for second VDOT enhancement grant

Walking & Wheeling the Northern Shenandoah Valley Program

The Northern Shenandoah Valley Regional Commission and Shenandoah Valley Battlefield Foundation's Walking & Wheeling Plan was adopted in 2005 and continues to be promoted in 2007 as a source of justification for further bicycle and pedestrian accommodation studies and projects.

❖ Promote Green Space Preservation

Frederick County Conservation Easement Authority: Ongoing 2007 - 2008

The Frederick County Conservation Easement Authority (CEA) was established to assist county landowners in the protection and preservation of farm land, forests, open space, scenic landscapes, historic sites, water resources, and environmentally sensitive lands. The primary method for accomplishing this mission is for the Authority to facilitate conservation easements.

In 2007 the CEA continued its public information campaign. Brochures on easements and the Authority were distributed to interested landowners and an informational meeting for the public was held on December 4, 2007.

The CEA is actively seeking to secure funding to implement a Purchase of Development Rights (PDR) program. A fundraising event was held on October 27, 2007 at the Museum of the Shenandoah Valley. Additionally, the County has submitted an application for matching funds through the Office of Farmland Preservation of the Virginia Department of Agriculture and Consumer Services.

Although no easements have been placed to date, Authority members and county staff continue to welcome any opportunities to meet with landowners and members of the community to discuss land preservation and to provide explanations of how conservation easements work.

For additional information on the Frederick County Conservation Easement Authority, visit <http://www.co.frederick.va.us/PlanningAndDevelopment/ConservationEasementAuthority/>.

Virginia Outdoors Foundation Easement Program: Ongoing 2007 - 2008

The Virginia Outdoors Foundation (VOF) is dedicated to promoting the preservation of open space lands and to encourage private gifts of money, securities, land or other property to preserve the natural, scenic, historic, open-space and recreational areas of the Commonwealth. The primary mechanism for promoting this mission is the open space easement.

On July 9 - 10, September 5 - 6, and October 22 - 23, VOF held Policy and Easement Consideration board meetings in Charlottesville, VA. Potential easement applications were reviewed for dozens of counties across Virginia, including one proposal in Frederick County.

As of December 2007, 16 easements totaling approximately 2,800 acres have been donated to VOF by Winchester City-Frederick County residents and organizations. A list of these recorded easements is included in Table 5 below. Additional easements are currently being reviewed, such as a 151-acre lot in Frederick County.

Table 5: VOF recorded easements in Frederick County and City of Winchester

(Data provided by the Virginia Outdoors Foundation)

County	Donor	Recorded Date	Acreage
Frederick	Wells & Pollard families	11/4/1998	1,019.17
Frederick	Civil War Preservation Trust	11/9/2000	222.03
Frederick	Cedar Creek Battlefield Foundation	6/29/2001	135.08
Frederick	Cedar Creek Battlefield Foundation	6/29/2001	15.27
Frederick	Chapin family	9/13/2002	142.70
Frederick	Fort Collier Civil War Center, Inc.	9/13/2002	10.00
Frederick	National Trust for Historic Preservation...	10/29/2002	183.13
Frederick	Kernstown Battlefield Association, Inc.	3/28/2003	108.08
Winchester (City)	Kernstown Battlefield Association, Inc.	3/28/2003	115.2659988
Frederick	Kernstown Battlefield Association, Inc.	8/28/2003	62.20

Frederick	Good Earth Too Family Limited Partnership	10/4/2006	63.70
Frederick	Good Earth Too Family Limited Partnership	10/10/2006	55.00
Frederick	Green family	10/24/2006	186.00
Frederick	Potomac Appalachian Trail Club, Inc.	12/29/2006	257.33
Frederick	Potomac Appalachian Trail Club, Inc.	12/29/2006	42.70
Frederick	Prelip family	10/23/2007	209.36
TOTAL			2,827.02

For additional information on the Virginia Outdoors Foundation, visit its web site at <http://www.virginiaoutdoorsfoundation.org/>.

Winchester Green Circle Project: Ongoing 2007 - 2008

The Winchester Green Circle Project is a walking and biking trail that, once completed, will encircle the city and provide safe alternative transportation methods for the community by connecting parks, neighborhoods, schools, and tourist attractions.

To date, the current focus of the Winchester Green Circle Project is the completion of Phase 1-A—Town Run Linear Park. Town Run Linear Park is a proposed section of trail following Town Run from Pleasant Valley Road to Pall Mall Street to Cecil Street (dashed blue line, Figure 15). This trail would connect Old Town Winchester, Shenandoah University, Jim Barnett Park, Winchester-Frederick County Virginia Conventions and Visitors Bureau, Shawnee Springs Park as well as the future locations of the Shenandoah Valley Discovery Museum and History & Tourism Center.

The City of Winchester has worked with a consultant to utilize Transportation Enhancement Program funding to design, acquire right-of-way, and construct this portion of the project. Actual construction of the multi-use trail is anticipated to begin in late spring of 2008. Additionally, the City's consultant is also working on the VDOT Bike and Pedestrian Safety grant (page 27) to install pedestrian signals and crosswalks at key intersections along the Green Circle route. Construction began in October on two of the seven intersection projects.

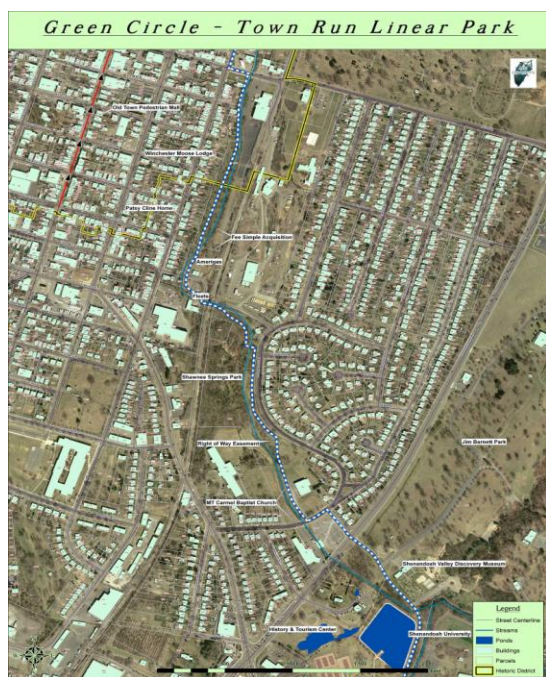


Figure 15: Town Run Linear Park is the current focus of the Green Circle project

Recently, the Green Circle Committee established an ad-hoc subcommittee of local stakeholders to help provide input to the original conceptual route and additional trail connections. The group is also working on upgrading the existing Green Circle web site to feature elements such as an interactive map, event information, and information on how citizens can get involved and donate to the project. The web site upgrade is being underwritten by the Winchester-Frederick County Economic Development Commission.

On October 6, 2007 the 4th annual Winchester Green Circle Fall Fitness Fair was held featuring a 5K and 1-Mile Kid's Fun Run. The goal of the event was to raise awareness of the Green Circle project and promote healthy lifestyles for the citizens of Winchester and Frederick County. The event was the most successful to date with approximately 100 runners participating in the 5K and 48 participants in the kid's run. All proceeds from the event supported the Green Circle project.

For additional information on the Winchester Green Circle, refer to Appendix K or visit <http://www.winchestergreencircle.com/>.

Redbud Run Greenway Project: Ongoing 2007 - 2008

This project is a multifaceted initiative to provide protection, access and interpretation of natural and historic resources in Frederick County. The Shenandoah Valley Battlefields Foundation and the Civil War Preservation Trust have permanently protected over 350 acres in the Redbud Run corridor, which covers over three miles to the confluence with Opequon Creek. In addition, 30 acres of land and three-quarters of a mile of stream from a 155-acre tract were donated to the Virginia Department of Game and Inland Fisheries (DGIF) in late 2004.

To date, a variety of local groups has worked closely with DGIF and Frederick County on the development of a management plan for this preservation parcel located on the DGIF property and adjoining Civil War Preservation Trust property. These groups are currently working with the Frederick County Public Schools administration to involve students from nearby Millbrook High and Redbud Elementary in the greenway project. Students will be given the opportunity to participate and receive instruction from DGIF staff on trail design and construction, tree planting and control of invasive species, natural and historic interpretation, water quality monitoring, fish population surveys, and habitat assessment. Additionally, Winchester Trout Unlimited plans to sponsor a Trout in the Classroom program where students raise fingerlings to be released in Redbud Run.

On June 28, a kick-off meeting was held with the major landowners and organizations currently involved with the project. The purpose of the meeting was to introduce the potential partners and share information on current and long-range plans for each owner and organization. The group agreed to pursue the development of a Redbud Run Greenway Alliance to work collectively on issues such as trail connections, design guidelines, and designated uses. The overarching goal was to establish an operational structure and leverage resources to involve the community at large.

A second meeting was held on September 7 and featured a tour of the DGIF property. The tour featured local historians and presentations by DGIF and Trout Unlimited. The purpose of the tour was to identify opportunities and develop educational programs and community service projects.

On September 14, the Civil War Preservation Trust (CWPT) held a grand opening of the recently constructed multi-use interpretive trails on its Third Battle of Winchester property. These trails consist of five miles of walking and biking paths with extensive signage highlighting the story of the historic Third Battle of Winchester. The trail system includes a parking facility on Redbud Road and a designated parking area behind Millbrook High School. The CWPT property is the first completed component of the Redbud Run Greenway. The Millbrook school property will provide a connection between CWPT-Third Battle Winchester and the 30-acre DGIF property. The project also has the ability to connect to other trail systems such as the Redbud Road Scenic Byway, Historic Milburn Road, Stephenson Depot area, and the Winchester Green Circle. Additionally, the Redbud Run Greenway project is serving as a case study for a statewide promotion of the Green Infrastructure approach.

For more information on the Redbud Run Greenway Project, refer to the documentation located in Appendix K.

Natural Resources Advisory Board

The ordinance to create a regional Natural Resources Advisory Board (NRAB) was formally approved by Winchester Common Council on August 14, 2007. NRAB will be a critical source of information to address natural resource conservation at a variety of levels in the local

decision-making processes. Additionally, the Natural Resources Advisory Board could potentially serve as the mechanism to integrate strategies from the Clean-up Plan and the basic principles of Green Infrastructure into local ordinances and comprehensive plans. For more information on the progress of the Natural Resources Advisory Board, refer to the documentation in Appendix K.

2007 Virginia Outdoors Plan

The Virginia Outdoors Plan is the Commonwealth's official conservation, outdoor recreation, and open-space plan, which serves as a guide to all levels of government and the private sector in meeting the land conservation, outdoor recreation, and open-space needs of the state. To date, the Virginia Department of Conservation & Recreation (VDCR) is considering comments received during 44 public meetings held throughout the state in late 2006 and revising the 2007 Virginia Outdoors Plan.

The 2007 edition of the Virginia Outdoors Plan will be the ninth produced in Virginia. In addition, the plan serves as a guidance document for the protection of lands through actions of the Virginia Land Conservation Foundation (VLCF).

Draft 2007 Virginia Outdoors Plan documents can be viewed by visiting the DCR Web site at www.dcr.virginia.gov. A draft *Regional Analysis and Recommendations* for the Northern Shenandoah Valley Planning District were made available to the public this year. To view the draft document, visit: http://www.dcr.virginia.gov/recreational_planning/documents/voppd07.pdf.

❖ Promote Mixed Use Development

City and County Comprehensive Plans

Comprehensive plans for the City of Winchester and Frederick County include provisions for promoting mixed use and cluster development. The county Plan, required to be revised every four years, is scheduled to be reworked by the end of 2008. Once the Frederick County Planning and Development Department revises the land use section of its Comprehensive Plan, it will include the new Urban Development Area Study discussed below.

Additionally, Frederick County Planning & Development was recently directed by the county Board of Supervisors to begin work on incorporating the recommendations of the Bicycle and Pedestrian Mobility Plan (page 27) into the county's comprehensive plan. These efforts will continue into 2008.

Meetings were held on November 6 and November 27 to discuss further updates of the city and county comprehensive plans.

Frederick County Urban Development Area Study

The purpose of the Urban Development Area (UDA) Study is to address the needs of the urbanizing areas of Frederick County while assuring a sustainable community and maintaining a high quality of life for all Frederick County community members. The UDA policy promotes a new form of development—neighborhood mixed use urban community centers. Mixed use urban community centers is a new philosophy of development that creates neighborhoods that incorporate residential, retail, educational, and public uses; commercial services; the opportunity for employment; and institutional and recreational resources.

Earlier this year, the Frederick County Board of Supervisors unanimously passed the Urban Development Area Study, officially making it part of the county's Comprehensive Plan. For additional information on the Frederick County UDA study, visit <http://www.co.frederick.va.us/PlanningAndDevelopment/UDA/Basic%20Information.htm>.

❖ Promote Telecommuting

Episodic Ozone Programs: Ozone Season 2007

Each Air Quality Action Day Network member (i.e., business, government, education, media, and community) is encouraged to promote telecommuting, especially on Air Quality Action Days.

NetTech Center of Winchester

The NetTech Center of Winchester is a member of the Valley AIRCorps program and the Air Quality Action Day network. The center offers many amenities and technology services, including broadband internet connectivity; desktop video-conference services; affordable set-up; overflow capacity; real-time remote employee access; Smart Digital telephone system with voicemail; and access to fax machines, printers, copiers, and shredders.

The NetTech Center, in partnership with the U.S. General Services Administration (GSA), offered all federal managers, supervisors, and senior executives free use of the center for the rest of the fiscal year, ending on September 30, 2007. The purpose of this promotion was to help federal managers learn what telecommuting is and how it works to help them better manage distant workers.

For more information on the NetTech Center, visit www.nettechcenter.net/.

3. Open Burning Restrictions

Establishing open burning restrictions for land clearing activities has the potential to reduce combustion sources in the emissions inventories. While this type of rule is sometimes difficult to enforce, the reduction of related fire hazards, along with the reduction of visible smoke and the resulting air-quality benefits were deemed important by the Northern Shenandoah Valley Task Force. This measure will be implemented by local ordinances.

Control Strategies:

City and County Restrictions: Ozone Season 2007

Winchester City and the County of Frederick each issued a memorandum during this year's ozone season regarding local government actions on Air Quality Action Days. These memorandums specified the restrictions of any burning associated with county land clearing and construction projects on AQAD. Other AQAD actions specified in the memorandum included postponement of mowing and the use of oil-based paints and solvents, restrictions on engine idling, as well as the limitation of prolonged outdoor exertion by government employees.

Winchester City code prohibits open burning within city limits.

4. Engine Idling Restrictions

Due in part to the nearby, heavily traveled I-81 corridor, restrictions for engine idling is another control strategy for the Northern Shenandoah Valley area. A large amount of idling emissions is generated from heavy-duty diesel vehicles that are parked at truck stops, rest areas, and to a lesser extent, distribution centers.

Control Strategies:

City and County Restrictions on Air Quality Action Days: Ozone Season 2007

Winchester City and the County of Frederick each issued a memorandum during this year's ozone season regarding local government actions on Air Quality Action Days. These memorandums specified restrictions on engine idling of gasoline powered, publicly owned vehicles on Air Quality Action Days. Other AQAD actions specified in the memorandum included postponement of mowing and the use of oil-based paints and solvents, restrictions on any burning associated with county land clearing and construction, as well as the limitation of prolonged outdoor exertion by government employees.

Frederick County Public Schools Bus Idling Policy

Frederick County Public Schools continues to promote and enforce an idling policy for all County school buses. This idling policy can be found in the Frederick County Driver's Handbook—one that is issued to all bus drivers in the school system—and reads:

"Due to the increased health concerns relating to diesel emissions as well as rising fuel cost, Frederick County Public Schools has established the following anti-idling policy.

- When performing pre-trip inspections, start the bus only at the point determined necessary to evaluate certain operational functions.*
- Avoid all unnecessary idling while waiting at schools to load or unload students. This requirement applies to all a.m. /p.m., kindergarten, tutor and activity runs, field trips, etc.*
- Follow manufacturer's recommendations on limiting idling time to five minutes or less, with the exception of medical requirements (heat or a/c) of special needs passengers.*
- If your bus is equipped with an engine block heater and has been plugged in overnight it is unnecessary to start it to warm it up.*
- In extreme cold weather conditions, a "cold weather starting" procedure may be implemented for the purpose of ensuring the safety of students and will supersede the above requirements."*

Idle Reduction Outreach Program: Ongoing 2007 - 2008

Valley AIRNow recently developed a program to educate area businesses and community members on the health and environmental effects associated with vehicle engine idling. A variety of free, educational tools were developed to promote the initiative, including an idle-reduction street sign (Figure 6) that can be displayed in parking lots and other commercial areas where idling occurs.

The idle reduction signs are metal, 12" x 18" in dimension, and may be mounted on u-channel posts or installed directly on the sides of buildings. All signs and u-channel posts are provided for free to targeted businesses in the Northern Shenandoah Valley area. Those businesses that have been targeted by the NSV Air Quality Improvement Task Force include day care centers, gas stations and convenience stores, and other locations that provide services to the mobile freight industry (e.g., travel plazas, rest areas, inland ports).

To date, nearly 100 signs have been distributed to and installed at a mixture of schools, day cares, and gas stations in the Northern Shenandoah Valley area. Valley AIRNow hopes to reach a goal of 200 signs installed in the Northern Shenandoah Valley by the end of 2008.

For more information on the Valley AIRNow idle reduction initiative, refer to Appendix C or visit www.valleyairnow.com/idlereduction.htm.

5. School Bus/Heavy Duty Fleets Retrofits

Retrofitting heavy duty diesel engines with emissions-control technologies, such as EGR systems or after-treatment devices, is an emissions-control measure that was addressed by the Northern Shenandoah Valley Task Force and completed as of December 2005. Eighteen Winchester City and 124 Frederick County schools buses were retrofitted with diesel oxidation catalysts. In addition, the ECM on all six late model school buses was reprogrammed to reduce NOx emissions. Refer to Appendix L for an updated list of EPA Mid-Atlantic Clean Diesel projects, which includes Frederick County and City of Winchester school bus retrofit information.

6. Voluntary Industrial Reductions

Although emissions-reduction benefits are sometimes difficult to quantify for voluntary industrial reductions, a campaign to promote voluntary measures by local industries is a reasonable and practical method to improve local air quality. Additionally, this strategy helps to increase awareness of the pollution problem and establish a relationship between local government and area industry.

Control Strategies:

Valley AIRCorps Program: Ongoing 2007

Valley AIRNow continues to recruit new members in a year-round effort for its Valley AIRCorps business outreach program. Upon enrollment in the program, companies designate a Clean Air Coordinator, who will receive email or fax notification of an Air Quality Action Day. The company can choose to formulate and personalize their AQAD program by encouraging alternative commute options, promoting telecommuting to those employees who qualify, regularly providing sponsorship for community events, regularly providing AQAD outreach assistance, lending use of dynamic message signs, and other emissions activities on AQAD. Companies have the flexibility to implement any creative policy that reduces emissions during ozone season.

For more information on the AIRCorps program, refer to Page 16.

Idle Reduction Outreach Program: Ongoing 2007 - 2008

Valley AIRNow recently developed a voluntary program to educate area businesses on the health and environmental effects associated with vehicle engine idling. A variety of free, educational tools was developed to promote the initiative, including an idle-reduction street sign (Figure 6) that can be displayed in parking lots and other commercial areas where idling occurs.

The idle reduction signs are metal, 12" x 18" in dimension, and may be mounted on u-channel posts or installed directly on the sides of buildings. All signs and u-channel posts are provided for free to targeted businesses in the Northern Shenandoah Valley area. Those businesses that have been targeted by the NSV Air Quality Improvement Task Force include day care centers, gas stations and convenience stores, and other locations that provide services to the mobile freight industry (e.g., travel plazas, rest areas, inland ports).

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APPENDIX A

Summary Chart

Control Measure	Summary description of control measure	Program/Measure status	Implementation Date	VOC/NO _x Reductions	Resources	Additional Information
Ozone Action Days/Public Awareness Campaign	A comprehensive local Ozone Action Days Program. This strategy is a combination of a number of measures that had been evaluated earlier as individual strategies and are currently being maintained and promoted, including: • General Public Awareness Program • School-based Public Awareness Program • Education and Promotion Campaign • Education and Promotion Campaign • Employer-based Ozone Action Days • Area Sources Ozone Action Days • Dynamic Message Signs • Video Monitor Deployment • Lawn and Garden Equipment Usage Restrictions for State/Local Governments • Other State/Local Government Restrictions (Refueling, Pesticides) • Voluntary Restrictions by Public (Lawn and Garden, Refueling, Others) Further information can be found in the SIP submitted December 30, 2004 on page 13, and in Appendix B	Valley AIRNow, an education and outreach program, was created in April 2005 to address this milestone, and continues its maintenance, implementation, and promotion in 2006. The activities of the program are broken down into two main categories: networks and information dissemination. Networks: <u>Government Air Quality Action Day Network</u> • Valley AIRNow continued to collaborate with City/County officials and designated Clean Air Coordinators to maintain and enforce the Air Quality Action Day (AQAD) plan for local government. This plan consists of (a) the dissemination of Alerts by the City and County-wide Clean Air Coordinators before predicted high ozone days, specifying measures employees can take to protect their health and reduce emissions for that day, and (b) the restriction of City/County department activities, such as mowing, painting, open burning, idling, and physical outdoor exertion on Action Days. <u>Schools Air Quality Action Day Network & Outreach</u> • Valley AIRNow continued to collaborate with City and County schools to maintain and enforce the Air Quality Action Day (AQAD) plan for educators. This plan consists of the dissemination of alerts by the City and County-wide school Clean Air Coordinators before pending high ozone days. Specific measures employees and students can take to protect their health and reduce emissions for the day, are clearly identified. • Valley AIRNow worked with area public and private schools to launch a program to educate parents, teachers, and students on the health and environmental effects associated with	Public Education and Outreach launched 2004 with creation of website, PSAs, and Air Quality Action Day alerts. Valley AIRNow Air Quality Education and Outreach Program launched April 2005. Full implementation completed September 30, 2005. Ozone Action Days/Public Awareness Campaign maintained, expanded and promoted October 2005 to present.	Please refer to associated VDEQ document for all reductions estimates.	Funding provided by Winchester-Frederick County and the SHENAIR Institute at James Madison University.	Additional information on Valley AIRNow, including outreach materials, can be found at www.valleyairnow.com or by request at info@valleyairnow.com .

Ozone Action Days/Public Awareness Campaign (cont...)		vehicle engine idling in school zones. Free, informational street signs were installed to promote the initiative and to encourage drivers to turn off their engines while parked. In September, Valley AIRNow ran a publicity campaign with local media outlets to promote the signage. • To date, a total of 39 signs (including u-channel posts and hardware for mounting) have been distributed for installation at nearly 35 public and private schools in the area. Recruitment to display additional signs is ongoing. • In November, local young artists in grades pre-K – 12 were invited to celebrate Thanksgiving and clean air in Valley AIRNow's first annual <i>Thankful for Clean Air</i> art contest. Approximately 100 pieces of artwork were submitted and judged by Shenandoah University's Organization of Arts Management Students. Prizes will be awarded to three grand prize winners and three honorable mentions during an awards ceremony in early 2008. • Valley AIRNow continued to explore ways to use Smog Dog at events as an educational, public outreach tool for kids. <u>Media Air Quality Action Day Network & Outreach</u> • Valley AIRNow continued to collaborate with television, print, and radio resources in and around Winchester-Frederick County to maintain the Air Quality Action Day (AQAD) plan for media. This plan consists of the dissemination of alerts by media Clean Air Coordinators before predicted high ozone days. Specific measures employees and audiences can take to protect their health and reduce emissions for the day, are clearly identified in the alert.				
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Ozone Action Days/Public Awareness Campaign (cont...)		• Area news media published several articles and aired broadcasts related to Valley AIRNow events, transportation, land use, green space preservation, and air quality issues in the area. • WAZT-TV incorporated air quality information into their local broadcasts. • TV-3 Winchester agreed to provide alerts to the community on pending Air Quality Action Days. • <i>The Winchester Star</i> printed daily ozone forecasts in their daily edition. • Valley AIRNow collaborated with Clear Channel Radio of Winchester to incorporate 10- and 15-second public service announcements into its existing PSA rotation. • In September, Valley AIRNow launched a publicity campaign with local media outlets to promote its idle reduction sign initiative and recognize participating partners. • In November, Valley AIRNow launched a publicity campaign with local media outlets to promote its <i>Thankful for Clean Air</i> art contest for pre-K – 12 students in the area. • The Top of Virginia Regional Chamber printed several announcements and partner updates in its <i>Business Agenda</i> and <i>Business Agenda Update</i> regarding Valley AIRNow's idle reduction initiative and clean air art contest. • Valley AIRNow participated in an interview on <i>The Valley Today</i> show on 95.3 FM. • Valley AIRNow participated in two separate interviews with WINC-FM regarding its idle reduction sign initiative and art contest. • Valley AIRNow continued to recruit new members for the AIRCorps media program and AQAD network. <u>Health Air Quality Action Day Network & Outreach</u>				
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Ozone Action Days/Public Awareness Campaign (cont...)		- Valley AIRNow continued to collaborate with Northern Shenandoah Valley health-care providers to maintain the Air Quality Action Day (AQAD) plan for health. This plan consists of the dissemination of alerts by health Clean Air Coordinators before predicted high ozone days. Specific measures employees and patients can take to protect their health and reduce emissions for the day, are clearly identified in the alert. - Valley AIRNow continued to recruit new members for the AIRCorps health program and AQAD network. - Valley AIRNow collaborated with the Top of Virginia Regional Chamber to print organizational announcements and partner updates in the <i>Business Agenda</i> and <i>Business Agenda Update</i>. - Valley AIRNow launched a program to educate area businesses serving ozone-sensitive groups on the health and environmental effects associated with vehicle engine idling. Free, educational tools were developed to promote the initiative, including an idle-reduction street sign that can be displayed in parking lots and other visible areas where idling occurs. <u>Business Air Quality Action Day Network & Outreach</u> - Valley AIRNow continued to collaborate with various Winchester-Frederick County businesses to maintain the Air Quality Action Day (AQAD) plan for business. This plan consists of the dissemination of alerts by designated business Clean Air Coordinators before predicted high ozone days. Specific measures employees and customers can take to protect their health and reduce emissions for the day, are clearly identified in the Alert.				
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Ozone Action Days/Public Awareness Campaign (cont...)		• Valley AIRNow continued to promote and expand the Valley AIRCorps business outreach program. Current membership in the AIRCorps program as of December 2007 is a variety of 31 manufacturing, petroleum, and health/fitness businesses. • Valley AIRNow continued to recruit new members for the AIRCorps program and AQAD network. This fall, an AIRCorps recruitment letter was distributed via fax to 1,000+ members of the Top of Virginia Regional Chamber of Commerce. • Valley AIRNow submitted several informational air quality articles for inclusion in the monthly Top of Virginia Regional Chamber <i>Business Agenda</i>. • Valley AIRNow launched a program to educate area businesses and community members on the health and environmental effects associated with vehicle engine idling. Free, informational street signs were installed to promote the initiative and to encourage drivers to turn off their engines while parked. In September, Valley AIRNow ran a publicity campaign with local media outlets to promote the signage. • Valley AIRNow partnered with local petroleum companies, day care centers, and other businesses to display the signs in areas experiencing high engine idling times. To date, a total of 47 signs (in addition to those installed at the schools) have been distributed for installation at various locations in the area. The newest member to this project is Flying J Travel Plaza, which has agreed to install two signs at its Winchester location. Recruitment to display additional signs is ongoing. • A variety of local businesses partnered with Valley AIRNow to help fund the <i>Thankful for Clean Air</i> community art contest.				
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Ozone Action Days/Public Awareness Campaign (cont...)		Information Dissemination: <u>Stakeholder Building</u> - Valley AIRNow adapted, revised, and/or developed the following: announcements and partner updates for the Top of Virginia Regional Chamber <i>Business Agenda</i> and <i>Business Agenda Update</i>, promotional materials for the idle reduction sign initiative (e.g., press release, public service announcements), air quality public service announcements for Clear Channel Radio of Winchester, promotional materials for the <i>Thankful for Clean Air</i> art contest (e.g., flyer, press release) and a variety of other informational materials. - Valley AIRNow hosted, attended, and/or presented at the following events: James Madison University Faculty Research Day, James Madison University Environmental Health (HTH 352), Shenandoah Valley Natural Systems Symposium, and North American Association for Environmental Education's 36th Annual Conference. - Valley AIRNow continued to meet and collaborate with various community groups and organizations, including: Girl Scouts of Shawnee Council, Winchester Green Circle, Shenandoah Valley Runners, and public/private learning institutions. - Valley AIRNow continued to provide real-time, local air quality information to the public via the Valley AIRNow website, Google Earth air quality forecasts, Air Update console, Valley AIRNow Air Quality Hotline; and by coordinating with the DEQ Ozone Forecasting Program, DEQcast – Info on Demand, EPA AIRNow, American Lung Association's Smog Alert, The Weather Channel, and Weather Underground.				
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Ozone Action Days/Public Awareness Campaign (cont...)		<u>Coordination</u> • VDOT highway variable message signs will be utilized when VA DEQ designates an Air Quality Action Day, displaying the words “Air Action Day” to inform motorists of current conditions. • VDOT visibility/traffic webcams are available to the public year-round on the Valley AIRNow website. • Valley AIRNow continued to coordinate and host monthly/bi-monthly Air Quality Improvement Task Force meetings, lead the Ozone Action Days/Public Awareness Phase I strategies, and ensure the implementation and maintenance of all other Phase I strategies. • Valley AIRNow continued to coordinate and maintain valuable collaborative partnerships with the following organizations: SHENAIR, Virginia Department of Environmental Quality (VDEQ), VDEQ’s Office of Environmental Education, VDOT, American Lung Association of Virginia, Eastern Panhandle Clean Air Connection, Winchester Green Circle, Valley Commuter Assistance Program, Winchester Green Circle Project, Mid-Atlantic Diesel Collaborative, Frederick County and Winchester Public Schools, Girl Scouts of Shawnee Council, Northern Virginia Petroleum Association, etc.				
Vehicle Miles Traveled Reduction Programs Vehicle Miles Traveled Reduction Programs	A comprehensive local Vehicle Miles Traveled (VMT) Reduction Program. This strategy is a combination of several individual programs and activities that are promoted to reduce vehicle miles of travel, including: • Enhanced/expanded Northern Shenandoah Valley Regional Commission Ridesharing Program • Bicycle and Pedestrian	Many programs and policies addressing VMT control measures were developed, implemented, and/or expanded upon throughout the Winchester-Frederick County area, including: • Valley Commuter Assistance Program (VCAP, www.vcapride.virginia.gov) via rideshare programs, park and ride lot expansion, coordination with various organizations, outreach events, and media advertisement; • WinFred Metropolitan Planning Organization (MPO) Bike and Pedestrian Mobility Study to	Full implementation completed September 30, 2005. Vehicle Miles Traveled Reduction Programs	Please refer to associated VADEQ document for all reductions estimates.	The Valley Commuter Assistance Program is funded by the State, with 20% local matching funds.	Appendix I-K included in the December 2005 NSV Semi-Annual Status Report.

Vehicle Miles Traveled Reduction Programs (cont...)	Accommodation • Green Space Preservation • Promotion of Mixed Use Development • Promotion of Telecommuting Further information can be found in the SIP submitted December 30, 2004 on pages 13-14, and in Appendix B.	integrate bicycle and pedestrian facilities between Winchester and Frederick County; • Formal approval of the final WinFred MPO Bike and Pedestrian Mobility Plan. • Metropolitan Planning Organization (MPO) 2030 Transportation Program to create a multi-modal transportation plan that addresses existing and current transportation needs of the Winchester-Frederick County MPO, including: the use of alternate modes of transportation, creation of a transportation network sensitive to the environment, and the utilization of land use patterns that maximize the efficiency of the network; • Bike and Pedestrian Safety Grant to incorporate pedestrian signals and crosswalks to key intersections along the Winchester Green Circle route; • Walking & Wheeling the Northern Shenandoah Valley project to justify further bicycle and pedestrian accommodation studies and projects; • VDOT Enhancement grant to construct multi-use asphalt paths along a section of Senseny Road in Frederick County; • Route 11 Corridor Access Management Study to assess proposed improvements, policies and regulations that will reduce congestion, safely and efficiently manage access to adjacent properties, and increase roadway capacity of Rt. 11; • Route 11/Route 37/Shady Elm Drive Interchange Study to assess proposed improvements, policies and regulations that will reduce congestion, safely and efficiently manage access to adjacent properties, and increase roadway capacity of this interchange area; • Application for a second Virginia Department of Transportation Enhancement grant to	developed, implemented, and promoted September 2005 to present.		Funding has been allocated for all bicycle and pedestrian accommodations, green space preservation initiatives, and mixed use development initiatives as described. The funding of the Net Tech Center of Winchester is Congressional ordered and is administered by the GSA.	
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Vehicle Miles Traveled Reduction Programs (cont...)		expand the Senseny Road multi-use road project. • Frederick County Conservation Easement Authority to assist county landowners in the protection and preservation of farm land, forests, open space, scenic landscapes, historic sites, water resources, and environmentally sensitive lands; • Virginia Outdoors Foundation Easement Program to promote the preservation of open space lands and to encourage private gifts of money, securities, land or other property to preserve the natural, scenic, historic, open-space and recreational areas of the Commonwealth; • Winchester Green Circle Project to complete the construction of Town Run Linear Park—a section of trail for pedestrians and bicyclists that connects parks, neighborhoods, schools, and tourist attractions; • Redbud Run Greenway project to provide protection, access, and interpretation of natural and historic resources in Frederick County. • Natural Resources Advisory Board to integrate strategies from the Clean-up Plan and the basic principles of Green Infrastructure, into local ordinances and comprehensive plans. • Comprehensive Plans for the City of Winchester and Frederick County to promote mixed use and cluster development; • Urban Development Area Study to create neighborhoods which incorporate residential, retail, educational, and public uses, commercial services, opportunity for employment, and institutional and recreational resources; • NetTech Center of Winchester to promote telecommuting services in the Northern Shenandoah Valley area.				
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Open Burning Restrictions	A ban(s) and/or restriction(s) on open burning during predicted high ozone days and/or the ozone season. Further information can be found in the SIP submitted December 30, 2004 on page 14, and in Appendix B.	The Frederick County Administrator issued a memorandum for Ozone Season 2007 specifying restrictions on burning associated with County land clearing and/or construction projects on Air Quality Action Days. Winchester City Code prohibits open burning within City limits.	Full implementation completed September 30, 2005. Open Burning Restrictions maintained and promoted for ozone season 2007.	Please refer to associated VADEQ document for all reductions estimates.	Coordination of plans to restrict open burning on Action Days is incorporated into the Valley AIRNow budget.	Appendix E included in the December 2005 NSV Semi-Annual Status Report.
Engine Idling Restrictions	A restriction(s) on public and private diesel truck idling. The EAC jurisdictions are committed to reduce idling of local government vehicles (including school buses) and to promote voluntary restrictions from privately owned vehicles and fleets.	Frederick County issued a memorandum for Ozone Season 2007 specifying restrictions on the idling of local government vehicles on Air Quality Action Days. Frederick County Public Schools has a school bus idling policy currently in place. Valley AIRNow launched a program for area schools, day care centers, and businesses to educate parents, teachers, students, business leaders, and other community members on the health and environmental effects associated with vehicle engine idling. An idle-reduction street sign was installed at a variety of businesses to encourage drivers to turn off their engines while parked. To date, nearly 100 signs have been installed at a mixture of schools, day cares, and gas stations. Valley AIRNow hopes to reach a goal of 200 signs installed in the Northern Shenandoah Valley by the end of 2008.	Full implementation completed September 30, 2005. Engine Idling Restrictions maintained and promoted for ozone season 2007.	Please refer to associated VADEQ document for all reductions estimates	Coordination of plans to restrict engine idling on Action Days is incorporated into the Valley AIRNow budget.	December 2005 NSV Semi-Annual Status Report.
School Bus and Heavy Duty Fleets Retrofits	A program involving the retrofitting of heavy duty diesel engines with emissions control technologies, such as EGR systems, or after treatment devices.	The retrofitting of 142 Winchester City and Frederick County school buses with diesel oxidation catalysts was completed in 2005. The reprogramming of all late model school bus ECM devices was completed in 2005 as well.	Full implementation completed September 30, 2005.	Please refer to associated VADEQ document for all reductions estimates.	The VA DEQ committed \$475,000 to complete this project	Appendix L(a) and L(b) included in the December 2005 NSV Semi-Annual Status Report.

School Bus and Heavy Duty Fleets Retrofits (cont...)	Further information can be found in the SIP submitted December 30, 2004 on page 14, and in Appendix B.		No further control strategy progress exists for 2007.		in 2005.	
Voluntary Industrial Reductions	A voluntary reductions program for local industries. The EAC jurisdictions are committed to seek voluntary commitments from local industries to reduce ozone precursor emissions during the ozone season and/or on predicted high ozone days. This strategy will help increase awareness of the pollution problem and establish a relationship between local government and area industry. Further information can be found in the SIP submitted December 30, 2004 on page 14, and in Appendix B.	Valley AIRNow worked with local industry through the AIRCorps program to formulate unique and personalized programs/policies for members that reduce smog-inducing emissions, particularly on Air Quality Action Days. New members are recruited for the program in a year-round effort. Valley AIRNow developed a voluntary program to educate area businesses on the health and environmental effects associated with vehicle engine idling. A variety of free, educational tools was developed to promote the initiative, including an idle-reduction street sign that can be displayed in parking lots and other commercial areas where idling occurs. To date, nearly 100 signs have been distributed to and installed at a mixture of schools, day cares, and gas stations in the Northern Shenandoah Valley area. Valley AIRNow hopes to reach a goal of 200 signs installed in the Northern Shenandoah Valley by the end of 2008.	Full implementation completed September 30, 2005. Voluntary Industrial Reductions program maintained and promoted September 2005 to present.	Please refer to associated VADEQ document for all reductions estimates.	Coordination of plans for Voluntary Industrial Reductions on Action Days is incorporated into the Valley AIRNow budget.	Additional information about Valley AIRCorps, including program materials, can be found at www.valleyairnow.com/aircorps.htm .

APPENDIX B

Top of Virginia Regional Chamber
Business Agenda and Business Agenda Update

Excerpt from: Business Agenda Update - August 17, 2007

Partner Announcements and Events

Blood donors are desperately needed in our area. American Red Cross Lucy Custer Building Hours are Mondays 2:00–7:00 p.m., Tuesdays 1:00–7:00 p.m., Thursdays 12:00–6:00 p.m., and Fridays 11:30 a.m.–5:30 p.m.

Events:

Sunday August 12— Saturday August 18—Clarke County Fair - Clarke County Ruritan Fair Grounds 540-955-3755
website: www.clarkecountyfair.org

Saturday, August 18 (10 am 'til 5 pm) and Sunday, August 19 Kristine and her Merry Band of Basketeers invites YOU to join us at our Anniversary Celebration! ... (11 am 'til 4 pm)....enjoy INCREDIBLE SAVINGS throughout the store including----35% off ALL ANTIQUES.....25% off our ENTIRE GARDEN SHED....PLUS enjoy our OPEN AIR MARKET ON SATURDAY with vendors showcasing their products and services (Arbonne International, Original Sin Art, BundleBoo, Pampered Chef, Global Touch Jewelry, Premier Jewelry, and Mary Kaye Cosmetics)!!! PLUS.....we'll have delicious refreshments....our NEW FREQUENT GUEST CARDS.....and DOORPRIZES!!! **Total Basket Cases** is SOOOO excited-----and we look forward to seeing you this weekend!

Announcements:

BELLE GROVE to celebrate 40th anniversary on Monday, August 13th from 5-7pm. Congressman Frank Wolfe; Alexander Reves, VA Director of the National Park Service; Louise Potter, longtime trustee of the National Trust for Historic Preservation; Betty Schutte, Belle Grove past president; and Gene Dicks, Middletown mayor will be featured guests. For more information please call Belle Grove at 540-869-2028.

Clear your calendars for Wednesday, October 24, 2007 at 7:00pm, so that you can attend Alpha Voyages, Inc. Sandals Night at the Hampton Inn off route 7 and Berryville Ave. Attend this gathering and hear about Sandals and it's Ultra All-Inclusive Resorts located throughout the Caribbean and come to know how the Sandals difference means you'll experience more than you'll ever dream of. Sandals are an all-adult resort and have been voted "Worlds Best All-Inclusive resorts" 12 years in a row. Call M.J. Williams 540-662-6279 or David Reichert 540-327-4567 to reserve a seat for this free seminar.

D'Vine Wines at 25 W Jubal Early Dr. (across from Grand Furniture) holds Free Wine Tasting / seminars weekly each Friday from 5 to 7 pm and Saturdays from noon to 5 pm. For more information call (540) 662-WINE or visit them on the web at www.dvine-wines.com

Citizens of Winchester-Frederick County will breathe easier thanks to a new, voluntary air quality initiative launched this summer to reduce pollution from vehicle engine idling. **Valley AIRNow**—Winchester-Frederick County's air quality outreach program—has partnered with local schools and businesses to install *Healthy Air Zone* street signs that encourage parents, employees, and patrons to turn off their engines while parked. Visit www.valleyairnow.com for more details and a list of participating businesses.

Trish Landes has joined **ColonialWebb Contractors** as an Account Executive. Landes's expertise in customer service and her commitment to personal client support will ensure her client's HVAC and Plumbing service needs are met. Prior to coming to ColonialWebb, she worked for Shenandoah Valley Office Equipment for over 10 years.

SAAA Home Tasks & Odd Jobs Caring for our Seniors by caring for your home! When you choose the SAAA Task Team you choose to provide quality care for your home or office, while providing quality care to the Seniors of the Shenandoah Area Agency on Aging. For more information call 540-631-7917.

Several **Howard Shockey & Sons, Inc.** employees attended the recent Tilt-Up Concrete Association Seminar in Virginia Beach and passed examinations for the following certifications from the American Concrete Institute (ACI): ACI Tilt-Up Supervisor – Ron Shockey, Bill Hartman, James Thomas, and Frank Kemp; ACI Tilt-Up Technician – George Stickman and Steve Utterback. For more information contact Karen Butler at 540-723-4119.

We are experiencing return mails due to incorrect addresses. If you have changed your email address please notify the Regional Chamber office as soon as possible.

Please send all submissions for the *Business Agenda Update* to kbronson@regionalchamber.biz or fax them to (540) 722-6365. The deadline for inclusion in the email broadcast is each Friday by noon.

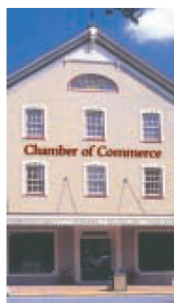
www.regionalchamber.biz

All paid events require advance registration. Registrants are responsible for all event fees unless cancellation is received 48 hours prior to the event.

Questions or comments? E-mail us at cccinfo@regionalchamber.biz or call 540-662-4118

To be sure your program and event information appears on the Chamber web site visit the Calendar area and post your information at <http://events.winchesterva.org>. For more information on Community Events, please visit our web site at <http://events.winchesterva.org> or the Convention & Visitor Bureau web site at www.visitwinchesterva.com

Excerpt from: Business Agenda - September Edition



TOP OF VIRGINIA REGIONAL CHAMBER

Business Agenda

THE VOICE OF BUSINESS

Volume 21, No. 8
September 2007



On Friday, September 7, 2007, the Top of Virginia Regional Chamber will host its eighth annual HobNob in the Valley. The event brings together the general public, area business people, elected officials and candidates listed on the November ballot in a casual, non-partisan gathering that celebrates the American electoral process.

The guest list includes Lt. Governor Bill Bolling, Congressman Frank Wolf, Senator Russ Potts, Jr., Delegate Beverly Sherwood, and Delegate Joe May. The State Senate candidates will be in attendance - Republican Jill Vogel Holtzman, Democrat Karen Shultz, and Independent Don Marro.

Invitations have also been extended to all elected and appointed officials from Clarke, Frederick and Warren Counties and also from the City of Winchester.



Honorary Hosts include Lt. Governor Bill Bolling, U. S. Senator John Warner, Congressman Frank Wolf, Senator Russell Potts, Delegate Beverly Sherwood, Delegate Joe T. May, Richard Shickle, Sr. Chairman of Frederick County Board of Supervisors, Elizabeth Minor, Mayor of Winchester City, Dr. James Davis, President of Shenandoah University, the Institute for Government and Public Service, Winchester Republican Committee, Frederick County Republican Committee, Winchester Democratic Committee and Frederick County Democratic Committee.

Participants at the HobNob will have the opportunity to express their views with a straw poll. The straw poll will mirror the November ballot. Processed electronically, the straw poll "takes the local pulse," reflecting the views of those in attendance.

The event hours are from 5:00 p.m. to 8:00 p.m. Tickets are \$15.00 per person and may be purchased by calling the Chamber office at 540-662-4118. Tickets include a barbeque dinner, beverage of choice and one vote in the straw poll. Bluegrass music will be supplied by Dalton Brill and the Wildcats. When asked about his participation in the event, Congressman Frank Wolf said, "The Hob Knob keeps getting better - and bigger - every year. It is an event you cannot miss in the Valley. I always look forward to attending."

The event is held outdoors on the property of the Shenandoah University Bernard J. Dunn School of Health & Pharmacy, 1775 N. Sector Court, Winchester, Virginia. The location is on the campus of Winchester Medical Center, easily accessible from the Route 37 By-Pass. The Chamber would like to especially thank our presenting sponsor Annandale Millwork & Allied Systems Corporation for their generous contribution and support of this popular event for the last 3 years. We also thank TV 3 Winchester, Oldies Radio 95.3, Clear Channel Communications, Le Papillon Day Resort and Winchester Printers, Inc. for their sponsorship and participation on the HobNob in the Valley 2007.

MEET YOU AT THE HOBNOB!!!

CLP Starts 11th Year

The Top of Virginia Regional Chamber is very pleased to announce that the Community Leadership Program Class of 2008 has been formed and 25 members of the local business community will be working toward their CLP certificate.

The successful applicants are: Jennifer Shea-Roop, Wachovia Securities, Michael Wines, Virginia International Terminals, Diane Sullivan, Winchester Medical Center, Patty Camery, Frederick County Public Schools, Jeri Lee Swagger, Frederick County Public Schools, Peter Vernimb, Frederick County Public Schools, Norie Ann Noll, Winchester Public Schools, Robert Smith, Jr., Winchester Public Schools, Rick Blume,



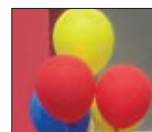
The Winchester Star



Keefauver, Youth Development Center.

Each class member represents a diverse segment of our community from private business to charitable organizations to local school systems. The range of age, ethnic and educational background among class

Continued on Page 2



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Winc. Addition Ser., pg 7



CLP, pg 1



Did you visit our booth at the Frederick and Clarke County fairs?

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Chamber Calendar, pg 8

INITIAL & PASS

Initial	Date	Initial	Date	Initial	Date

2 N. Cameron Street, Suite 200
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TOP OF VIRGINIA
REGIONAL CHAMBER

THE VOICE OF BUSINESS ■ CLARKE-FREDERICK-WINCHESTER

Partner Updates

■ "Citizens of Winchester-Frederick County will breathe easier thanks to a new, voluntary air quality initiative launched this summer to reduce pollution from vehicle engine idling. **Valley AIRNow**—Winchester-Frederick County's air quality outreach program—has partnered with local schools and businesses to install *Healthy Air Zone* street signs that encourage parents, employees, and patrons to turn off their engines while parked. Visit www.valleyairnow.com for more details and a list of participating businesses."

■ Trish Landes has joined **ColonialWebb Contractors** as an Account Executive. Landes's expertise in customer service and her commitment to personal client support will ensure her client's HVAC and Plumbing service needs are met. Prior to coming to ColonialWebb, she worked for Shenandoah Valley Office Equipment for over 10 years.

■ The **Lord Fairfax Area Food Bank** is launching two new programs: The first program, the "Item of the week club" will consist of all interested groups, businesses, and organizations that have the desire and the means to collect specified food items on an on going basis. We will email the "Item of the week" either weekly or monthly. The second new program is called "Adopt a Pantry" program. If your club, business, or organization prefers to donate money rather than to collect food, this program will give you the option to do so. The idea is to help support local food pantries for low income families.

■ **Belle Grove Plantation** is planning a holiday visit to the Biltmore Estate November 7 – November 9, 2007. The package includes motor coach to Asheville and return, 2 night stay at The Inn on Biltmore Estate, a day tour of the Biltmore House, lunch at the Bistro, a Christmas Candlelight Dinner at the Stable Café, and an evening Christmas Candlelight Tour of the house. Contact Betsey Anderson, Special Events Coordinator for Belle Grove at 540-869-2028.

■ **SAAA Home Tasks & Odd Jobs** Caring for our Seniors by caring for your home! When you choose the SAAA Task Team you choose to provide quality care for your home or office, while providing quality care to the Seniors of the **Shenandoah Area Agency on Aging**. For more information call 540-631-7917.

■ Several **Howard Shockey & Sons, Inc.** employees attended the recent Tilt-Up Concrete Association Seminar in Virginia Beach and passed examinations for the following certifications from the American Concrete Institute (ACI): ACI Tilt-Up Supervisor – Ron Shockey, Bill Hartman, James Thomas, and Frank Kemp; ACI Tilt-Up Technician – George Stickman and Steve Utterback. For more information contact Karen Butler at 540-723-4119.

■ **SECURE SHRED**, a **White Properties Company**, has been servicing the shredding needs of Winchester and surrounding areas since 2001. SECURE SHRED is now expanding their shredding operations to include on-site as well as off-site document destruction to meet our customers' needs. The shredding technology employed by SECURE SHRED reduces all manner of paper and documents to the smallest shred size in the industry, providing our customers with maximum security. With a 5,000 lbs/hr throughput, there is no job to "big" for SECURE SHRED. Contact us at www.theseureshredder.com.

■ Demonstrating compliance with The Joint Commission's national standards for health-care quality and safety, **Valley Home Care** and **Valley Health Urgent Care** have earned the Joint Commission's Gold Seal of Approval™. The Joint Commission, the nation's oldest and largest healthcare standards-setting and accrediting organization, conducted unannounced, on-site evaluations in June.

■ **Bone & Joint Specialists of Winchester, PC** is relocating to Medical Office Building II, Suite 310, at the Winchester Medical Center campus. New and expanding services will include a Prompt Care Clinic with same day appointments and osteoporosis evaluation and treatment. More information is available at www.boneandjoint.com.



"Dog Days Mixer" at the Bank of Clarke County



"Virginia Brewing Company/ZeroPack" Business After Hours



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**"The Valley
Business Today"**

Join the Valley's
Business leaders

**LIVE Wednesday @
12:30 p.m.**

(TVRC 4th Wednesday)



Pg. 3

September
2007

CLARKE-FREDERICK-WINCHESTER



Engaging Your Young Professionals

Realizing that when it comes to America's workforce, Generation X and Generation Y are now the majority, the Chamber has established a program to stay ahead of the workforce trend.

Studies report that young professionals first choose a place to live and then find a job. The Chamber's **Young Professionals Group (YPG)** capitalizes on our region's great quality of life and establishes the message that Winchester City, Clarke and Frederick Counties are a choice destination for young professionals. The Chamber is proactively focusing on how the region can keep new graduates and young professionals from taking flight to other cities and states by offering the following events:

September 20th, 5:15-7pm: Habitat for Humanity ReStore, Winchester

September 29th, 4pm: Orioles Trip, Camden Yards

October 11th, 7pm: Walking Ghost Tour of Downtown Winchester

November 16th, 6pm: Casino Night at BK Security and Home Automation, Inc.

January 17th, 5:15-7pm: Gladiator Fight Club, Winchester

February 21st, 5:15-7pm: Laser Tag at Fun Expedition, Winchester

March 21st, 5:15-7pm: Spa Evening at Le Papillon Day Resort

April 12th, All Day: Virginia Wine Tour

Thank you to the YPG presenting sponsor, BK Security and Home Automation, Inc. Sponsors help the Chamber keep the cost of YPG events affordable for our Young Professionals and gives YPGers exposure to what the community has to offer. For more information on YPG, contact Kat Bronson, Director, Marketing and Communications at the TVRC 540-662-4118.

Help your employees keep kids drug-free

FREE online resources at www.theantidrug.com/atwork

540-722-3589

www.cleaninc.org

EDC UPDATE

Area Industries Work to Maintain Good Air Quality

Since 2003, area industries have been working to improve the community's air quality by voluntarily analyzing and reducing air pollutants through the Ozone Early Action Plan. Their commitment to the community has helped lead to the recognition of Grade B air by the American Lung Association for Winchester-Frederick County.

Residents can join area industries in this initiative by making small changes in their daily lives. As kids head back to school, consider turning off your car while you wait for your children before and after school. By choosing not to idle your vehicle, you can prevent approximately three pounds of air pollution each month.

Reducing idling, in addition to other changes like filling gas tanks at night, not topping off and combining errands, can help Winchester-Frederick County maintain its good air quality. For more information on the Ozone Early Action Plan, or any other EDC initiative, contact the EDC at 540.665.0973 or visit www.winva.com.

Promote Your Services and Products On TVRC's Website!!

With over 100,000 hits and 4,000 visitors per month, our website may be just what your business needs. Three levels available. Contact Kat Bronson, Director, Marketing and Communications for more information.

LEVEL 1 - (Subscription good for 1 year)

Home Page Banner Yearly Rate: \$4,000

LEVEL 2 (Subscription good for 1 year)

Directory Banner Yearly Rate: \$3,000

LEVEL 3 (Subscription good for 1 year)

Box Ad Yearly Rate: \$2000



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Spotlight on Non-profit

Center for Hope Blue Ridge Hospice

The Center for Hope is a community oriented Counseling Center provided by Blue Ridge Hospice. The Center for Hope is staffed with Master's level counselors and offers a wide range of therapy and services designed to meet the needs of people who are experiencing grief related to any kind of loss including death, divorce, trauma, separation from loved ones and other changes in a safe home-like environment. The Center for Hope counselors have specialized experience in areas of depression, anxiety, relationship conflict, children's therapy, group therapy and other life changes.

Support groups are offered at various times of the year and include: dealing with loss, divorce, and other issues. In addition to your EAP services, consider offering Outreach and Education Workshops in the following areas: *Grief in the Workplace*- assists in understanding how grief affects productivity and how to support your employees during times of loss. *Avoiding Burnout in the Helping Profession*- teaches how to establish healthy boundaries, apply good self care and burn-out prevention when working in any helping profession (i.e. nursing, teaching, social work, law enforcement, medical, etc.) In addition, *Grief Support and Outreach* bereavement counselors are available when a sudden loss occurs in the work, school, or home setting. Workshops can be tailored to meet the needs of your group.

The Center for Hope currently has locations in Winchester, Berryville, Woodstock, and Front Royal and will have a new location in Purcellville in the Fall. Please contact the Center for Hope at 877-210-HOPE (4673) for further information.

Top of Virginia Regional Chamber (USPS 6860-8000) is published monthly for \$2.00 per year by the Top of Virginia Regional Chamber, 2 N. Cameron St., Suite 200, Winchester, VA 22601. Periodicals postage paid at Winchester, VA postmaster. Send address changes to **Top of Virginia Regional Chamber Newsletter**, 2 North Cameron Street, Suite 200, Winchester, VA 22601

The Willows At Meadow Branch

Gracious Assisted Living

540-667-3000

**1881 Harvest Drive
Winchester, VA 22601**

www.thewillowsatmeadowbranch.com

Excerpt from: Business Agenda Update – October 19, 2007

Partner Announcements and Events

Events:

Friday, October 19 Historic Long Branch Hot Air Balloon & Pumpkin Glow 4:00-9:00pm Balloons & Pumpkins Glow at Dusk Weather Permitting. Live music by Dixie Rhythm & Souled Out. Nalls Farm Market Pumpkin Carving & Demonstrations. For more information please call: 540-837-1856 Email: historic@historiclongbranch.com Website: www.historiclongbranch.com

Saturday & Sunday, October 20&21 Historic Long Branch Shenandoah Valley Hot Air Balloon & Wine Festival

Saturday & Sunday, October 20&21 Belle Grove Plantation's 143rd Anniversary of the Battle of Cedar Creek Re-enactment & Living History Weekend. For more info call (540) 869-2028 or the Cedar Creek Battlefield Office at (540) 869-2064.

Thursday, October 25 For One Block West's October dinner, we're celebrating my favorite grape, Pinot Noir. It's so versatile and pairs with so much food, that I am going to have a blast picking the wines and the food. The trick with Pinot is to keep it affordable and that is going to be my big challenge. Dinner promptly at 7:00pm.

Friday, October 26 8:00am United Way Campaign First Public Report Meeting Featuring the Apple Country Head Start "Froggy Friends Singers" at the United Way/Our Health Building located at 329 N. Cameron Street, Winchester. Please RSVP by Tuesday, October 23rd, to 540-536-1610 or email psuway@visuallink.com

Announcements:

Blood donors are desperately needed in our area. American Red Cross Lucy Custer Building Hours are Mondays 2:00—7:00 p.m., Tuesdays 1:00—7:00 p.m., Thursdays 12:00-6:00 p.m., and Fridays 11:30 a.m.-5:30 p.m.

The Blue Ridge Area Food Bank Network has placed a link to the Orbitz travel booking engine on its home page at www.brafb.org. By accessing Orbitz through this link, individuals interested in booking any facet of travel can join in the fight to end hunger with every online reservation. The Food Bank Network will receive \$5 for each airline reservation, \$6 for every hotel booking, and \$2 for each car reservation. The user will pay nothing extra for booking through our web site, and all revenues generated will stay within the Blue Ridge Area Food Bank Network coverage area.

Haunted Casino Night to benefit **NW Works** will be held Saturday, October 27 from 6 p.m. – 11 p.m. at 828 Smithfield Avenue. Fun casino action, fabulous food, great drinks, silent auction, live entertainment and more! Tickets are \$35 each and are available for purchase from HandyMart locations and through NW Works. Free parking at Jno. Solenbergers with free shuttle service to and from the event. Call 540-667-0809 for more details. Event sponsored by Jim Stutzman Chevrolet-Cadillac-Buick.

Attitude Is Everything. Cara Kellam of **Brickhouse Coaching** is facilitating a mastermind group which will focus on changing your life by changing your thoughts. If you are looking for a positive and supportive environment, this group is for you. Meeting dates are 11/6, 11/13, 11/20, & 11/27 from 6:30 to 8:00 P. M. Cost is \$80.00 and includes all 4 dates. Seating is limited, reserve your space soon. To make a reservation and for more information, please contact Cara Kellam at 540-542-1695 or carakellam@verizon.net.

Ben Reid and Jay Lahman, Sales Representatives of **Frederick Block, Brick & Stone**, recently attended the Interlocking Concrete Pavement Institute (ICPI) Paver Sales to Specifiers School in Washington, DC. Frederick Block, Brick & Stone is a member of ICPI, the North American trade association representing the interlocking concrete paving industry. The sessions covered included how to develop sales relationships, how to assist architects in the specification process, as well as the design and construction of permeable paving systems. Permeable paving systems allow water to flow over as well as under it to help manage storm water runoff more efficiently. This "green" building practice earns property owners LEED (Leadership in Energy and Environmental Design) credits.

Valley AIRNow, in collaboration with **Executive Protection Systems** and The Northern Virginia Petroleum Association, is inviting local young artists (preK-12) to celebrate Thanksgiving and clean air in the first annual *Thankful for Clean Air* art contest. Participating artists should creatively address the theme "What YOU can do to protect the air that WE breathe!" Examples include carpooling, refueling in the evening, checking tire pressure, keeping your car properly maintained, and reducing vehicle idling. For more artwork ideas or contest specifications, interested individuals are encouraged to visit the Valley AIRNow website at www.valleyairnow.com.

OakCrest Builders, Inc., a 33 year old Winchester based homebuilder, has been honored by the Top of Virginia Building Association for two of their homes entered in the Parade of Homes. A total of 42 homes were entered in the 2007 Parade of Homes. Boyce Crossing, OakCrest Builders' community in Boyce, VA, was awarded Best Overall for Division VI which is single-family homes ranging from 3,601 – 4,600 sq. ft. They also received Best Overall for Division IV, single-family homes less than 2,600 sq. ft., for their model home in Lake Holiday located in Cross Junction, VA.

Officials of the Boards of Directors of **First Bank** and First National Corporation announced that Gerald F. "JJ" Smith, Jr. has been elected to both Boards. Smith is President of Valley Proteins, Inc. in Winchester, Virginia.

Take a minute to check out our online sponsors...this could be your business!



Excerpt from: Business Agenda Update - October 26, 2007

Partner Announcements and Events

Events:

Saturday, October 27 The Barns of Rose Hill Halloween Ghouls & Goblins Dance 8:00 pm-12:00 am Music by Kendra and the Kingpins of Charlottesville. Millwood Country Club, Millwood, Va. For more info call Wendy Clatterbuck: 540-837-2128

Saturday, October 27 Haunted Casino Night to benefit **NW Works** will be held from 6 p.m. – 11 p.m. at 828 Smithfield Avenue. Fun casino action, fabulous food, great drinks, silent auction, live entertainment and more! Tickets are \$35 each and are available for purchase from HandyMart locations and through NW Works. Free parking at Jno. Solenbergers with free shuttle service to and from the event. Call 540-667-0809 for more details. Event sponsored by Jim Stutzman Chevrolet-Cadillac-Buick.

Saturday, October 27 Haunted Hayrides 7:30PM - 10:30 PM **Clarke County Parks & Recreation** Center If you are looking for a frighteningly good time that will make your heart beat faster, then this hayride is for you. There will be plenty of ghouls, goblins, and things that go bump in the night. Fee: \$5.00 For More information, please call (540) 955-5140.

Thursday, November 1 LFCC Workforce Solutions & Continuing Ed: Microsoft Word, Mail Merging; \$49; 1:00 p.m. – 4:00 p.m.

Friday, November 2 First Friday Enjoy a free evening of drawings, paintings, prints, sculpture, ceramics, photography and live musical entertainment weather permitting. Old Town Mall 6-9 p.m. 540-667-5166. www.shenarts.org

Fridays, November 2, 9, 16 LFCC Workforce Solutions & Continuing Ed: Supervising Spanish Speaking Employees; \$169; 12:00 p.m. – 4:00 p.m.

Announcements:

Blood donors are desperately needed in our area. American Red Cross Lucy Custer Building Hours are Mondays 2:00—7:00 p.m., Tuesdays 1:00—7:00 p.m., Thursdays 12:00-6:00 p.m., and Fridays 11:30 a.m.-5:30 p.m.

Callas Contractors, Inc. is proud to announce that Nicholas V. Hill, Sr. has re-joined the Callas team. He returns as Vice President of Construction. Nick has over 35 years of construction experience; of which 24 years have been with the Callas Family. He began his career with Callas as a Superintendent and worked his way to Vice President/Senior Project Manager. He received a Construction Degree in Construction Management from Frederick Community College.

BB&T has hired Rick Loughborough as a financial center leader. Loughborough is based at BB&T's 1000 Berryville Ave location. With \$130.8 billion in assets, BB&T Corp. is the nation's 14th largest financial holding company. More information is available at BBT.com.

Total Basket Cases is excited about their NOVEMBER TO REMEMBER! Ladies...join Kristine and her Merry Band of Basketeers for their monthly Tuesday Night Trunk Treasures on Tuesday, November 13 from 6:30-8:30! This is a fantastic ladies night of food, fun and friends while enjoying the first peek of tremendous finds. Everyone who attends receives a special gift. Refreshments will be served for this HOLIDAY HAPPINESS themed evening! 540-822-9415 www.totalbasketcases.com

The **United Way of Northern Shenandoah** held its 1st Public Report meeting on October 26. Campaign volunteer leaders reported that to date, \$434,858, 32% of goal, has been raised to support local health and human care services.

Valley AIRNow is hosting the *Thankful for Clean Air* art contest. November 1 – 31 PreK-12 artists are invited to creatively address the theme "What *YOU* can do to protect the air that *WE* breathe!" Prizes sponsored by Executive Protection Systems and The Northern Virginia Petroleum Association. Visit www.valleyairnow.com for artwork specifications and submission instructions.

FLU SEASON IS COMING! Make a reservation now and keep your employees healthy. **Premier On-Site Care**, a division of PHR, Inc. is currently taking reservations for flu shots to be administered in OCTOBER, NOVEMBER and DECEMBER. We will administer flu shots to your employees on-site at your place of business at our clinic location. NO ON-SITE FEE will be charged for 10 or more employees. COST: 1-49 \$25.00 each, 50-99 \$23.50 each, 100+ \$21.25 each. We are pleased to invoice your company or collect cash from your employees. Please contact Tanya Barron -or- Lowell Henderson @ 540-450-0233.

Executive Protection Systems (EPS), a leading turnkey provider of emergency preparedness solutions, equipment and training, today announced the winner of the first annual Executive Protection Systems Eugene Guevremont Memorial Scholarship Program. The program is designed to foster support for students choosing to pursue advanced degrees in any number of fields.

Nameeta Sahni, graphic designer for **OakCrest Companies**, recently won the American Graphic Design Award from Graphic Design USA, a national magazine for graphic designers. Graphic Design has been presenting this popular competition, open to all segments of the creative community, for more than three decades. Sahni's winning entry was for her *No Comparison* advertising campaign for OakCrest Builders which appeared in the Winchester Star in early 2007.

Anytime Fitness has been sponsoring a campaign in the month of October to raise \$250,000 for charity. Half will be donated to the American Heart Association and the other half will go to a variety of charities nationwide—including a worthy charity in our area. For more info on "Celebrating Everyday Superheroes" campaign visit www.anytimefitness.com.

Mary Hammond has joined the real estate firm of **Jim Barb Realty, Inc.** Mary recently retired from BB&T after 30 years. She brings many years of service to her clients and to the community.

Take a minute to check out our online sponsors...this could be your business!



Excerpt from: Business Agenda Update - November 9, 2007

Partner Announcements and Events

Saturday, November 10 Mt. Carmel Baptist Church, 1317 S. Pleasant Valley Road, Winchester, VA. Women's Day Week-end—Luncheon with Dr. Danita Blow. **Sunday, November 11** at 11:00 am a Dynamic Women's Day Worship with recording artist Tisa Wood from Bobby Jones Gospel, Praise Dancers and Inspirational preaching by Dr. Danita Blow of Baltimore, MD. Food, Fun and Fellowship.

November 9—11 Valley Furniture Country Interiors and the Miller House—Christmas Open House. The sights, sounds, and sensations of Christmas come alive. Enjoy the fine selection of holiday wreaths, garlands, ornaments and seasonal accents. Refreshments will be served. 5958 Valley Pike, Stephens City, VA. For information 540-869-2121.

Saturday, November 10—"Good News in the Gospels for Senior Adults" - Dr. Jane Marie Thibault, a clinical gerontologist and professor at the Louisville School of Medicine, will be the keynote speaker. Dr. Thibault is the author of two books on spirituality and aging. The workshop is scheduled from 8:00 am—4:00 pm. For additional information visit www.strengthforaging.info or call 540-667-5869. Cost \$25.00 and includes lunch.

November 10 & 11 Holiday Market—Arts, crafts, gifts, food, entertainment and free admission! Organized by the Main Street Craft Market Berryville. The event will take place at the Clarke County Recreation Center, 225 Al Smith Circle, Berryville, VA.

Sunday, November 11—Powhatan School Open House from 1:30—3:30 pm.

Tuesday, November 13—Lord Fairfax Community College, Workforce Solutions & Continuing Education—present the following classes: ServSafe Food Certification from 8:30 am—6:00 pm. Cost \$169.00. When YOU'RE Smiling... 1:00 pm—4:00 pm. Cost 69.00. Psychopharmacology and Psychotherapy from 8:00 am—3:30 pm. Cost \$179.00 Microsoft Excel, Basic from 6:00 pm—8:45 pm. Cost \$119.00. This last class will run until November 20th. For information call 540-868-7021

Saturday, November 17—Classy Trash Sale—Going from Trash to Treasure, Wayside Theatre's volunteer core P.R.O.P.S. is having their annual "Classy Trash Sale" this fall. Clear up your basements or attic and support the arts in your community at the same time. **Donation Drop-off Times:** Wednesday, Thursday, & Friday, November 14th—16th Noon—5:00 pm to the Curtain Call Café in Middletown, VA. Please no computer equipment or clothes.

Saturday, November 17—Blandy Gala & Auction—A fall gala and auction at the State Arboretum of Virginia at Blandy Experimental Farm with the theme "No Child Left Inside" to benefit environmental education programs for children. The gala will feature both live and silent auction, fabulous food and live music. The events starts at 5:30 p.m. Tickets for the gala are \$75 per person. Reservations are required. For information email FOSAEvents@gmail.com or call 540-837-1758 Ext. 0

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The Northern Virginia daily's 9th Annual Magic of Reading Holiday Book Drive runs through December 7th. The Daily is collecting NEW books for children ages infant—teen and will distribute those books to local human care organizations which then get them to needy children. More than 20,000 books have been distributed in the past 8 years. For information call 1-800-296-5137.

We are experiencing return mails due to incorrect addresses. If you have changed your email address please notify the Regional Chamber office as soon as possible.

Please send all submissions for the *Business Agenda Update* to kbronson@regionalchamber.biz or fax them to (540) 722-6365. The deadline for inclusion in the email broadcast is each Wednesday by noon.

www.regionalchamber.biz

All paid events require advance registration. Registrants are responsible for all event fees unless cancellation is received 48 hours prior to the event.

Take a minute to check out our online sponsors...this could be your business!



APPENDIX C

Valley AIRNow
Idle Reduction Sign Initiative

Healthy Air Zone Street Sign



Idle Reduction Initiative Press Release

FOR IMMEDIATE RELEASE

Issued By: Valley AIRNow

For more information contact:

Tiffany Tumer, Outreach Coordinator

(540) 560-3466; tumerta@jmu.edu



PRESS RELEASE

Valley AIRNow • www.valleyairnow.com • info@valleyairnow.com • Hotline: 540.450.2207

Valley AIRNow Announces New Clean Air Campaign

Winchester-Frederick County schools, businesses unite to reduce pollution from engine idling

Winchester, VA—Blue skies and clean air are Valley hallmarks—together, we can help keep it that way!

Citizens of Winchester-Frederick County will breathe easier thanks to a new, voluntary air quality initiative launched this summer to reduce pollution from vehicle engine idling. Area schools and businesses have installed *Healthy Air Zone* signs (Figure 1) to encourage parents, employees, and patrons to turn off their engines while parked.

The pollutants found in exhaust from engine idling can adversely affect our environment as well as our health. Potential health effects include coughing or difficulty breathing, aggravation of asthma and other respiratory problems, and decreased lung function. Children are particularly vulnerable to air pollution because they breathe more quickly and take in more air than adults.



Figure 1.

"We will be reminding our customers to do their part and to let them know that we are a responsible business who is part of their community and are concerned about their health and the health of their family members," said Robert Claytor, President of H.N. Funkhouser & Co.—a campaign partner that has installed 20 signs at its local Handy Mart convenience store locations.

Area schools and businesses participating in the Idle Reduction Campaign include:

- Abundant Life Daycare & Preschool (Figure 2)
- Apple Tree Clubhouse
- Apple Valley Montessori School
- DK Industrial Services

- Emmart Oil Company
- Frederick County Public Schools
- Fremont Street Nursery
- H.N. Funkhouser & Co./Handy Mart Convenience Stores
- Heritage Child Development Center
- Heritage Clubhouse
- Little ME Daycare
- Morgan Oil Corporation
- Mountain View Christian Academy/Training His Tots Christian Daycare & Preschool
- Rosedale Baptist Church Christian College & Kiddie Kollege
- Shenandoah Child Care Center
- Virginia Inland Port
- The Winchester Academy
- Winchester Day Nursery
- Winchester Public Schools



Figure 2. Idle reduction sign at Abundant Life Daycare in Stephens City

To date, these businesses are displaying a combined total of approximately 85 idle reduction signs. Any other schools or businesses—particularly daycare centers, convenience stores or business members of the mobile freight industry—interested in displaying this signage should email info@valleyairnow.com or contact Tiffany Tumer at (540) 560-3466. Supplies are limited, so don't wait!

###

APPENDIX D

James Madison University
Faculty Research Day Poster

Center for Energy and Environmental Sustainability (CEES) Atmosphere Group

James Madison University in collaboration with the University of Virginia and Virginia Tech
C.J. Brodrick, J. Graytys, T. Newbold, T. Tumar, R. Davis, J. Stenger, L. Marr,
M. Deaton, R. Parilak, D. Shaffer, G. Tucker, R. Hondula, D. Knight, L. Schweitzer,
S. Frysinger, L. Radocha, A. Albrecht, L. Sitka, T. Lee, G. Bansal
C. Davis, M. Fenzel, A. VanBenschoten

The Atmosphere Group within the Center for Energy and Environmental Sustainability provides expertise in air quality, climate change, and meteorology in support of the Center's overall objectives:

- To promote a green curriculum at JMU and work toward the goals of the United Nations Decade of Education for Sustainable Development (2005-2014).
- To conduct research and outreach on implementing more sustainable practices in homes, schools, offices, industry, and communities in the Shenandoah Valley.
- To green the JMU campus at multiple levels—buildings, grounds, and use of resources.
- To foster a culture of natural resource awareness and stewardship at JMU.
- To engage students in education, research, and outreach on sustainability.
- To conduct integrated research that recognizes the interdependence of the environment, the economy, and society in achieving sustainable communities and ecosystems.

Education

Science, Technology, Engineering and Math (STEM)

JMU Courses

Faculty members are incorporating inquiry-based activities and emerging data visualization methods to a variety of student audiences ranging from general education students, to pre- and in-service teachers, and to science student to include:

GLOBE

JMU recently partnered with the Global Learning and Observations to Benefit the Environment (GLOBE) program. GLOBE is a worldwide hands-on, primary and secondary school-based science and education program that trains teachers to help students improve their achievement in science and math, and in the use of computer and network technology by involving them in performing real science—taking measurements, analyzing data, and participating in research in collaboration with scientists. JMU has already trained more than 30 faculty and teachers in GLOBE protocols.



Science on a Sphere

JMU is the first university to acquire Science on a Sphere (SOS)—a sphere-shaped, data visualization tool developed by the National Oceanic and Atmospheric Administration (NOAA). SOS uses four projectors to project onto the entire surface of a six-foot diameter sphere. Many of the current images for SOS use processed satellite data so the observer has the illusion of seeing Earth from an astronaut's perspective in space. The tool is currently being piloted with faculty members from different disciplines and will be used in faculty research, JMU classes, and K-12 science education.

Undergraduate Research Opportunities

Undergraduate research opportunities are available through JMU faculty projects as well as via collaborations with other universities, non-profit organizations, and agencies. Student research is frequently conducted in small teams over summers or as part of the capstone project in ISAT. Examples of past projects include comparing the noise from auxiliary power systems, characterizing the thermal signatures of heavy-duty vehicles, and modeling the full fuel cycle emissions of truck idle reduction technologies.

Environmental and Sustainability Education

The Atmosphere team provides environmental and sustainability education to K-12 teachers and students, as well as to civic clubs and organizations. JMU offers professional development workshops to help Valley teachers incorporate atmospheric lessons into the teaching curriculum. Additionally, JMU is partnered with the American Lung Association and the Department of Environmental Quality to complete the Clean Air Champions (CAC) module which incorporates proper car maintenance into the Virginia high school Driver's Education curriculum.



Scholarship

Fundamental Research, Applied Research & Evaluation

Emissions Source Research at Virginia Tech

The Virginia Tech team is working toward evaluating the impact of locally emitted versus regionally transported emissions and quantitatively comparing air quality control strategies that the local governments are considering implementing. Currently, Tech's air quality modeling team has run the Community Multiscale Air Quality (CMAQ) model over the entire southeastern U.S. and has evaluated model performance specifically for the Shenandoah Valley.

Ground Truthing of NWS PM Forecasting

The National Weather Service (NWS) is producing forecasts of air pollutant concentrations in the Shenandoah Valley for the period October 2006 through December 2007. JMU researchers are comparing these with data from air quality monitoring stations for that period. To date, emphasis has been on retrieving historical forecasts made by NWS with the CMAQ model and retrieving records from the VA Department of Environmental Quality for several monitoring stations in the Valley. Initial analyses will be conducted to evaluate how well the NWS model has predicted concentrations of fine particulate matter (i.e., PM_{2.5}).



Air Mass and Back-Trajectory Climatology at UVA

The UVA climate group has been working towards the creation of a respiratory health watch/warning system. They are trying to predict the number of respiratory-related admissions into the hospital on a given day based on complex relationships between weather, season, and SSC air mass types. A series of estimations on trajectories, pollutants, and aeroallergens has been completed. The goal now is to develop a model to predict the levels of carbon monoxide, ozone, nitrogen dioxide, as well as mold spores, ragweed, grass, and tree pollen levels. UVA's model output will feed into JMU's interface system that will alert the public.



Vehicle Idle Reduction Policy Analysis

JMU researchers have collaborated with social science research faculty and Argonne National Laboratory to examine heavy vehicle emissions reductions options, including heavy truck idle reduction (IR) and biodiesel fuel adoption. Our analysis uses a systems approach that looks at energy over the full fuel cycle, which includes power plant impacts when plug-in power is used as well as fuel transport and delivery impacts.



Decision Maker Support

Regional Planning & Policy Support

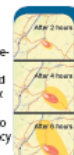
Local Government Decision Support Tools

The Atmosphere Group and Virginia Tech's Sustainable Engineering program are working cooperatively to support local government efforts to rationally select the energy and emissions reductions strategies that yield the greatest benefits per unit cost. This effort will:

1. Gather baseline emissions for the cities of Roanoke and Harrisonburg using the National Association of Clean Air Agencies (formerly STAPPA and ALAPCO) modeling tool;
2. Quantitatively compare the cost-effectiveness of greenhouse gas and criteria air pollutant reductions for various control measures; and
3. Develop a rational prioritization of reduction measures based on their priorities and these outputs.

Emergency Responder Decision Support Tools

The CATS/HMAC (Consequence Assessment Tool Set/Hazard Prediction and Assessment Capability) software packages, developed by the Defense Threat Reduction Agency, were designed to help local emergency medical services plan for and respond to hazardous materials release events. This complex system has been used primarily by the military to date, and the JMU team is working with local emergency responders to evaluate simplified, customized interfaces for local Emergency Responders.



Data Collection

Continuous PM_{2.5} Monitoring in partnership with the Virginia Department of Environmental Quality, the Atmosphere Group has purchased a continuous monitor to measure small particles (PM_{2.5}) that are associated with adverse health effects. The monitor is being prepared for installation at Rest, VA, just north of Winchester.

Blandy Farm Wind Measurements

The SHENAIR weather station at Blandy Farm measures air temperature and moisture, wind direction and speed, precipitation and air pressure. Data from the Blandy/SHENAIR tower will be used in research and forecasting models for air quality in the Shenandoah Valley region. This data is made accessible to the public via <http://www.bme-teostac.com/SHENAIR/>. Data from the tower will augment observation stations of other Virginia and national agencies such as Virginia Department of Environmental Quality and the National Weather Service.



Stewardship

Public Health Protection

Valley AIRNow Outreach on Idle Reduction Valley AIRNow is an air quality education program serving the City of Winchester and Frederick County that was developed in response to air quality concerns in that region. Personal actions, such as reduced car idling, are one of many solutions that our team teaches to the public.



Shenandoah Valley Atmospheric Influence on Respiratory Illness Alert System (ARIAS)

A pilot health advisory system is being developed at JMU. The system will use e-mail or cell-based text messages to alert subscribers to forecasted conditions that present risks to sufferers of environmentally-related respiratory ailments. The ARIAS team is working closely with UVA researchers who are developing the forecasting.

Biodiesel Safety Education

The Atmosphere Group at JMU has co-hosted three regional biodiesel workshops with the Alternative Fuels Group and has supported other outreaches, like those conducted by Virginia Clean Cities. Our group's focus has been on biodiesel safety education, especially as it relates to methanol exposure and toxic emissions.

Collaborators

Our group serves as the interface between research and practical implementation. Thus, we collaborate with a variety of external groups including:

- Virginia Department of Environmental Quality;
- National Weather Service;
- Cities of Winchester, Harrisonburg, Roanoke, and Frederick County;
- Northern Shenandoah Valley Regional Commission;
- Argonne National Laboratory;
- Local Governments for Sustainability-HCLE;
- American Lung Association;
- University of Virginia; and
- Virginia Tech

Our flagship program is the Shenandoah Valley Air Quality Initiative (SHENAIR), which is a local government and university alliance that provides a science-based, regional response to air quality issues affecting the Valley.

Contact Information

Christie-Joy Brodrick, Director, Atmosphere Group
540-568-3202
brodrick@jmu.edu

Tiffany Newbold, Associate-Director, Atmosphere Group
540-568-8898
newbold@jmu.edu



APPENDIX E

Shenandoah Valley Natural Systems Science Symposium

Shenandoah Valley Natural Systems Symposium
 Science for "Taking Care of the Water" plus Air & Land Relationships
 Objective: Build A Shenandoah Valley Science Plan that will inform policy makers.

**Organized by the
 Shenandoah Valley Science Collaborative**

**October 15 – 16, 2007
 Shenandoah University
 Winchester, Virginia 22601**

Sponsors:

**U.S. Geological Survey
 Foundation for Earth Science
 Great Valley Water Science Forum
 Shenandoah Valley Regional Water Resources
 Policy Committee
 SHENAIR Local Government Committee**



October 15, 2007

8:30 a.m. Registration – Continental Breakfast

9 a.m. Welcome – John Staelin, Chair, Regional Water Resources Policy Committee

Goal Statement: Shenandoah Valley researchers, Virginia and West Virginia, are invited to the Symposium to present an overview of current work, a statement of current goals and needs, identification of gaps and other science needed from the research perspective. Federal and State agencies, research universities and organizations are invited to consider the existing programs and expressed needs with an eye to considering if they have data, tools, techniques or other resources that might provide quick results in the short run and build for greater results in the long term – define the science needed for the Shenandoah Valley region.

Overview – The water science questions and the local governmental policy needs. The following questions developed from local government and Water Resources Policy Committee members were developed and sent to Dr. Suzette Kimball, Eastern Regional Director, U.S. Geological Survey, on September 15, 2005.

1. What is the inter-relationship of flow between groundwater and stream flow in the Shenandoah Valley? (groundwater flows into streams and stream flows back to the groundwater)

2. What are the current levels of groundwater pollution in the Valley (How much of the problem is caused by natural causes, septic failures, farming, urban runoff, etc. and how can these be remediated and prevented?)
3. Can groundwater budgets be defined by local area? (The USGS is working on a water budget for the region. However, as it is expensive to build water distribution systems it would be extremely useful to have groundwater budgets by small localized area.)
4. If #3 is not possible, can underground “watersheds” be defined for karst areas? The long held assumption has been that underground water flow mirrors surface water flow, but that assumption has been proven false. (We understand that underground watersheds have been defined for karst areas in Kentucky.)
5. What is the potential for deepwater reservoirs as either a source of water or as a storage area?
6. What is the interrelationship between air quality and water quality? (The NOAA funded, ShenAir project should provide useful data but the data will need to be studied and interpreted.)
7. What is the interrelationship between soil quality and water retention and water quality? (According to a USDA study, a section of soil containing 4-5% organic matter with a humus reading of 12-15 can hold double its weight in water – absorbing a 3-4 “rain event in a hour compared to soil with a humus rating of 6-9 which can only absorb ½ inch of rain per hour.)

Further in pursuit of this information, development of a Science Plan for the Strategy Number 4 of the Plan is to develop a “Shenandoah Valley Water Resources Science Plan” to provide decision-makers with the ability to better see how policy actions affect future watershed conditions. The purpose of this Symposium is to scope out the science needed to answer these questions as well as consider related science questions that relate to maintaining and improving water quality in the region. [Shenandoah Valley Regional Water Resources Strategic Plan](#)

9:20 a.m. Overview of Methodology and Symposium Outcome - Jim McNeal, USGS

9:35 a.m. Panel 1 - Science Plan Recommendations – USGS Science Centers – I
 Hugh Bevans, Director, West Virginia Water Science Center
 Mark Bennett, Director, Virginia Water Science Center
 Niel Plummer, Research Hydrologist, Eastern Branch of Hydrologic Research, NRP

10:45 a.m. Break

11:00 a.m. Panel 2 - Science Plan Recommendations – USGS Science Centers – II
 David Weary, Research Geologist, Eastern Region Earth Surface Processes Team
 Bruce Taggart, Assistant Director, Leetown Science Center
 Dave Kirtland, Chief, Eastern Geographic Science Center

Noon - Lunch Break

12:45 p.m. – Panel 3 – Science Plan recommendations – University Researchers
 Greg Carbone, University of South Carolina, Regional Integrated Sciences and Assessment - RISA Program, NOAA Climate Office research and Decision Support Tools

Don Orth, Ph.D., Thomas Jones Professor, Fisheries and Wildlife Sciences, Department of Fisheries and Wildlife Sciences, Virginia Tech - Beyond Instream Flow
 Mark Kozar, USGS – The Opequon Creek – VA-WV Partnership
 Jim Giraytys, CCM, James Madison University - Airshed/Watersheds

2:00 p.m. – Panel 4 - Science Plan recommendations – State Agencies
 Scott Kudlas, Manager, Office of Water Supply Planning, VA Department of Environmental Quality
 Don Kain, Fish Kill Task Force, VA Department of Environmental Quality
 Andrew Johnson, Wildlife Biologist II, West Virginia Department of Environmental Protection

2:45 p.m. – Break

3:00 p.m. Panel 5 - Science Plan recommendations – State Agencies
 Dr. Diane Helentjaris, Director, Lord Fairfax Health District, Virginia
 Rick Hertges, R.S., Onsite Sewage Program Coordinator, WV Department of Health and Human Resources
 Wil Orndorff, Karst Protection Coordinator, VA Department of Conservation and Recreation

4:00 p.m. Panel 6 - Science Plan Recommendations – Universities
 Rick Webb, Projects Coordinator, Shenandoah Watershed Study (SWAS), University of Virginia
 Wayne Teel, Ast. Professor, National Atmospheric Deposition Program, James Madison University
 Peter Sforza, VirginiaView Coordinator, Virginia Tech - Satellite Remote Sensing Resources

5 p.m. Adjourn – Networking .

5:30 p.m. – 7 p.m. Poster sessions – reception.

7 p.m. – Dinner on your own – networking encouraged.

October 16, 2007

8:30 a.m. Welcome – John Staelin, Chair, Regional Water Resources Policy Committee

8:35 Review of Monday – Goals for Today – Jim McNeal

8:45 a.m. Panel 7 – Science Plan Resources – Federation of Earth Science Information Partner Organizations

Introduction, Dick Wertz, Foundation for Earth Science

Kristi R. Arsenault, Research Associate, Goddard Earth Sciences and Technology Center, Hydrological Sciences Branch (NASA Perspective)

Nicholas L. Clesceri, **WATER** and **Environmental Research Systems Network (WATERS Network)** (NSF Perspective)

Mary McCaffery, EPA, Office of Research and Development (EPA Resources and Decision Support Tools)

Tim Owen, National Climatic Data Center, National Integrated Drought Information Center (NIDIS) NOAA/NESDIS Resources and Decision Support Tools)

Erick Malaret, Applied Coherent Technology Corporation , Rapid Environmental Assessment Composition Tools (REACT)

Noon - Lunch Break

12:45 p.m. – Science Plan – Priorities – Break-out groups

The information from the first day will be posted to the Wiki and the Conference Science Writer will compile recommendations and comments into a list or lists as the material requires. Participants will be divided into groups which will meet to discuss the recommendations, review them to determine if gaps remain, and then prioritize the research recommendations for inclusion into the initial Science Plan.

2:45 p.m. – Break

3:00 p.m. – Science Plan – Putting it together.

The Break-out groups will be brought together for to compare priority rankings of recommended science and those things which may have been added. The participants will then work to develop Valley-wide priorities.

The last step will be to have a Working Committee which will follow-up on completion of the Plan for presentation to the Regional Water Resources Policy Committee and SHENAIR Local Government Committees in December, 2007.

4:15 p.m. Adjourn – Networking .

4:45 p.m. Planning Committee Debriefing

Lodging and University Location Information

Directions to - Shenandoah University (SU) - Winchester, VA 22601 - The Main Campus of SU is located off of I-81 exit 313. Take Route 50/17 west. Bear right on Millwood Pike turning right on Lowery Drive and the first right. Symposium location is Henkel Hall - Building 20 on Campus Map - http://www.su.edu/campus_map1.html Area hotels are listed on the University website: http://www.su.edu/university_info/hotels.asp Most hotels have a government rate, though availability can be first come, first served. Sample rates were \$67.60 and \$70. Fairfield Inn offers a Shenandoah University Corporate Rate to those attending functions at SU and this conference qualifies. It is equal to the government rate. Rooms have direct internet access and the lobby has Wi-Fi. As this is the Fall season, make reservations as soon as possible.

Remote Participation Links

[ColabWiki: Shenandoah Valley Science](http://colab.cim3.net/cgi-bin/wiki.pl?ShenandoahValleyScience)

<http://colab.cim3.net/cgi-bin/wiki.pl?ShenandoahValleyScience>

APPENDIX F

Valley AIRNow
Thankful for Clean Air Art Contest

Promotional Flyer (Page One)



Valley AIRNow presents
The First Annual Clean Air Art Contest
Sponsored By
Executive Protection Systems and
The Northern Virginia Petroleum Association



Art Contest



Additional Sponsors



Eligibility:
Students PreK through 12

Submission Deadline:
November 30, 2007

Promotional Flyer (Page Two)

Thankful for Clean Air (Valley AIRNow) Art Contest Details

Theme: What YOU can do to protect the air that WE breathe!
Eligibility Requirements: All students, grades PreK – 12
Submission Deadline: November 30, 2007

Valley AIRNow, a non-profit air quality outreach program serving the Winchester-Frederick County area, is inviting local young artists to celebrate Thanksgiving and clean air in the first annual *Thankful for Clean Air* art contest. Participating artists should address the theme “What YOU can do to protect the air that WE breathe!” Examples include carpooling, refueling in the evening, checking tire pressure, keeping your car properly maintained, and reducing vehicle idling. For more examples, visit the Valley AIRNow website at www.valleyairnow.com.

Judging:

Artwork is judged on originality, technical rendition, and overall aesthetics. Send ONLY ONE original work of art per individual. Artists understand that their entry must be their original work and that if accepted will be published on our website. Artists retain the copyright to their work at all times. Artwork cannot be returned. Judging will be provided by Shenandoah University’s Organization of Arts Management Students. Winners will be announced on Saturday, December 8th.

Age Categories/Prizes

Pre-K, Elementary, Middle, and High School

First place prize winners will receive a bicycle and helmet

Second place winners will receive an all-inclusive art set

Third place winners will receive a generous gift basket of art supplies

Directions for Students:

1. Create a medium (color illustration, painting, digital*, photography*) that addresses the artwork theme described above. Artists should use white paper and place the page in landscape orientation, so that the paper is 8 ½ inches high and 11 inches wide. You may choose to write a clean air message or sentence on the picture.

*Note: Digital images should be submitted as JPEGs at a resolution of 72 dpi. However, if you do not know how to resize your image, you may submit them to tumerta@jmu.edu given that the image is saved in JPEG format.

2. On the back of the picture, write your name, grade, age, name of school, teacher’s name, and phone number or mailing address.
3. Drawings should not be folded or stapled and must be received or postmarked by November 30th to:

Valley AIRNow - James Madison University
ISAT/CS Building, MSC 4102
Harrisonburg, VA 22807

(Note: Teachers may send all class entries together in one envelope.)

4. Digital artwork and photography can be emailed to tumerta@jmu.edu

For additional questions on the *Thankful for Clean Air* art contest, please contact Tiffany Tumer, Valley AIRNow Outreach Coordinator at info@valleyairnow.com or (540) 560-3466.

So what are you waiting for? Be thankful for clean air, be creative and start drawing!

For Release 10/31/2007
Issued By: Valley AIRNow
For more information contact:
Tiffany Tumer, Outreach Coordinator
(540) 560-3466; tumerta@jmu.edu



PRESS RELEASE

Valley AIRNow • www.valleyairnow.com • info@valleyairnow.com • Hotline: 540.450.2207

Clean Air Art Contest for Area Students Announced

Solicitation for original pre-K—12 artwork depicting actions our community can take to improve the air we breathe

Winchester, VA—Blue skies and clean air are Valley hallmarks—together, we can help keep it that way!

Valley AIRNow, in collaboration with Executive Protection Systems and the Northern Virginia Petroleum Association*, is inviting local young artists to celebrate Thanksgiving and clean air in the first annual *Thankful for Clean Air* art contest. Participating artists should address the theme "What **YOU** can do to protect the air that **WE** breathe!" Examples include carpooling, refueling in the evening, checking tire pressure, keeping your car properly maintained, and reducing vehicle idling. For more artwork ideas, interested individuals are encouraged to visit the Valley AIRNow website at www.valleyairnow.com.

A total of 12 pieces of artwork with clean air themes by pre-K—12 students in the Northern Shenandoah Valley area, will be awarded \$1,000 worth of prizes provided by the partners listed below. Shenandoah University's Organization of Arts Management Students (OAMS) will select three winners from the following age groups: pre-K (includes daycare children), elementary, middle, and high school. Prizes for each age group are as follows:

- *Gold*: A bicycle to promote alternative modes of transportation (generously donated by Executive Protection Systems)
- *Silver*: An all-inclusive art set, plus additional supplies (generously donated by the Northern Virginia Petroleum Association*)
- *Bronze*: A young artist's gift basket (generously donated by the Northern Virginia Petroleum Association*)



In addition to these prizes, one to three classrooms, daycare centers, or other groups

* Refer to list of participating individual members

that truly grasp the concept of clean air and community action will receive a generous donation of art supplies provided by our local Wal-Mart center!

A wide variety of mediums will be accepted including color drawings, paintings, photography, and digital artwork. All paper submissions must be postmarked no later than November 31, 2007 and mailed to:

Valley AIRNow - James Madison University
CS/ISAT Building, MSC 4102
Harrisonburg, VA 22807

Digital artwork and photography may be submitted via email to info@valleyairnow.com. For a complete list of contest specifications, visit www.valleyairnow.com/artcontest.htm.

For additional questions on the *Thankful for Clean Air* art contest, please contact Tiffany Tumer, Valley AIRNow Outreach Coordinator at info@valleyairnow.com or (540) 560-3466. So what are you waiting for? Be thankful for clean air, be creative and start drawing!

Contest Sponsors:

- **Executive Protection Systems**
- **The Northern Virginia Petroleum Association***
 - Emmart Oil Company
 - Griffith Energy Services, Inc.
 - H.N. Funkhouser & Co.
 - Holtzman Corp.
 - Morgan Oil Corporation
 - Quarles Petroleum Inc.
 - Roach Energy
 - Skyline Oil Inc.
 - Southern States Cooperative
- NetTech Center of Winchester
- **Wal-Mart—Winchester location**

###

APPENDIX G

North American Association for Environmental Education
36th Annual Conference
Virginia Beach, VA

COME

TO THE
COAST

*explore new horizons
for environmental education*



NAAEE's 36TH Annual Conference

November 14–17, 2007

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CONFERENCE OVERVIEW

Tuesday, November 13

- 8 AM – 5 PM NAAEE Board Meeting
- 8 AM – 5 PM Field Experiences
- 5 PM – 6:30 PM Registration Office Open
- 7 PM – 9 PM Research Symposium Reception

Wednesday, November 14

- 7 AM – 6 PM Registration Office Open
- 8 AM – 5 PM NAAEE Board Meeting
- 8 AM – 5 PM Workshops and Research Symposium
- 5:30 PM – 7 PM Various Receptions at VBCC
- 7 PM – 10 PM Opening Keynote (Chen) and Performance (McCutcheon)

See more information on Tuesday-Wednesday Day at a Glance, pages 30–31.

Thursday, November 15

- 7 AM – 11:30 AM Registration Office Open
- 8 AM – 9:15 AM Industry Accountability: How It's Done Panel
- 9:30 AM – 12:15 PM Concurrent Sessions
- 12:30 – 1:45 PM Connecting EE and Music Panel
- 1:30 PM – 5 PM Registration Office Open
- 2:00 PM – 4:45 PM Concurrent Sessions
- 4:45 PM – 5:30 PM Photo Contest Awards and Performance (Yarrow)
- 5:30 PM – 7:30 PM Exhibit Hall Opening (with Poster Sessions and Affiliate Welcome)

See more information on Thursday Day at a Glance, pages 32–33.

Bus Route

The NAAEE conference bus will travel between the VBCC and the Doubletree Hotel, Holiday Inn Oceanside, and Fairfield Inn. The complete cycle should take about 15 minutes.

Buses run during the following

WEDNESDAY: 6 AM to 11 PM

THURSDAY: 6 AM to 10 PM

FRIDAY: 6 AM to 7:30 PM, then from VBCC to Nauticus, stopping at hotels on the way back at the end of the Nauticus event

SATURDAY: 6:00 AM to 7 PM, then will take people from VBCC to First Landing State Park, stopping at hotels on the way back at the end of the Oyster Roast event

Friday, November 16

- 7 AM – 11:30 AM Registration Office Open
- 7 AM – 8 AM Continental Breakfast – Exhibit Hall
- 8 AM – 9:15 AM Environmental Justice Panel
- 9:30 AM – 12:15 PM Concurrent Sessions
- 12 PM – 2 PM Authors' Corner in Exhibit Hall (local dessert buffet provided)
- 1:30 PM – 5 PM Registration Office Open
- 1:45 PM – 4:30 PM Concurrent Sessions
- 7 PM – 10 PM Special Event at Nauticus (Annual Stapp Scholarship Auction)

See more information on Friday Day at a Glance, page 50–51.

Saturday, November 17

- 7 AM – 11 AM Registration Office Open
- 7:30 AM – 9:15 AM Continental Breakfast – Exhibit Hall (Share Fair)
- 8:45 AM – 9:15 AM Keynote (Pregacke)
- 9:30 AM – 11:15 AM Concurrent Sessions
- 11:30 AM – 1:30 PM Awards Ceremony, Luncheon, and Keynote (Earle)
- 1:45 PM – 2:30 PM NAAEE Business Meeting
- 2:30 PM – 5 PM Registration Office Open
- 1:45 PM – 4:30 PM Concurrent Sessions
- 7 PM – 10 PM Networking Oyster Roast at First Landing State Park

See more information on Saturday Day at a Glance, page 64–66.

Sunday, November 18

- 8 AM – 2 PM Field Experiences



Visit the newly updated
F.R.E.E. Network

- ♦ An engaging website for teachers and students at all levels to learn about forests and forest management
- ♦ More than 100 interactive, scientifically sound educational resources and activities

www.freetwork.org

Hosted by Donnell Partners, Inc., a Minneapolis-based environmental nonprofit

CONFERENCE STRANDS

Hundreds of Learning Opportunities

With 22 concurrent sessions in most time slots during the three-day conference, the seven conference strands are all given special attention. Thank you to our strand leaders and strand reviewers for their hard work!

Community & Conservation Education

Come explore innovative and contemporary environmental education strategies in community-based social marketing, place-based education, citizen science, community engagement, watershed education, evaluation tools and more. See how communities are engaged in the conservation of our world's natural resources.

Environmental Justice & Cultural History

Environmental education has traditionally focused on natural resources and wildlife, and how people manage their behavior to sustain healthy ecosystems. We will explore new concepts, alliances, and strategies to move the communities where we work into a more environmentally-just reality.

Fundraising & Leadership Development

Learn about which sources of financial support will be most viable in the future and how to draft proposals that have a greater likelihood of being successful. Investigate proven measures of success when securing new members and retaining current ones.

Marine Education

Learn how the new Ocean Literacy Principals mesh with NAAEE's Guidelines for Excellence. See the best new ideas linking real-time ocean observing data to the classroom. What works best, what's tried and true? Hear the latest audience needs assessments and program evaluations.

Service-Learning

Service-learning is an approach to teaching and learning that links service to the community with curriculum-based learning ... an approach that, when done well, can be very effective. Learn how this approach to EE is different than others that involve student participation in community affairs and environmental action. This strand made possible by the innovative partnership with Earth Force (www.earthforce.org).

Sustainability Education

Practitioners, researchers, policy makers, community leaders, and K-16 teachers and administrators will find thought-provoking ideas, engaging conversation, and solid information about education for a sustainable future.

Technology & EE

A brand-new strand addresses how technology can enhance and expand the reach of environmental education programs. Learn how you can integrate technology into your programs and utilize some of these tools to improve environmental literacy.

Non-Strand-Specific Sessions

Some sessions cross multiple strands and are printed in black.



THE INTERNATIONAL CHARTER FOR HUMAN RESPONSIBILITIES
INVITES YOU TO OUR HANDS-ON SESSION:

MOBILIZING HUMAN RESPONSIBILITY FOR SUSTAINABILITY

- Learn about environmental education for sustainability in Brazil, India and the Philippines
- Adapt these programs to your own contexts
- Draft your own principles of environmental responsibility

FRIDAY, NOV. 16 FROM 9:30AM TO 11:15AM
BALLROOM THREE IN THE CONVENTION CENTER

<http://www.charter-human-responsibilities.net>

NINA GREGG, US COORDINATOR
charter.USA@alliance21.org



SESSION FORMATS & KEY TO LISTINGS

Session Formats

Traditional Presentations (45 minutes)

These sessions focus on a topic or program and typically involve a presentation, followed by time for discussion and questions, although this may vary.

Poster Session (2 hours)

Poster reports on EE research and innovative programs and projects. Poster presentations will run simultaneously in a common area with participants freely moving from one poster to another.

Hands-on Sessions (1 hour & 45 minutes)

Hands-on sessions deal with a single topic or program, in an interactive setting where participants can have an open discussion with an experienced expert. Not intended as a lecture. New this year, on Friday we have a community hands-on room in Ballroom 3.

Symposium (1 hour & 45 minutes)

Symposiums are panel discussions where speakers who will present different perspectives on a common topic.

Roundtable Discussion (1 hour & 45 minutes)

Roundtable discussions are informal presentations that overlap two sessions. Participants may enter and leave throughout the discussion. (Historically, NAAEE has called this presentation format "Interacts".)

Proposal Review Process

This year, NAAEE received more than 600 high-quality proposals related to the seven conference strands, reflecting a wide range of experiences, perspectives, and research in sustainability and environmental education. Each proposal was peer reviewed, coordinated by a strand leader with expertise in a specific area. Reviewers were provided uniform review criteria in advance. This careful process aimed to ensure quality and an overall balance of views in the presentations.

Key to Events Listings

Session format	→	Roundtable Discussion	←	Time
Title (color-coded by strand title on facing page)	→	"If Trees Could Talk" incorporating social aspects of education for a sustainable future	←	Location
		VBCC/Ballroom 3	←	Presenter(s)
		PRESENTER(s): Meg John (Forest History Society), Cheryl Oakes (Forest History Society)		
Description	→	Helping the next generation of adults to develop a strong environmental ethic and decision-making skills is a continuing challenge to education in the United States...		

Tuesday, November 13
Wednesday, November 14

Tuesday/Wednesday at a Glance

Tuesday, November 13

8:00 AM – 5:00 PM	NAAEE Board of Directors meeting	VBCC Board room
8:00 AM – 5:00 PM	Field Experiences	Depart at Front of VBCC
5:00 PM – 6:30 PM	Registration Office Open	VBCC
7:00 PM – 9:00 PM	4th Annual Research Symposium Reception	Doubletree Hotel Ballroom North

Wednesday, November 14

7:00 AM – 6:00 PM	Registration Office Open	VBCC Lobby
7:00 AM	Coffee Service	VBCC Lobby
8:00 AM – 5:00 PM	NAAEE Board of Directors Meeting	VBCC Board room
8:00 AM – 5:00 PM	Workshops	VBCC
8:00 AM – 5:00 PM	4th Annual Research Symposium	VBCC
12:00 PM	Lunch for Research Symposium and Workshop Participants	Ballroom 3
3:00 PM	Afternoon Break with snacks	VBCC Lobby

welcome receptions	5:30 PM – 7:00 PM	New Member Welcome Reception	VBCC/2A
	5:30 PM – 7:00 PM	Technology Reception	VBCC/2D
	5:30 PM – 7:00 PM	Intra-City Collaboratives & Capacity Building Reception Hosted by the District of Columbia Environmental Education Consortium	Doubletree Hotel Crepe Myrtle Room
	5:30 PM – 7:00 PM	Welcoming Diversity: The Richness of NAAEE La Riqueza de la NAAEE: Bienvenida a la Diversidad	VBCC/2C

7:00 PM – 10:00 PM	Opening Keynote by Milton Chen ♪ Performance by John McCutcheon	VBCC Ballrooms 1 & 2
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Alternative Vehicle Ride and Drive

5:30 PM to 7:00 PM, in front of the VBCC

Scheduled vehicles:

Hydrogen 3 fuel cell vehicle (invited)

Battery powered electric vehicle

Hybrid electric vehicle

Ethanol vehicle

Natural gas vehicle

Electric mobility machine



Look for participants from the “Build It and They Will Come” workshop playing their instruments in the lobby as you enter the ballroom for the opening keynote!

Look for a video to the music of John Denver’s “Yellowstone” during the opening session. Thanks to Hal Thau, business manager for John Denver, for synchronization rights to the tune and lyrics for one-time use, and to Cheryl Charles for helping us connect with the John Denver organization.

4th Annual Research Symposium

November 13–14, 2007

“Celebrating the Diversity of our Research Methodologies: Finding common ground”

Tuesday, November 13

Reception

7:00 PM – 9:00 PM Doubletree Hotel

Wednesday, November 14

Plenary and Sessions VBCC

(see Research Symposium program for presentation list and locations)

The NAAEE Research Commission holds its 4th Annual NAAEE EE Research Symposium to facilitate discussion and collaboration among EE researchers and students from around the world.

Alan Reid, senior lecturer at the University of Bath, England, and editor of the international journal *Environmental Education Research*, will present the keynote address, titled “The State and Future of EE Research.” Throughout the day, we will revisit the important questions Alan raises, including in an afternoon plenary session facilitated by Cat Stylinski, assistant professor at the University of Maryland Center for Environmental Science. We will close by developing a list of items to share during a research panel discussion on Saturday, November 17, 2007, at 1:45 – 3:30 PM in Room 1B for the general NAAEE conference audience.



8:00 AM – 8:30 AM

Opening Plenary

8:30 AM – 8:55 AM

Plenary: State and future of EE Research

9:00 AM – 10:45 AM

Session I: Paper Presentations in 6 breakout sessions

11:00 AM – 11:45 AM

Session II: Panel Discussions

12:30 PM – 1:55 PM

Session III: Plenary Poster and Roundtable Session

2:00 PM – 3:45 PM

Session IV: Paper Presentations in 6 breakout sessions

4:00 PM – 4:45 PM

Report out: Cat Stylinski, Assistant Professor at the University of Maryland Center for Environmental Science

4:45 PM – 5:15 PM

Plenary: Closing Discussion. Ron Meyers will lead the closing discussion on messages to take to the Research Commission and the general audience perspectives on the symposium.

Wednesday Highlights

WORKSHOPS

- | | |
|--|--|
| 1. Downsview Park: Modern Living in a Modern World | VBCC/4D |
| 2. Wetland Outdoor Classroom: The Planning of Wetlands 11-Steps to Success | VBCC/1C |
| 3. Going Wild in the City: Discovering the Urban Ecosystem | Virginia Aquarium |
| 4. Bridging Conservation and Communities: A Conservation Education Toolkit | VBCC/4B |
| 5. Music - Build It and They Will Come | VBCC/4E |
| 6. Using the Environmental Impact Module as a Case Study for Environmental Justice | cancelled |
| 7. Evaluating your Education Program: A Practical Approach for EE Practitioners | VBCC/1B |
| 8. Service-learning 101 - Environmental Education in the Community | VBCC/1A |
| 9. Environmental Education - Guidelines for Excellence | VBCC/4C |
| 10. NAAEE Resource Reviews: Take the Plunge! | VBCC/4A (AM only) and Cyber Café in PM |
| 11. Learning Ocean Science through Ocean Exploration | cancelled |
| 12. Co-Creating the Story of the Emerging Culture of Sustainability | VBCC/5B |
| 13. The Environment and Paper | cancelled |
| 14. A New Way of Thinking: An Introduction to Education for Sustainability (EFS) | VBCC/5C |
| 15. Affiliate Workshop for Emerging Environmental Education Leaders | VBCC/3D & E |
| 16. Networking Now for the Future | VBCC/5D |
| 17. Designing a Certification Program in Your State | VBCC/4A (PM only) |

Tuesday, November 13
Wednesday, November 14

Thursday at a Glance

6:00 AM — 7:00 AM	Yoga	Doubletree Hotel Sequoia Room
7:00 AM — 11:30 AM	Registration Office Open	VBCC Lobby
7:00 AM — 8:00 AM	Commission/Committee/Council Chairs Breakfast	VBCC VIP Lounge
7:00 AM	VBCC stands selling coffee	VBCC Lobby
7:45 AM — 8:00 AM	National Environmental Education Foundation's Richard C. Bartlett Award Presentation	VBCC Ballrooms 1 & 2
8:00 AM — 9:15 AM	Industry Accountability: How It's Done	
8:30 AM — 4:30 PM	No EE Teacher Prep Program Left Behind Workshop	Doubletree Hotel Oak Room
9:30 AM — 12:15 PM	Concurrent Sessions	VBCC
9:45 AM — 4:00 PM	Screening Room shows Film Contest Finalists	VBCC 1A
11:30 AM — 1:30 PM	VBCC stands selling lunches	VBCC Lobby
12:30 PM — 1:45 PM	Connecting Environmental Education and Music Panel	VBCC Ballrooms 1 & 2
1:30 PM — 4:45 PM	Registration Office Open	VBCC Lobby
2:00 PM — 5:00 PM	Concurrent Sessions	VBCC
4:45 PM — 5:30 PM	Photo and Film Contest Awards	VBCC Ballrooms 1 & 2
	Peter Yarrow Performance	
	PLT Interpretive Dance	
5:30 PM — 7:30 PM	Exhibit Hall Grand Opening	VBCC Exhibit Hall A
	Buffet dinner and cash bar	
	Affiliate Welcome and "Cakewalk"	
	Poster Sessions	
8:00 PM	Sponsor Appreciation Reception	VBCC VIP Lounge

Thursday Highlights

No EE Teacher Prep Program Left Behind Workshop: Critical information that teacher preparation programs need to meet the national EE standards adopted by NCATE/NAAEE.

Richard C. Bartlett Award: The National Environmental Education Foundation recently established this award to recognize an outstanding educator who has successfully integrated environmental education into his or her daily teaching programs. This juried award will be personally presented by Richard C. Bartlett, honorary board member of NEEF, and a dedicated conservationist who has made enormous contributions to the advancement of environmental literacy nationwide. The winner will receive a \$5,000 award sponsored by Toyota Motor Sales, USA, Inc.

Industry Accountability: How It's Done Panel: This panel features industry leaders discussing "how industry rates industry" in sustainability and environmental practices, how industry makes these major decisions and the importance for environmental educators. Stu Dalheim, manager of advocacy and policy for the Calvert Asset Management Company, a leader in the socially responsible investment community for decades, will lead the panel. Todd Brady, worldwide environmental manager of Intel, and Dawn Rittenhouse, director of sustainable development for DuPont, and Mark Buckley, vice president of environmental affairs, Staples, Inc., will join in this interactive session to help each of us decide how we should choose partners for long-term success.

Thursday, November 15

7:00 AM – 8:00 AM

Commission/Committee/Council Chairs Breakfast

VBCC VIP LOUNGE

By Invitation Only

7:45 AM

VBCC Ballrooms 1&2

National Environmental Education Foundation's Richard C. Bartlett Award Presentation

PLENARY PANEL | 8:00 AM – 9:15 AM

Industry Accountability: How It's Done

See description on page 12.

SYMPOSIUM | 9:30 AM – 11:15 AM

Alternative Fuels and Advanced Technology Vehicles

VBCC/1D

PRESIDENT(S): Barry Carr (Homeland Energy), Chelsea Jenkins (Virginia Clean Cities), Tiffany Turner (SHENAIR, James Madison University), Mary Spruill (National Energy Education and Development Project)

As repercussions of our fossil-fuel economy become clearer, the need to develop renewable alternatives is some of society's most important work. This panel examines alternative transportation options, and why energy literacy is key in helping society move in a new direction.

HANDS-ON SESSIONS | 9:30 AM – 11:15 AM

An Inconvenient Truth: Climate Change & What You Can Do

VBCC/5D

PRESIDENT(S): Haily Summerford (City of Fort Worth-Environmental Management Dept.)

Summerford was trained by Al Gore to spread the message about global warming. Her presentation is a version of Gore's slide show, the basis of "An Inconvenient Truth," including updated data and resources as well as hands-on activities.

Bridging the EE/EJ Gap

VBCC/5A

PRESIDENT(S): Augusto Medina (EETAP)

Are you uncertain about how EE and environmental justice (EJ) overlap and diverge? Then help us examine their similarities and differences and how to incorporate EJ within EE, with a variety of resources and interactive exercises.

Community-Based Social Marketing Tools for Greening Offices

VBCC/4C

PRESIDENT(S): Elaine Jane Cole (Antioch University)

An overview of a community-based social marketing (CBSM) sustainable offices campaign at a university. Learn about the process of developing CBSM prompts and have an interactive opportunity to create your own.

Membership Development for Successful Organizations

VBCC/4E

PRESIDENT(S): Jennifer Visitation

An interactive panel to discuss successful strategies for membership development: recruiting, retaining and upgrading members; the role of members in your organization; member "benefits", members as active participants in your organization, members as leaders, creating diversity in your membership.

Question: Who's Turf is the Surf? Answer: YOURS!

VBCC/5B

PRESIDENT(S): Windy Arey-Kent (North Carolina Aquarium at Pine Knoll Shores)

Educators from the North Carolina Aquarium at Pine Knoll Shores will help you to "inspire appreciation and conservation" of YOUR aquatic ecosystems by facilitating programs and activities that incorporate art, music, puppetry, and lab-based experiments to teach ocean literacy principles.

Teaching Ecological Economics in Grades 6-12: Rationale, Content, and Methods

VBCC/4D

PRESIDENT(S): Susan Santone (Creative Change Educational Solutions)

Strategies, resources, and sample lessons for teaching ecological economics in grades 6-12. Learn how ecological, human, and economic systems are linked; compare "conventional" and ecological economics; and experience sample lessons on environmental manufacturing and other topics.

Teaching the Greatest Challenge to Sustainability: Climate Change

VBCC/5C

PRESIDENT(S): Tim Grant (Green Teacher)

Discuss the latest climate change research, followed by hands-on activities (with take-away materials) for youth educators related to the science and impacts of climate change, energy conservation, renewable energy, and transportation alternatives.

ROUNDTABLE DISCUSSION | 9:30 AM – 11:15 AM

VBCC/Ballroom 3

A Philosophy of Science for Environmental Education: Pragmatic Experimentalism

PRESIDENT(S): Ron Meyers (Meyers and Associates)

Overview of Dewey's philosophy of science for environmental and science educators teaching scientific methods or conducting research, a useful and intuitively friendly approach that embraces qualitative and quantitative methods in the social, life, and physical sciences.

A Project Based on an Environmental Perspective of Dengue Fever Cases Provided

PRESIDENT(S): Christiane Gioppo (Federal University of Paraná), Ricardo da Silva (Federal University of Paraná), Harriett Stubbs (North Carolina State University)

Environmental perspectives of the Dengue Fever used as a background to discuss alternative evaluation. The use of different disciplines together (i.e., science, education, environment, health, art, and GIS technology) can provide a new perspective for science and environmental education.

Friday at a Glance

6:00 AM – 7:00 AM	Yoga	Doubletree Hotel Sequoia Room
7:00 AM – 11:30 AM	Registration Office Open	VBCC Lobby
7:00 AM – 8:00 AM	Continental Breakfast	VBCC Exhibit Hall A
7:00 AM – 2:00 PM	Exhibit Hall Open	
7:00 AM – 8:00 AM	Committee and Council Meetings	
8:00 AM – 9:15 AM	Environmental Justice Panel	VBCC Ballrooms 1 & 2
9:30 AM – 12:15 PM	Concurrent Sessions	VBCC
9:30 AM – 4:30 PM	Screening Room shows Film Contest Finalists	VBCC/1A
12:00 PM – 2:00 PM	Authors' Corner	VBCC Exhibit Hall A
	Lunch for sale in Exhibit Hall, local dessert buffet provided	
1:30 PM – 5:00 PM	Registration Office Open	VBCC Lobby
1:45 PM – 4:30 PM	Concurrent Sessions	VBCC
4:45 PM – 6:00 PM	Commission and Committee Meetings	VBCC
	Higher Education Commission	Abbey Road Pub
6:30 PM – 7:00 PM	Buses depart for Nauticus	Front of VBCC
7:00 PM – 10:00 PM	Buffet Dinner, Live and Silent Auctions	Nauticus

Friday Highlights

Widening Our Vision: Combining Environmental Education, Environmental Health, and Environmental Justice Panel

Building on enthusiasm generated last year, this forum will feature nationally known speakers Tom Goldtooth (Indigenous Environmental Network), Alice Coles (Bayview Citizens for Social Justice), and Gus Medina (Environmental Education and Training Partnership). The forum will explore pathways to collaboration among environmental education, health, and justice. Join us in opening these transformative trails with diverse communities. J. Allen Johnson, Esq. (Chair, EJ Commission) will moderate the session.

screening room schedule	9:30 AM	The Dragon Run: A Step Into the Past
	10:10 AM	Planet H2O: Episode 102: Water World
	10:55 AM	Waters Journey Everglades Part I
	12:10 PM	Waters Journey Everglades Part 2
	1:25 PM	Black Diamonds: Mountaintop Removal and the Fight for Coalfield Justice
	2:55 PM	Kilowatt Ours
	3:50 PM	A River Reborn

Commission/Committee/Council Meetings: See list on page 23.

Nauticus Buffet Dinner: Our evening at Nauticus, a spectacular maritime-themed science center, includes the annual Stapp Scholarship fundraising auction, as well as a sumptuous buffet dinner of locally-raised vegetables, poultry, and pork. Last year's auction netted over \$8,000—so bid high and often to help surpass this in 2007!

Saturday at a Glance

6:00 AM – 7:00 AM	Yoga	Doubletree Hotel Sequoia Room
7:00 AM – 11:00 AM	Registration Office Open	
7:30 AM – 9:15 AM	Continental Breakfast	Exhibit Hall
	Exhibitor Prize Drawings	
7:30 AM – 9:30 AM	Share Fair	Prefunction area
7:30 AM – 8:30 AM	Committee and Council Meetings	VBCC
8:45 AM – 9:15 PM	Keynote Speaker Chad Pregracke	VBCC Ballroom 3
9:30 AM – 11:15 AM	Concurrent Sessions	VBCC
9:30 AM – 3:30 AM	Screening Room Shows Film Contest Finalists	VBCC 1A
11:30 AM – 12:15 PM	Celebrating Excellence Awards Luncheon and Keynote Speaker Dr. Sylvia Earle	VBCC Ballrooms 1 & 2
1:45 PM – 2:30 PM	NAAEE Business Meeting	VBCC Ballrooms 1 & 2
1:45 PM – 4:30 PM	Concurrent Sessions	VBCC
2:30 PM – 5:00 PM	Registration Office Open	
4:30 PM – 5:30 PM	Commission Meetings	VBCC
5:30 PM – 6:30 PM	President's Reception	VIP Lounge
6:30 PM	Buses depart for Oyster Roast	Front of VBCC
7:00 PM – 10:00 PM	Networking and Oyster Roast	On the beach

Saturday Highlights

Celebrating Our K-12 Partners: Saturday's agenda has been packed with presentations of interest to K-12 classroom teachers, but anyone can attend them.

Learn and Serve Virginia Grantees 7:30 AM – 8:30 AM in VBCC/4E

Meeting open to anyone in Virginia who would like to learn more about the Virginia Learn and Serve program.

Virginia Naturally Partners Meeting and Coffee 9:30 AM – 11:30 AM in Doubletree Hotel Sequoia Room

Important updates regarding regional teams, grant funding, and professional development. Virginia's new leadership initiative will be unveiled.

Share Fair: Participants include Duke Environmental Leadership Program, Great Smoky Mountains Institute at Tremont, Green Teacher, Universal Holiday Travels, Rainforest Alliance, University of Wisconsin—Madison Center for Biology Education, and Virginia Association of Soil & Water Conservation Districts.

Commission/Committee/Council Meetings: See list on page 23.

Virginia Aquarium's *Ocean in Motion* Truck: See live animals and examples of interactive learning that the aquarium brings to visitors with a touch pool and four onboard aquariums. The truck will be on display outside the convention center from 9:00 AM – 2:00 PM.

APPENDIX H

News Coverage - Print



Wednesday, August 8, 2007

Summer's sweltering wrath Ozone levels are climbing

By Robert Igoe
The Winchester Star

Winchester — While it's bad enough that the region is in the midst of a heat wave, the heat may be threatening air quality.

Along with Tuesday's high temperature of 95 degrees, the state Department of Environmental Quality's air-quality monitoring station in Frederick County recorded a peak level of 67 PPB — particles of pollution per billion.

The daily level reached the Air Quality Index's moderate, or "yellow" range — between 74 and 96 PPB. To qualify as moderate, an eight-hour average level must reach 65-84 PPB.

DEQ meteorologist Dan Salkovitz said elevated levels are not unusual during high temperatures.

"It's pretty typical for this time of year," he said. "It's much higher in the larger metropolitan areas such as Washington and Richmond."

Ozone is the main pollutant in smog and forms when pollution from cars, industrial exhaust, and other sources are heated by the sun.

Too much ozone can create a hazard for elderly and young persons, as well as those with breathing and heart problems.

Salkovitz said even higher-risk groups generally see no severe effects until the levels reach unhealthy, or "orange" status — a 97-119 PPB daily level or 85-104 PPB eight-hour average.

"For a person with no existing [health] condition, these levels should not have any serious effects," he said. "There may be some who get watery eyes or a scratchy throat, but the main issue is that orange-level ozone is unhealthy for sensitive groups."

Salkovitz said residents can help to control ozone levels by limiting the use of gasoline- or petroleum-powered engines, including vehicles and lawn mowers.

He also recommended that residents not burn brush or yard waste and turn off all appliances and lights that are not in use.

"This takes some of the demand off of power companies, which are being stressed by people's use of air conditioners," he said.

At Handley High School, head football coach Tony Rayburn said he has had to make some changes to the team's practice schedule to fight the heat. For now, he plans to hold practices chiefly in the morning hours.

Rayburn noted that the Virginia High School League has guidelines to advise coaches on activities that may be conducted during certain heat and humidity conditions.

"We had a few kids sit out a little bit here and there," he said of Tuesday's first day of practice. "But for the most part, we haven't had any problems."

Salkovitz said the ozone levels will remain yellow today and Thursday, but should return to the normal green level on Friday.

This coincides with weather forecasts of close to 100 degrees today and Thursday before dropping back to the 90-degree range on Friday.

In the meantime, the outdoors will feel much like the Lovin' Spoonful described it in "Summer in the City:"

Hot town, summer in the city

Back of my neck getting dirty and gritty

Been down, isn't it a pity

Doesn't seem to be a shadow in the city

All around, people looking half dead

Walking on the sidewalk, hotter than a match head.

"Summer in the City" by John Sebastian, Steve Boone, and Mark Sebastian (1966); © Windswept Holdings LLC, Carlin America Inc.



Piper Petitta, 4, of Winchester, worked up a sweat on Tuesday by bouncing on a trampoline at Montague Avenue United Methodist Church.
(Scott Mason)



Tuesday, August 28, 2007

Bike plan, sans funding, gets nod

By Ed Farrell
The Winchester Star

Winchester — The Frederick County Transportation Committee approved a comprehensive bicycle and pedestrian plan on Monday.

But the panel reaffirmed that it has no intention to budget the funding — about \$9 million — the study recommends.

County transportation planner John A. Bishop said he expects some changes in the wording of the Winchester-Frederick Metropolitan Planning Organization Bicycle and Pedestrian Mobility Plan to address concerns raised by the MPO board.

As worded, the plan raises "a fear it would create an expectation [that Frederick County] will spend \$5 million over the next five years," Bishop said.

Supervisor Charles S. DeHaven Jr. noted that while he did not see the county "spending that kind of tax dollars" to implement the bicycle plan, he could envision its leaders maximizing opportunities to obtain grants and to encourage future development to "be tied in" with the goals of the plan.

But even if alternative methods of constructing bicycle lanes and paths can be found, DeHaven said, county leaders would still have to consider the costs of maintaining the facilities.

Bishop then briefed the committee about one effort to obtain state funding, the Senseny Road Improvement Grant.

He said county officials applied for a grant in 2006 for what was then identified as a \$700,000 project that would include creating bicycle paths from Meade Drive to Williamson Road, and improved crossings at Senseny Road Elementary School and at intersections.

Bishop said the county was awarded a \$140,000 reimbursement grant for the project that, he told the committee, "we haven't done anything with yet."

He said he would submit an amended grant application to the Virginia Department of Transportation that would

expand the Senseny Road project from Interstate 81 to Greenwood Road.

Noting that VDOT typically honors about one-quarter of the amount requested, Bishop said it is important to widen the scope of the project.

"The strategy is to keep the dollar amount up, so if we get a quarter of it, we'll receive more funding," he told the committee.

The VDOT grant, Bishop said, requires a 20 percent county match, but comes with no deadline for use.

He said he has not determined the amount he will apply for in the next funding cycle, adding: "The main issue is the county cannot take the money for this project and spend it elsewhere."

Bishop noted that long-term plans call for Senseny to be expanded to four lanes, at which time bicycle lanes could be included.

He could offer no timeline for the completed widening of Senseny. "We gained a portion of it with the Orrick Commons project, and we've received some proffers from other landowners out there, but the key is when the project is placed in the VDOT six-year spending plan."

In other action, the committee agreed to forward to the county Board of Supervisors a proposal for the implementation of an Access Management Plan.

In documentation provided to the committee, access management is defined as "a systematic way to carry out the roadway functional hierarchy that is implicit in state, regional, and local transportation plans."

DeHaven said Frederick County is "way behind the ball on this."

In his staff report, Bishop is recommending that the Transportation Committee review "one or two primary considerations, such as signal or intersection spacing," each month.

Attending the meeting at the Frederick County Office Complex were DeHaven, Phillip Lemieux, James Racey, II, and Mike Smith.

— Contact Ed Farrell at
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Supervisors endorse paths for bicycles, pedestrians

But unanimous decision returns plan to commission for further changes

By Alex Bridges

(Daily Staff Writer)

WINCHESTER — Frederick County supervisors have endorsed the concept of building a network of bicycle and pedestrian paths.

But the Board of Supervisors stopped short Wednesday of backing the plan it received from the Winchester-Frederick County Metropolitan Planning Organization. Instead, supervisors voted 6-0 to send the Bicycle and Pedestrian Mobility Plan back to the MPO. Supervisor Gary Dove did not attend the meeting.

Once that group's policy board approves the document, according to the motion approved Wednesday, then county staff should look at ways to implement the proposed network into the locality's comprehensive plan through amendments. Supervisors noted that the mobility plan would have to extend beyond the MPO's coverage area.

Supervisors Chairman Richard Shickle questioned the process by which the plan came to the board.

"It is impossible, in my mind, for us to adopt a plan that calls for so many other elements, or support a plan, before we find a place or set up a committee to find out how we're going to do that," said Shickle.

The chairman sought help in crafting a motion that supported the plan but tried not to implement it at the moment.

"This is something we need to be about and endorse this concept. I endorse it fully," said Supervisor Gene Fisher, who then added he had concern with some elements of the plan. "Some of these details in here, in no way would I accept, just from a safety standpoint. ... Some of the stuff I see in here scares me."

"We gotta put safety at the top of the list and make sure that our citizens aren't running the gauntlet if they're trying to walk or cycle," Fisher said.

Supervisor Charles "Chuck" DeHaven expressed support for the mobility plan.

"I think the study was ready. I'm very pleased with the connectivity, the concepts within the plan that are comprehensive and inclusive and community-wide," DeHaven said. "And I would like to see staff take this plan, in its final form as determined by the policy committee [of the MPO], and then look at how we would

implement portions of it into our comp plan and to the point where we would be insisting that future development implement the plan."

In other business, supervisors:

- Voted 6-0 to deny a request to rezone 59 acres of property near the intersection of U.S. 11 and Cedar Hill Road in the Stonewall District from rural area to light industrial with proffers. BPG Properties Ltd. sought to rezone the property and make it available for office, warehouse and/or industrial use.

DeHaven echoed concerns from the Department of Planning and the Planning Commission that rezoning the property, even with proffers, would not conform with the county comprehensive plan or its northeastern road plan. Nor did the request address "interparcel connectivity" or bring the adjacent road network to a level C performance standard, he said.

Ty Lawson, an attorney representing the applicant, defended the rezoning request and the methodology in its traffic impact analysis. He noted that other adjacent properties are zoned light industrial and that the county has little of this type of property and could use it.

- Approved a contract to buy three parcels of property in Gore from Katherine Smeltzer for \$165,900.
- Granted tax-exempt status to Blue Ridge Hospice.
- Approved a resolution authorizing the issuance of bonds not to exceed \$4 million to help pay for a 12th elementary school.
- Conveyed the deed for the old Stephens City School from the county to Stephens City.

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Tuesday, September 18, 2007

Planning for future growth

By Drew Houff
The Winchester Star

WINCHESTER — For the most part, new developments in Frederick County fall in the Urban Development Area or the Sewer and Water Service Area.

Projects are built in those areas because of services available, including the county's road network.

Michael T. Ruddy, deputy director of the county's Department of Planning and Development, said the Carriage Park development and the Haggerty Property's Master Development Plan revisions work in conjunction with the county's Comprehensive Plan.

Much of the work is done in consideration of the Eastern Road Plan, trying to connect developments with new or existing roads so that residents can easily travel throughout the county.

In August, the county Board of Supervisors approved rezoning the 45.44-acre Carriage Park development — off Va. 7, east of Winchester — which will add as many as 240 single-family townhouses on the property.

At the same meeting, the supervisors approved rezoning the Haggerty Property's 111.56 acres to Residential Performance District as part of a proffer revision.

The project, also called The Canyon, could add as many as 300 single-family, detached, and attached residential dwellings about three miles east of Winchester and 1,500 feet south of Va. 7.

"It's obviously a developing area of the county," Ruddy said, noting that each of the projects will affect traffic flow near the Opequon Wastewater Treatment Plant.

"When projects come along, we want to make sure they work with Comprehensive Plan, not just in the land use, but the transportation all works together," he said. "Regardless of when these projects come on line, they'll add to the bigger whole, which has been thought out and planned out.

"Transportation is one of the key elements there, not only with future [Va.] 37 coming through there, but the relocation of Valley Mill Road and the major collector road system that goes above and beyond [Va.] 7 and

[Va.] 37."

Carriage Park, Ruddy said, originally did not seem to fit in with the bigger picture of needs of the county, but the proffers and other steps taken by the developer, Carriage Place LLC, have made it a better match for the Frederick County Comprehensive Plan.

He said the Frederick County Long-Range Land-Use Plan demonstrates the uses for property east of Interstate 81.

The majority of the properties are still best suited for residential use, Ruddy said, although business and commercial projects would be mixed in with the residential properties.

He said the county's main effort is to have residential properties along the Urban Development Area and the Sewer and Water Service Area, where the resources are readily available to assist in the needs of subdivisions and developments.

"In the past year or so, we've really been reinforcing the county's long-range policy, which is the Urban Development Area and the Sewer and Water Service Area," Ruddy said. "There is a dynamic there as compared with the rural areas and urban areas; so within the urban-designated areas, that's where the infrastructure is and planned to be so that the growth can be accommodated, depending on the type."

He said following those guidelines has led to a mix of urban and rural areas, but the mix still follows the county's overall needs and plans.

"We looked at the neighborhood villages and urban centers, which were a key part of the UDA study," Ruddy said. "The county's long-standing policy has followed a lot of things, with Interstate 81 being somewhat of a boundary between the prime agricultural soils and limestone belt on the western side which is conducive to agricultural farmland, which makes the policy that you don't want to get into that [with development] because it is good for other things, including agricultural uses."

"On the eastern side, there is a drain that goes toward Opequon Creek, which is lined by shale and makes for poor agricultural soil and poor for drainfields, making for accommodating more intensive growth."

Ruddy noted that the rerouting of Valley Mill Road, as well as the establishment of Haggerty Road and another east-west connector road, should help to handle the impact of the increased traffic in that area.

The proximity of the Opequon Water Treatment Facility and the Parkins Mill Facility also helps with the development of residential neighborhoods to the east of I-81, he added.

Ruddy said the Haggerty Property, a development from David Holliday's Canyon LC, is further along with plans than the Carriage Park development.

He said the recent action taken by the supervisors was to adopt a change in the Master Development Plan for the Haggerty Property because it would provide for an alternative for Valley Mill Road, ensuring the protection of sensitive natural resources and not using an existing one-lane bridge.

Carriage Park, Ruddy added, has areas where additional connector roads can be placed to allow access to the development from Valley Mill Road or some other east-west collector road.

He said the two developments, along with other properties, will follow the county's long-range plans, as well as set the standard under which that portion of the county is developed.

Those plans include Channing Drive becoming more of a north-south road, connecting Senseny Road to Valley Mill Road.

Ruddy said Valley Mill Road's rerouting, for example, will improve traffic flow, since the one-lane bridge will no longer serve as a main part of the road system.

He added that the Haggerty Property will be a crucial part of the future Va. 37 as well, since Va. 37 passes through The Canyon and loops back to Interstate 81 and its Exit 310 interchange near Kernstown.

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Second biking-walking path grant sought

By Robert Igoe
The Winchester Star

Winchester — More money could be coming for a project to improve "green" transportation.

At its regular meeting on Monday, the Frederick County Transportation Committee announced that it will apply for a second enhancement grant to improve non-motor vehicle access near Senseny Road Elementary School.

The project will enhance bicycle and pedestrian paths near the school. That network will also serve as a cornerstone of a planned larger system of bicycle and pedestrian paths that will involve the county and Winchester.

Last year, the committee received \$140,000 toward the \$2.07 million project from an enhancement grant.

In other actions, the committee announced that a project to relocate Exit 307 (Stephens City) on Interstate 81 south of its current location has been added to the county's Capital Improvement Plan.

According to the project justification form, the relocation is being coordinated with the Warrior Drive extension and Stephens City bypass.

The project has an estimated cost of \$60 million, but no target dates have been set for the construction.

The committee also discussed potential changes to the county Zoning Ordinance to limit motor vehicle access on major roads.

Under the current ordinance, driveways must be spaced at least 150 feet from the nearest driveway or intersection if the road it connects with has a speed limit of less than 35 mph.

If the road has a speed limit higher than 35 mph, that spacing requirement increases to 200 feet.

The committee is asking the Board of Supervisors to discuss changes to the ordinance, including increasing the spacing requirements and encouraging the use of interparcel connectors, particularly on important business arteries such as U.S. 11.

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Wednesday, October 17, 2007

So scant a resource, so vital it be pure now, in the future

By Drew Houff
The Winchester Star

WINCHESTER — About 70 percent of the world's surface is covered by water, but only 0.6 percent of the world's water is groundwater.

Such a scant percentage helps demonstrate why clean groundwater remains a key concern for local political leaders, citizens, scientists, and government officials.

Many of those people attended the two-day Shenandoah Valley Natural Systems Symposium at Shenandoah University on Monday and Tuesday.

The symposium's theme, Science for "Taking Care of the Water" plus air and land relationships, brought together the representatives of the U.S. Geological Survey, the Foundation for Earth Science, and the Great Valley Water Science Forum along with the Shenandoah Valley Regional Water Resources Policy Committee and the Shenair Local Government Committee.

The goal of the symposium was to determine a Shenandoah Valley science plan to inform policy makers about natural resources throughout the Shenandoah Valley, representing Frederick, Clarke, Shenandoah, Rockingham, Page, and Augusta counties plus the cities of Winchester, Harrisonburg, Staunton, and Waynesboro in Virginia, and Berkeley and Jefferson counties in West Virginia.

John Staelin, chairman of the Shenandoah Valley Regional Water Resources Policy Committee, said the gathering of officials and the sharing of information was a key result from the symposium.

"You need to know the information you have and also the



Patrick McBride, an employee with Applied Coherent Technology, was one of the morning speakers at Tuesday's conference on water resources at Shenandoah University.

He spoke on fusing science data to answer questions about water in the Shenandoah Valley. The goal of the symposium centered on how to keep groundwater, only a small percentage of the earth's water, clean.

(Rick Foster)

information you still need to get," Staelin said on Tuesday evening.

He noted that information then can be used to develop strategies to protect resources and make long-range plans.

Staelin said the USGS' commitment to the region, including the investment of \$1 million, shows how valuable the Shenandoah Valley is on a larger scale.

Jim McNeal, a USGS geologist for the eastern region, said the karst infrastructure in the eastern United States makes discoveries in the Shenandoah Valley all the more valuable because they can be applied from upstate New York down to Tennessee, as conditions are similar.

That similarity, he said, should attract different researchers who want to come to the region, increasing the importance to independent researchers and government studies.

McNeal said such an emphasis likely will increase research in the Shenandoah Valley and subsequently lead to the better protection of natural resources.

Tom Christoffel, a senior planner with the Northern Shenandoah Valley Regional Commission, said the gathering put everyone on the same page, helping them to form policy and programs that will lead to better water reserves.

Pat Gochenour, a Frederick County resident who participated in the forum, said there was a camaraderie among the participants, as each wanted to do what he or she could to help.

"This can move forward; we can move forward," she said of the suggestions made by the different participants. "When you have a symposium like this, you get scientists giving you the background you need. You can still continue to work forward because all of the other state agencies all work with you."

Gochenour said the participation of various state officials also helps, making the effort more than political.

"We also got to show we are good stewards of God's creation," she said.

The various proposals noted what are issues in Jefferson County, W.Va., may not be issues at the southern end of the Shenandoah Valley, yet some commonality — such as the need for monitoring groundwater — are key in all of the region. The sharing of information also was a key theme, as the public needs to be better informed on the effects of growth and land use on water resources.



Thursday, October 18, 2007

MPO adopts unfunded biking/walking plan

By Ed Farrell
The Winchester Star

Winchester — The Winchester-Frederick County Metropolitan Planning Organization adopted its \$80,000 bicycle and pedestrian plan, but it will be up to Frederick County, Winchester, and Stephens City to determine how they wish to fund the study's recommendations.

Approval of the plan included the addition of a statement clarifying that "cost estimates are provided for planning purposes only and are not a schedule or guarantee of local funding."

"As far as the MPO is concerned, we've adopted the plan," said Frederick County Supervisor Charles S. DeHaven Jr. "Now it will be up to the county and the municipalities to determine the portions they wish to implement and fund."

Among the report's recommendations are \$14.6 million in "short-term" bicycle and sidewalk projects.

The report recommends \$3.6 million in sidewalk-related improvements for Winchester, \$496,000 for similar work in Stephens City, and \$5.9 million for Frederick County.

The report also recommends \$4 million for "short-term" bicycle facilities for Frederick County, with the most significant being a \$720,800 2.1-mile "shared-use path" on U.S. 522 (North Frederick Pike) from the Winchester city line to Indian Hollow Road.

The plan, in its entirety, can be viewed at www.winfredmpo.org.

Present at the meeting, held at the Frederick County Office Complex, were DeHaven, Stewart R. Masters, and Art Major. Absent were Richard C. Shickle and Charles T. Gaynor.



The \$80,000 bicycle/pedestrian plan has drawn moral support at all levels, but financial support is still lacking. Its passage, therefore, doesn't mean much will occur soon.
(Jeff Taylor)

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Tuesday, October 23, 2007

Land preservation event set

By Robert Igoe
The Winchester Star

Winchester — The Frederick County Conservation Easement Authority will host a celebration from 7 until 9 p.m. on Saturday in the Museum of the Shenandoah Valley.

The event, designed to demonstrate the importance of rural land preservation, will also feature locally produced wine and dessert and a silent auction.

The Conservation Easement Donation Program allows landowners to earn the appraised value of agricultural land by giving up development rights to that land, which is protected from development in perpetuity.

The land is held by the Board of Supervisors, the county Conservation Easement Authority, and other government agencies, though ownership remains with the property owner.

Besides the purchase price, the landowner can also take advantage of state and federal tax breaks, including presenting the value of the property against income tax liabilities for up to 10 years.

The featured speaker will be Doug Rinker, owner of Winchester Equipment Co.

For more information about the easement program, or to make a reservation, call Diane Kearns at 540-665-5651.

— Contact Robert Igoe at
rigoe@winchesterstar.com



Wednesday, October 24, 2007

City begins review of comprehensive plan

By Ed Farrell
The Winchester Star

Winchester — The first full-scale update of the city's Comprehensive Plan, is under way, with major decisions about form and format being considered by the Planning Commission.

At a work session on Tuesday, the commissioners discussed details of the plan, described by Planning Director Timothy A. Youmans as "a guide for the physical development of the community into the future."

It details areas to be included, information to be released to the public, and the type of oversight needed.

Youmans provided the group with two proven models: one used by Harrisonburg, which updated its plan in 2004 under the guidance of 14 individuals; and one by Blacksburg, which created a 45-year outlook that included 16 groups and committees, with more than 100 people listed.

James W. Deskins, the city's economic development director, described the differences: "The Harrisonburg model was pragmatic; Blacksburg was academic."

The decision on ways to proceed with the plan update is the sole purview of the Planning Commission, in accordance with Virginia law, Youmans said.

State guidelines say such plans must be "reviewed" every five years, he said, but they provide no timelines for updates.

The planning commissioners, however, began notifying the City Council early this year about their belief that the city's 16-year-old primary planning document was due for an overhaul.

The city government has budgeted \$80,000 over the next two years to pay for the study, which is expected to take 18 months to complete.

Among the areas recommended for inclusion in the study are: demographics and trends; housing; transportation; community facilities and services; general welfare; historical, cultural, and architectural resources; economic development; intergovernmental cooperation; land use; environment; and implementation.

Suggested "quality of life" issues that could be included are: highly educated citizenry; economic opportunities and prosperity; vibrant, age-diverse population; environmentally sustainable; engaged public; enhanced environmental, natural, recreational, and cultural opportunities; preservation of historic, architectural, and cultural resources; neighborhood preservation; safety, convenience; and diverse land use.

Youmans said that state law requires any local revision to consider the concept of "new urbanism," which, in its simplest form, is neighborhood development that attempts to provide concentrated areas in which residents can live, work, and shop.

As part of developing the scope of the plan's update, Deskins said he is recommending that the city government hire a consultant to perform a detailed survey of residents.

This is called a "Statistically Valid Citizen Customer Satisfaction Survey," and Deskins said the information provided by such a study would be invaluable in gauging city-provided functions which residents feel are done well, or which need improvement.

Deskins said the survey should include questions that ask about overall satisfaction with the quality of services, overall image and quality of life, and the importance of reasons for living in Winchester.

Other possible questions would ask specifics about the public's views on safety, recreation, city maintenance, enforcement of codes, and perception of city leadership.

The survey would, Deskins said, "provide a tool for informed decision-making regarding long-range planning in the Comprehensive Plan."

The next workshop to discuss the plan is set for 7 p.m. on Tuesday. Additional meetings on the plan are set for 7:30 a.m. on Nov. 6 and 7:30 a.m. on Nov. 27.

All meetings are planned for the Exhibit Room on the fourth floor of Rouss City Hall, except for the Nov. 6 meeting, which will be held in the City Council chambers.

Attending the meeting in Rouss City Hall were Susan G. Masters, Nate L. Adams, III, David Shore, Phillip Weber, Jr., John A. Willingham, and Frank Sublett. Absent was Kevin L. Talley.

— Contact Ed Farrell at
efarrell@winchesterstar.com



Wednesday, November 28, 2007

Comprehensive plan getting a makeover

By Ed Farrell
The Winchester Star

Winchester — With the first full-scale update of the comprehensive plan in 16 years under way, the city's Planning Commission examined priorities listed in the document's last update.

Planning Director Timothy A. Youmans gave the board a briefing based on the city's existing comprehensive plan, which was adopted in 1991 and last updated in 2005.

While many of the goals listed in the document, which Youmans has described as "a guide for the physical development of the community into the future," are still valid, several are clearly in need of revamping.

One outdated practice, Youmans said, involved the creation of private streets in Winchester.

The current comprehensive plan still says "private streets are allowed and generally utilized ... sometimes to the detriment of overall public circulation and access needs." But Youmans said the city has altered that stance.

"We haven't had a private street project within the last decade," Youmans said, in part because the city now requires such streets to meet the same standards as public streets.

The trend toward "New Urbanism" — creating self-sustaining neighborhoods where residents live, work, and shop close to home — also has the potential, Youmans said, to be "a huge departure from our current practices."

Some areas of the city, such as those used historically for heavy industry, have the potential for redevelopment in the New Urbanism model, he said.

"There's not going to be an expansion of heavy industry in Winchester," Youmans told the commission. "The [City] Council's made that clear."

Attending the Planning Commission meeting in Rouss City Hall were Nate L. Adams III, David Shore, Philip Weber Jr., and Frank Sublett. Absent were Susan G. Masters, John A. Willingham, and Kevin L. Talley.

— Contact Ed Farrell at
efarrell@winchesterstar.com

Thursday, December 6, 2007

Panel considers future projects

By Robert Igoe
The Winchester Star

Winchester — Changes to the county's Capital Improvement Plan and sign ordinance will get a look-over from county officials before public hearings begin.

During its regular meeting on Wednesday, the Frederick County Planning Commission held discussions on these issues, then sent its comments to the Board of Supervisors, which will hold its own discussions at its regular meeting at 7:15 p.m. on Jan. 8 in the Frederick County Office Complex.

The CIP lists 55 projects, including four that have been added to the plan:

- * New baseball field lighting at Sherando and Clear Brook parks (\$1,069,000).
- * Phase two of the county's Sherando Park bicycle trail (\$450,000).
- * The relocation of Exit 307 on Interstate 81 at Stephens City (\$60 million).
- * A north-side taxiway connector for Winchester Regional Airport (\$1,100).

Key returning projects include \$55,250,000 for a new high school, \$35 million for a new middle school, \$34 million to replace Frederick County Middle School, \$47.8 million to widen U.S. 11 north of Winchester to the West Virginia state line, \$23 million to extend Warrior Drive near Stephens City, \$20 million to extend Channing Drive east of Winchester, \$22 million to widen Senseny Road east of Winchester, \$18.2 million for a new transportation facility, and \$7.6 million for new park land.

The changes to the sign regulations would allow banner signs and electronic message signs in all zoning districts, though banner signs would be limited to a maximum 30-day display and electronic message signs would not be allowed to use animation or change messages more than once every two minutes.

The changes would also limit the sizes of signs along roads. Signs on arterial roads would be limited to 25 feet in height and 150 square feet. On collector roads, they would be no more than 15 feet tall and 100 square feet. Signs on all other roads would be limited to 12 feet in height and 50 square feet.

Attending the Planning Commission meeting in the Frederick County Office Complex were Christopher Mohn, Roger Thomas, June M. Wilmot, Charles E. Triplett, Robert Morris, Gary R. Oates, Gregory S. Kerr, H. Paige Manuel, Gregory L. Unger, John H. Light, and Cordell L. Watt. Absent were George J. Kriz and Richard C. Ours.

— Contact Robert Igoe at
rigoe@winchesterstar.com



Monday, December 10, 2007

Easements are seen as way of protecting look of Frederick

By Alex Bridges -- Daily Staff Writer

WINCHESTER — Preservationists want more Frederick County property owners to protect their land from builders rather than see it used for more houses.

One way to do that is to put land into a conservation easement.

About 3,000 acres of private land in Frederick County is held or co-held in conservation easements by the Virginia Outdoors Foundation. Other land trusts also hold easements.

A handful of property owners attended a recent informational meeting held by the county's Conservation Easement Authority, learning about the process and benefits.

A procedure is in place for Frederick County to buy property development rights and to allow the authority to co-hold an easement with the Board of Supervisors. But as Diane Kearns, vice chairwoman of the authority, said Thursday, supervisors have taken a pass.

"So it's all sort of there right in place but it's not been funded nor have they said they want to do it if somebody goes through the process," Kearns said. "The thought process behind [it] is that they're just not convinced that they need to spend public funds to do this."

About \$265,000 in state matching money from a \$4 million fund is available to the county if it chooses to enter the business of buying development rights, she said. The county could qualify for that money, Kearns added.

"I've got my fingers crossed that something will change some way or that the right piece of property might come along that everyone wants to get behind," Kearns said.

The authority doesn't even have a budget — save for about \$2,500 from private donors. So now Kearns sees the authority educating the community about the benefits of conservation easements.

"We're trying to get the word out about those options and we're not necessarily seeking to hold them ourselves," county planning technician Amber Powers said. "It's one of those things where it's good to have that option because there are going to be properties perhaps in the future that will need county protection that may not fit into that niche that the Potomac Conservancy serves."

The conservancy also holds easements and has been active in the county.

Easements can benefit the county. Data from the U.S. census of agriculture show the county spent 37 cents per dollar in revenue, after land-use tax adjustment, to supply public services such as fire and rescue to open space and farmland in 2002. By comparison, it costs \$1.19 per each dollar in revenue to service residential property. It cost 29 cents per dollar to service commercial and industrial land that year.

"Conservation easements can still be working land," Powers said. "Many of them are farmland and are still being used as farms, so in that sense there's no loss of functionality."

By comparison, Clarke County has moved to buy development rights in its efforts to preserve open space. Planning Director Charles "Chuck" Johnston said Clarke's conservation easement authority, in place since 2003, receives \$150,000 per year from any surplus revenue to buy development rights. But most of the county's more than 16,000 acres now in easement has come from donations and is held by the Virginia Outdoors Foundation. Because the state agency generally doesn't take easements of less than 100 acres, the county can and does.

Kearns said that if, for example, the county wanted land for a park, it makes sense for it to buy property rights on a tract and put it into an easement because the value would drop and it would cost less.

She also noted that the more open space there is in the county, fewer roads have to be built than for housing or commercial development.

Conservation easements have their benefits, but putting land into one should start with an owner's desire to preserve the property, Kearns said. The financial considerations should be secondary, she added, though selling development rights gives the owner money outright while they still hold the land. Also, the value drops and the owner's taxes are reduced. By donating the easement, Kearns said the owner would be eligible for state tax credits and federal tax deductions.

But property in easements doesn't necessarily mean less tax revenue for the county because the assessment on the land could rise after a period, Kearns said. A buyer may want land in easement to be surrounded by similar tracts to be assured that their view may remain intact and that no development could occur around the land.

"I know what's going to be around me, and that's marketable and that has basically raised that up, so if you can get a critical mass of these things together, your negative land values suddenly swaps to a positive," Kearns said.

"If you have space which is open around you, it increases your quality of life," she added. "[T]hat's why I think it's worth spending some public monies because I hear a lot of people say they like the way Frederick County looks. They like to be able to drive to work and see orchards and see cattle and see open space."

** Contact Alex Bridges at abridges@nvdaily.com*

Excerpt From: VaNaturally November News

Assorted items of professional interest

Thankful for Clean Air Art Contest

Valley AIRNow, a non-profit air quality outreach program serving the Winchester-Frederick County area, is inviting local young artists to celebrate Thanksgiving and clean air in the first annual *Thankful for Clean Air* art contest. Participating artists should address the theme "What **YOU** can do to protect the air that **WE** breathe!" Examples include carpooling, refueling in the evening, checking tire pressure, keeping your car properly maintained, and reducing vehicle idling. For more examples or contest details, visit the Valley AIRNow website at www.valleyairnow.com/artcontest.htm.

Air & Waste Management Association Education Programs

The Air & Waste Management Association, an international association of environmental professionals, has published EE Resource Guides for air quality and non-point source pollution prevention for grades K-12, as well as the grade 6-8 Air Quality guide in Spanish and French. Download fact sheets at <http://eelink.net/cgi-bin/ee-link/newclick/1294097index>

Edutopia Issue Devoted to EE

The October 10, 2007 issue of *Edutopia* "Go Green 2007: Education for the Ecosystem" is devoted to environmental education. Search the Go Green resource database by topic for activities such as field trips or lesson plans by grade-level. Learn about schools involved in innovative learning projects on cool schools and sustainable schoolyard design. Read the articles on EE activities happening in and out of the classroom. <http://eelink.net/cgi-bin/ee-link/newclick/1294093>

Earth Gauge Launches New Web Site

Earth Gauge is an initiative by the National Environmental Education Foundation (NEEF) and the American Meteorological Society (AMS) providing meteorologists with environmental information to help them connect weather with the environment. Browse the environmental topics for practical tips on dealing with certain weather conditions. www.earthgauge.net

Items You Never Thought To Recycle

We recycle newspapers, magazines, cans, and cereal boxes. If you are only recycling the obvious items you are not even chipping the surface. This website will try to tell you how and where to recycle the not-so-obvious. www.dumblittleman.com/2007/10/items-you-never-thought-to-recycle.html

Fun Fact

Recycling one aluminum can saves enough energy to run a TV for three hours -- or the equivalent of a half a gallon of gasoline. <http://members.aol.com/ramola15/funfacts.html>

APPENDIX I

Public Service Announcements
Clear Channel Radio Submissions

**10: and 15: DRAFT PUBLIC SERVICE
ANNOUNCEMENTS**

TITLE: Trip Chaining

LENGTH: 10 seconds

TYPE: Live read

Trip chaining—or combining your errands into one trip—saves time and reduces congestion and pollution. So keep it up—because it all adds up to cleaner air.

Sponsored by Valley AIRNow.

TITLE: Car Maintenance

LENGTH: 10 seconds

TYPE: Live read

Regular car maintenance can save you money, reduce traffic congestion due to breakdowns and reduce pollution. So keep it up—because it all adds up to cleaner air.

Sponsored by Valley AIRNow.

TITLE: Alternate Choices

LENGTH: 10 seconds

TYPE: Live read

Sharing a ride, walking or biking can save you money and reduce traffic congestion and pollution. So keep it up—because it all adds up to cleaner air. Sponsored by Valley AIRNow.

TITLE: Bad Air Day

LENGTH: 15 seconds

TYPE: Live read

Having a bad air day? If the Air Quality Index is orange, you bet you are.

Summer is ozone season and with longer days and temperatures that soar, pollution in the air does too. To find out more visit valleyairnow.com.

TITLE: Common Sense

LENGTH: 15 seconds

TYPE: Live read

This summer, before you work out, exercise a little common sense by checking the Air Quality Index. When it's forecast to be orange, consider adjusting your daily outdoor activities to reduce your exposure to ozone air pollution. Look for it in your local paper or listen for it on [insert radio station name]. Visit valleyairnow.com for more information.

APPENDIX J

Virginia Clean Air Champions
What's Your PSI? Checklist

What's Your PSI?

Vehicle manufacturers and auto experts recommend using a tire pressure gauge to check inflation at least **once every month**. Believe it or not, this simple action will not only improve your fuel economy and extend the life of your tire, but it will also improve the quality of the air we breathe! Visit www.virginiacleanairchampions.org for more tips and information!

Tire Pressure Checklist

- Step 1:** Find the recommended inflation pressure for your tires in the owner's manual or on the vehicle placard, commonly located in the frame of your driver or passenger-side door. **Note: Do not follow the pressure described on your tire! This is the *maximum* tire pressure and refers to the pressure required to carry the maximum load of the tire.**
- Step 2:** Remove cap from the valve on one tire and use the Clean Air Champions tire gauge provided to take a pressure reading. Firmly press the tip of the gauge on the valve until air no longer escapes and read the pressure using the graduations of the gauge. **Note: only measure pressure when your tires are "cold"! If your vehicle has been parked for at least 3 hours and has not been driven for more than one mile since, you will get an accurate cold tire inflation reading.**
- Step 3:** Add air as needed to achieve your recommended tire inflation pressure. If you overfill the tire, release air by pushing on the metal stem in the center of the valve with your gauge, then re-check the pressure.
- Step 4:** Replace the valve cap and repeat for each tire.

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APPENDIX K

Opequon Watershed Water Quality Improvement
& Natural Resource Conservation Activities

Opequon Watershed Water Quality Improvement & Natural Resource Conservation Activities
from
July 1-December 31, 2007

Winchester Green Circle

Working with a consultant the City's focus has been utilizing the **Transportation Enhancement Program** funding to design, acquire right of way and construct the **Town Run Linear Park** section of the project. This section will connect Jim Barnett Park, Shenandoah University, the Frederick-Winchester Visitors Center and the new History & Tourism Center with Shawnee Springs Preserve and the Winchester Historic District. The route will follow Town Run with a 10' wide multi-use separated trail. It is anticipated that construction will begin in late spring of 2008 on the segment from Jim Barnett Park to the Pall Mall Street RR trestle. In November a proposal was submitted to VDOT for the remaining section from Pall Mall Street to Cecil Street.

The City's consultant is also working on the Bike & Pedestrian Safety Program grants to install pedestrian signals and crosswalks at key intersections along the Green Circle route. Construction began in October on two of the seven intersections/projects.

The **Green Circle Committee** has established an ad-hoc sub committee of local stakeholders and they are working on providing input to the original conceptual route and additional trail connections. The group is also working on upgrading the existing Green Circle website which has been used primarily to promote the annual Fall Fitness Fair. The project will feature an interactive map along with information on events and how citizens can get involved and donate to the project. The website upgrade is being underwritten by the Winchester-Frederick County Economic Development Commission.

On October 6 the 4th annual **Winchester Green Circle Fall Fitness Fair** was held featuring the GC 5-K and 1 Mile Kid's Fun Run. The event was the most successful to date with 100 runners for the 5-K and 48 for the Kid's Run. The goal of the event is to raise awareness about the Green Circle project and promote healthy active lifestyles for the citizens of Winchester and Frederick County. The running events are sponsored by the Shenandoah Valley Runners and the Shenandoah University Department of Physical Therapy. All proceeds go to support the Green Circle project.

Win-Fred MPO Bike & Pedestrian Mobility Study

On October 17 the MPO Policy Committee approved the Bike & Pedestrian Mobility Study conducted by Toole Design Group of Hyattsville, MD. The project experienced numerous procedural delays and took approximately 18 months to complete, however everyone agreed that the final product will be of great value to the MPO and surrounding jurisdictions as we strive to improve and promote bike-ped facilities. The Steering Committee felt fortunate to work with a consultant with the experience of Toole Design Group. The plan contains chapters on existing conditions, facility, policy and program recommendations and an implementation plan. The appendices include bike-ped facility design guidelines, ordinance reviews and definitions. The study also provided maps and selected case studies. All products can be accessed at www.winfredmpo.org.

Opequon Watershed Clean-Up and World Water Monitoring Day

This second annual event was held on Saturday October 14; there was a tremendous response from the community with 43 participants. A group of adults and older students worked in the city on a stretch of Abrams Creek and collected over 1,500 lbs. of trash and debris. Another group led by Tara Sieber (DEQ) and Jim Lawrence (TOW) took part in a water monitoring demonstration on Redbud Run in Frederick County. The students and their parents also toured the Virginia Game & Inland Fisheries property which is part of the Redbud Run Greenway.

Winchester Natural Resources Advisory Board

The ordinance to create the Natural Resources Advisory Board (NRAB) was approved by Winchester Common Council on August 14, 2007 by a 7-2 vote. Common Council is in the process of reviewing the procedures it has in place to create advisory boards and the initiative has not advanced since approval. Two key members of the Council voted against the ordinance and we are concerned that there may be further delays. The city and the region are facing some serious mandates to improve water quality and we are hoping this board will bring additional technical and financial assistance to address these natural resource issues. To date local governments have been unable to obligate staff or solicit assistance to improve water quality. On the other hand NGOs and their partners have been successful in bringing resources to the community such as the Opequon Targeted Watershed Grant and numerous Urban & Community Forestry Grants along with Water Quality Improvement Funds. It is hoped that the NRAB can serve as a catalyst for change through development of well coordinated public/private partnerships that seek to improve local environmental health.

Opequon Targeted Watershed Project

The Virginia Tech Biological Systems Engineering Department and its local partners received a Targeted Watershed Grant from the EPA in 2006. The grant which is administered by the National Fish & Wildlife Foundation is entitled "Effective Strategies for Reducing Nutrient Loads in the Opequon Creek Watershed". The 3-year, \$998,000 grant is now in its second year. In year one a comprehensive monitoring program was developed for the Virginia portion of the watershed. Currently 38 sites are being monitored bi-weekly for both nutrients and bacteria. In addition the project has installed two floodplain wetlands and will monitor them for their ability to remove pollutants from the stream during storm events. The overall goal for the project is to develop a comprehensive nutrient reduction plan for the entire watershed and set up an off set trading program for the Winchester-Frederick Service Authority which operates two WWTPs on the Opequon. In year two a monitoring program for West Virginia will be developed along with the installation of additional innovative stormwater Best Management Practices (BMPs).

Redbud Run Greenway

This is a multi faceted watershed management project providing protection, access and interpretation of natural & historic resources in Frederick County.

A Kick-Off meeting of the major landowners and organizations currently involved with the project was held on June 28, 2007. The purpose of the meeting was to introduce the potential partners and share information on current and long range plans for each owner and organization. The group agreed to pursue the development of a Redbud Run Greenway Alliance to work collectively on issues such as trail connections, design guidelines, designated uses and resolving user conflicts. The overarching goal was to establish a structure to operate from and leverage resources and work to involve the community at large and other potential partners and supporters. The following partners were represented at the meeting: Frederick County Schools, Civil War Preservation Trust, Shenandoah Valley Battlefields Foundation, VA Department of Game & Inland Fisheries, Winchester Wheelmen, Winchester-Frederick Convention & Visitors Bureau, Winchester Trout Unlimited, and The Opequon Watershed.

A second meeting was held on September 7. Following a brief presentation at Millbrook High School the group toured the Game & Inland Fisheries property. The tour featured local historians and presentations by DGIF and Trout Unlimited. The purpose of the tour was to identify opportunities to develop educational programs and community work projects. There was agreement to work together with Frederick County schools and a follow up tour is being planned for school faculty focusing on the history, science and natural resource programs. Winchester Trout Unlimited is conducting the "Trout in the Classroom" in 4 Frederick County schools. Through the program students will raise trout fingerlings to be released in Redbud Run.

Facilitation for the meetings was provided by Ursula Lemanski of the National Park Service-Rivers, Trails & Conservation Assistance Program. Project coordination is being provided by a grant from the **Urban and Community Forestry Program** of the **USDA Forest Service and Virginia Department of Forestry**

Submitted by:

Jim Lawrence, Opequon Watershed Coordinator
Chesapeake Bay Targeted Watershed Project
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APPENDIX L

Mid-Atlantic Clean Diesel Project List



Mid-Atlantic Air Protection

Serving Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia

Mid-Atlantic Clean Diesel Project List as of 12/14/2007*

ID	State	Project Recipient	Type(s) of Vehicle/Equipment	Tech.	Fuel Type
56	VA	VA DEQ/Roanoke County School District/VEPCO	school buses	DOCS	
57	VA	VA DEQ/Roanoke City School District/VEPCO	school buses	DOCS	
58	VA	VA DEQ/Frederick County School District/VEPCO	school buses	DOCS	
59	VA	VA DEQ/Henrico County School District/VEPCO	school buses	DOCS	
60	VA	VA DEQ/Fairfax County School District/VEPCO	school buses	DOCS	
61	VA	VA DEQ/Winchester City School District/VEPCO	school buses	DOCS	
62	VA	VA DEQ/City of Virginia Beach & City of Norfolk Public School Districts/VEPCO	school buses		CNG
348	VA	Fairfax County, VA	state/county/city vehicles other onroad vehicles	DOCS	
349	VA	Fairfax County, VA	transit shuttle buses	DPFS EGR ASD IP	ULSD
404	VA	Virginia Department of Environmental Quality		IP	
460	VA	Rockingham County Schools	school buses	DOCS	
461	VA	Harrisonburg City	school buses transit shuttle buses	DOCS	
547	VA	Norfolk City Schools	school buses	DOCS	
548	VA	VA DEQ/Virginia Beach Schools/VEPCO	school buses	DOCS	
549	VA	VA DEQ/Winchester County Schools/VEPCO	school buses	DOCS	
550	VA	VA DEQ/Loudon County School District/VEPCO	school buses	DOCS OTHR	

553	VA	Virginia Port Authority in Hampton Roads.	other onroad vehicles port equipment	DOCS RPLC	CNG
554	VA	Virginia Port Authority	port equipment	IP	
555	VA	Virginia Port Authority		IP	
558	VA	Harrison City	transit shuttle buses	DOCS	
560	VA	Loudoun County School District	school buses	DOCS	
565	VA	VADEQ		OTHR	
567	VA	Virginia Port Authority	port equipment	DOCS RPLC OTHR	
582	VA	Fairfax County Transit - Connector Bus system	transit shuttle buses	DPFS EGR ASD IP	ULSD
720	VA	City of Richmond/City of Hopewell School Districts. Clean School Bus USA grant recipients 2005.	school buses	DOCS OTHR	
1087	VA	Petro Truck Stop #72/IdleAire Technologies		TSE	
1088	VA	Truck Stops of America #021/IdleAire Technologies.		TSE	
1090	VA	Henry County			
1100	VA	Harrisonburg School District	school buses		BIOD
1101	VA	Northumberland School District.	school buses		BIOD
1102	VA	Arlington County School District.	school buses		BIOD
1103	VA	James City County/Williamsburg School District.	school buses		BIOD
1104	VA	Blacksburg Public Works w/Virginia Tech Physical Plant Department.	school buses		BIOD
1105	VA	Gloucester County School District.	school buses		BIOD
1106	VA	Virginia Beach School District.	school buses		BIOD

*Compiled from <http://www.epa.gov/reg3artd/diesel/r3projects.htm>