

**FAIRFAX COUNTY PLANNING COMMISSION
ENVIRONMENT COMMITTEE/
ENVIRONMENTAL QUALITY ADVISORY COUNCIL MEETING
WEDNESDAY, DECEMBER 10, 2008**

COMMITTEE MEMBERS PRESENT:

Walter L. Alcorn, At-Large
Frank A. de la Fe, Hunter Mill District
Earl L. Flanagan, Mount Vernon District
James R. Hart, Commissioner At-Large, Chairman
Kenneth A. Lawrence, Providence District
Timothy J. Sargeant, At-Large

COMMITTEE MEMBERS ABSENT:

Jay P. Donahue, Dranesville District
Rodney L. Lusk, Lee District

ENVIRONMENTAL QUALITY ADVISORY COUNCIL MEMBER PRESENT:

Stella Koch, At-Large, Chair

OTHER STAFF PRESENT:

Michelle Brickner, Director, Land Development Services (LDS), Department of Public Works and Environmental Services (DPWES)
John Friedman, Director, Code Analysis Division, LDS, DPWES
Judith Cronauer, Code Analysis Division, LDS, DPWES
Shannon Curtis, Stormwater Planning Division, DPWES
Noel Kaplan, Planning Division, Department of Planning and Zoning
Pam Pelto, Esquire, Office of the County Attorney
Sara Robin Ransom, Assistant Director, Planning Commission Office
Kara A. DeArrastia, Deputy Clerk to the Planning Commission

OTHERS PRESENT:

Inda Stagg, Walsh, Colucci, Lubeley, Emrich & Walsh, PC
Michael Rolband, President, Wetland Studies and Solutions, Inc. (WSSI)
Mark Headly, WSSI
Cyrena Movitz, DRI Development Services, LLC

ATTACHMENTS:

- (1) "Miles of GIS-Estimated Headwater Streams (Ephemeral and Intermittent) Protected" Chart
- (2) GIS Maps of Low Density, Moderate Density, and High Density Watersheds

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Chairman James R. Hart called the meeting to order at 7:03 p.m., in the Board Conference Room, 12000 Government Center Parkway, Fairfax, Virginia 22035.

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Chairman Hart said the first item on the agenda was approval of minutes.

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Commissioner de la Fe MOVED THAT THE ENVIRONMENT COMMITTEE MINUTES OF OCTOBER 15, 2008 AND OCTOBER 23, 2008, BE APPROVED.

Commissioners Sargeant and Flanagan seconded the motion which carried unanimously.

Commissioner Sargeant MOVED THAT THE ENVIRONMENT COMMITTEE MINUTES OF NOVEMBER 13, 2008, BE APPROVED.

Commissioner de la Fe seconded the motion which carried unanimously.

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Judith Cronauer, Code Analysis Division, Land Development Services (LDS), Department of Public Works and Environmental Services (DPWES), reviewed the drainage area criteria to date, including the miles of GIS-estimated headwater streams protected, the projected number of properties impacted by a 35-foot buffer around adjacent streams, and the projected number of buildings encroaching within that buffer zone, as shown in Attachment (1).

In response to a question from Commissioner de la Fe, Shannon Curtis, Stormwater Planning Division, DPWES, said the term "building" encompassed any structure with a footprint.

Responding to a question from Commissioner Sargeant, Ms. Cronauer and Mr. Curtis explained how staff calculated the projected number of buildings encroaching in a 35-foot wide buffer.

In response to a question from Chairman Hart, Pam Pelto, Esquire, Office of the County Attorney, said that adoption of an amendment with a lesser impact would be allowed if the advertisement of the proposed code amendment indicated a greater impact.

Commissioner Sargeant suggested that the staff recommendation and publication of the buffer regulations provide sufficient justification and specify the financial and legal impacts.

Responding to a question from Commissioner Lawrence, Mr. Curtis would check to see if the GIS attributes would allow staff to distinguish the residential from the nonresidential buildings encroaching in the 35-foot wide buffer.

Ms. Cronauer pointed out that the figures in the handout represented rough estimates. Additional information would be provided at the next Committee meeting.

In response to a question from Chairman Hart, Ms. Cronauer said she anticipated guidance from the Committee to narrow down the drainage area so a smaller range could be further examined.

Responding to a question from Commissioner Flanagan, Ms. Cronauer said that structures that encroach into the buffer area before the ordinance went into effect would be considered noncomplying so they would be grandfathered.

After a brief discussion about written notification to affected property owners, Ms. Pelto noted that the only legal requirement was publication of the proposed amendment twice in the same newspaper.

In response to a question from Commissioner Flanagan, Ms. Cronauer said a drainage area of 50 acres or greater would have less impact to property owners.

Responding to a question from Chairman Hart, Mr. Curtis explained staff's rationale for collecting data on a 50-acre or greater drainage area.

Commissioner Lawrence recommended that staff specify the number of impacted houses, citing the difference in the financial impact to an owner of a shed versus a house. He also noted the difference between the continuation of a nonconforming use of a house versus a shed.

Stella Koch, At-Large, Chair of the Environmental Quality Advisory Council, commented that a drainage area of 50 acres or greater appeared to require enormous effort for a minimal result of 4 percent increase in the number of headwater streams protected.

In response to questions from Commissioner Sargeant, Mr. Curtis explained that the average drainage area for perennial streams was 50 acres, which also represented the lower end of the protection of headwater streams and its associated impact.

Ms. Cronauer reviewed the watershed maps depicting the drainage areas, cleaned non-Resource Protection Area (RPA) watercourses, and the current RPAs, as shown in Attachment (2).

Responding to a question from Chairman Hart, Ms. Cronauer explained that staff must decide what stream systems to buffer, such as stream beds and banks or all open watercourses, including manmade channels.

In response to a question from Ms. Koch, Mr. Curtis said cleaned non-RPA watercourses did not include piped systems outside RPAs.

Responding to more questions from Ms. Koch, Michelle Brickner, Director, LDS, DPWES, explained that staff would determine the criteria a stream system or watercourse must meet to be subject to buffer requirements. Michael Rolband, President of Wetland Studies and Solutions, Inc., said he assumed that Fairfax County would follow the stream definitions stipulated by the U.S. Army Corps of Engineers and Virginia Department of Environmental Quality.

In response to a question from Chairman Hart, Ms. Cronauer said field mapping would be necessary to determine whether a stream had bed and bank conditions. Ms. Brickner added that

staff would not necessarily have to map all bed and bank conditions ahead of time but could decide on a case-by-case basis whether a stream would be subject to the buffer regulations.

Responding to a question from Commissioner Flanagan, Ms. Cronauer explained that the cleaned non-RPA watercourse layer along roadways only included waterways that captured drainage from areas other than the adjacent road.

Mr. Rolband said one possible way to implement the buffer requirements was to designate on the map the streams that would be regulated as RPAs, which already required a field delineation of the stream to precisely define it. He noted that the County also needed to publicize the benefits of the different drainage areas, the associated change in the number of headwater streams protected, and the justification for regulating 10 acres versus 50 acres in a quantitative manner.

In response to a question from Chairman Hart, Ms. Koch said any improvement in water quality would be associated with the percentage of the buffering of headwaters.

Chairman Hart recommended that staff specify the number of houses that would be affected by the 35-foot wide buffer. He also recommended developing an objective reference as a starting point and a way for owners of properties or buildings adjacent to water to opt out of meeting the buffer requirements by demonstrating that they did not fulfill certain criteria. He said, however, that the default position should be that the requirements would apply to these owners unless they could prove otherwise.

Responding to a question from Commissioner Alcorn, Ms. Cronauer noted that mapping all County properties adjacent to water would require significant field work.

A brief discussion took place on the impacts to buildings and the conditions of streams located within low density versus high density watersheds and possible thresholds for measuring improvement of water quality due to buffers.

Committee consensus for further direction: Continue examining 10 acres or greater as the drainage area triggering buffer requirements. Support a baseline determination of an objective definition that all owners of the affected properties or buildings would be subject to the buffer requirements but with the option to opt out upon demonstration of nonconformance with specific criteria.

Commissioner Alcorn suggested that if the 10 acres or greater option was chosen, the processes for implementation and communications with the public be reviewed.

Chairman Hart said he anticipated a vigorous public outreach effort to provide information and solicit input.

Commissioner Sargeant suggested that staff quantify the benefit of the buffer requirements based on scientific data to adequately justify this change.

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Ms. Cronauer said the first issue to be discussed was the possibility of using different requirements for different areas, such as wider buffer widths in areas like the Water Supply Protection Overlay District (WSPOD) or certain streams that the County was trying to protect.

Ms. Peltó pointed out that there was no legal impediment to the County imposing stricter requirements in certain areas, just as long as it was substantiated by appropriate documentation.

Chairman Hart explained that although wider buffers would pose greater environmental benefits, they would also create economic impacts on property owners; therefore, wider buffers should be related to the WSPOD or some other objective rationale. He said staff must provide the public with a clear, convincing explanation as to the justification for buffers wider than 35 feet.

A discussion followed on the impact to properties by a 35-foot wide buffer versus a 100-foot wide buffer.

Committee consensus for further direction: Support different requirements for different areas, such as stricter requirements for areas like the WSPOD. Recommend staff continue evaluating this issue.

Ms. Cronauer noted that the second issue was the possibility of applying the regulations incrementally, such as one watershed at a time as opposed to the County at-large.

Committee consensus for further direction: Oppose applying the regulations incrementally. Support applying the regulations to the County as a whole and implementation of the regulations upon completion of a watershed plan.

Ms. Cronauer said the third issue was whether the County should impose reforestation requirements if the construction was not impacting the adjacent buffer area.

Ms. Koch noted the existence of evidence supporting an increase in buffer vegetation to mitigate the stream impact from impervious cover.

A brief discussion ensued on a possible threshold for triggering reforestation requirements.

Committee consensus for further direction: Recommend staff continue evaluating whether the use must encroach into the buffer area before reforestation requirements would apply and determine if a precedent would be set if reforestation was required when the use did not encroach in the buffer.

Ms. Cronauer noted that the final issue was if the performance criteria for Resource Management Areas (RMAs) were used as a basis for the buffer requirements, they may not apply to situations where the land disturbance was less than 2,500 square feet.

In response to a question from Commissioner Alcorn, Ms. Cronauer said a building permit was still required at a minimum of 150 square feet of land disturbance uses requiring a site plan.

Discussion followed concerning the County's exemption of 2,500 square feet or less in land disturbance area.

Committee consensus for further direction: Recommend staff continue evaluating whether the land disturbance had to be greater than 2,500 square feet before the buffer requirements activate, if the requirements were incorporated into the performance criteria for RMAs.

Ms. Cronauer reported that she would provide the Board of Supervisors' Environment Committee with an update on the riparian buffer protection project.

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Chairman Hart announced that the next Committee meeting would be on February 26, 2009, at a time to be determined, in the Board Conference Room.

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The meeting was adjourned at 8:18 p.m.
James R. Hart, Chairman

An audio recording of this meeting is available in the Planning Commission Office, 12000 Government Center Parkway, Suite 330, Fairfax, Virginia 22035.

Minutes by: Kara A. DeArrastia

Approved: February 26, 2009

Linda B. Rodeffer, Clerk
Fairfax County Planning Commission

MILES OF GIS-ESTIMATED HEADWATER STREAMS (EPHEMERAL AND INTERMITTENT) PROTECTED								
Drainage Area Triggering Buffer Requirements	10 Acre or Greater		30 Acre or Greater		50 Acre or Greater		Total Estimated Headwater Streams	
Watershed Pilot Area								
Difficult Run	17.82	43%	4.73	11%	0.92	2%	41.70	100%
Dogue Creek	7.55	53%	3.84	27%	1.27	9%	14.12	100%
Horsepen Creek	4.63	51%	1.64	18%	0.25	3%	9.10	100%
Johnny Moore Creek	5.45	50%	2.01	19%	0.61	6%	10.82	100%
Pimmit Run	3.45	31%	0.85	8%	0.32	3%	11.00	100%
Wolf Run	6.38	47%	1.24	9%	0.35	3%	13.46	100%
Total Pilot Area	45.28	45%	14.31	14%	3.73	4%	100.20	100%
Countywide Projection Headwater Streams Protected	266.38	45%	84.15	14%	21.95	4%	589.40	

IMPACT TO PROPERTIES (35-FOOT WIDE BUFFER)			
	10 Acre or Greater	30 Acre or Greater	50 Acre or Greater
Parcels Impacted in the Pilot Area	1,510	536	173
Countywide Projection of Parcels Impacted Countywide	8,882	3,153	1,018

BUILDINGS ENCROACHING (35-FOOT WIDE BUFFER)			
	10 Acres or Greater	30 Acre or Greater	50 Acre or Greater
Buildings Encroaching in the Buffer in the Pilot Area	115	33	15
Countywide Projection of Buildings Encroaching in the Buffer	676	194	88

Low Density Watershed: Jonny Moore Creek 5.29 sq. mi.

Number Affected by 35ft Buffers (Johnny Moore)

	10 ac	30 ac	50 ac
Parcels	101	51	17
Buildings	2	1	1

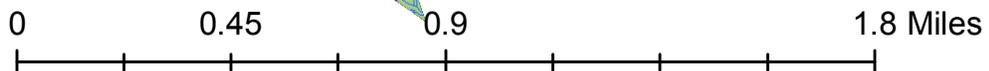
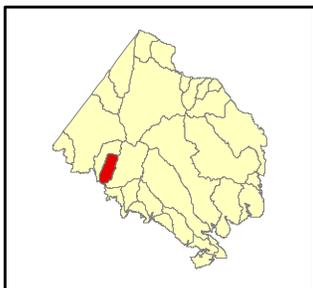
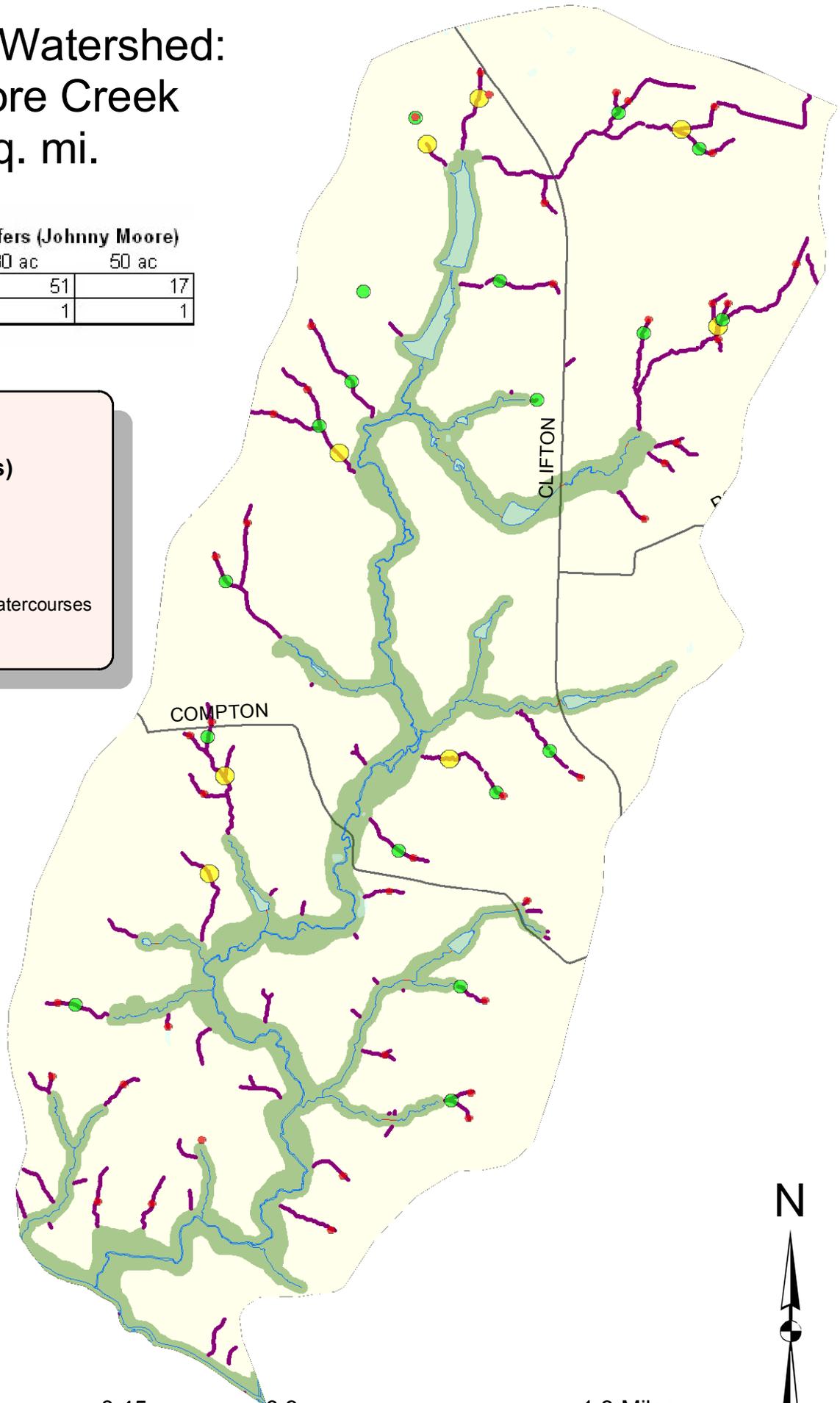
Legend

Drainage Area (Acres)

- 10
- 30
- 50

— Cleaned Non-RPA Watercourses

■ Current RPAs

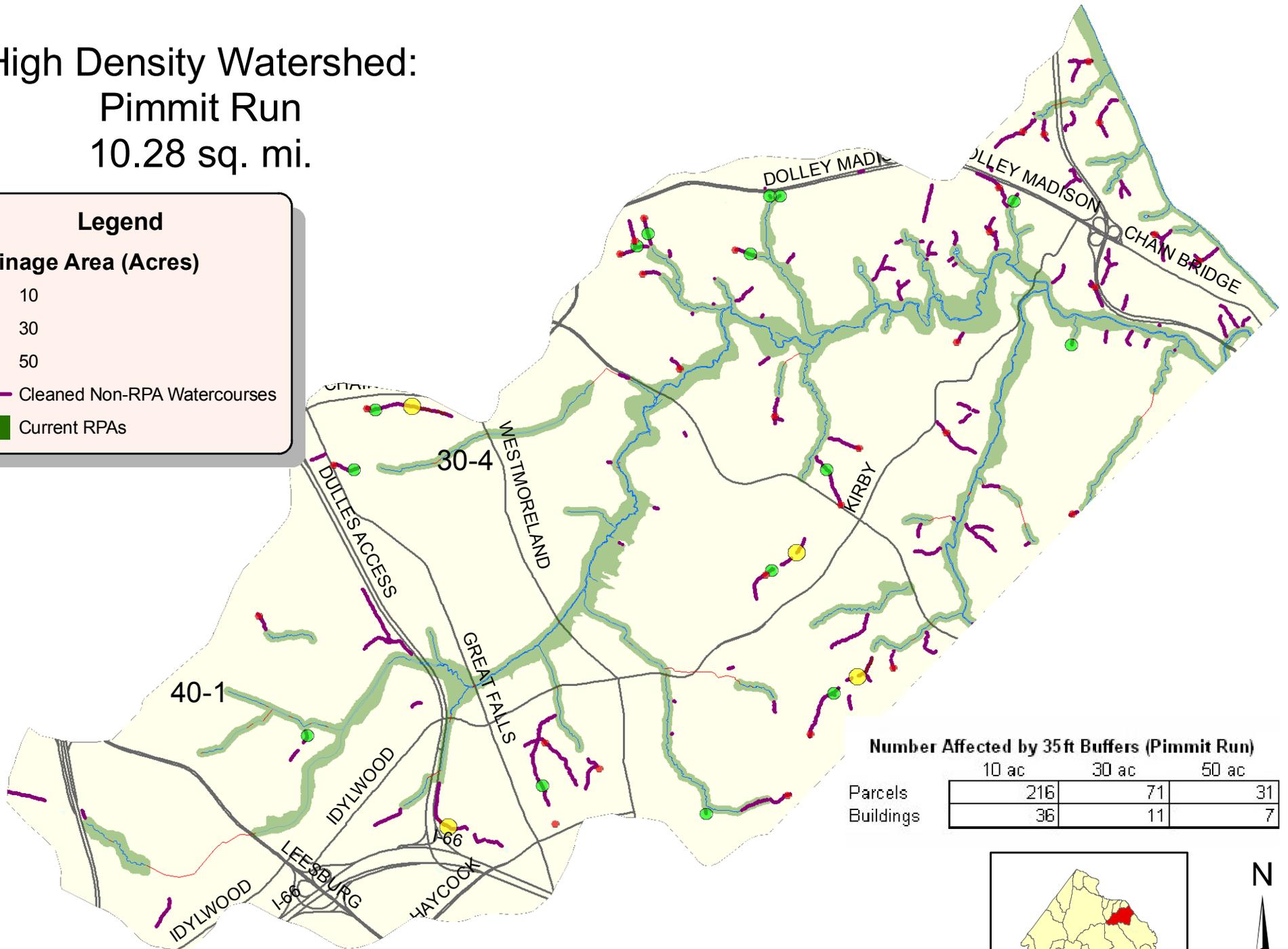


High Density Watershed: Pimmit Run 10.28 sq. mi.

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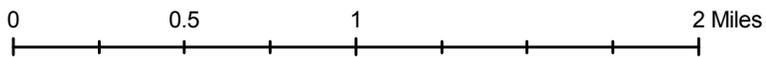
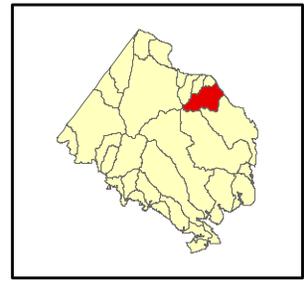
Drainage Area (Acres)

- 10
- 30
- 50
- Cleaned Non-RPA Watercourses
- Current RPAs

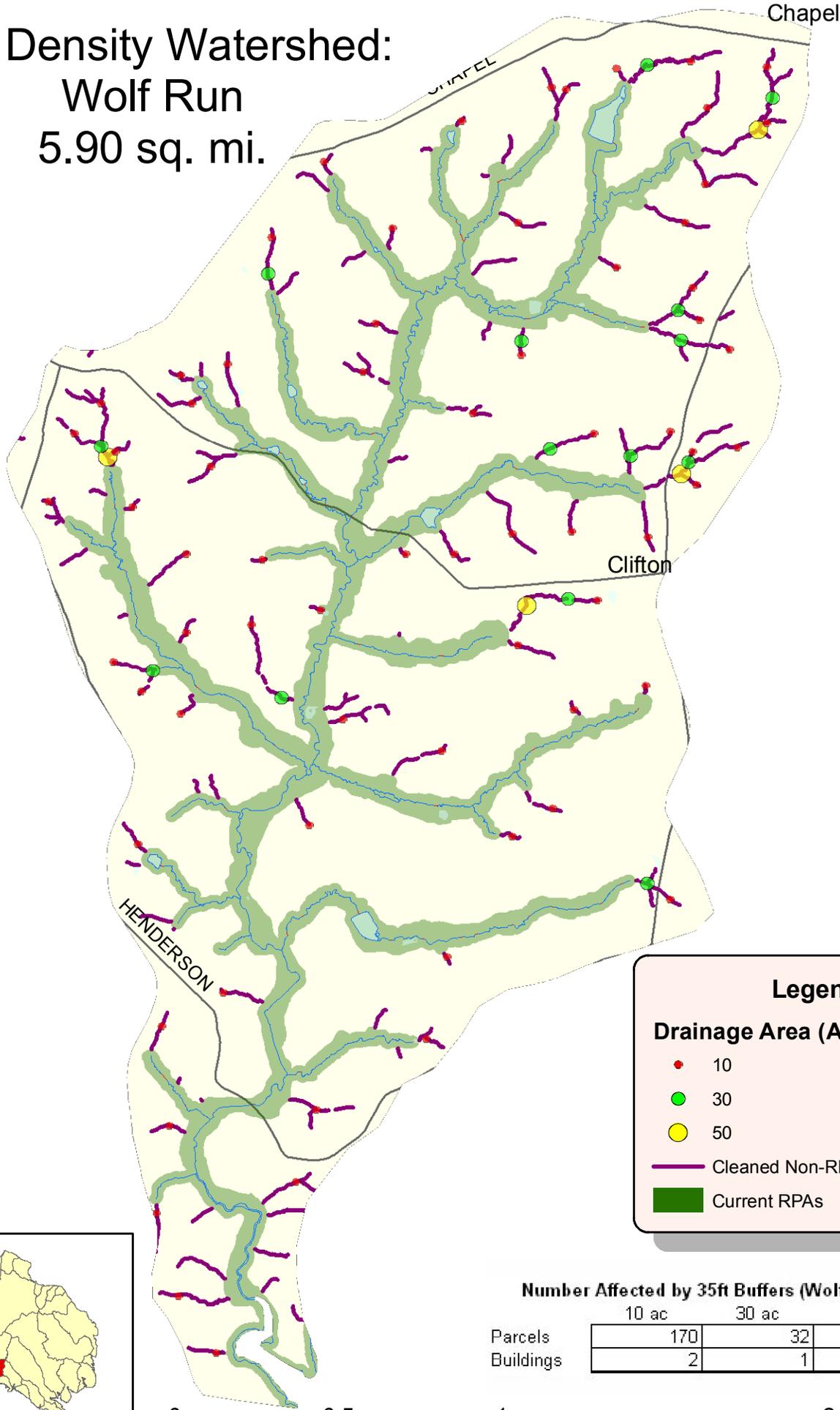


Number Affected by 35 ft Buffers (Pimmit Run)

	10 ac	30 ac	50 ac
Parcels	216	71	31
Buildings	36	11	7



Low Density Watershed: Wolf Run 5.90 sq. mi.



Legend

Drainage Area (Acres)

- 10
- 30
- 50
- Cleaned Non-RPA Watercourses
- Current RPAs

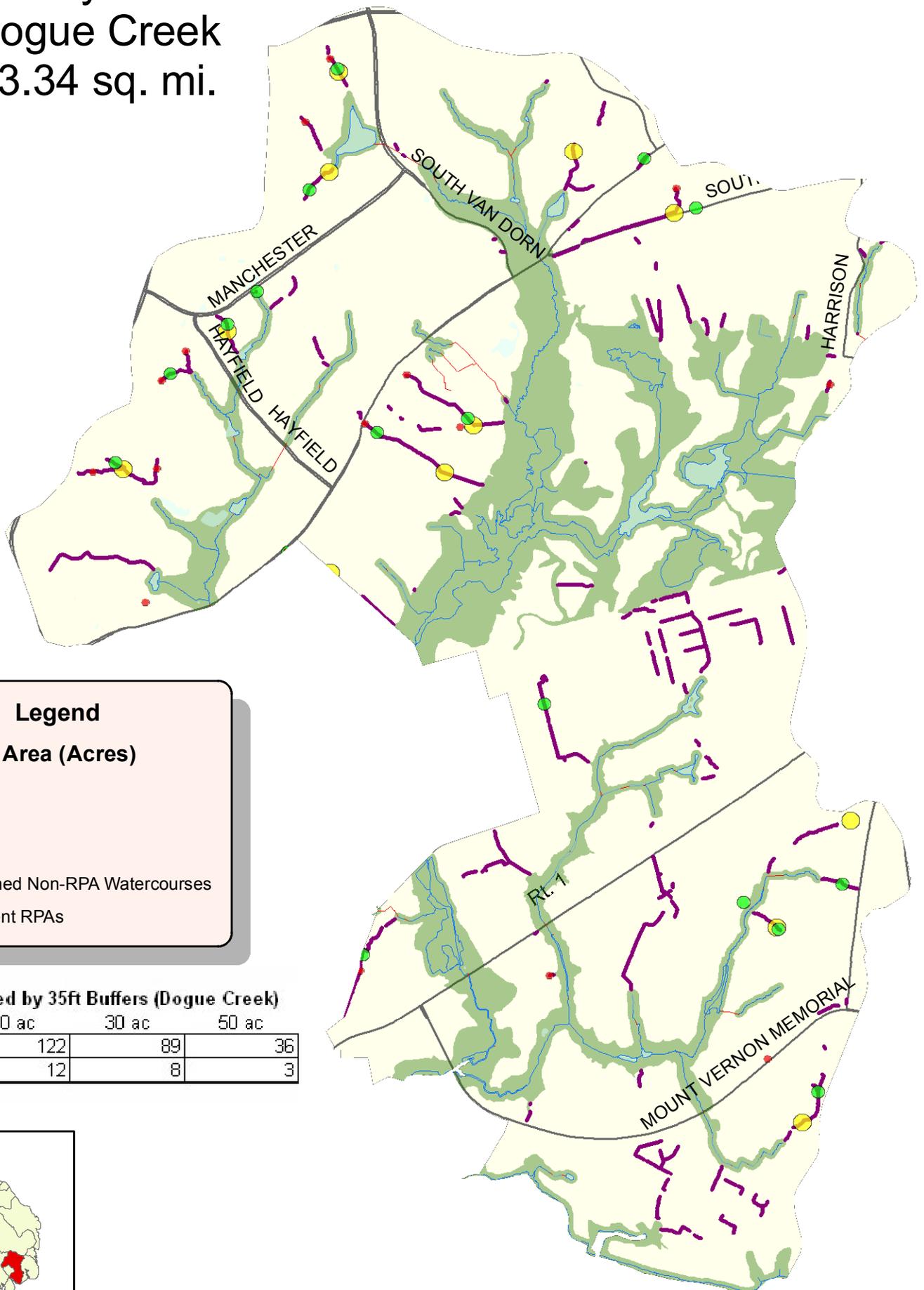


Number Affected by 35ft Buffers (Wolf Run)

	10 ac	30 ac	50 ac
Parcels	170	32	9
Buildings	2	1	1



High Density Watershed: Dogue Creek 13.34 sq. mi.



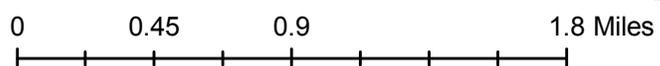
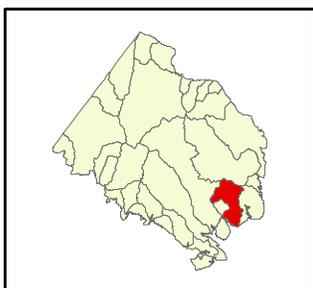
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Drainage Area (Acres)

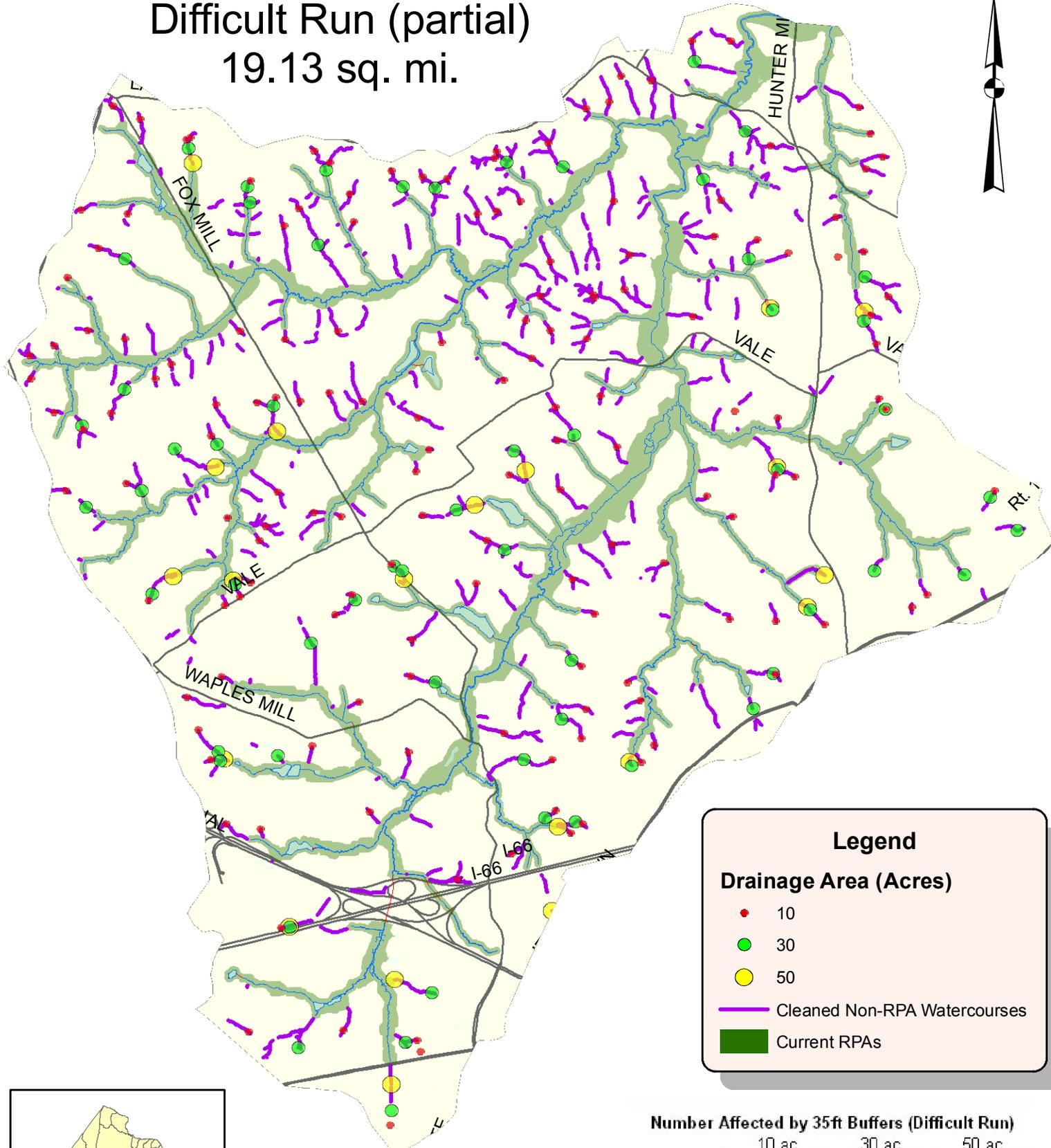
- 10
- 30
- 50
- Cleaned Non-RPA Watercourses
- Current RPAs

Number Affected by 35ft Buffers (Dogue Creek)

	10 ac	30 ac	50 ac
Parcels	122	89	36
Buildings	12	8	3



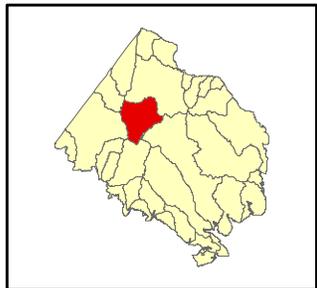
Moderate Density Watershed: Difficult Run (partial) 19.13 sq. mi.



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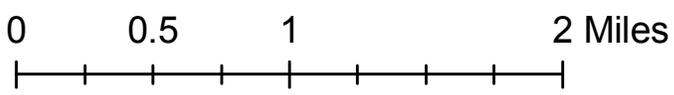
Drainage Area (Acres)

- 10
- 30
- 50
- Cleaned Non-RPA Watercourses
- Current RPAs

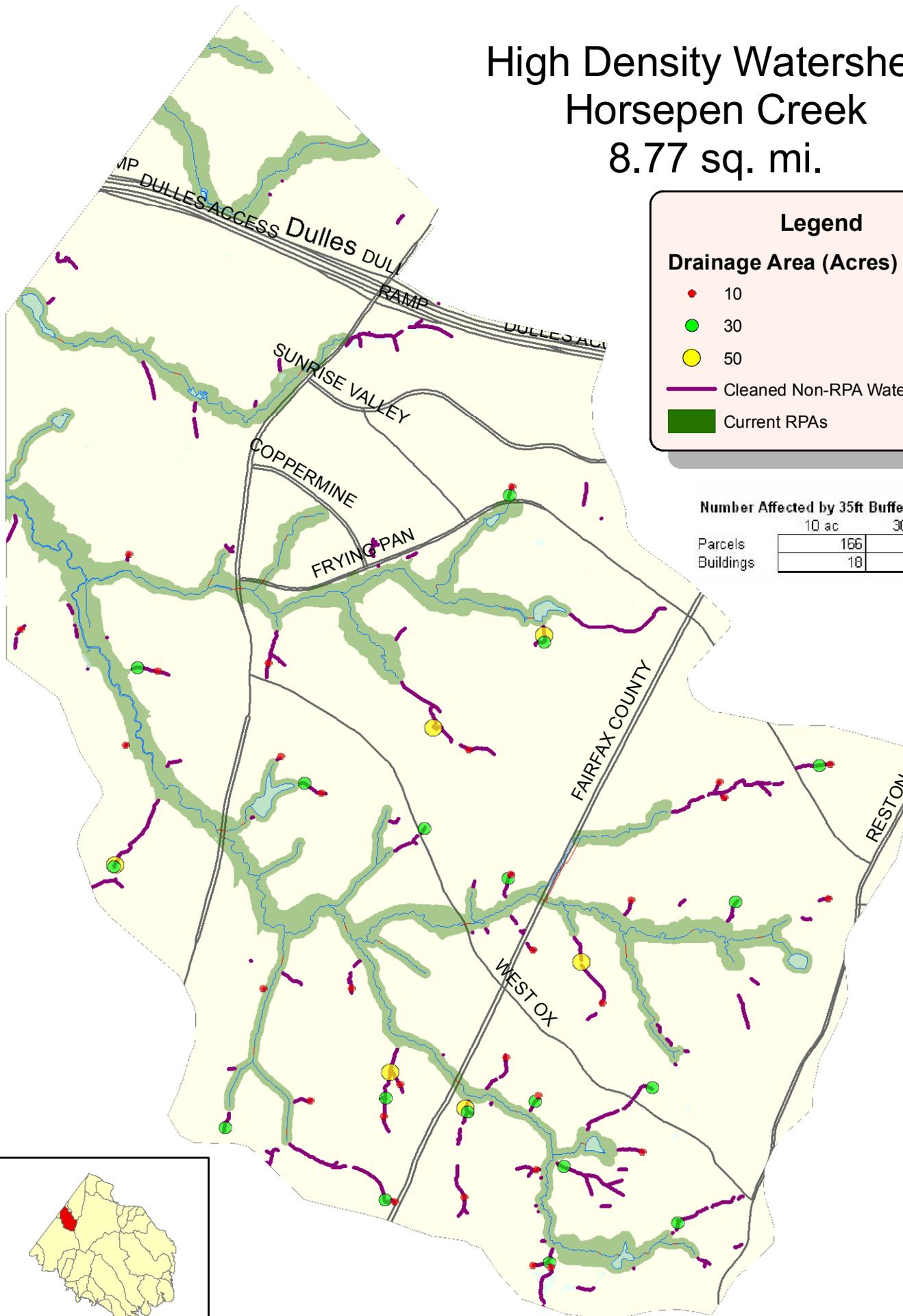


Number Affected by 35ft Buffers (Difficult Run)

	10 ac	30 ac	50 ac
Parcels	737	216	57
Buildings	45	7	2



High Density Watershed: Horsepen Creek 8.77 sq. mi.



Legend

Drainage Area (Acres)

- 10
- 30
- 50
- Cleaned Non-RPA Watercourses
- Current RPAs

Number Affected by 35ft Buffers (Horsepen Creek)

	10 ac	30 ac	50 ac
Parcels	166	77	23
Buildings	18	5	2

