# IN THE UNITED STATES DISTRICT COURT EASTERN DISTRICT OF VIRGINIA RICHMOND DIVISION

GOLDEN BETHUNE-HILL, et al.,

Plaintiffs,

v.

VIRGINIA STATE BOARD OF ELECTIONS, *et al.*,

Defendants.

Civil Action No. 3:14-cv-00852-REP-AWA-BMK

PLAINTIFFS' MEMORANDUM IN SUPPORT OF THEIR PROPOSED REMEDIAL PLANS

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#### I. INTRODUCTION

Plaintiffs respectfully submit this memorandum in support of their proposed remedial plans pursuant to the Court's Order dated October 19, 2018 (Dkt. No. 278). The plans—labeled Plaintiffs' Remedial Plan A ("Plan A") and Plaintiffs' Remedial Plan B ("Plan B")—are attached to the accompanying Declaration of Kevin J. Hamilton.<sup>1</sup>

Given the number of districts at issue and the strict 1% population equality standard utilized by the General Assembly—which Plaintiffs follow here—there is admittedly no single and perfect solution to the racial gerrymander of Districts 63, 69, 70, 71, 74, 77, 80, 89, 90, 92, and 95 (the "Challenged Districts"). Plaintiffs offer two remedial maps that are broadly similar, but which tackle the challenge of redressing the baseless application of the 55% Black Voting Age Population ("BVAP") rule to the Challenged Districts in a handful of different ways.

Both proposed remedial plans cure the unconstitutional racial gerrymander of the Challenged Districts and rebalance the population of affected house districts while respecting traditional redistricting criteria. Plaintiffs' remedial plans are both more compact than the existing plan and split far fewer political subdivisions. The ease with which the Challenged Districts and the surrounding districts can be redrawn in more sensible configurations illustrates the unnecessary lengths to which the General Assembly went to enforce the mandatory 55% BVAP floor in the Challenged Districts in the first place. For all the reasons stated below, Plaintiffs respectfully ask the Court to adopt one of their proposed remedial plans.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Plaintiffs have separately filed with the Court hard copies of Plaintiffs' proposed remedial maps with accompanying data files.

<sup>&</sup>lt;sup>2</sup> Plaintiffs do not have a strong preference between the two alternatives. The primary difference between the two proposed plans is set out on page 3 *infra*.

#### II. BACKGROUND

Following a second bench trial in this matter on remand from the United States Supreme Court, on June 26, 2018, the Court found in Plaintiffs' favor on the merits of their claim that Virginia's current house legislative districting plan violates the equal protection clause of the Fourteenth Amendment to the United States Constitution. Dkt. Nos. 234, 235. Accordingly, the Court ordered that the "Commonwealth of Virginia is hereby enjoined from conducting any elections after [June 26, 2018] for the office of Delegate in the Commonwealth's House of Delegates in the Challenged Districts until a new redistricting plan is adopted." Dkt. No. 235. The Court gave the political branches until October 30, 2018, to adopt a new remedial plan, although it instructed "[t]he Virginia General Assembly . . . to exercise this jurisdiction as expeditiously as possible." *Id*.

After the General Assembly failed to adopt a new districting plan by this deadline,<sup>3</sup> the Court ordered the parties to submit proposed remedial plans no later than November 2, 2018. *See* Dkt. No. 278.

#### III. ARGUMENT

Accompanying this memorandum, Plaintiffs provide the Court with their proposed remedial plans, maps of Plaintiffs' proposed versions of the Challenged Districts and surrounding environs, and reports of the basic demographic details of Plaintiffs' proposals.

As explained below, Plaintiffs' plans cure the fundamental constitutional deficiency in the existing plan (the "Enacted Plan")—the baseless application of a flat 55% BVAP floor to the various and varied Challenged Districts regardless of their unique geography, communities, and electoral history. Plaintiffs' remedial plans preserve the structure of the Enacted Plan, but are superior to the Enacted Plan with respect to every objective metric. The remedial plans' versions of the Challenged Districts are more compact and split fewer political subdivisions than the Enacted Plan. By following traditional districting principles,

<sup>&</sup>lt;sup>3</sup> Intervenors informed the Court on October 5, 2018, of their view that the political branches would be unable to adopt a remedial plan. *See* Dkt. No. 275-1.

Plaintiffs' remedial plans thus unravel the unconstitutional racial gerrymander while preserving the voting rights of African-American voters.

The major difference between Plaintiffs' proposed Plan A and Plan B is in the treatment of Charles City County. At present, Charles City County is part of an elongated District 74 that stretches through a thin strip of Henrico County down to Charles City County to sweep in sufficient BVAP to meet the 55% BVAP rule. Remedying District 74 is best done by drawing a more compact district centered in Henrico. That leaves Charles City County in need of a new home.

Plaintiffs offer two alternatives. In Plan A, Plaintiffs move Charles City County into District 62. In Plan B, Plaintiffs move Charles City County into District 70. Each option impacts the nearby Richmond-centered districts in different ways. Briefly stated, Plan A keeps District 70 centered in Richmond City County and Henrico County, but requires a greater split of Henrico County and other alterations of Richmond area districts for population equality reasons, whereas Plan B results in District 70 expanding further to the east but requires a less significant split of Henrico County. Both approaches are reasonable—and provide an effective remedy—but require different tradeoffs. Accordingly, Plaintiffs present both for the Special Master's and the Court's consideration.

# A. The Court Need Not—and Should Not—Defer to Proposed Remedial Plans Presented by Either Defendants or Intervenors

In taking up the task of creating a constitutional districting plan, it is important to note at the outset that the Court has no constitutional plan before it that has been duly adopted by the political branches in Virginia. In response to the Court's Memorandum Opinion, the General Assembly did not adopt (or even hold a floor vote on) a remedial plan. Had the political branches adopted a remedial plan themselves, the task before the Court would be quite different. In that instance, the Court would likely have deferred to the map duly adopted under Virginia law. But here the political branches failed to adopt a new map manifesting

their judgment on the configuration of Virginia's legislative districts in the absence of an unconstitutional racial gerrymander of the Challenged Districts.

The Court therefore has no proposed remedial plan before it that is entitled to the Court's deference. The Enacted Plan is, as the Court has found, unconstitutional and so must be remedied. *See Abrams v. Johnson*, 521 U.S. 74, 85-86 (1997) (adopted redistricting plan "is not owed . . . deference to the extent the plan subordinated traditional districting principles to racial considerations" because "courts [are] to correct—not follow—constitutional defects in districting plans").

This said, in drafting their remedial plan, Plaintiffs have still sought to minimize the impact of redistricting on the existing districts. *See Personhuballah v. Alcorn*, 155 F. Supp. 3d 552, 563 (E.D. Va. 2016) (adopting remedy that altered five of eleven congressional districts and noting that the plan would "not alter any districts outside of the Third District and those abutting it, but may make substantial changes to those districts"). Plaintiffs have therefore focused alterations to the Enacted Plan to the Challenged Districts and surrounding districts to the extent possible.

# B. Plaintiffs' Proposed Remedial Plans Fix the General Assembly's Racial Gerrymander of the Challenged Districts

Plaintiffs' proposed remedial plans achieve the primary objective of the remedial phase of this litigation—curing the unconstitutional racial gerrymander of the Challenged Districts identified by the Court.

As set out in detail in the Memorandum Opinion, the enacted versions of the Challenged Districts were drawn with race as the predominant factor. What that meant for each individual Challenged District varied. As the Court notes, some Challenged Districts were used as "donor" districts, with BVAP siphoned off to bolster the BVAP in "recipient" districts that otherwise may have fallen short of the 55% BVAP floor. Thus, in some instances, a district was drawn to unite far-flung African-American communities, which

explains, for example, the unusual shape of District 95. *See* Dkt. No. 234 ("Mem. Op.") at 54-55. In other cases, the record shows that the general configuration of a given district (and thus the surrounding districts) was driven by racial considerations, such as Delegate Jones' acknowledgment that the "eastward move [of District 71] into District 70 was required to ensure that District 71 had sufficient BVAP to meet the 55% number." *Id.* at 40. Likewise, the record reflected that the borders between districts were drawn to split political subdivisions to achieve the General Assembly's racial ends. *See, e.g., id.* at 21-22. This explains why the Challenged Districts as a whole split more political subdivisions than the non-Challenged Districts and contributed to the majority of splits in surrounding districts. *See, e.g., id.* at 22-23.

To address these issues in the configuration of the Challenged Districts, Plaintiffs followed the basic approach that Special Master Dr. Bernard Grofman followed in the *Personhubbalah* litigation. *See Personhuballah v. Wittman*, No. 3:13-cv-00678, Report of the Special Master, Dkt. No. 272 (Nov. 15, 2015). That is, rather than using race as the predominant factor (as under the Enacted Plan), Plaintiffs' remedial maps were drawn "according to good government criteria." *Id.* at 3. Plaintiffs then—like Dr. Grofman did in *Personhubbalah*—did basic backstopping of the resulting maps by ensuring the resulting maps were non-retrogressive and making adjustments to maintain the residences of present incumbents in their districts. *Personhuballah v. Wittman*, No. 3:13-cv-00678, Supplemental Comments to the Report of the Special Master, Dkt. No. 294 at 4-5, 15 (Dec. 11, 2015).<sup>4</sup>

The merits of this approach are evident in the results. Indeed, Plaintiffs' proposed remedial plans are superior to the Enacted Plan in every meaningful respect. As explained below, Plaintiffs split markedly fewer political subdivisions, and they improve the compactness of the Challenged Districts significantly.

<sup>&</sup>lt;sup>4</sup> To the best of Plaintiffs' knowledge, based on address information they were able to locate, Plaintiffs' proposed plans do not pair incumbents or draw incumbents out of their existing districts.

The natural consequence of doing so was, generally speaking, to lower the BVAP in various Challenged Districts where the BVAP had been artificially inflated through application of the across-the-board 55% BVAP floor. While the BVAP of all but one district in each plan has been reduced, *see* Hamilton Decl., Ex. C, H, this approach also avoids retrogression in the ability of African Americans to elect candidates of choice. As reflected in Dr. Palmer's analysis, as credited and explicated by the Court in its Opinion, 55% BVAP was not remotely necessary "in order for black voters to be able to elect their preferred candidates" in any of the Challenged Districts. Mem. Op. at 88. Indeed, even a 45% BVAP would have resulted in victory for African-American preferred candidates in all 11 Challenged Districts ranging from 59.4% to 81% of the vote. *Id.* Plaintiffs' proposed plans do not result in a BVAP lower than 46% in any Challenged District, Ex. C, H, meaning that African-American preferred candidates can be expected to win each of these districts by a supermajority or more.

District	Current District BVAP	Plaintiffs' Plan A BVAP	Plaintiffs' Plan B BVAP
63	60.1%	56.2%	56.2%
69	55.9%	51.4%	50.0%
70	57.1%	59.2%	54.8%
71	56.1%	51.6%	51.6%
74	57.9%	52.9%	59.6%
77	59.4%	47.6%	47.6%
80	57.0%	52.5%	52.5%

<sup>&</sup>lt;sup>5</sup> In Plaintiffs' Plan A, the BVAP of District 70 increases modestly. The same is true of District 74 in Plaintiffs' Plan B. Both District 70 and District 74 were used as "donor" districts in the Enacted Plan, Mem. Op. 37, and so it is not surprising that in remedying the existing racial gerrymander by following traditional districting principles, these districts increased in BVAP under some plan configurations.

District	Current District BVAP	Plaintiffs' Plan A BVAP	Plaintiffs' Plan B BVAP
89	56.2%	52.4%	52.4%
90	57.5%	46.1%	46.1%
92	61.9%	59.3%	59.3%
95	61.2%	50.2%	50.2%

As further explained below (and reflected in the maps submitted along with this brief), Plaintiffs unraveled the racial gerrymander of the Challenged Districts by uniting political subdivisions that were split in the Enacted Plan and otherwise adhering to traditional districting principles. Plaintiffs did not seek to adhere to a BVAP target or floor in redrawing the Challenged Districts. Indeed, Plaintiffs' plans demonstrate that no such racial threshold was necessary to maintain African-American voting strength in the Challenged Districts.

#### C. Plaintiffs' Proposed Remedial Plans Achieve Population Equality

The ideal population for each Virginia House district following the 2010 census is 80,010 persons. Plaintiffs' proposed districts are of equal population, with no more than +1% or -1% variance between districts. *See* Hamilton Decl., Ex. C, H.

# D. Plaintiffs' Proposed Remedial Plans Better Adhere to Traditional Redistricting Criteria Than the Enacted Plan

# 1. Plaintiffs' Remedial Plans Reflect Greater Respect for Political Subdivisions than the Enacted Plan

Plaintiffs' proposed remedial plans substantially reduce the number of split political subdivisions in both the Challenged Districts and the map as a whole.

The Challenged Districts used artful political subdivision splits as a key mechanism for achieving its racial aims. *See*, *e.g.*, Mem. Op. at 22-24. In comparison to the Enacted Plan, Plaintiffs' proposed remedial plans make marked improvements:

	<b>Enacted Plan</b>	Plaintiffs' Plan	Plaintiffs' Plan
		A	В
# of split counties	59	51	52
Total county splits	197	173	174
# of split VTDs	116	82	82
Total VTD splits	236	166	165

See Hamilton Decl., Ex. E, J (Split Political Subdivisions Report for Plan A and B). Plaintiffs' proposed plans are a substantial improvement over the Enacted Plan, even though Plaintiffs limited changes to the Challenged Districts and surrounding districts.

Thus, Plaintiffs' remedial plans manifest a greater respect for political subdivisions than the Enacted Plan. This is not surprising. Because the General Assembly used race as the predominant consideration in drawing the Challenged Districts, it paid little heed to political boundaries when drawing the Challenged Districts. Ignoring political subdivisions was one of the primary ways the General Assembly was able to meet the 55% BVAP floor in each Challenged District. In "unwinding" this racial gerrymander fully, Plaintiffs' proposed plans include districts that more closely follow Virginia's geographic and political contours, even without making radical changes to the existing plan.

#### 2. Plaintiffs' Remedial Plans Create Compact Districts

The proof of the General Assembly's predominant use of race was also found in the unusual configuration of many of the Challenged Districts. From the way District 95 snaked up the Peninsula to sweep in African-American voters to the way District 80 wove its way through the South Hampton Roads region, the General Assembly disregarded traditional redistricting principles in service of its racial aims.

In restructuring the Challenged Districts, Plaintiffs improved their compactness. Indeed, with a handful of exceptions, their remedial plans either match or improve the compactness of every Challenged District. *See* Hamilton Decl., Ex. D, I (Measure of Compactness Reports for Plan A and Plan B).

Plaintiffs provide a comparison of the compactness of their proposed remedial plans and the Enacted Plan using three common compactness measures. The Reock test compares each district to an ideal circle (considering the circle the best and most compact shape possible) and computes the ratio of the area of the district to the minimum area of a circle sufficiently large to encompass the district. The Polsby-Popper test compares the ratio of a district's area with the area of a circle sharing the same perimeter. Under these two measures, a larger number means the district is more compact. The Schwarzberg measure compares the ratio of the perimeter of the district to the perimeter of a circle of an equal area to that of the district. Under this measure, a smaller number means the district is more compact.

Taken as a whole, and even given the constraint of limiting changes to the Challenged Districts and their immediate environs, Plaintiffs' proposed remedial plans match or improve on the compactness of the Enacted Plan under each of the three measures. The bolded number shows the most compact plan(s):

Plan	Mean Reock	Mean Polsby- Popper	Mean Schwarzberg
Plaintiffs' Plan A	0.37	.26	1.89
Plaintiffs' Plan B	0.36	.26	1.90
Enacted	0.36	.24	2.00

The superior compactness of Plaintiffs' remedial plans manifests more clearly on a district-by-district comparison of the Challenged Districts. In all but two instances, Plaintiffs' iterations of the Challenged Districts are superior. The measurement in bold again reflects, as to each district, which iteration of the Challenged District is most compact:

District	R	eock	Polsby	-Popper	Schwa	artzberg
	Enacted	Plaintiffs	Enacted	Plaintiffs	Enacted	Plaintiffs
63	.25	Plan A: .59	.16	Plan A: .51	2.31	Plan A: 1.27
		Plan B: . <b>59</b>		Plan B: <b>.51</b>		Plan B: <b>1.27</b>
69	.52	Plan A: .46	.34	Plan A: .35	1.68	Plan A: 1.65
		Plan B: .46		Plan B: <b>.37</b>		Plan B: <b>1.60</b>
70	.40	Plan A: <b>.41</b>	.19	Plan A: .19	2.19	Plan A: 2.16
		Plan B: .30		Plan B: .20		Plan B: <b>1.78</b>
71	.33	Plan A: .38	.24	Plan A: <b>.30</b>	1.99	Plan A: <b>1.76</b>
		Plan B: .38		Plan B: .29		Plan B: 1.78
74	.16	Plan A: <b>.26</b>	.12	Plan A: .22	2.26	Plan A: 1.96
		Plan B: .21		Plan B: <b>.22</b>		Plan B: <b>1.93</b>
77	.19	Plan A: <b>.26</b>	.15	Plan A: .25	2.49	Plan A: <b>1.99</b>
		Plan B: <b>.26</b>		Plan B: <b>.25</b>		Plan B: <b>1.99</b>
80	.26	Plan A: <b>.39</b>	.11	Plan A: <b>.28</b>	2.92	Plan A: <b>1.85</b>
		Plan B: <b>.39</b>		Plan B: <b>.28</b>		Plan B: <b>1.85</b>
89	.40	Plan A: <b>.50</b>	.20	Plan A: .43	2.21	Plan A: <b>1.47</b>
		Plan B: <b>.50</b>		Plan B: <b>.43</b>		Plan B: <b>1.47</b>
90	.46	Plan A: <b>.48</b>	.20	Plan A: <b>.46</b>	2.17	Plan A: <b>1.44</b>
		Plan B: <b>.48</b>		Plan B: <b>.46</b>		Plan B: <b>1.44</b>
92	.34	Plan A: .32	.26	Plan A: <b>.31</b>	1.89	Plan A: <b>1.74</b>
		Plan B: .32		Plan B: <b>.31</b>		Plan B: <b>1.74</b>
95	.14	Plan A: <b>.25</b>	.14	Plan A: <b>.34</b>	2.61	Plan A: <b>1.69</b>
		Plan B: <b>.25</b>		Plan B: .34		Plan B: <b>1.69</b>
Average	.31	Plan A: <b>.39</b>	.19	Plan A: .33	2.25	Plan A: 1.73
		Plan B: .38		Plan B: <b>.33</b>		Plan B: <b>1.69</b>

In sum, in the course of curing the constitutional deficiencies of the Challenged Districts and making necessary adjustments to re-achieve population equality, Plaintiffs were able to improve the compactness of the Challenged Districts and the House map as a whole. Had Plaintiffs departed more freely from the contours of the existing districts, they could have improved the compactness of the districts even further.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> The same is true with regard to the final adjustments Plaintiffs made to their Plans to ensure that incumbents were not drawn out of their districts. For example, Plaintiffs found it necessary to split additional VTDs in District 70 and 89 for this purpose. In doing so, Plaintiffs followed the methodology used by Special Master Grofman in *Personhuballah*. *See supra* at 5.

#### IV. CONCLUSION

For the reasons stated above, Plaintiffs respectfully request that the Court adopt either Plaintiffs' proposed Plan A or Plan B. Both remedial plans clearly and cleanly fix the unconstitutional racial gerrymander of the Challenged Districts. Moreover, though Plaintiffs did not perform radical surgery on other districts, they were still able to improve the objective characteristics of the map in the course of tweaking districts to achieve population equality. Plaintiffs therefore submit that their proposed remedial plans fairly and adequately remedy the unconstitutional gerrymander of the Challenged Districts.

Dated: November 2, 2018 Respectfully submitted,

By: /s/ Aria C. Branch

Marc Erik Elias (admitted *pro hac vice*) Bruce V. Spiva (admitted *pro hac vice*) Aria Branch (VSB No. 83682)

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Attorneys for Plaintiffs

### **CERTIFICATE OF SERVICE**

I hereby certify that on the 2nd day of November, 2018, I filed the foregoing with the Clerk of Court using the CM/ECF system, which will then send a notification of such filing to the counsel of record in this case.

### IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF VIRGINIA RICHMOND DIVISION

GOLDEN BETHUNE-HILL, et al.,

Plaintiffs,

v.

VIRGINIA STATE BOARD OF ELECTIONS, et al.,

Defendants.

VIRGINIA HOUSE OF DELEGATES, et al.,

Intervenor-Defendants.

Civil Action No. 3:14-cv-00852-REP-GBL-BMK

- I, Kevin J. Hamilton, state that I have personal knowledge of the matters set forth in this declaration and, if sworn as a witness, would testify as follows:
- 1. I am an attorney practicing at the firm of Perkins Coie LLP and served as a lead counsel for the plaintiffs in this matter.
- 2. Attached as Exhibit A is a true and correct copy of region maps for the Richmond, Tri-City, South Hampton Roads, and North Hampton Roads regions in Plaintiffs' Remedial Plan A.
- 3. Attached as Exhibit B is a true and correct copy of maps of each of the Challenged Districts in Plaintiffs' Remedial Plan A.
- 4. Attached as Exhibit C is a true and correct copy of a Population Summary and Voting Age Population Summary for Plaintiffs' Remedial Plan A.

- 5. Attached as Exhibit D is a true and correct copy of a Measures of Compactness report for Plaintiffs' Remedial Plan A.
- 6. Attached as Exhibit E is a true and correct copy of a Political Subdivisions Split Between Districts report for Plaintiffs' Remedial Plan A.
- 7. Attached as Exhibit F is a true and correct copy of region maps for the Richmond, Tri-City, South Hampton Roads, and North Hampton Roads regions in Plaintiffs' Remedial Plan B.
- 8. Attached as Exhibit G is a true and correct copy of maps of each of the Challenged Districts in Plaintiffs' Remedial Plan B.
- 9. Attached as Exhibit H is a true and correct copy of a Population Summary and Voting Age Population Summary for Plaintiffs' Remedial Plan B.
- 10. Attached as Exhibit I is a true and correct copy of a Measures of Compactness report for Plaintiffs' Remedial Plan B.
- 11. Attached as Exhibit J is a true and correct copy of a Political Subdivisions Split Between Districts report for Plaintiffs' Remedial Plan B.

I declare under penalty of perjury that the foregoing statements are true and correct.

Executed this 2nd day of November, 2018 in Philadelphia, Pennsylvania.

Kevin J. Hamilton

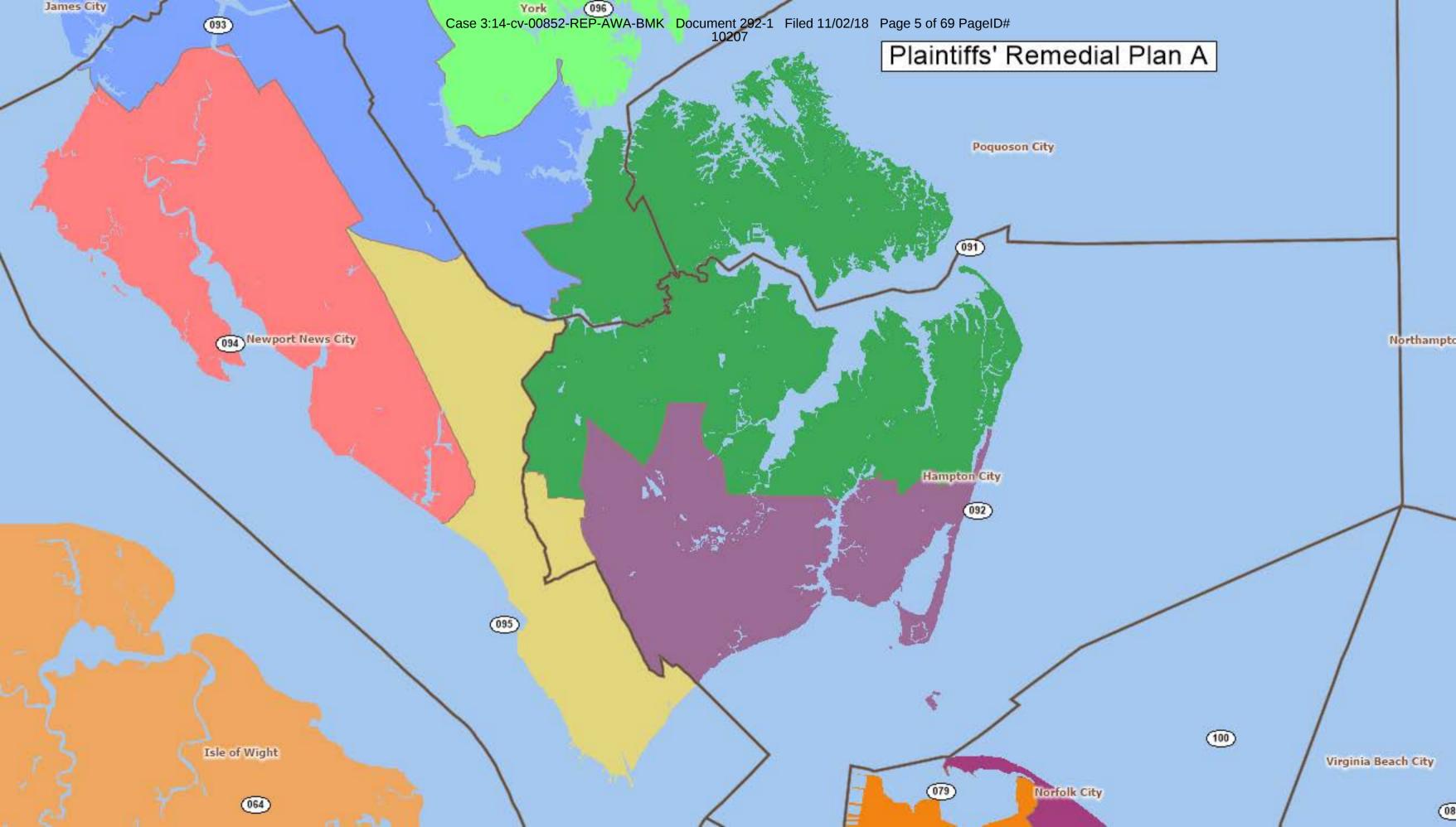
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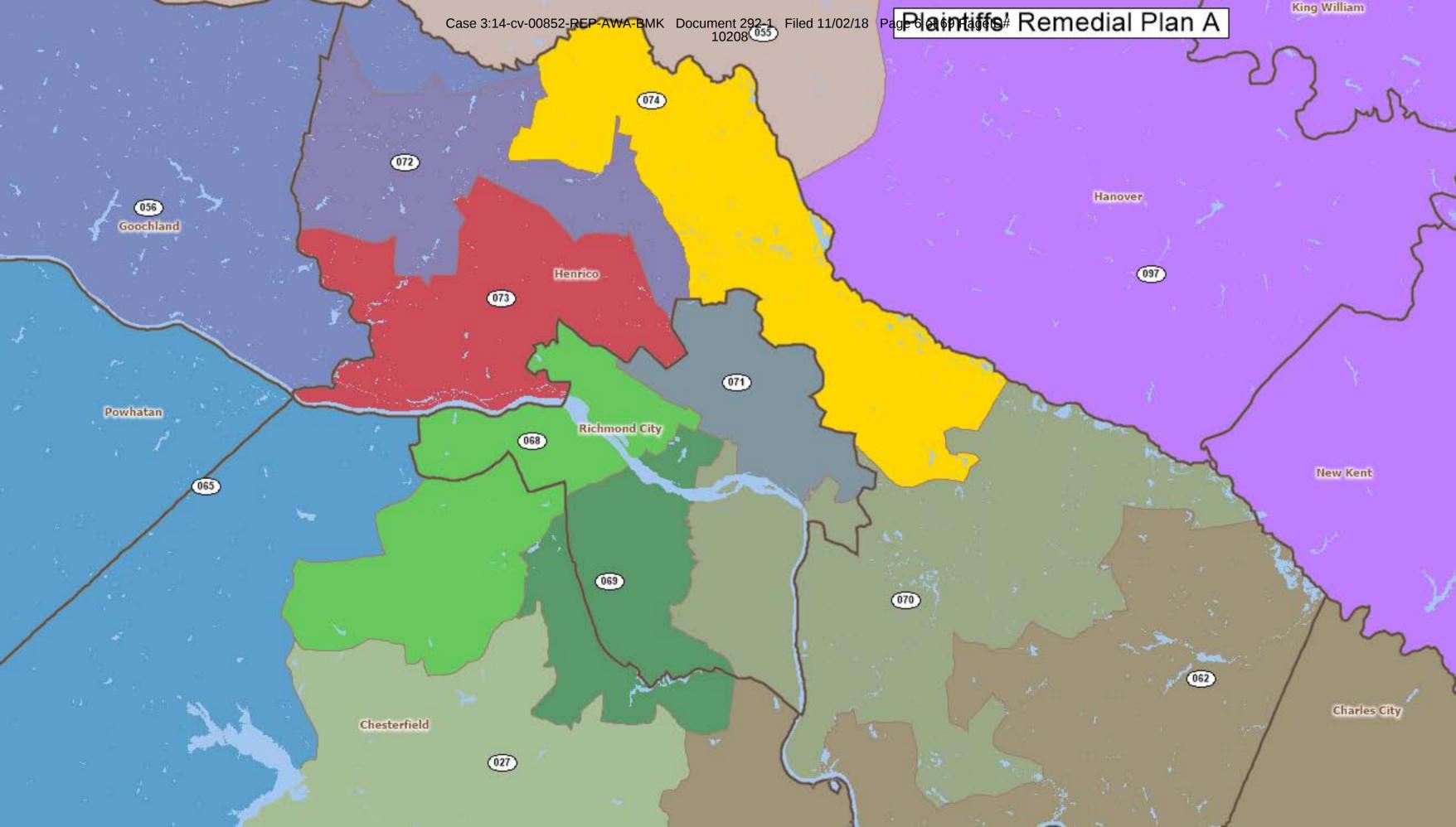
### CERTIFICATE OF SERVICE

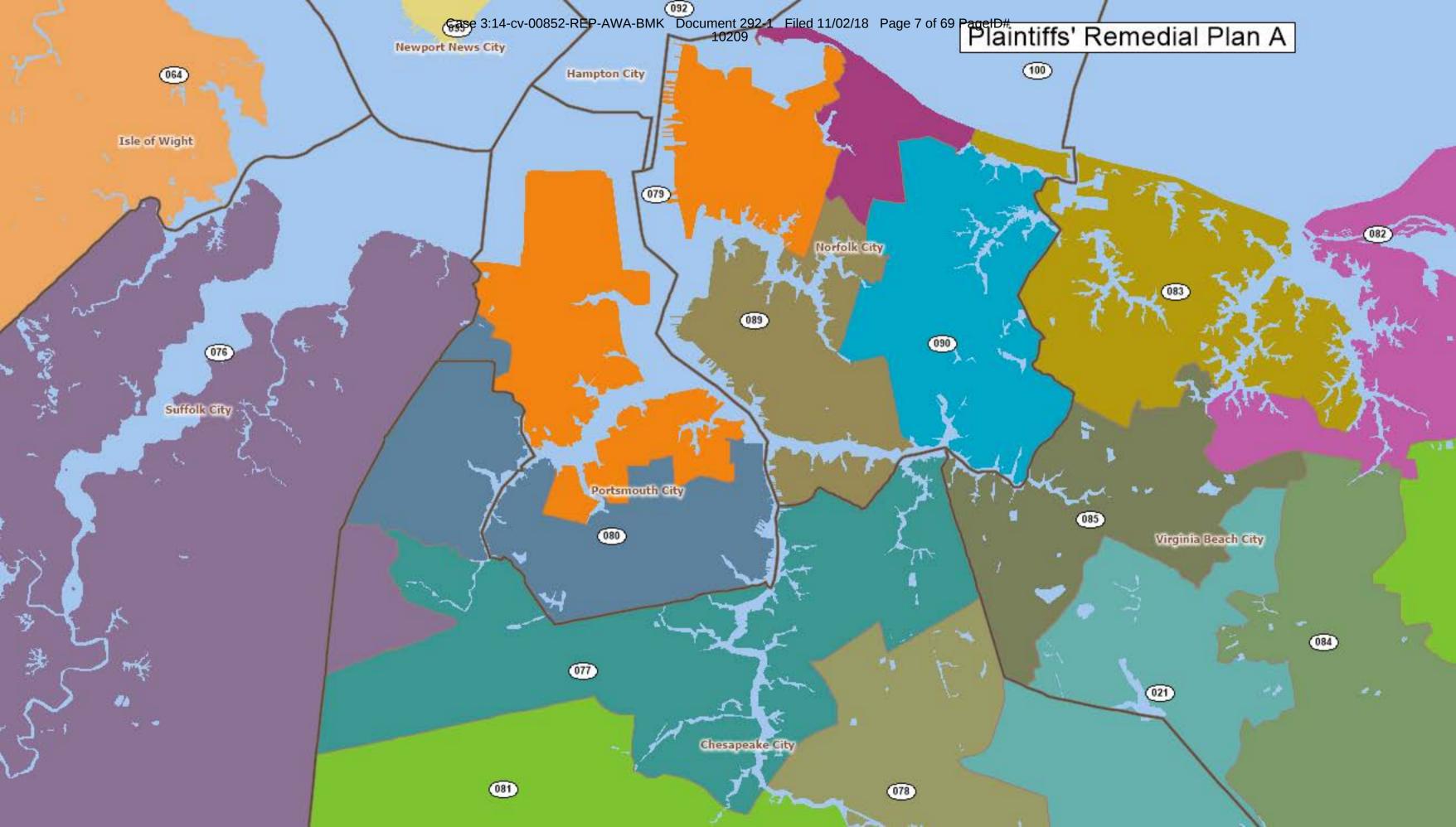
I hereby certify that on the 2nd day of November, 2018, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system, which will send a copy to counsel of record.

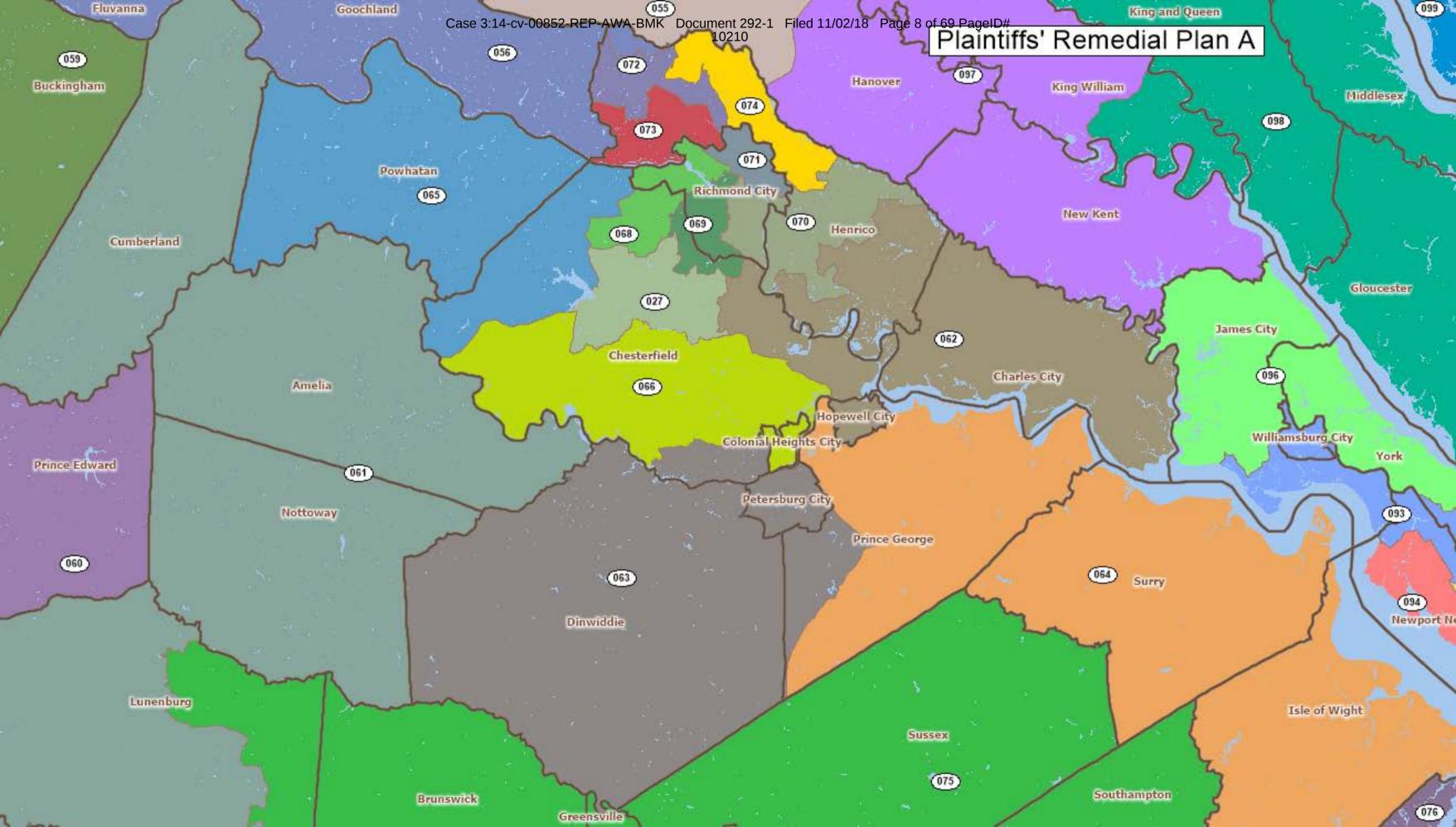
/s/ Aria Branch ARIA BRANCH

### **EXHIBIT A**

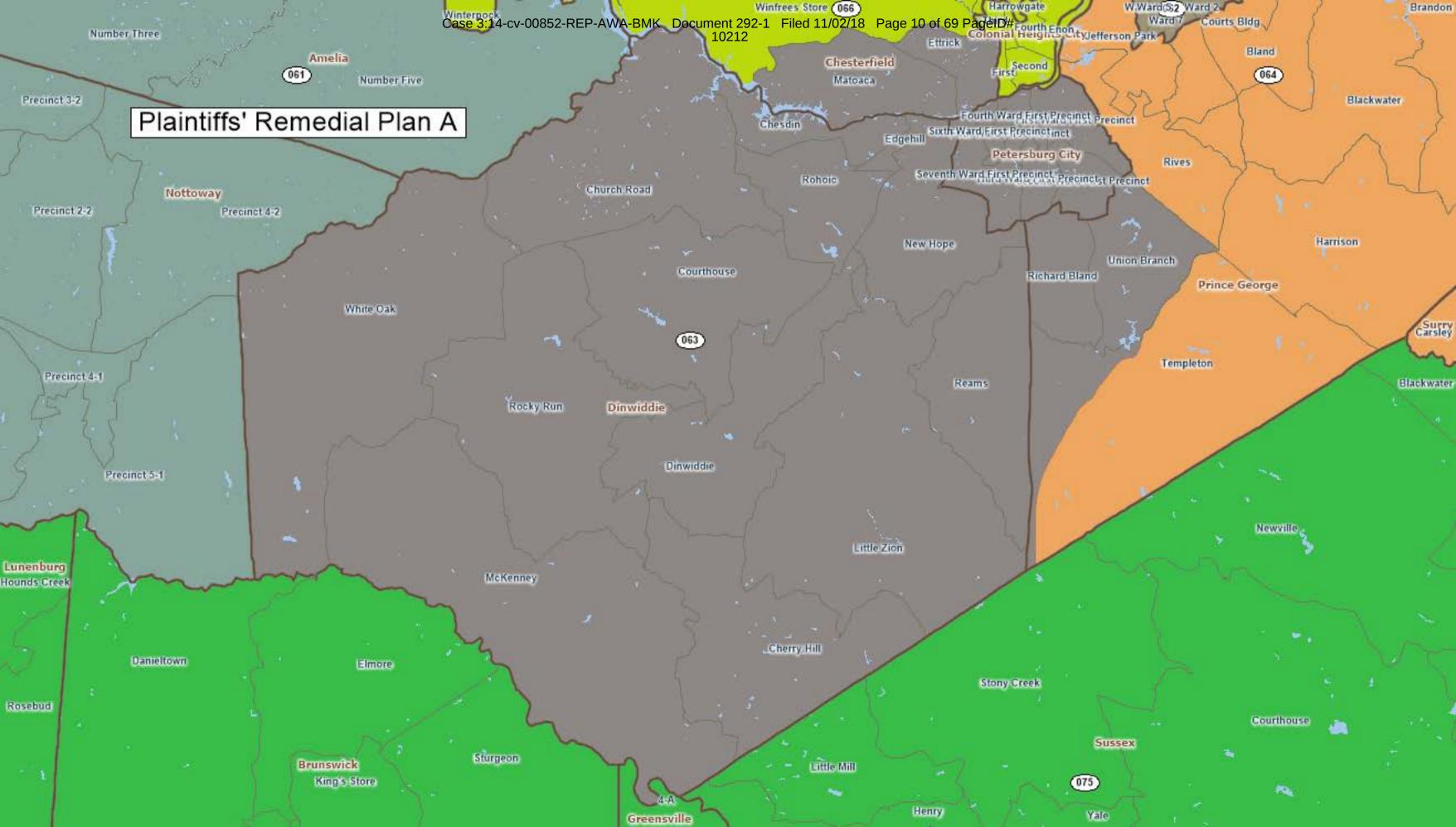


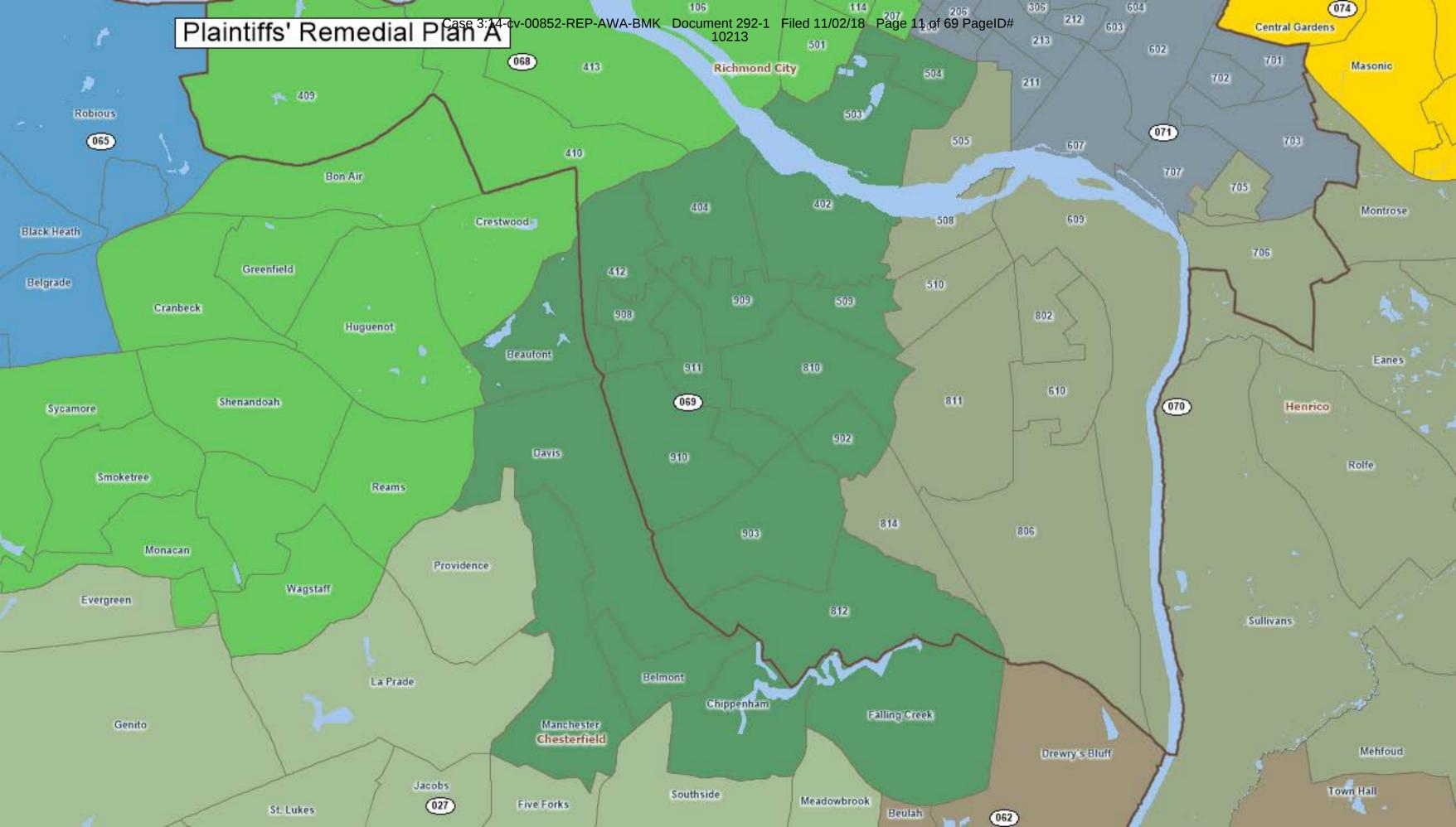


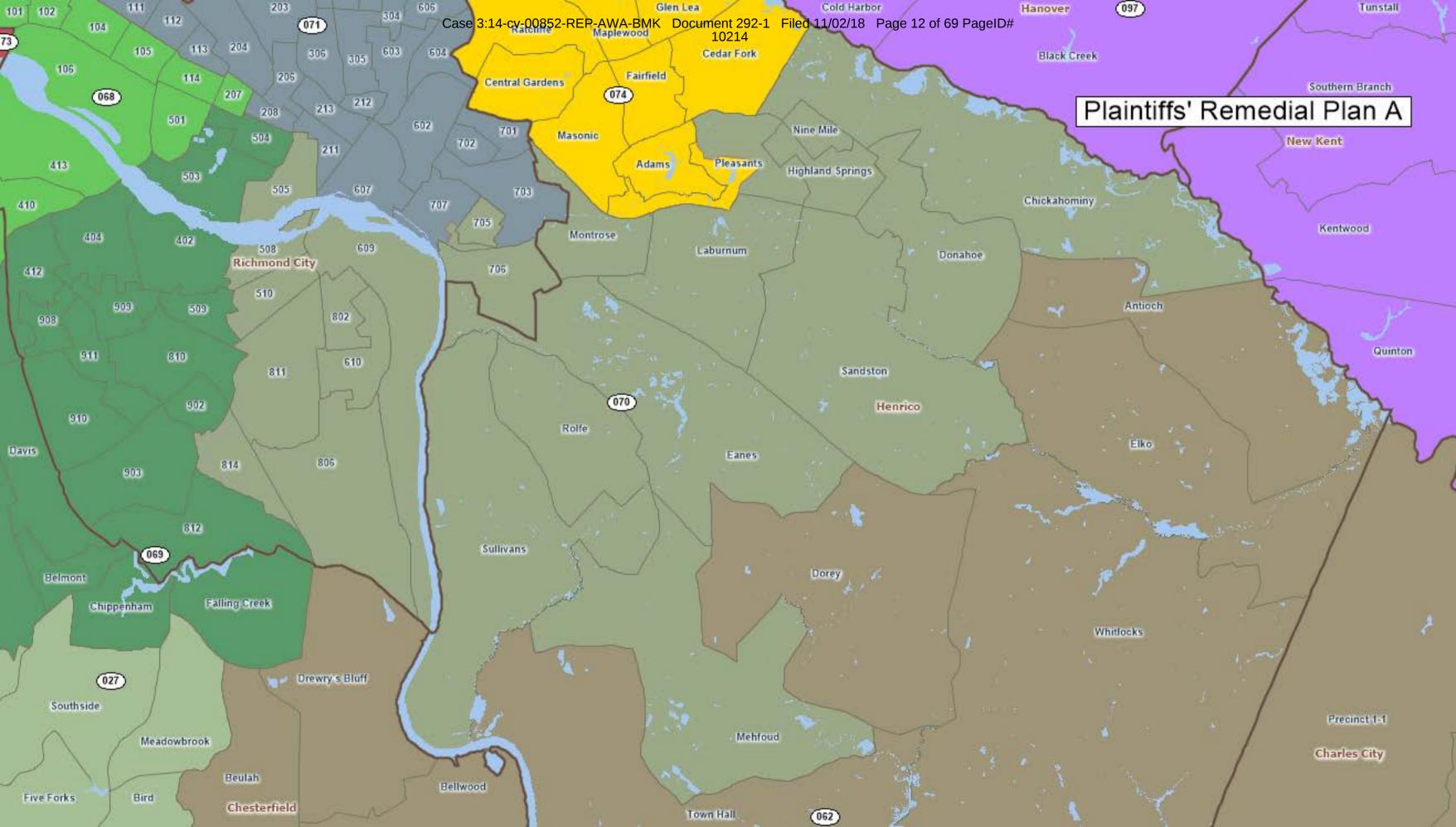


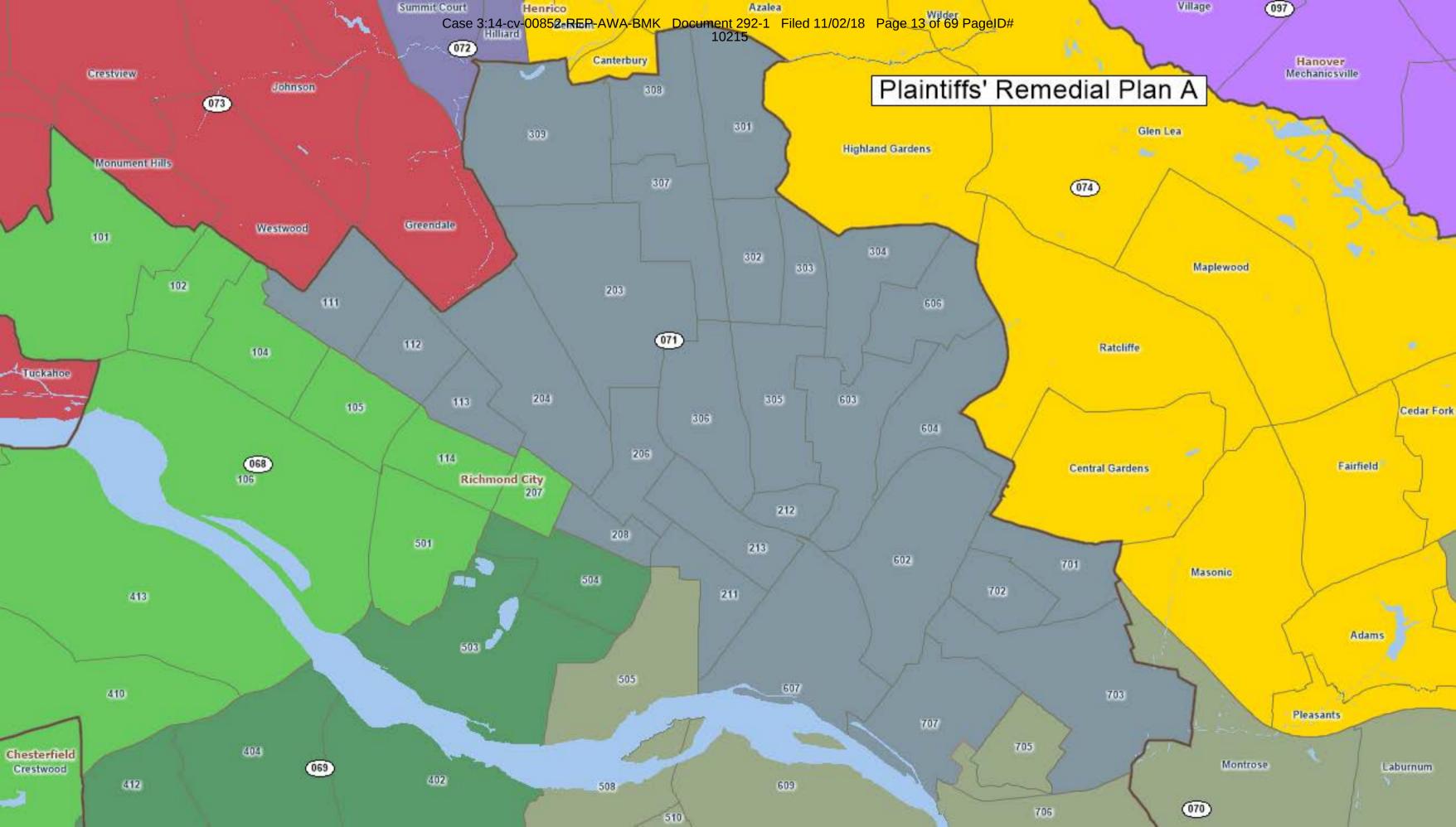


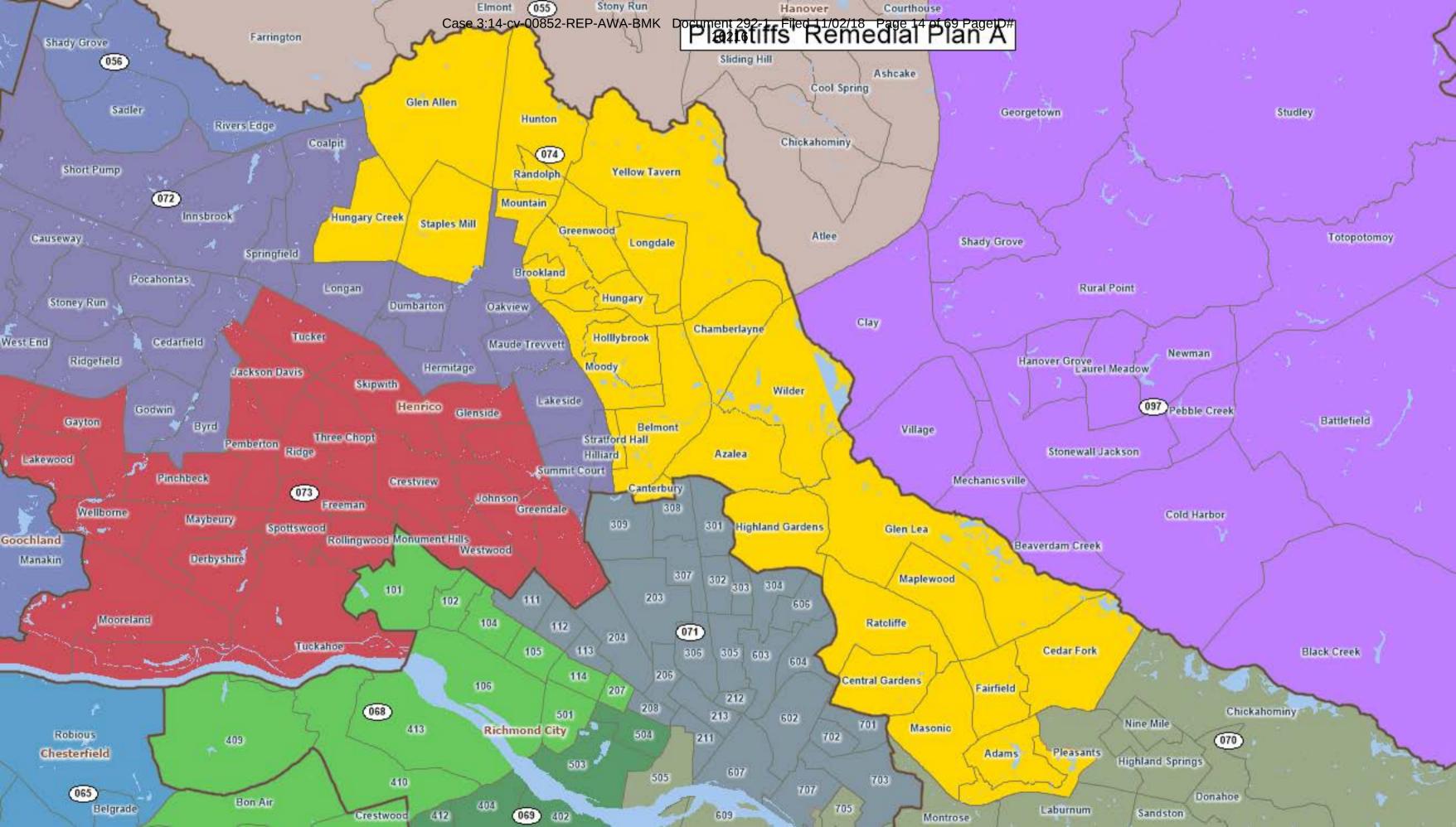
### **EXHIBIT B**

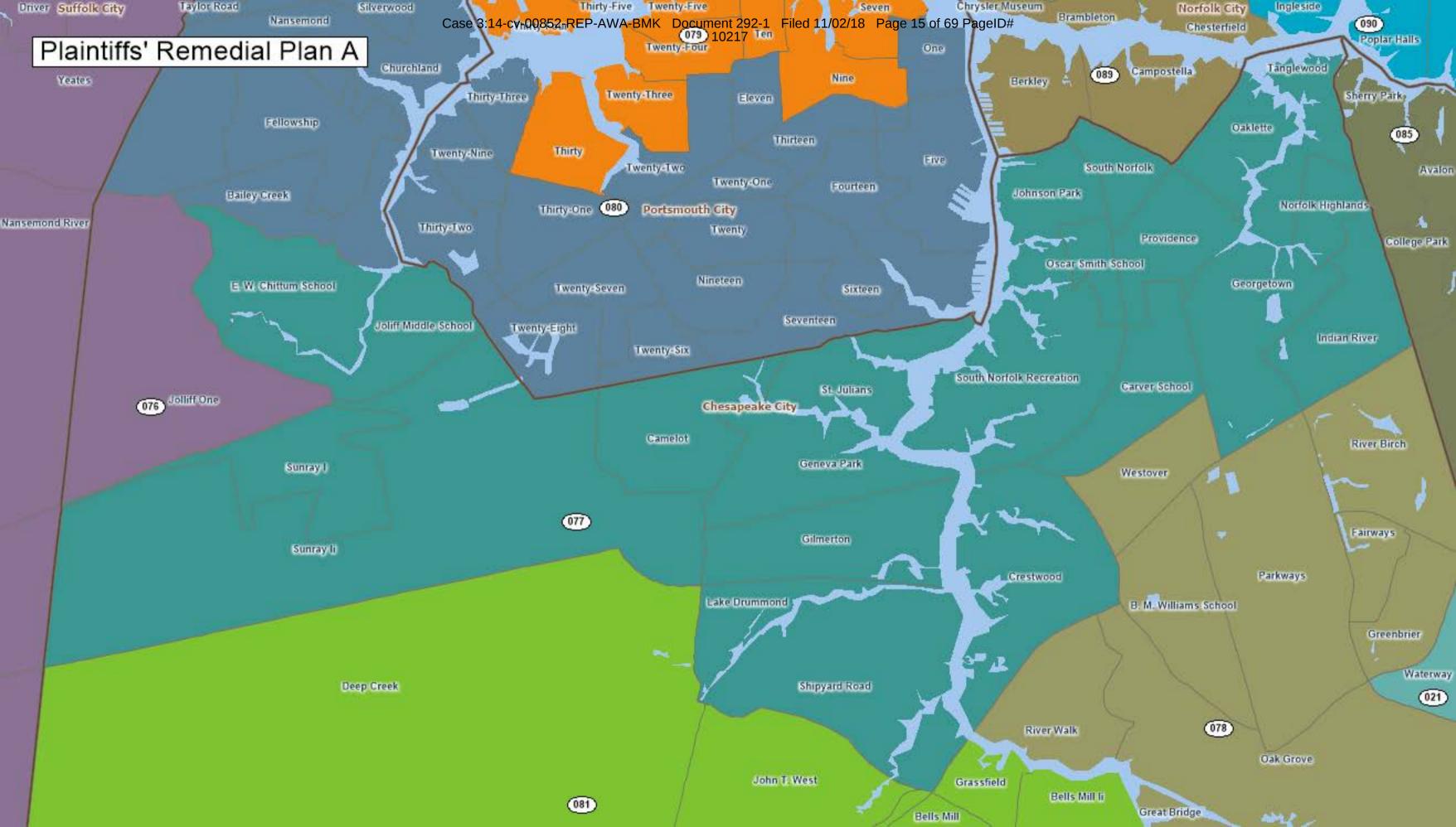


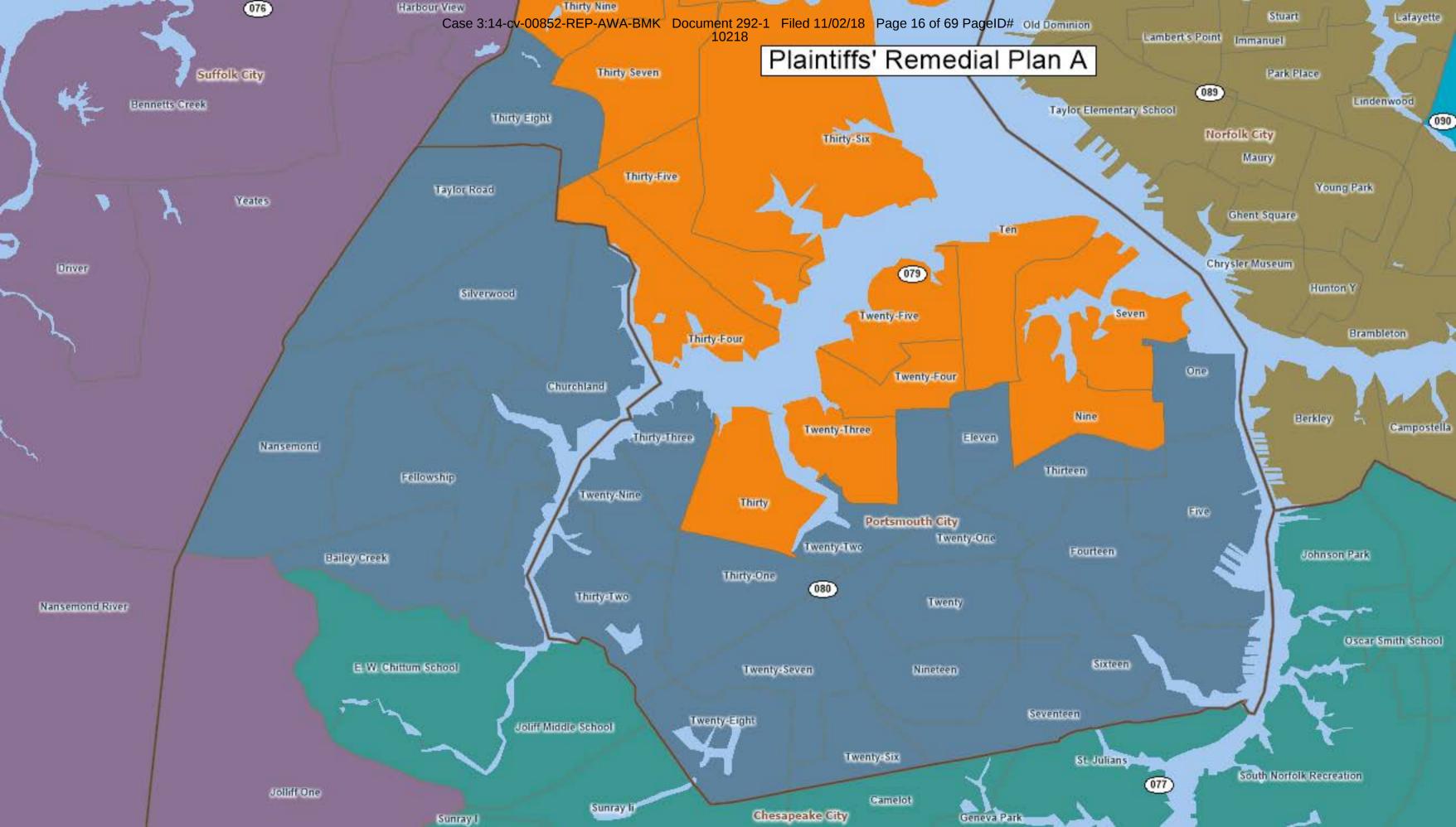


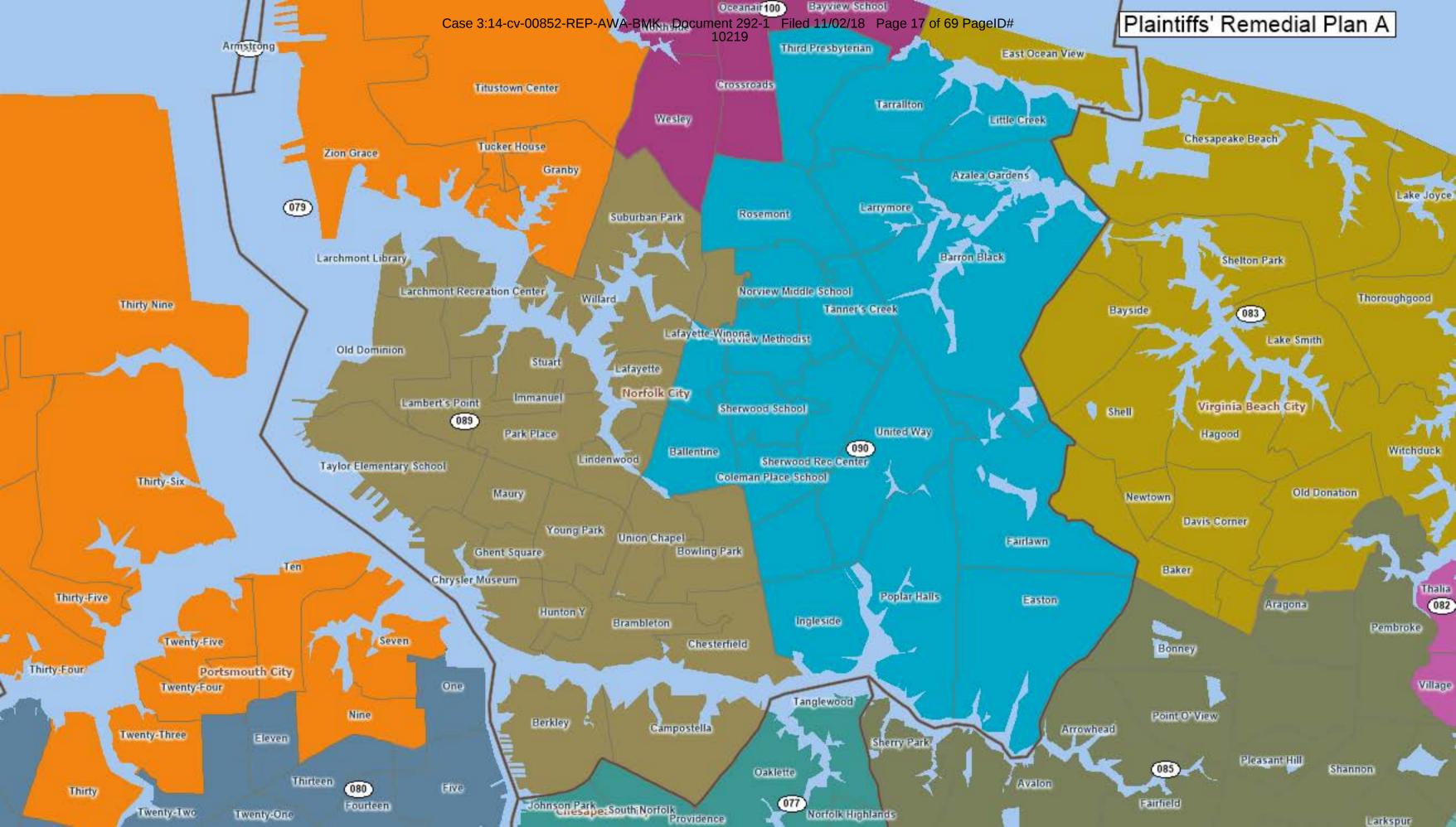


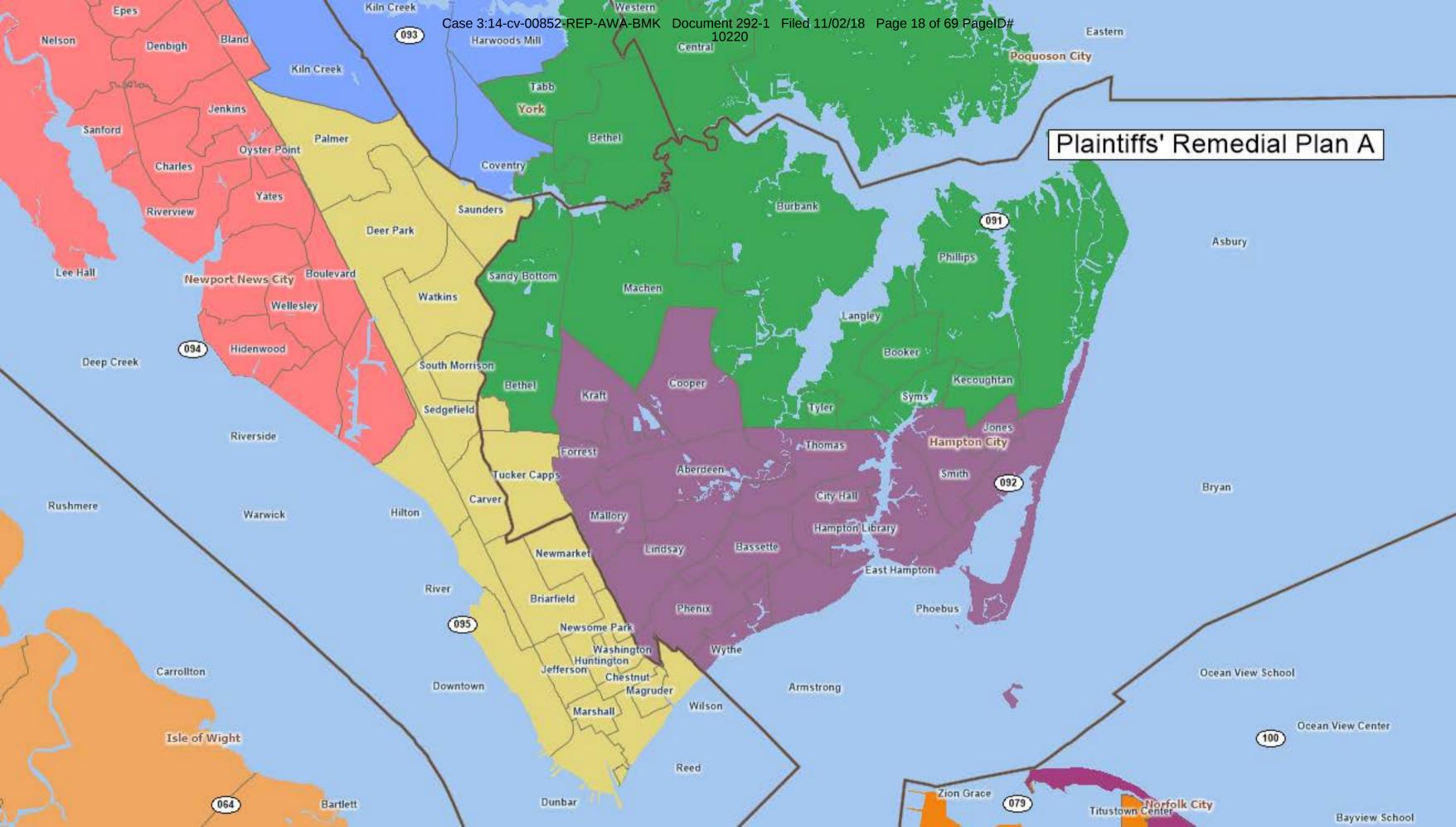












## **EXHIBIT C**

#### Plaintiffs' Remedial Plan A Population Summary % Black

	Total		%			Black (alone	% Black												
НĎ			76 Deviation	White	% White	Black (alone or in Part)	(alone or in Part)	Riack	% Black	Hispanic	% Hisnanic	ΔΙΔΝ	<b>≪</b> ∆IAN	Arisa	% Acian	Hawel	% HawPi	Other	≪ Other
51001	80,508	498		76,238	94.7%	2,938	3.6%	2,642	3.3%	1,032	1.3%	198	0.2%	273	0.3%	21	0.0%	378	0.5%
51002	79,491	-519		45,289	57.0%	21,234	26.7%		24.3%	14,019	17.6%	389	0.5%	4,714	5.9%	143	0.2%	5,537	7.0%
51003	80,583	573		77,178	95.8%	2,453	3.0%	2,187	2.7%	471	0.5%	89	0.1%	361	0.4%	10	0.0%	141	0.2%
51004	80,446	436		77,768	96.7%	1,687	2.1%	1,487	1.8%	833	1.0%	127	0.2%	215	0.3%	9	0.0%	323	0.4%
51005 51006	80,600 79,608	590 -402	-0.50%	76,060	94.4% 95.9%	2,670 1,847	3.3% 2.3%	2,217	2.8%	2,219	2.8%	149	0.2%	279	0.3%	24	0.0%	963	1.2%
51007	80,146	136		74,108	92.5%	3,719	4.6%	1,491 3,148	1.9% 3.9%	1,348 1,636	1.7% 2.0%	144 144	0.2% 0.2%	233 1,036	0.3% 1.3%	11 18	0.0%	620 445	0.8% 0.6%
51008	80,685	675		74,011	91.7%	3,761	4.7%	3,262	4.0%	1,558	1.9%	167	0.2%	1,519	1.9%	18	0.0%	595	0.7%
51009	80,574	564	0.70%	69,709	86.5%	8,461	10.5%	7,855	9.7%	2,349	2.9%	205	0.3%	272	0.3%	13	0.0%	1,447	1.8%
51010	80,617	607		60,881	75.5%	7,711	9.6%	6,650	8.2%	9,800	12.2%	276	0.3%	5,836	7.2%	34	0.0%	3,995	5.0%
51011 51012	80,132	122 482		47,632	59.4%	28,095	35.1%		33.0%	4,734	5.9%	213	0.3%	1,374	1.7%	49	0.1%	2,072	2.6%
51012	80,492 80,579	569		70,200 48,642	87.2% 60.4%	4,022 11,894	5.0% 14.8%	3,42B 10,402	4.3% 12.9%	1,959 20,063	2.4% 24.9%	160 397	0.2% 0.5%	4,443 7,610	5.5% 9.4%	22 65	0.0% 0.1%	587 9,494	0.7% 11.8%
51014	79,407	-603		47,862	60.3%	29,125	36.7%		35.9%	2,407	3.0%	145	0.2%	561	0.7%	24	0.0%	1,271	1.6%
51015	80,630	620	0.77%	75,913	94.1%	1,994	2.5%	1,507	1.9%	3,386	4.2%	189	0.2%	361	0.4%	17	0.0%	1,474	1.8%
51016	79,692	-318		54,827	68.8%	22,513		21,837	27.4%	2,628	3.3%	189	0.2%	368	0.5%	7	0.0%	1,389	1.7%
51017 51018	80,631 79,450	621		71,273	88.4%	5,959	7.4%	5,176	6.4%	2,059	2.6%	157	0.2%	1,880	2.3%	22	0.0%	639	0.8%
51019	80,080	-560 70		69,073 73,554	86.9% 91.9%	6,596 S,190	8.3% 6.5%	5,720 4,655	7.2% 5.8%	4,292 1,019	5.4% 1.3%	260 217	0.3% 0.3%	943 332	1.2% 0.4%	45 20	0.1% 0.0%	1,563 241	2.0% 0.3%
51020	79,334	-676		69,268	87.3%	7,701	9.7%	6,665	8.4%	2,580	3.3%	173	0.2%	494	0.6%	21	0.0%	1,054	1.3%
51021	79,608	-402	-0.50%	45,487	57.1%	21,051	26.4%	19,164	24.1%	5,567	7.0%	225	0.3%	9,178	11.5%	95	0.1%	1,559	2.0%
51022	79,307	-703		59,135	74.6%	17,825		17,029	21.5%	1,773	2.2%	192	0.2%	1,019	1.3%	26	0.0%	565	0.7%
51023	79,330	-680		62,083	78.3%	13,394		12,524	15.8%	2,087	2.6%	313	0.4%	2,010	2.5%	34	0.0%	914	1.2%
51024 51025	79,678 80,011	-332 1		70,684 73,736	88.7% 92.2%	7,017 3,245	8.8% 4.1%	6,459 2,727	8.1% 3.4%	1,424 2,893	1.8% 3.6%	428 148	0.5% 0.2%	442 950	0.6% 1.2%	21 11	0.0%	446 1,258	0.6% 1.6%
51026	80,688	678		67,806	84.0%	4,260	5.3%	3,531	4.4%	9,906	12.3%	264	0.3%	1,878	2.3%	64	0.1%	5,170	6.4%
51027	79,469	-541		52,148	65.6%	20,582		19,296	24.3%	5,628	7.1%	321	0.4%	2,440	3.1%	49	0.1%	2,891	3.6%
51028	79,304	-706		56,206	70.9%	16,476		14,841	18.7%	7,076	8.9%	403	0.5%	1,961	2.5%	85	0.1%	2,658	3.4%
51029	79,851	-159		68,575	85.9%	5,669	7.1%	4,732	5.9%	6,597	8.3%	248	0.3%	1,106	1.4%	20	0.0%	3,382	4.2%
51030 51031	80,583 79,210	573 -800		62,914 50,345	78.1% 63.6%	13,207 17,494		11,938 15,955	14.8% 20.1%	5,030 11,324	6.2% 14.3%	275 470	0.3% 0.6%	802 4,561	1.0% 5.8%	59 130	0.1% 0.2%	2,448 4,161	3.0% 5.3%
\$1032	80,268	258		55,73B	69.4%	6,846	8.5%	5,929	7.4%	7,420	9.2%	213		12,951	16.1%	40	0.0%	2,189	2.7%
51033	80,550	540	0.67%	70,393	87.4%	4,657	5.8%	3,883	4.8%	5,090	6.3%	194	0.2%	2,203	2.7%	47	0.1%	1,784	2.2%
51034	80,722	712		61,693	76.4%	3,137	3.9%	2,618	3.2%	5,819	7.2%	152		11,696	14.5%	37	0.0%	1,729	2.1%
51035 51036	80,213 79,746	203 -264		53,780 53,210	67.0% 66.7%	4,431 8,034	5.5% 10.1%	3,816 7,138	4.8% 9.0%	8,037 8,819	10.0% 11.1%	212 247		16,330 12,776	20.4% 16.0%	56 32	0.1%	2,780 3,187	3.5% 4.0%
51037	80,255	245		47,377	59.0%	7,154	8.9%	6,282	7.8%	10,555	13.2%	258		19,197	23.9%	47	0.1%	3,605	4.5%
51038	80,758	748	0.93%	42,448	52.6%	8,542	10.6%	7,896	9.8%	25,694	31.8%	508	0.6%	15,293	18.9%	63	0.1%	10,919	13.5%
51039	80,710	700		46,876	58.1%	8,318	10.3%	7,585	9.4%	15,374	19.0%	384		15,794	19.6%	77	0.1%	6,603	8.2%
51040 51041	80,729 80,792	71 <del>9</del> 782		55,837 54,579	69.2% 67.6%	5,891 5,343	7.3% 6.6%	5,095 4,637	6.3% 5.7%	7,868 9,941	9.7% 12.3%	240 183		13,863 15,266	17.2% 18.9%	78 62	0.1% 0.1%	2,649 2,885	3.3% 3.6%
51042	79,964	-46		55,174	69.0%	9,089	11.4%	8,114	10.1%	7,461	9.3%	261		11,008	13.8%	104	0.1%	1,939	2.4%
51043	80,750	740	0.92%	47,821	59.2%	15,299	18.9%	14,109	17.5%	12,611	15.6%	291	0.4%	9,989	12.4%	81	0.1%	4,915	6.1%
51044	80,796	786		44,799	55.4%	18,844		17,690	21.9%	19,469	24.1%	413	0.5%	5,310	6.6%	90	0.1%	9,136	11.3%
51045 51046	80,240 80,333	230 323		59,905 41,531	74.7% 51.7%	10,197 23,914	12.7% 29.8%	9,434 22,577	11.8% 28.1%	11,072 13,746	13.8% 17.1%	363 293	0.5% 0.4%	3,145 6,546	3.9% 8.1%	63 87	0.1% 0.1%	4,791 5,911	6.0% 7.4%
51047	80,757	747		61,673	76.4%	4,477	5.5%	3,900	4.8%	10,754	13.3%	427	0.5%	7,508	9.3%	56	0.1%	4,263	5.3%
51048	79,492	-518	-0.65%	63,919	80.4%	3,802	4.8%	3,291	4.1%	5,831	7.3%	179	0.2%	8,184	10.3%	48	0.1%	1,318	1.7%
51049	80,609	599		42,754	53.0%	14,797		13,754	17.1%	21,749	27.0%	497	0.6%		12.6%	105	0.1%	9,557	11.9%
51050 51051	80,677 80,372	667 362		50,040 55,264	62.0% 68.8%	12,619 13,854		11,036 12,462	13.7% 15.5%	21,171 10,775	26.2% 13.4%	450 444	0.6% 0.6%	5,698 4,757	7.1% 5.9%	114 85	0.1% 0.1%	9,436 3,777	11.7% 4.7%
51052	79,290	·720		33,564	42.3%	26,018		23.892	30.1%	23,127	29.2%	663	0.8%	5,377	6.8%	99		10,940	13.8%
51053	80,049	39	0.05%	48,549	60.6%	4,895	6.1%	4,294	5.4%	16,791	21.0%	400	0.5%	16,424	20.5%	45	0.1%	7,101	8.9%
51054	80,155	145		SB,394	72.9%	-		14,128	17.6%	6,404	8.0%	283	0.4%		2.4%	86	0.1%	2,577	3.2%
51055	79,578	-432		63,245	79.5%			12,766	16.0%	2,068	2.6%		0.4%	881	1.1%	36	0.0%	695	0.9%
51056 51057	80,046 80,778	36 7 <b>6</b> 8		61,943 55,937	77.4% 69.2%	13,934 14,978		13,107 13,861	16.4% 17.2%	1,804 5,761	2.3% 7.1%		0.3% 0.3%		3.4% 7.2%	27 49	0.0% 0.1%	541 2,396	0.7% 3.0%
51058	80,767	757		71,271	88.2%	6,129		5,290	6.5%	2,569	3.2%		0.2%		1.6%	20	0.0%	1,071	1.3%
51059	79,345	-665	-0.83%	61,136	77.1%	16,499	20.8%	15,647	19.7%	1,436	1.8%	203	0.3%	457	0.6%	34	0.0%	529	0.7%
51060		-791		50,287	63.5%			26,636	33.6%	1,407	1.8%		0.3%	368	0.5%	22	0.0%	620	0.8%
51061 51062	79,792 80,065	-218 55		50,089 47,885	62.8% 59.8%	27,647 24,481		26,906 23,205	33.7% 29.0%	2,085 7,359	2.6% 9.2%		0.3% 1.2%	345 1,719	0.4% 2.1%	23 87	0.0% 0.1%	958 3,953	1.2% 4.9%
51063		-574		32,019	40.3%			44,174	55.6%	2,391	3.0%		0.3%	535	0.7%	37	0.0%	999	1.3%
51064	79,452	-558		52,144	65.6%			23,500	29.6%	2,744	3.5%	359	0.5%	789	1.0%	119	0.1%	767	1.0%
51065		-328		67,806	85.1%			7,345	9.2%	1,890	2.4%		0.2%		3.2%	29	0.0%	458	0.6%
51066		-680		59,495	75.0%			13,977	17.6%	3,788	4.8%		0.4%		2.6%	45	0.1%	1,474	1.9%
\$1067 \$1068	79,633 79,218	-377 -792		53,29B 63,304	66.9% 79.9%	4,972 11,087		4,333 10,339	5.4% 13.1%	7,838 3,428	9.8% 4.3%	142 240	0.2%	16,199 2,444	20.3% 3.1%	75 23	0.1% 0.0%	2,654 1,224	3.3% 1.5%
51069	79,489	-521		26,051	32.8%			41,984	52.8%	11,664	14.7%		0.5%		2.0%	99	0.1%		9.0%
51070		-598		25,162	31.7%			49,129	61.9%	3,721	4.7%		0.5%	888	1.1%	52	0.1%	1,898	2.4%
51071 51072	79,515 80,432	-495 422		30,507 57,948	38.4% 72.0%	44,831 10,830		43,728 9,958	55.0% 12.4%	1,909	2.4% 5.6%	203	0.3% 0.2%		3.2% 10.6%	38 27	0.0%	597 1,756	0.8% 2.2%
51072	80,432 79,730	-280		57,948 58,639	72.0% 73.5%	-		9,958 10,286		4,486 6,005	5.6% 7.5%		0.2%	-	7.4%	39	0.0%	2,675	3.4%
51074	79,880	-130		30,275	37.9%			43,318	54.2%	2,889	3.6%		0.3%			41	0.1%	1,230	1.5%
51075	79,287	-723	-0.90%	35,158	44.3%	42,555	53.7%	41,910	52.9%	1,616	2.0%	203	0.3%	295	0.4%	24	0.0%	761	1.0%
51076	79,530	-480		40,644	51.1%			34,734	43.7%	2,360	3.0%		0.3%		1.7%	52		644	0.8% 1.9%
51077 51078	80,448 80,037	438 27		35,638 59,510	44.3% 74.4%			39,019 13,932	48.5% 17.4%	4,100 3,395	5.1% 4.2%		0.4% 0.4%		1.7% 3.7%	60 49	0.1% 0.1%	1,541 750	0.9%
51079	80,217	207		46,482	57.9%			26,253	32.7%	5,989	7.5%		0.7%		2.8%	187	0.2%		2.2%

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51080	79,924	-86	-0.11%	32,607	40.8%	44,098	55.2% 42,761	53.5%	2,389	3.0%	336	0.4%	1,229	1.5%	102	0.1%	820	1.0%
51081	80,691	681	0.85%	60,992	75.6%	14,384	17.8% 13,174	16.3%	4,450	5.5%	298	0.4%	2,119	2.6%	96	0.1%	1,245	1.5%
51082	79,504	-506	-0.63%	64,133	80.7%	10,250	12.9% 9,023	11.3%	4,668	5.9%	309	0.4%	2,043	2.6%	98	0.1%	1,350	1.7%
51083	80,774	764	0.95%	53,040	65.7%	20,669	25.6% 19,256	23.8%	5,123	6.3%	332	0.4%	3,478	4.3%	133	0.2%	1,647	2.0%
51084	79,655	-355	-0.44%	50,866	63.9%	18,664	23.4% 17,068	21.4%	6,111	7.7%	301	0.4%	5,968	7.5%	160	0.2%	1,730	2.2%
51085	80,754	744	0.93%	52,551	65.1%	19,037	23.6% 17,489	21.7%	5,050	6.3%	378	0.5%	5,295	6.6%	117	0.1%	1,634	2.0%
51086	80,747	737	0.92%	46,400	57.5%	7,132	8.8% 6,369	7.9%	17,163	21.3%	351	0.4%	15,998	19.8%	42	0.1%	8,162	10.1%
51087	79,275	-735	-0.92%	44,093	55.6%	7,429	9.4% 6,483	8.2%	11,761	14.8%	236	0.3%	19,678	24.8%	54	0.1%	5,109	6.4%
51088	80,191	181	0.23%	60,158	75.0%	12,879	16.1% 11,480	14.3%	7,188	9.0%	261	0.3%	2,106	2.6%	95	0.1%	3,356	4.2%
51089	80,517	507	0.63%	31,318	38.9%	45,497	56.5% 44,279	55.0%	2,558	3.2%	232	0.3%	1,913	2.4%	56	0.1%	751	0.9%
\$1090	79,228	·782	-0.98%	33,391	42.1%	38,860	49.0% 37,049	46.B%	5,285	6.7%	341	0.4%	3,379	4.3%	114	0.1%	1,859	2.3%
51091	79,503	·S07	-0.63%	\$1,706	65.0%	22,177	27.9% 20,508	25.8%	3,604	4.5%	332	0.4%	2,719	3.4%	94	0.1%	1,009	1.3%
51092	79,959	-51	-0.06%	27,332	34.2%	49,076	61.4% 47,056	58.9%	3,528	4.4%	347	0.4%	1,317	1.6%	82	0.1%	1,037	1.3%
51093	79,232	-778	-0.97%	53,806	67.9%	18,041	22.8% 16,524	20.9%	5,061	6.4%	268	0.3%	3,804	4.8%	137	0.2%	1,673	2.1%
51094	79,268	-742	-0.93%	45,286	57.1%	27,456	34.6% 25,249	31.9%	6,442	8.1%	389	0.5%	2,547	3.2%	159	0.2%	2,051	2.6%
51095	79,667	-343	-0.43%	32,062	40.2%	42,862	53.8% 40,935	51 <i>.4</i> %	4,917	6.2%	367	0.5%	1,271	1.6%	81	0.1%	2,105	2.6%
51096	79,217	-793	-0.99%	62,755	79.2%	11,949	15.1% 10,948	13.8%	3,357	4.2%	266	0.3%	2,069	2.6%	78	0.1%	1,001	1.3%
51097	79,386	-624	-0.78%	67,533	85.1%	8,951	11.3% 8,379	10.6%	1,505	2.0%	597	0.8%	947	1.2%	29	0.0%	503	0.6%
51098	79,251	-759	-0.95%	63,155	79.7%	13,769	17.4% 12,959	16.4%	1,870	2.4%	403	0.5%	519	0.7%	23	0.0%	536	0.7%
S1099	80,332	322	0.40%	\$6,801	70.7%	20,709	25.8% 19,785	24.6%	2,971	3.7%	353	0.4%	551	0.7%	27	0.0%	1,183	1.5%
51100	80,680	670	0.84%	50,700	62.8%	24,232	30.0% 23,019	28.5%	6,746	8.4%	403	0.5%	1,280	1.6%	125	0.2%	2,785	3.5%

### Plaintiffs' Remedial Plan A Voting Age Population Summary

	Mating Age		*			Block folour	% Black				•								
HD	Voting Age Population	Deviation		White	% White	Black (alone or in Part)	(alone or in Part)	Black	% Black	Hispanic	% Hispanic	AIAN	% AIAN	Asian	% Asian	HawPi	% HawPi	Other	% Other
51001	64,221	498	0.62%	60,648	94.4%	2,537	4.0%	-	3.8%	754	1.2%	170	0.2%	226	0.4%	12	0.0%	284	0.4%
51002 51003	56,163 64,745	-519 573	-0.65% 0.72%	33,408 62,065	59.5% 95.9%	•	25.1% 3.0%		23.8% 2.9%	8,879 327	15.8% 0.5%	264 70	0.3% 0.1%	3,477 294	6.2% 0.5%	100 8	0.1% 0.0%	3,616 83	4.5% 0.1%
51004	64,195	436	0.54%	62,070	96.7%		2.2%	-	2.1%	541	0.8%	97	0.1%	161	0.3%	3	0.0%	230	0.3%
51005	64,337	590	0.74%	61,274	95.2%	-	2.7%		2.6%	1,353	2.1%	117	0.1%	211	0.3%	18	0.0%	622	0.8%
51006 51007	62,988 64,401	-402 136	-0.50% 0.17%	60,788 59,855	96.5% 92.9%		2.0% 4.2%	•	1.8% 3.8%	813 1,137	1.3% 1.8%	113 114	0.1% 0.1%	171 922	0.3% 1.4%	11 18	0.0% 0.0%	374 302	0.5% 0.4%
51003	63,203	675	0.84%	58,658	92.8%	2,576	4.1%	-	3.8%	1,012	1.6%	178	0.2%	1,064	1.7%	16	0.0%	397	0.5%
51009	64,142	564	0.70%	56,131	87.5%	•	10.0%	-	9.8%	1,388	2.2%	165	0.2%	208	0.3%	13	0.0%	896	1.1%
51010 51011	57,050 62,356	607 122	0.76% 0.15%	44,095 39,559	77.3% 63.4%	•	9.0% 31.6%	-	8.4% 30.7%	6,259 3,146	11.0% 5.0%	173 174	0.2% 0.2%	4,041 1,049	7.1% 1.7%	28 33	0.0%	2,676 1,402	3.3% 1.7%
51012	69,034	482	0.60%	60,408	87.5%	-	4.6%		4.2%	1,618	2.3%	138	0.2%	3,927	5.7%	22	0.0%	484	0.6%
51013	58,290	569	0.71%	36,735	63.0%	•	13.7%		12.8%	12,955	22.2%	288	0.4%	5,600	9.6%	46	0.1%	6,227	7.7%
51014 51015	62,379 62,907	-603 620	-0.75% 0.77%	39,414 59,863	63.2% 95.2%	•	34.3%	21,176 1,132	33.9% 1.8%	1,451 2,048	2.3% 3.3%	114 150	0.1% 0.2%	415 281	0.7% 0.4%	15 14	0.0%	774 920	1.0% 1.1%
51016	63,086	-318	-0.40%	44,381	70.4%	· · ·		16,985	26.9%	1,595	2.5%		0.2%	276	0.4%	5	0.0%	849	1.1%
51017	63,576	621	0.78%	57,265	90.1%		6.2%		5.9%	1,309	2.1%	118	0.1%	1,368	2.2%	19	0.0%	412	0.5%
51018 51019	59,686 62,844	-560 70	-0.70% 0.09%	52,508 58,171	88.0% 92.6%		7.9% 6.0%	-	7.5% 5.8%	2,635 639	4.4% 1.0%	195 160	0.2% 0.2%	686 249	1.1% 0.4%	36 15	0.0%	990 140	1.2% 0.2%
51020	62,717	-676	-0.84%		89.0%	-	8.5%		8.0%	1,608	2.6%	138	0.2%	390	0.6%	16	0.0%	614	0.8%
51021	58,656	-402	-0.50%	34,776	59.3%			13,706	23.4%	3,432	5.9%	163	0.2%	7,249	12.4%	69	0.1%	1,080	1.4%
51022 51023	61,467 63,982	-703 -680	-0.88% -0.85%	47,057 51,425	76.6% 80.4%	-	20.7% 15.2%	12,479 9,408	20.3% 14.7%	1,179 1,543	1.9% 2.4%	155 264	0.2% 0.3%	729 1,473	1.2% 2.3%	21 28	0.0%	385 680	0.5% 0.9%
\$1024	64,424	-332	-0.41%	57,333	89.0%		8.7%		8.4%	990	1.5%	316	0.4%	375	0.6%	19	0.0%	327	0.4%
51025	61,585	1	0.00%	57,373	93.2%	2,289	3.7%	-	3.5%	1,717	2.8%	101	0.1%	656	1.1%	10	0.0%	783	1.0%
51026 51027	65,566 58,903	678 -541	0.85% -0.68%	S6,466 40,374	86.1% 68.5%		4.6% 23.8%	2,714 13,611	4.1% 23.1%	6,380 3,504	9.7% 5.9%	193 250	0.2% 0.3%	1,609 1,830	2.5% 3.1%	62 36	0.1% 0.0%	3,382 1,836	4.2% 2.3%
51028	58,388	-706	-0.88%	43,126	73.9%	-		10,399	17.8%	4,374	7.5%	298	0.4%	1,491	2.6%	56	0.1%	1,689	2.1%
S1029	61,320	-159	-0.20%	53,930	87.9%		6.1%		5.7%	4,035	6.6%	181	0.2%	849	1.4%	16	0.0%	2,074	2.6%
51030 51031	61,276 56,743	573 -800	0.72% -1.00%	48,944 37,294	79.9% 65.7%	9,439 11,839	15.4% 20.9%	9,097 11,228	14.8% 19.8%	3,171 7,182	5.2% 12.7%	202 307	0.3% 0.4%	595 3,361	1.0% 5.9%	42 102	0.1% 0.1%	1,541 2,740	1.9% 3.5%
51032	55,263	258	0.32%	39,133	70.8%	-	8.2%		7.7%	4,881	8.8%	122	0.2%	8,777	15.9%	32	0.0%	1,500	1.9%
51033	57,140	540	0.67%	50,780	88.9%	2,931	5.1%		4.8%	3,123	5.5%	135	0.2%	1,542	2.7%	38	0.0%	1,127	1.4%
\$1034 51035	57,978 62,743	712 203	0.89% 0.25%	44,921 42,985	77.5% 68.5%		3.7% 5.4%		3.4% 4.9%	3,83S 5,932	6.6% 9.5%	108 146	0.1%	8,542 12,585	14.7% 20.1%	29 51	0.0% 0.1%	1,138 2,065	1.4% 2.6%
51036	61,859	-264	-0.33%	43,038	69.6%	-	9.0%		8.4%	6,069	9.8%	164	0.2%		15.4%	29	0.0%	2,172	2.7%
51037	63,480	245	0.31%	38,998	61.4%		8.4%	-	7.7%	7,714	12.2%	191		14,688	23.1%	39	0.0%	2,639	3.3%
51038 51039	62,463 61,870	748 700	0.93%	33,887 37,283	54.3% 60.3%		9.8% 9.4%		9.2% 8.9%	18,684 10,921	29.9% 17.7%	367 265	0.5% 0.3%	12,217 12,080	19.6% 19.5%	41 58	0.1% 0.1%	7,851 4,758	9.7% 5.9%
51040	58,415	719	0.90%	41,056	70.3%	·-	6.8%	-	6.3%	5,322	9.1%	169	0.2%	10,133	17.3%	52	0.1%	1,856	2.3%
51041	60,765	782	0.98%	41,973	69.1%		5.9%	•	5.5%	6,992	11.5%	128		11,598		46	0.1%	2,058	2.5%
51042 51043	58,066 62,318	-46 740	-0.06% 0.92%	41,053 38,605	70.7% 61.9%		10.1% 17.6%	5,523 10,418	9.5% 16.7%	4,910 8,829	8.5% 14.2%	182 202	0.2% 0.3%	8,295 7,668	14.3% 12.3%	75 65	0.1% 0.1%	1,309 3,407	1.6% 4.2%
51044	59,112	786	0.98%	33,967	57.5%	13,291		12,763	21.6%	12,893	21.8%	268	0.3%	4,055	6.9%	63	0.1%	6,186	7.7%
51045	67,692	230	0.29%	51,797	76.5%	-	11.8%		11.1%	8,358	12.3%	296	0.4%	2,791	4.1%	57	0.1%	3,534	4.4%
51046 51047	66,262 68,384	323 747	0.40% 0.93%	35,868 53,109	54.1% 77.7%	-	5.2%	17,958 3,223	27.1% 4.7%	10,253 8,449	15.5% 12.4%	238 345	0.3% 0.4%	5,512 6,473	8.3% 9.5%	74 42	0.1% 0.1%	4,315 3,328	5.4% 4.1%
51048	64,068	-518	-0.65%	51,895	81.0%	3,124	4.9%	2,799	4.4%	4,435	6.9%	148	0.2%	6,686	10.4%	42	0.1%	1,000	1.3%
51049 51050	66,373 55,689	599 667	0.75% 0.83%	36,838 35,574	55.5% 63.9%	-	17.3% 14.8%	-	16.3% 13.8%	16,346 13,405	24.6% 24.1%	390 274	0.5% 0.3%	8,469 4,143	12.8% 7.4%	79 77	0.1% 0.1%	7,129	8.8% 7.6%
51051	58,448	362	0.45%		71.2%		15.8%	-	15.0%	6,847	11.7%		0.3%	3,531	6.0%	67	0.1%	6,115 2,469	3.1%
51052	56,592	-720	-0.90%	25,644	45.3%			16,793	29.7%	14,987	26.5%		0.5%			80	0.1%	7,219	9.1%
51053 51054	62,827 57,249	39 145	0.05% 0.18%	39,121 42,858	62.3% 74.9%		5.7% 18.1%			12,306 3,932	19.6% 6.9%	284 202	0.4% 0.3%	13,039 1,416	20.8% 2.5%	40 57	0.1% 0.1%	5,151 1,657	6.4% 2.1%
51055	59,680	-432			80.0%		17.0%		16.5%	1,335	2.2%		0.3%	663	1.1%	24	0.0%	462	0.6%
51056	60,780	36		47,347	77.9%			10,491	17.3%	1,094	1.8%		0.2%	1,793	3.0%	24	0.0%	328	0.4%
51057 51058	68,024 61,395	768 757	0.96%	48,829 \$4,936	71.8% 89.5%			10,520 4,117	15.5% 6.7%	4,207 1,524	6.2% 2.5%		0.2% 0.1%	5,186 940	7.6% 1.5%	34 17	0.0%	1,682 642	2.1% 0.8%
51059	62,208	-665	-0.83%		77.8%			12,344	19.8%	941	1.5%		0.2%	340	0.5%	26	0.0%	361	0.5%
51060	62,712	-791		41,036	65.4%			20,290		927	1.5%		0.2%	289	0.5%	19	0.0%	389	0.5%
51061 51062	63,280 60,706	-218 55		40,447 38,169	63.9% 62.9%			21,112 16,594	33.4% 27.3%	1,421 4,815	2.2% 7.9%		0.3% 0.9%	258 1,363	0.4% 2.2%	15 57	0.0% 0.1%	657 2,672	0.8% 3.3%
51063	62,461	-574			41.1%			34,613	55.4%	1,578	2.5%		0.3%	443	0.7%	28	0.0%	677	0.9%
51064	61,617	-558		41,079	66.7%			18,163		1,821	3.0%		0.4%	637	1.0%	72	0.1%	530	0.7%
51065 51066	58,783 58,449	•328 •680		50,272 45,270	85.5% 77.5%		10.1% 16.9%		9.8% 15.4%	1,172 2,293	2.0% 3.9%		0.1% 0.3%	1,766 1,616	3.0% 2.8%	18 42	0.0% 0.1%	297 902	0.4% 1.1%
51067	57,154	-377	-0.47%	39,122	68.5%	3,391	5.9%	3,116	5.5%	5,329	9.3%	105	0.1%	11,455	20.0%	55	0.1%	1,841	2.3%
51068 51069	63,178 61,528	-792 -521		51,555 22,383	81.6% 36.4%		12.8% 51.4%	7,754 30,986	12.3% 50.4%	2,312 8,200	3.7% 13.3%	170 314	0.2% 0.4%	1,939 1,369	3.1% 2.2%	17 70	0.0% 0.1%	849 5,162	1.1% 6.5%
51070	59,751	-521			36.0%			34,736		2,506	4.2%		0.4%	1,369 814	1.4%	40	0.1%	1,279	1.6%
51071	66,240	-495		28,142	42.5%	34,180	51.6%	33,396	50.4%	1,628	2.5%	179	0.2%	2,509	3.8%	32	0.0%	506	0.6%
51072 51073	60,326 62,345	422 -280		44,434 46,958	73.7% 75.3%		13.0% 12.8%		12.4% 12.3%	2,968 4,158	4.9% 6.7%		0.2% 0.2%	6,128 4,588	10.2% 7.4%	18 28	0.0%	1,176 1,898	1.5% 2.4%
S1074	61,129	-130	-0.16%	25,304	41.4%	32,344		31,776		1,866	3.1%	161	0.2%	2,122	3.5%	28	0.0%	805	1.0%
51075	63,665	-723	-0.90%	29,002	45.6%			33,315		1,066			0.2%	239	0.4%	18	0.0%	516	0.7%
51076 51077	58,364 58,834	-480 438	0.55%	31,344 27,757	53.7% 47.2%			24,593 27,445		1,447 2,634	2.5% 4.5%		0.2% 0.3%	1,015 1,073	1.7% 1.8%	31 48	0.0% 0.1%	431 1,160	0.5% 1.4%
\$1078	60,316	27	0.03%	45,422	75.3%	11,068	18.4%	10,711	17.8%	2,127	3.5%	251	0.3%	2,294	3.8%	37	0.0%	519	0.6%
51079	66,380	207	0.26%	39,913	60.1%	21,110	31.8%	20,649	31.1%	4,858	7.3%	494	0.6%	1,987	3.0%	155	0.2%	1,483	1.8%

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51080	60,143	-86	-0.11%	26,160	43.5%	31,588	52.5%	31,021	51.6%	1,616	2.7%	254	0.3%	988	1.6%	73	0.1%	643	0.8%
51081	59,929	681	0.85%	46,145	77.0%	10,247	17.1%	9,827	16.4%	2,736	4.6%	247	0.3%	1,606	2.7%	75	0.1%	833	1.0%
51082	62,865	-506	-0.63%	52,024	82.8%	7,125	11.3%	6,572	10.5%	3,146	5.0%	245	0.3%	1,644	2.6%	78	0.1%	973	1.2%
51083	62,705	764	0.95%	43,306	69.1%	14,282	22.8%	13,702	21.9%	3,440	5.5%	252	0.3%	2,769	4.4%	82	0.1%	1,174	1.5%
51084	58,375	-355	-0.44%	38,245	65.5%	12,905	22.1%	12,315	21.1%	3,880	6.6%	235	0.3%	4,662	8.0%	122	0.2%	1,205	1.5%
51085	62,044	744	0.93%	42,008	67.7%	13,228	21.3%	12,636	20.4%	3,335	5.4%	294	0.4%	4,279	6.9%	102	0.1%	1,171	1.5%
51086	59,286	737	0.92%	34,944	58.9%	5,108	8.6%	4,802	8.1%	12,059	20.3%	219	0.3%	11,609	19.6%	33	0.0%	5,779	7.2%
51087	55,787	-735	-0.92%	32,124	57.6%	5,006	9.0%	4,654	8.3%	7,895	14.2%	147	0.2%	13,563	24.3%	42	0.1%	3,505	4.4%
51088	58,354	181	0.23%	45,104	77.3%	8,479	14.5%	7,991	13.7%	4,545	7.8%	197	0.2%	1,584	2.7%	78	0.1%	2,206	2.8%
51089	62,820	507	0.63%	26,850	42.7%	32,912	52.4%	32,204	51.3%	1,899	3.0%	192	0.2%	1,700	2.7%	47	0.1%	577	0.7%
51090	60,733	-782	-0.98%	27,546	45.4%	27,979	46.1%	27,252	44.9%	3,513	5.8%	273	0.3%	2,736	4.5%	92	0.1%	1,350	1.7%
51091	58,986	-507	-0.63%	39,836	67.5%	15,250	25.9%	14,558	24.7%	2,217	3.8%	229	0.3%	2,108	3.6%	74	0.1%	671	0.8%
51092	62,382	-51	-0.06%	22,724	36.4%	36,972	59.3%	35,936	57.6%	2,373	3.8%	282	0.4%	1,067	1.7%	64	0.1%	766	1.0%
51093	62,281	-778	-0.97%	44,052	70.7%	12,756	20.5%	12,119	19.5%	3,443	5.5%	217	0.3%	3,088	5.0%	101	0.1%	1,169	1.5%
S10 <del>9</del> 4	60,264	-742	-0.93%	36,779	61.0%	18,647	30.9%	17,735	29.4%	4,254	7.1%	305	0.4%	2,080	3.5%	117	0.1%	1,485	1.9%
51095	60,645	-343	0.43%	26,657	44.0%	30,437	50.2%	29,594	48.8%	3,319	5.5%	283	0.4%	1,049	1.7%	61	0.1%	1,545	1.9%
51096	61,067	-793	-0.99%	49,447	81.0%	8,583	14.1%	8,227	13.5%	2,119	3.5%	192	0.2%	1,578	2.6%	57	0.1%	661	0.8%
51097	60,024	-624	-0.78%	51,473	85.8%	6,626	11.0%	6,433	10.7%	969	1.5%	451	0.6%	702	1.2%	20	0.0%	322	0.4%
51098	62,740	-759	-0.95%	50,614	80.7%	10,481	16.7%	10,201	16.3%	1,205	1.9%	322	0.4%	395	0.6%	17	0.0%	385	0.5%
S1099	63,534	322	0.40%	46,161	72.7%	15,464	24.3%	15,150	23.8%	1,916	3.0%	278	0.3%	421	0.7%	22	0.0%	747	0.9%
51100	63,387	670	0.84%	41,814	66.0%	17,524	27.6%	17,066	26.9%	4,344	6.9%	322	0.4%	1,030	1.6%	104	0.1%	1,858	2.3%

## **EXHIBIT D**

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Plan Type:

Date: 11/2/2018 Time: 1:15:03AM

Administrator:

# 

Sum	N/A	N/A	N/A
Min	0.16	1.23	0.09
Max	0.62	2.95	0.63
Mean	0.37	1.89	0.26
Std. Dev.	0.11	0.31	0.10

DISTRICT	Reock	Schwartzberg	Polsby- Popper
51001	0.26	1.69	0.30
51002	0.30	2.17	0.18
51003	0.28	1.84	0.21
51004	0.49	1.97	0.20
51005	0.19	2.29	0.17
51006	0.27	1.82	0.26
51007	0.50	1.81	0.25
51008	0.47	1.83	0.26
51009	0.35	1.83	0.24
51010	0.23	2.16	0.18
51011	0.59	1.80	0.26
51012	0.39	1.95	0.22
51013	0.16	2.53	0.13
51014	0.24	2.34	0.16
51015	0.55	1.52	0.34
51016	0.36	2.11	0.18
51017	0.25	2.95	0.09
51018	0.62	1.92	0.24
51019	0.43	2.09	0.17
51020	0.27	2.28	0.15
51021	0.42	1.74	0.31
51022	0.20	2.59	0.11
51023	0.26	2.25	0.15
51024	0.44	1.78	0.25
51025	0.26	2.14	0.18
51026	0.46	1.57	0.36
51027	0.48	1.75	0.29
51028	0.48	1.82	0.26
51028	0.39	1.98	0.20
51029	0.53	1.49	0.36
51030	0.33	2.11	0.30
51031	0.38	1.64	0.19
51032	0.46	1.89	0.23
51034	0.24	1.91	0.22
51035	0.20	2.11	0.19
51036	0.43	1.66	0.30
51037	0.18	2.24	0.18
51038	0.62	1.44	0.45
51039	0.35	2.16	0.19
51040	0.26	2.20	0.17

			Polsby-	
DISTRICT	Reock	Schwartzberg	Popper	
51041	0.36	1.72	0.32	
51042	0.35	2.09	0.20	
51043	0.22	2.10	0.21	
51044	0.43	1.69	0.32	
51045	0.29	1.81	0.26	
51046	0.52	1.28	0.55	
51047	0.41	1.73	0.33	
51048	0.18	2.24	0.16	
51049	0.24	2.35	0.16	
51050	0.46	1.62	0.34	
51051	0.24	2.15	0.18	
51052	0.23	1.92	0.25	
51052	0.46	1.69	0.34	
51054	0.47	1.89	0.25	
51055	0.57	1.69	0.28	
51056	0.45	1.85	0.26	
51050	0.45	1.47	0.41	
51057	0.32	2.11	0.19	
51059	0.30	1.98	0.21	
51060	0.38	1.62	0.31	
51061	0.32	2.21	0.17	
51062	0.34	1.93	0.18	
51063	0.59	1.27	0.51	
51064	0.39	2.12	0.17	
51065	0.49	1.57	0.35	
51066	0.30	1.73	0.29	
51067	0.30	1.73	0.25	
51068	0.34	1.74	0.23	
51069	0.34	1.65	0.35	
51070	0.41	2.16	0.19	
51070	0.41	1.76	0.19	
51072	0.38	2.18	0.20	
51072	0.29	1.93	0.24	
51073	0.26	1.96	0.22	
51074	0.20	1.56	0.32	
51076	0.41	1.44	0.47	
51077	0.45	1.99	0.25	
51077	0.20	1.74	0.32	
51078	0.44	1.74	0.27	
51079	0.44	1.76	0.27	
51080	0.39	1.81	0.28	
51081	0.57	1.61	0.28	
51082	0.33	1.47	0.43	
51083	0.44	1.72	0.32	
51084	0.41	1.74	0.27	
51085	0.39	1.89	0.27	
51086	0.33	2.30	0.23	
51087	0.22	2.56	0.17	
			0.13	
51089	0.50	1.47		
51090	0.48	1.44	0.46	
51091	0.48	1.41	0.49	
51092	0.32	1.74	0.31	
51093	0.21	2.45	0.15	
51094	0.48	1.23	0.63	
51095	0.25	1.69	0.34	
51096	0.20	2.19	0.17	

# Casens:14<sup>P</sup>civi00852<sup>II</sup>REP<sup>A</sup>AWA AWA AWA Document 292-1 Filed 11/02/18 Page 27 of 69 PageID# Plan Type: 10229

DISTRICT	Reock	Schwartzberg	Polsby- Popper
51097	0.43	1.73	0.21
51098	0.28	1.78	0.26
51099	0.27	1.97	0.21
51100	0.29	1.51	0.39

## **EXHIBIT E**

## Case 3:14-cv-00852-REP-AWA-BMK Document 292-1 Filed 11/02/18 Page 29 of 69 PageID# 10231

Plan Name: Plaintiffs' Remedial Plan A

Plan Type: Administrator:

#### **Political Subdivisions Split Between Districts**

Friday November 2, 2018 12:16 AM

Number of subdivisions not split:

County 83 Voting District 2,291

Number of subdivisions split into more than one district:

County 51 Voting District 82

Number of subdivision splits which affect *no* population:

County 2
Voting District 3

Split Counts

County

Cases where an area is split among 2 Districts: 24
Cases where an area is split among 3 Districts: 14
Cases where an area is split among 4 Districts: 5
Cases where an area is split among 5 Districts: 1
Cases where an area is split among 6 Districts: 2
Cases where an area is split among 7 Districts: 3
Cases where an area is split among 8 Districts: 1
Cases where an area is split among 17 Districts: 1

Voting District

Cases where an area is split among 2 Districts: 80 Cases where an area is split among 3 Districts: 2

County	Voting District	District	Population
Split Counties:			
Albemarle VA		51025	21,420
Albemarle VA		51057	37,303
Albemarle VA		51058	30,929
Albemarle VA		51059	9,318
Alexandria City VA		51045	59,633
Alexandria City VA		51046	80,333
Amherst VA		51023	10,678
Amherst VA		51024	21,675
Arlington VA		51045	14,388

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County         Voting District         Procession           Split Counties         (continued):           Arlington VA         51047           Arlington VA         51048           Arlington VA         51049           Augusta VA         51020           Augusta VA         51024           Augusta VA         51025           Bedford VA         51019           Bedford VA         51022           Bedford VA         51023           Botetourt VA         51017           Botetourt VA         51019           Campbell VA         51022           Campbell VA         51059           Campbell VA         51054           Caroline VA         51055           Caroline VA         51055           Caroline VA         51099           Chesapeake City VA         51021	80,757 55,008 57,474 24,485 17,273 31,992 22,948 28,780 16,948 4,449 28,699 17,154 30,664 7,024 2,484 19,742
Arlington VA       51047         Arlington VA       51048         Arlington VA       51049         Augusta VA       51020         Augusta VA       51024         Augusta VA       51025         Bedford VA       51019         Bedford VA       51022         Bedford VA       51023         Botetourt VA       51017         Botetourt VA       51019         Campbell VA       51022         Campbell VA       51059         Campbell VA       51054         Caroline VA       51055         Caroline VA       51055         Caroline VA       51099	55,008 57,474 24,485 17,273 31,992 22,948 28,780 16,948 4,449 28,699 17,154 30,664 7,024 2,484
Arlington VA       51048         Arlington VA       51049         Augusta VA       51020         Augusta VA       51024         Augusta VA       51025         Bedford VA       51019         Bedford VA       51022         Bedford VA       51023         Botetourt VA       51017         Botetourt VA       51019         Campbell VA       51022         Campbell VA       51059         Campbell VA       51054         Caroline VA       51055         Caroline VA       51099	55,008 57,474 24,485 17,273 31,992 22,948 28,780 16,948 4,449 28,699 17,154 30,664 7,024 2,484
Arlington VA       51048         Arlington VA       51049         Augusta VA       51020         Augusta VA       51024         Augusta VA       51025         Bedford VA       51019         Bedford VA       51022         Bedford VA       51023         Botetourt VA       51017         Botetourt VA       51019         Campbell VA       51022         Campbell VA       51059         Campbell VA       51054         Caroline VA       51055         Caroline VA       51099	55,008 57,474 24,485 17,273 31,992 22,948 28,780 16,948 4,449 28,699 17,154 30,664 7,024 2,484
Arlington VA       51049         Augusta VA       51020         Augusta VA       51024         Augusta VA       51025         Bedford VA       51019         Bedford VA       51022         Bedford VA       51023         Botetourt VA       51017         Botetourt VA       51019         Campbell VA       51022         Campbell VA       51059         Campbell VA       51054         Caroline VA       51055         Caroline VA       51099	24,485 17,273 31,992 22,948 28,780 16,948 4,449 28,699 17,154 30,664 7,024 2,484
Augusta VA       51020         Augusta VA       51024         Augusta VA       51025         Bedford VA       51019         Bedford VA       51022         Bedford VA       51023         Botetourt VA       51017         Botetourt VA       51019         Campbell VA       51022         Campbell VA       51059         Caroline VA       51054         Caroline VA       51055         Caroline VA       51099	24,485 17,273 31,992 22,948 28,780 16,948 4,449 28,699 17,154 30,664 7,024 2,484
Augusta VA       51024         Augusta VA       51025         Bedford VA       51019         Bedford VA       51022         Bedford VA       51023         Botetourt VA       51017         Botetourt VA       51019         Campbell VA       51022         Campbell VA       51059         Caroline VA       51054         Caroline VA       51055         Caroline VA       51099	17,273 31,992 22,948 28,780 16,948 4,449 28,699 17,154 30,664 7,024 2,484
Augusta VA       51025         Bedford VA       51019         Bedford VA       51022         Bedford VA       51023         Botetourt VA       51017         Botetourt VA       51019         Campbell VA       51022         Campbell VA       51059         Caroline VA       51054         Caroline VA       51055         Caroline VA       51099	31,992 22,948 28,780 16,948 4,449 28,699 17,154 30,664 7,024 2,484
Bedford VA       51022         Bedford VA       51023         Botetourt VA       51017         Botetourt VA       51019         Campbell VA       51022         Campbell VA       51059         Campbell VA       51060         Caroline VA       51054         Caroline VA       51055         Caroline VA       51099	28,780 16,948 4,449 28,699 17,154 30,664 7,024 2,484
Bedford VA       51023         Botetourt VA       51017         Botetourt VA       51019         Campbell VA       51022         Campbell VA       51059         Campbell VA       51060         Caroline VA       51054         Caroline VA       51055         Caroline VA       51099	28,780 16,948 4,449 28,699 17,154 30,664 7,024 2,484
Botetourt VA       51017         Botetourt VA       51019         Campbell VA       51022         Campbell VA       51059         Campbell VA       51060         Caroline VA       51054         Caroline VA       51055         Caroline VA       51099	16,948 4,449 28,699 17,154 30,664 7,024 2,484
Botetourt VA       51019         Campbell VA       51022         Campbell VA       51059         Campbell VA       51060         Caroline VA       51054         Caroline VA       51055         Caroline VA       51099	28,699 17,154 30,664 7,024 2,484
Campbell VA       51022         Campbell VA       51059         Campbell VA       51060         Caroline VA       51054         Caroline VA       51055         Caroline VA       51099	28,699 17,154 30,664 7,024 2,484
Campbell VA       51059         Campbell VA       51060         Caroline VA       51054         Caroline VA       51055         Caroline VA       51099	17,154 30,664 7,024 2,484
Campbell VA       51059         Campbell VA       51060         Caroline VA       51054         Caroline VA       51055         Caroline VA       51099	30,664 7,024 2,484
Campbell VA       51060         Caroline VA       51054         Caroline VA       51055         Caroline VA       51099	7,024 2,484
Caroline VA Caroline VA Caroline VA 51055 Caroline VA 51099	2,484
Caroline VA 51055 Caroline VA 51099	
Caroline VA 51099	- / -
	6,319
	5,030
Chesapeake City VA 51076	2,057
Chesapeake City VA 51077	80,448
Chesapeake City VA 51078	80,037
Chesapeake City VA 51080	21,946
Chesapeake City VA 51081	32,691
Chesterfield VA 51027	79,469
Chesterfield VA 51062	40,229
Chesterfield VA 51063	13,302
Chesterfield VA 51065	51,636
Chesterfield VA 51066	61,919
Chesterfield VA 51068	44,427
Chesterfield VA 51069	25,254
Clarke VA 51010	4,309
Clarke VA 51033	9,725
Culpeper VA 51018	12,895
Culpeper VA 51030	33,794
Fairfax VA 51034	53,301
Fairfax VA 51035	80,213
Fairfax VA 51036	79,746
Fairfax VA 51037	57,690
Fairfax VA 51038	80,758
Fairfax VA 51039	80,710
Fairfax VA 51040	66,026
Fairfax VA 51041	80,792
Fairfax VA 51042	79,964
Fairfax VA 51043	80,750
Fairfax VA 51044	80,796
Fairfax VA 51045	6,219
Fairfax VA 51048	24,484
Fairfax VA 51049	23,135
Fairfax VA 51053	67,717
Fairfax VA 51067	70,636

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Plan Name: Plan Type:	Plaintiffs' Remedial Plan A Administrator: User:		
County	Voting District	District	Population
Split Counties	(continued):		
Fairfax VA		51086	68,789
Fauquier VA		51018	40,915
Fauquier VA		51031	15,101
Fauquier VA		51088	9,187
Fluvanna VA		51056	7,231
Fluvanna VA		51058	18,460
Franklin VA		51009	46,650
Franklin VA		51022	9,509
Frederick VA		51010	13,649
Frederick VA		51029	43,969
Frederick VA		51033	20,687
Fredericksburg	g City VA	51028	8,950
Fredericksburg		51088	15,336
Hampton City	•	51091	50,673
Hampton City		51092	79,959
Hampton City		51095	6,804
Hanover VA		51055	50,481
Hanover VA		51097	49,382
Henrico VA		51056	13,165
Henrico VA		51062	9,989
Henrico VA		51070	43,739
Henrico VA		51072	80,432
Henrico VA		51073	79,730
Henrico VA		51074	79,880
Henry VA		51009	15,434
Henry VA		51014	15,368
Henry VA		51016	23,349
James City VA		51093	20,694
James City VA		51096	46,315
King William	VA	51097	11,575
King William		51098	4,360
Loudoun VA		51010	62,659
Loudoun VA		51032	80,268
Loudoun VA		51033	50,138
Loudoun VA		51034	27,421
Loudoun VA		51067	8,997
Loudoun VA		51086	11,958
Loudoun VA		51087	70,870
Lunenburg VA		51061	8,470
Lunenburg VA		51075	4,444
Lynchburg Cit	y VA	51022	23,864
Lynchburg Cit	y VA	51023	51,704
Montgomery V	VA	51007	35,026
Montgomery V	/A	51008	17,599
Montgomery V	VA	51012	41,767
Nelson VA		51020	7,776
Nelson VA		51059	7,244
Newport News	s City VA	51093	28,588
Newport News	s City VA	51094	79,268
Newport News	s City VA	51095	72,863

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Plan Name: Plaintiffs' Remedial Plan A Administrator: Plan Type: User:		
County Voting District	District	Population
Split Counties (continued):		
Norfolk City VA	51079	42,660
Norfolk City VA	51083	5,271
Norfolk City VA	51089	80,517
Norfolk City VA	51090	79,228
Norfolk City VA	51100	35,127
Pittsylvania VA	51014	20,984
Pittsylvania VA	51016	42,522
Portsmouth City VA	51079	37,557
Portsmouth City VA	51080	57,978
Prince George VA	51062	0
Prince George VA	51063	5,713
Prince George VA	51064	30,012
Prince William VA	51002	45,961
Prince William VA	51013	66,306
Prince William VA	51031	64,109
Prince William VA	51040	14,703
Prince William VA	51050	42,856
Prince William VA	51050	80,372
Prince William VA	51052	79,290
Prince William VA	51032	8,405
Pulaski VA	51007	29,841
Pulaski VA	51012	5,031
Richmond City VA	51068	34,791
Richmond City VA	51069	54,235
Richmond City VA	51070	35,673
Richmond City VA	51070	79,515
Roanoke City VA	51011	80,132
Roanoke City VA	51017	16,900
Roanoke VA	51008	33,094
Roanoke VA		
	51017 51015	59,282
Rockingham VA Rockingham VA		4,966
	51025	26,599
Rockingham VA	51026	31,774
Rockingham VA Russell VA	51058	12,975
Russell VA	51003	4,583
	51004	24,314
Smyth VA Smyth VA	51005	11,877
•	51006	20,331
Spotsylvania VA	51054	77,671
Spotsylvania VA	51055	9,355
Spotsylvania VA	51056	4,780
Spotsylvania VA	51088	30,591
Stafford VA	51002	33,530
Stafford VA	51028	70,354
Stafford VA	51088	25,077
Suffolk City VA	51064	7,112
Suffolk City VA	51076	77,473
Virginia Beach City VA	51021	74,578
Virginia Beach City VA	51081	48,000
Virginia Beach City VA	51082	79,504

# Case 3:14-cv-00852-REP-AWA-BMK Document 292-1 Filed 11/02/18 Page 33 of 69 PageID# 10235

Plan Name: Plan Type:	laintiffs' Remedial Plan A	Administrator: User:		
County	Voting District		District	Population
Split Counties (c	ontinued):			
Virginia Beach Ci			51083	75,503
Virginia Beach Ci	-		51084	79,655
Virginia Beach Ci	-		51085	80,754
Virginia Beach Ci	-		51100	0
Warren VA			51015	9,629
Warren VA			51018	18,267
Warren VA			51029	9,679
Washington VA			51004	26,563
Washington VA			51005	28,313
Wise VA			51001	27,786
Wise VA			51004	13,666
York VA			51091	16,680
York VA			51093	15,882
York VA			51096	32,902
Split VTDs :				
Albemarle VA	East Ivy		51025	1,145
Albemarle VA	East Ivy		51057	2,444
Albemarle VA	Free Bridge		51057	4,095
Albemarle VA	Free Bridge		51058	460
Amherst VA	Amelon		51023	1,337
Amherst VA	Amelon		51024	3,458
Amherst VA	Elon		51023	834
Amherst VA	Elon		51024	2,764
Arlington VA	Jefferson		51047	1,410
Arlington VA	Jefferson		51049	3,019
Arlington VA	Oakridge		51045	1,705
Arlington VA	Oakridge		51049	3,511
Augusta VA	Fishersville		51020	707
Augusta VA	Fishersville		51025	4,104
Augusta VA	White Hill		51020	1,157
Augusta VA	White Hill		51024	2,331
Bedford VA	Liberty High School		51019	838
Bedford VA	Liberty High School		51023	2,152
Bedford VA	Thaxton Elem School		51019	765
Bedford VA	Thaxton Elem School		51023	1,843
Chesapeake City			51078	546
Chesapeake City			51081	2,760
Chesterfield VA	Bailey Bridge		51027	4,061
Chesterfield VA	Bailey Bridge		51066	1,849
Chesterfield VA	Enon		51062	3,961
Chesterfield VA	Enon		51066	932
Chesterfield VA	Evergreen		51027	4,161
Chesterfield VA	Evergreen		51065	2,713
Chesterfield VA	Evergreen		51068	358
Clarke VA	Millwood		51010	1,693
Clarke VA	Millwood		51033	78
Fairfax VA	Baileys		51038	4,068
Fairfax VA	Baileys		51049	3,004
Fairfax VA	Belle Haven		51044	3,232

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Plan Name: Plain Plan Type:	tiffs' Remedial Plan A	Administrator: User:	
County	Voting District	District	Population
Split VTDs (continue	ed):		
Fairfax VA	Belle Haven	51045	179
Fairfax VA	Belvoir	51043	3,167
Fairfax VA	Belvoir	51044	2,216
Fairfax VA	Camelot	51039	1,381
Fairfax VA	Camelot	51053	407
Fairfax VA	Flint Hill	51035	2,035
Fairfax VA	Flint Hill	51036	3,897
Fairfax VA	Franklin	51067	1,228
Fairfax VA	Franklin	51086	3,530
Fairfax VA	Hayfield	51043	658
Fairfax VA	Hayfield	51044	3,178
Fairfax VA	Huntington	51043	5,464
Fairfax VA	Huntington	51045	320
Fairfax VA	Kinross	51067	3,186
Fairfax VA	Kinross	51086	3,128
Fairfax VA	Lake Braddock	51039	388
Fairfax VA	Lake Braddock	51041	6,417
Fairfax VA	Lane	51039	3,307
Fairfax VA	Lane	51043	2,015
Fairfax VA	Lees Corner West	51067	3,177
Fairfax VA	Lees Corner West	51086	2,463
Fairfax VA	London Towne West	51037	4,019
Fairfax VA	London Towne West	51040	1,825
Fairfax VA	Lorton	51042	0
Fairfax VA	Lorton	51042	4,353
Fairfax VA	Mosby	51045	2,906
Fairfax VA	Mosby	51037	6,928
Fairfax VA	Pohick	51041	3,303
Fairfax VA	Pohick	51042	2,489
Fairfax VA	Salona	51034	1,236
Fairfax VA	Salona	51048	2,387
Fairfax VA	Stone	51037	3,052
Fairfax VA	Stone	51067	2,902
Fairfax VA	Vale	51036	907
Fairfax VA	Vale	51067	3,094
Fairfax VA	Weyanoke	51038	5,130
Fairfax VA	Weyanoke	51039	1,022
Fairfax VA	Willow Springs	51037	3,327
Fairfax VA	Willow Springs	51040	3,764
Fairfax VA	Woodson	51037	4,956
Fairfax VA	Woodson	51041	2,358
Fairfax VA	Woodyard	51040	1,101
Fairfax VA	Woodyard	51042	1,646
Frederick VA	Parkins Mill	51042	6,942
Frederick VA Frederick VA	Parkins Mill	51010	1,263
Frederick VA Fredericksburg City V		51029	698
Fredericksburg City V		51028	1,523
Hampton City VA	Bethel	51088	4,800
Hampton City VA	Bethel	51091	4,800 548
Trampion City VA	Dettier	31093	J40

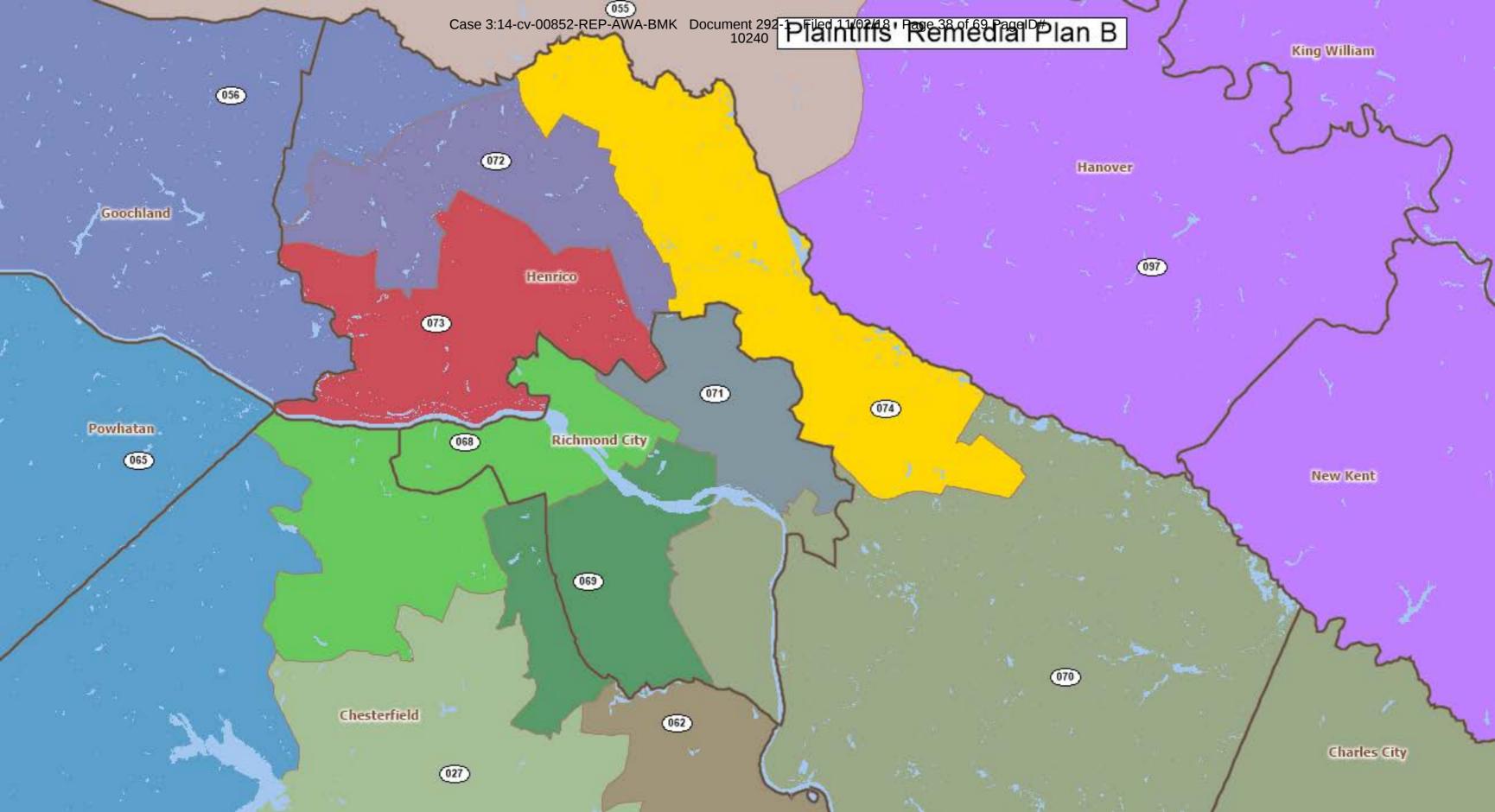
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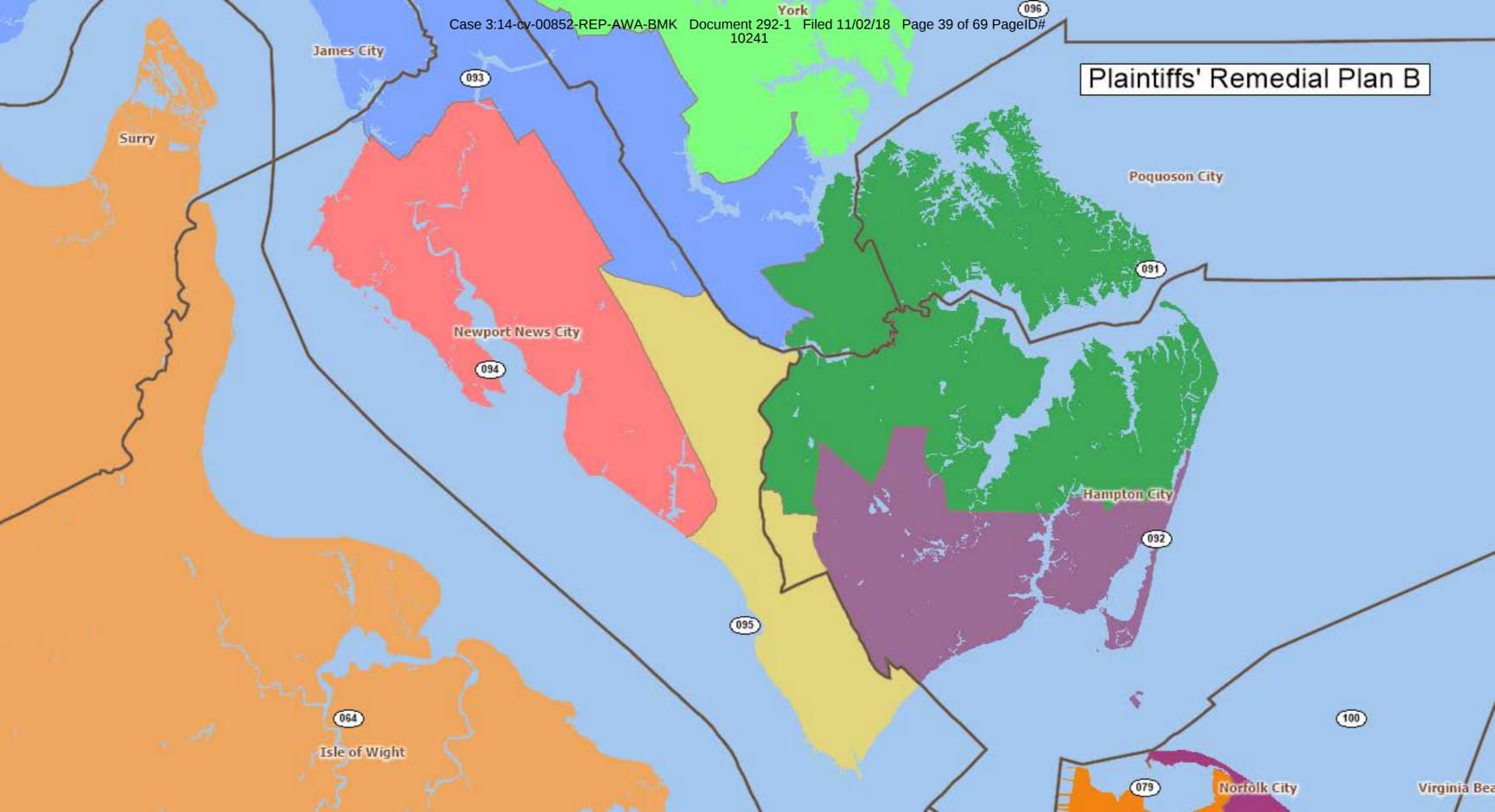
Plan Name: Plaintif Plan Type:	fs' Remedial Plan A	Administrator: User:						
County	Voting District		District	Population				
Split VTDs (continued):								
Henrico VA	Pleasants		51070	4,243				
Henrico VA	Pleasants		51074	1,046				
Henry VA	Axton		51014	353				
Henry VA	Axton		51016	1,782				
King William VA	Courthouse		51097	2,129				
King William VA	Courthouse		51098	143				
Loudoun VA	Belmont Ridge		51010	3,034				
Loudoun VA	Belmont Ridge		51032	4,058				
Loudoun VA	Countryside		51032	948				
Loudoun VA	Countryside		51087	1,928				
Loudoun VA	Dulles South		51067	6,329				
Loudoun VA	Dulles South		51087	11				
Loudoun VA	Mill Run		51032	3,722				
Loudoun VA	Mill Run		51087	1,180				
Loudoun VA	Park View		51086	2,336				
Loudoun VA	Park View		51087	2,766				
Loudoun VA	Philomont		51010	1,402				
Loudoun VA	Philomont		51033	1,105				
Loudoun VA	Pinebrook		51010	2,399				
Loudoun VA	Pinebrook		51087	2,325				
Lunenburg VA	Brown's Store		51061	1,040				
Lunenburg VA	Brown's Store		51075	265				
Lunenburg VA	Peoples Community Center		51061	725				
Lunenburg VA	Peoples Community Center		51075	207				
Lunenburg VA	Rosebud		51061	557				
Lunenburg VA	Rosebud		51075	747				
Lunenburg VA	Victoria Public Library		51061	1,086				
Lunenburg VA	Victoria Public Library		51075	1,336				
Montgomery VA	E-1		51007	10,740				
Montgomery VA	E-1		51012	654				
Newport News City VA			51093	3,023				
Newport News City VA			51094	6,789				
Newport News City VA			51093	2,317				
Newport News City VA			51094	2,340				
Norfolk City VA	Lafayette-Winona		51089	1,026				
Norfolk City VA	Lafayette-Winona		51090	2,339				
Portsmouth City VA	Nine		51079	2,752				
Portsmouth City VA	Nine		51080	402				
Prince George VA	Courts Bldg		51062	0				
Prince George VA	Courts Bldg		51064	3,810				
Prince George VA	Templeton		51063	1,044				
Prince George VA	Templeton		51064	3,579				
Prince William VA	Alvey		51040	2,244				
Prince William VA	Alvey		51087	4,913				
Prince William VA	Battlefield		51013	80				
Prince William VA	Battlefield		51040	5,599				
Prince William VA	Benton		51031	2,848				
Prince William VA	Benton		51051	1,805				
Prince William VA	Godwin		51031	3,710				
				2,7.10				

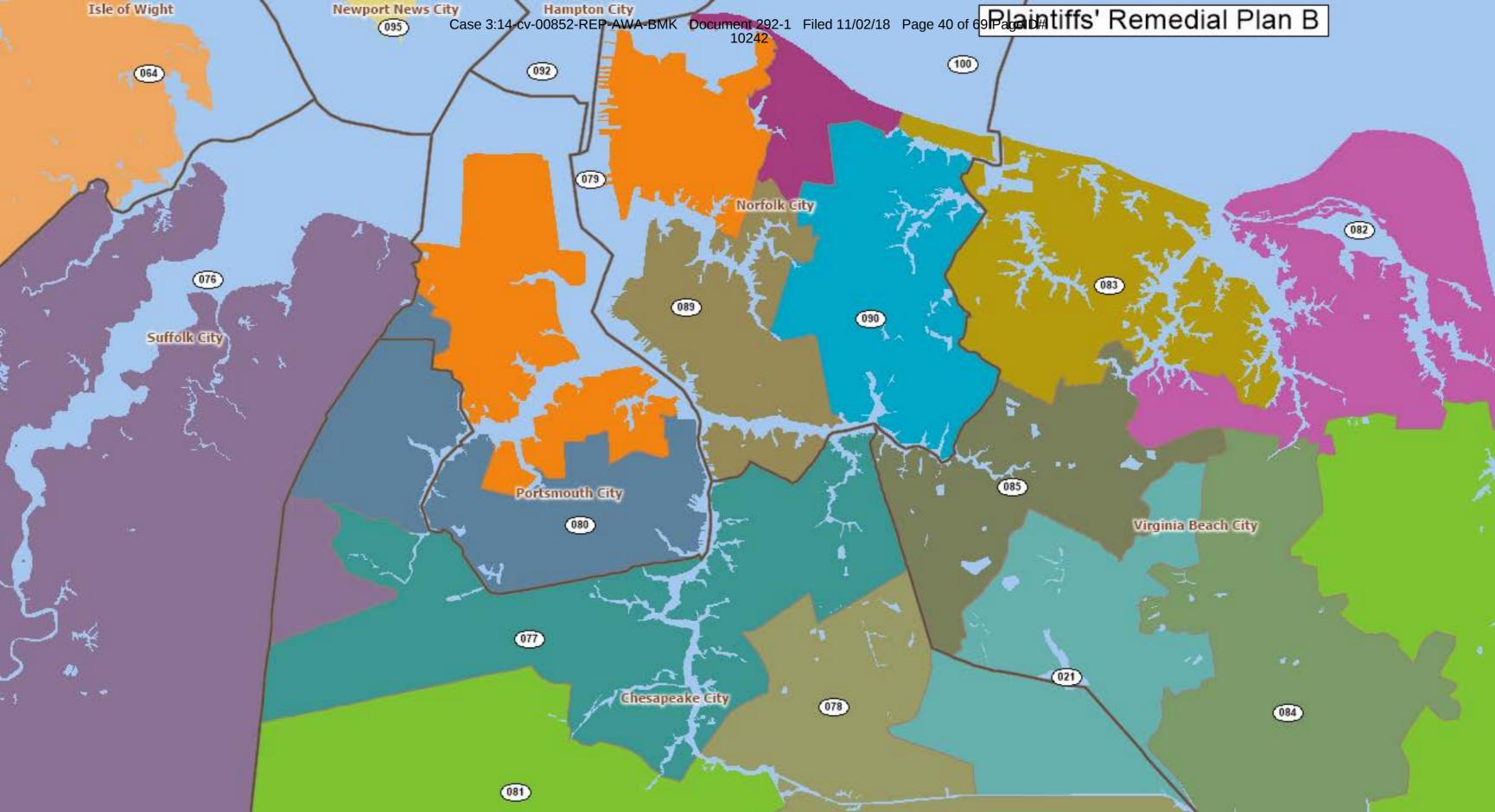
Case 3:14-cv-00852-REP-AWA-BMK Document 292-1 Filed 11/02/18 Page 36 of 69 PageID# 10238

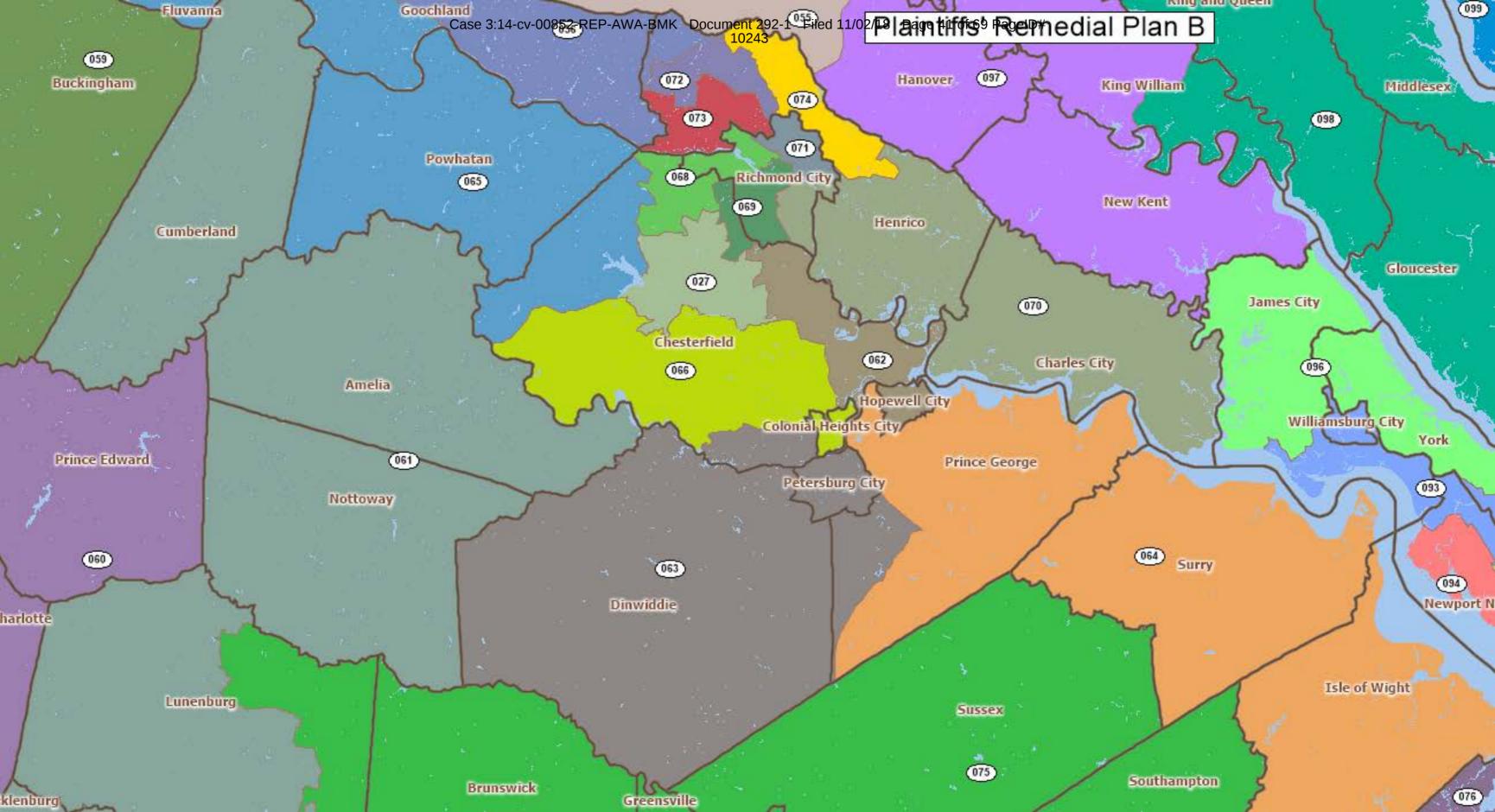
Plan Name: Plan Type:	Plaintiffs' Remedial Plan A	Administrator: User:		
County	Voting District		District	Population
Split VTDs (co	ontinued):			
Prince William	VA Godwin		51052	4,449
Prince William	VA Henderson		51031	3,800
Prince William	VA Henderson		51052	2,700
Prince William	VA Minnieville		51031	456
Prince William	VA Minnieville		51052	4,819
Prince William	VA Stonewall		51013	5,472
Prince William	VA Stonewall		51050	1,141
Richmond City	VA 707		51070	86
Richmond City	VA 707		51071	5,576
Roanoke VA	Penn Forest		51008	1,911
Roanoke VA	Penn Forest		51017	417
Rockingham V	A Plains		51015	1,664
Rockingham V	A Plains		51026	1,998
Russell VA	Honaker		51003	1,463
Russell VA	Honaker		51004	2,591
Spotsylvania V	A Brokenburg		51054	1,530
Spotsylvania V	A Brokenburg		51055	1,384
Spotsylvania V	A Brokenburg		51056	1,562
Stafford VA	Hampton		51028	4,244
Stafford VA	Hampton		51088	1,168
Stafford VA	Whitson		51002	1,537
Stafford VA	Whitson		51088	3,512
Virginia Beach	City VA Aragona		51083	3,841
Virginia Beach	City VA Aragona		51085	3,439
•	City VA Chesapeake Beach		51083	8,310
	City VA Chesapeake Beach		51100	0
Virginia Beach	City VA London Bridge		51082	4,803
Virginia Beach	City VA London Bridge		51084	763
Wise VA	East Pound		51001	1,168
Wise VA	East Pound		51004	1,416
York VA	Coventry		51091	3,668
York VA	Coventry		51093	5,134
York VA	Edgehill		51093	2,346
York VA	Edgehill		51096	2,989

## **EXHIBIT F**

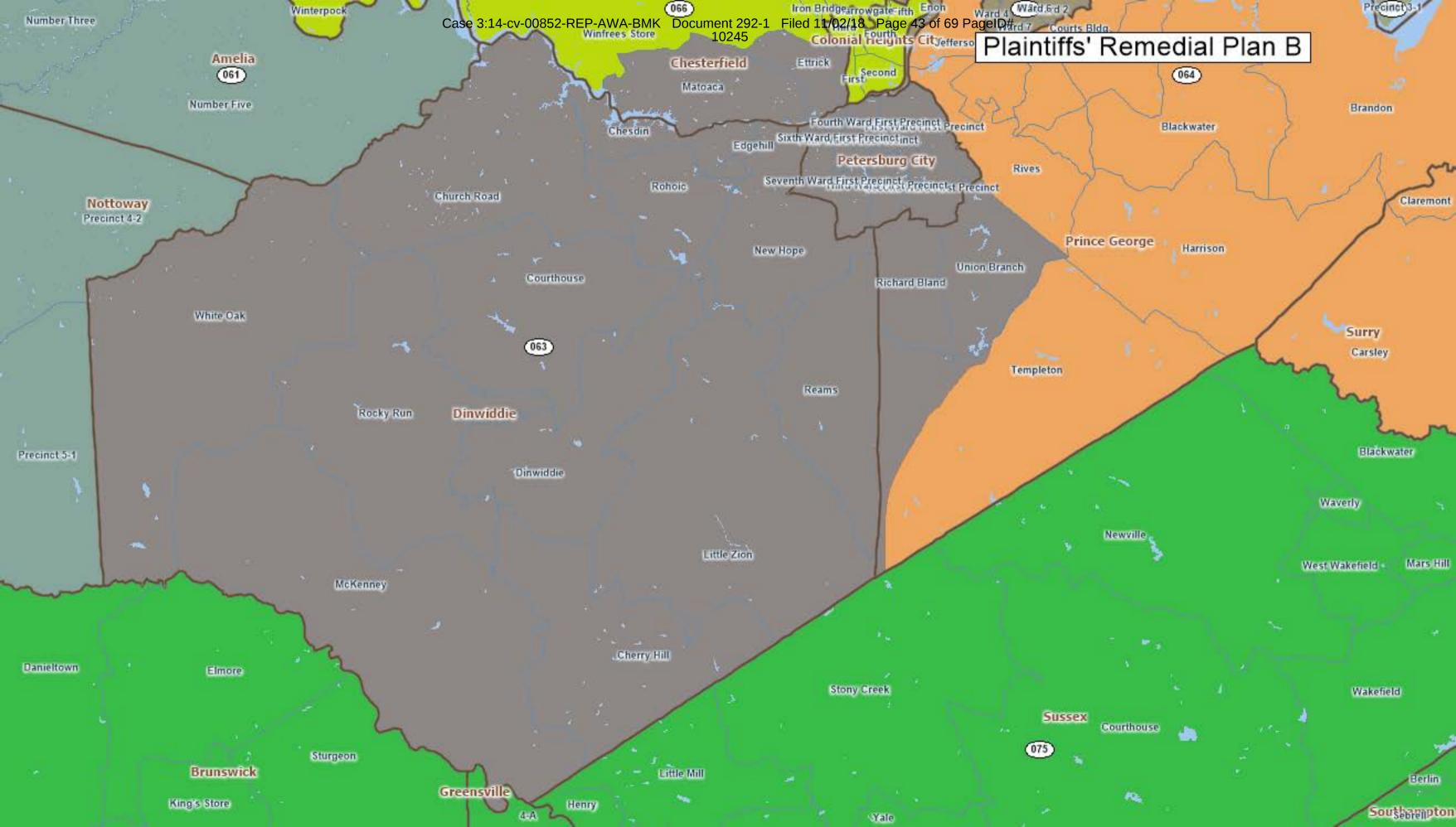


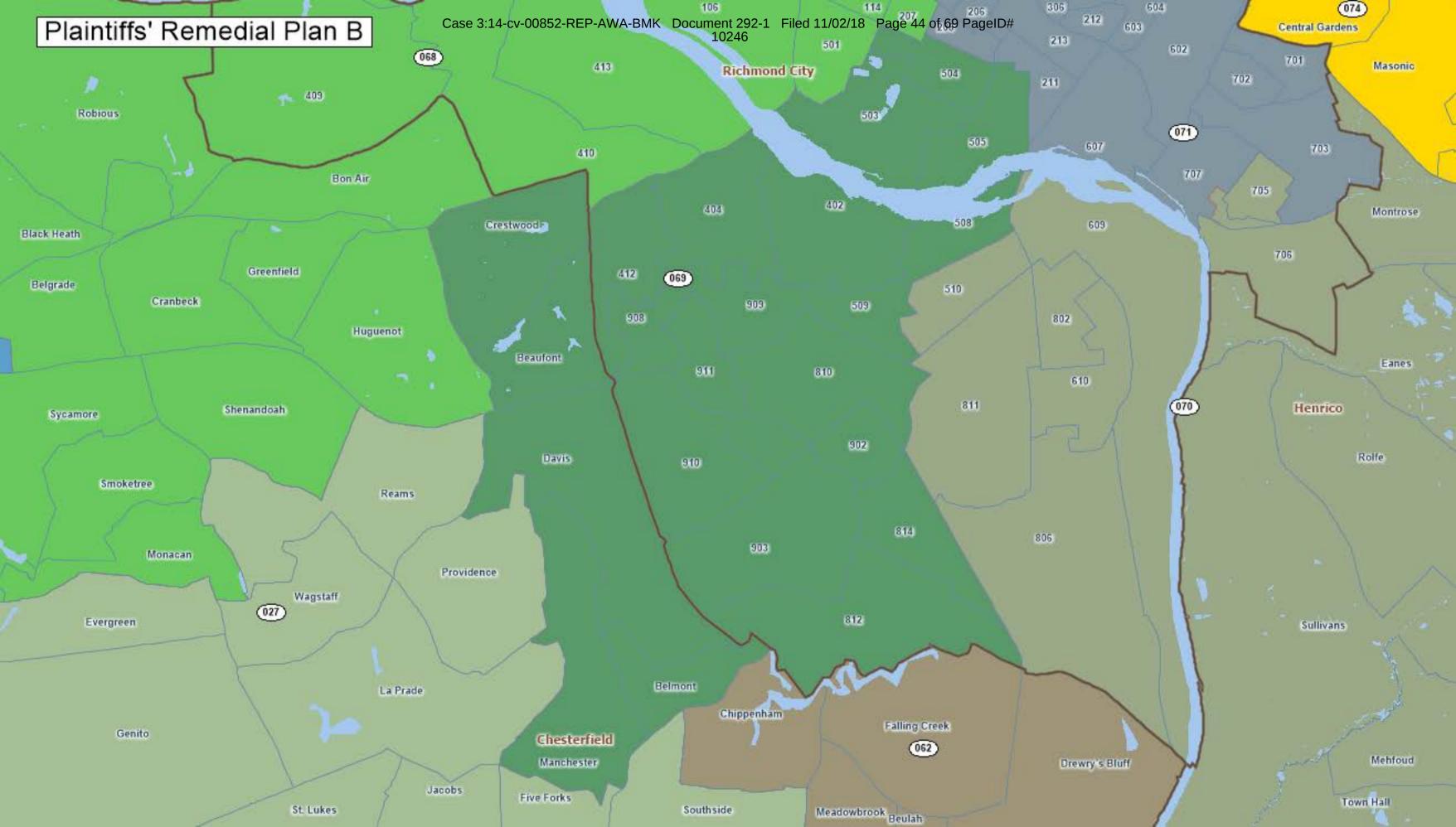


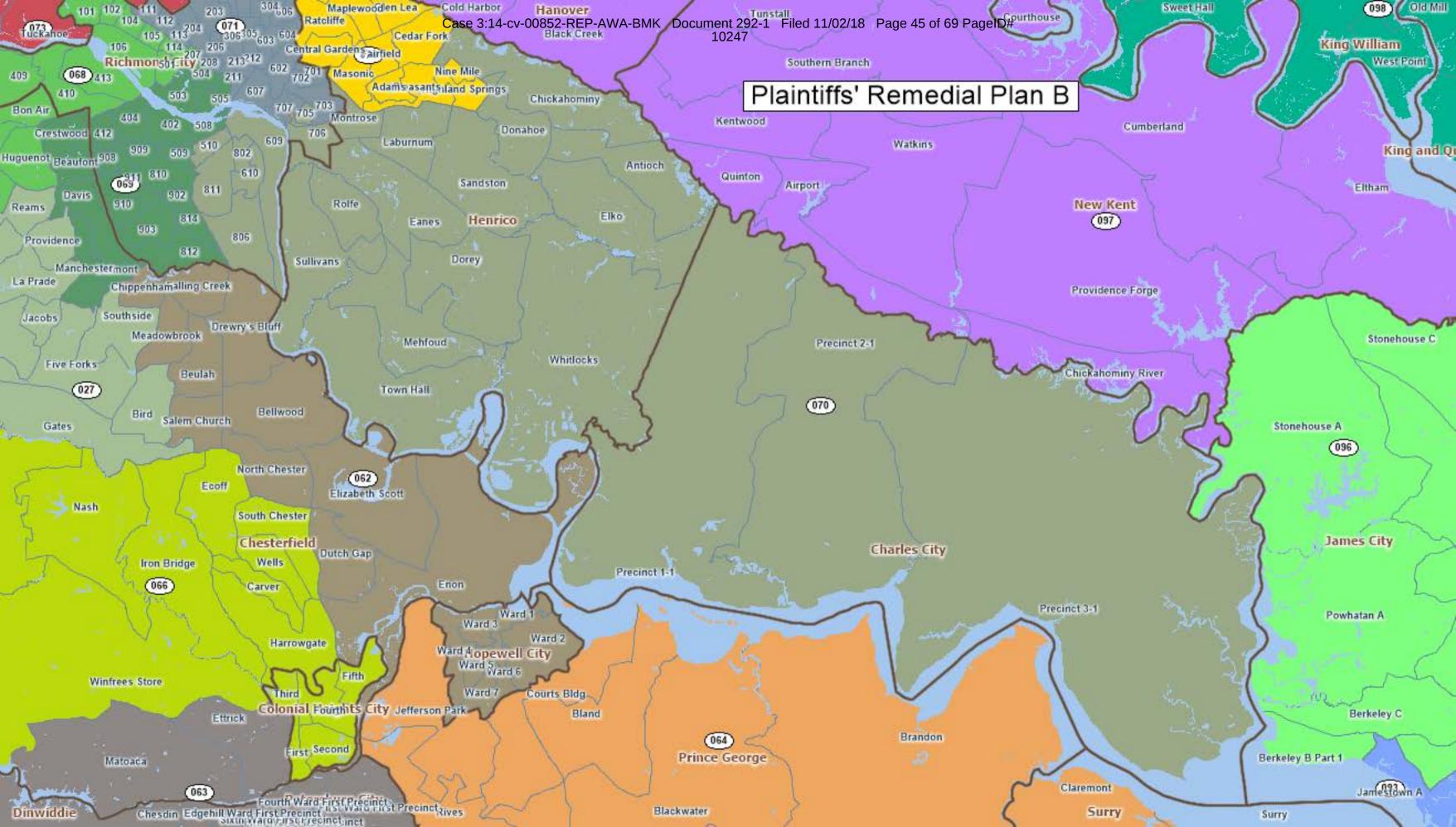


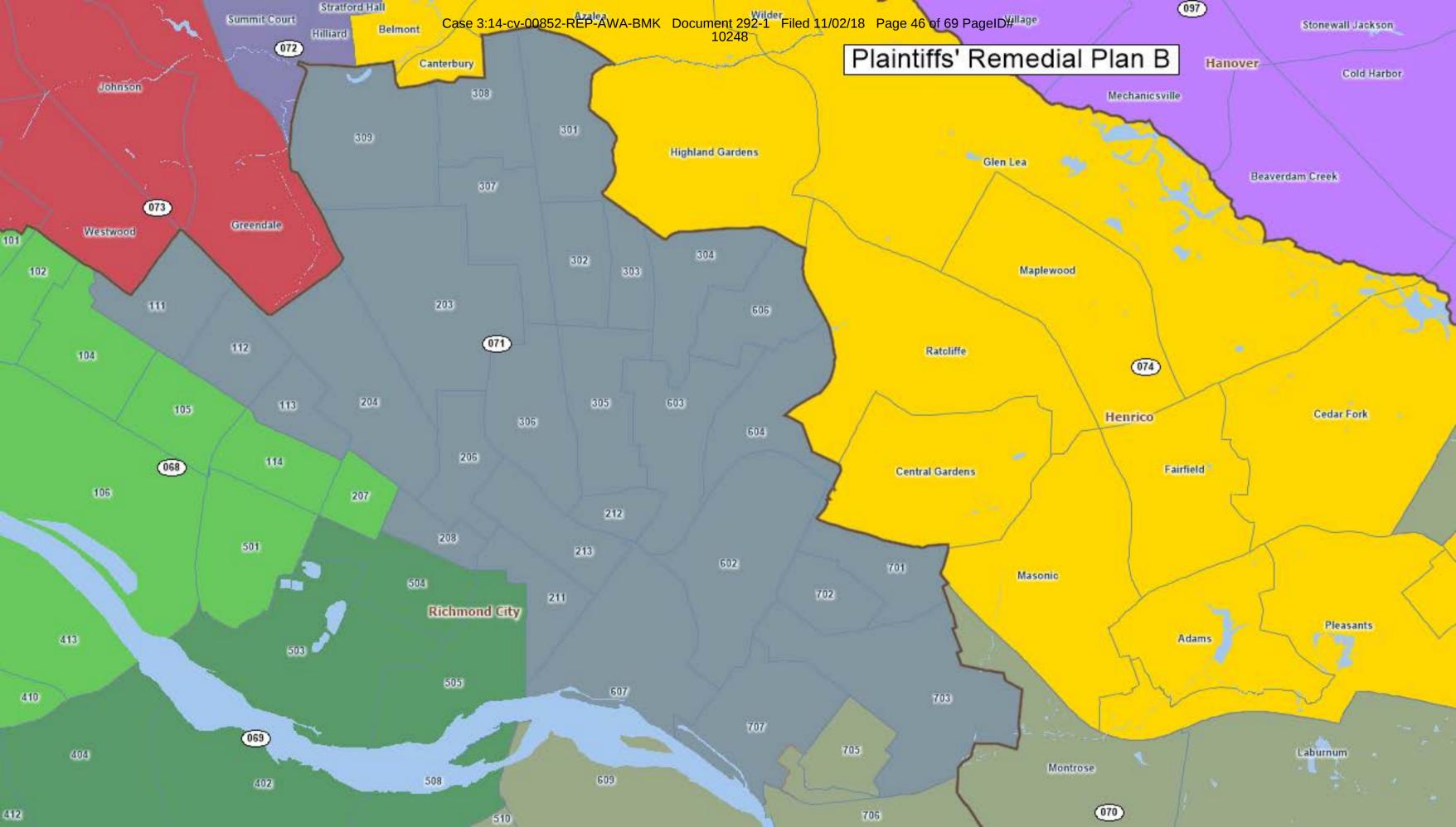


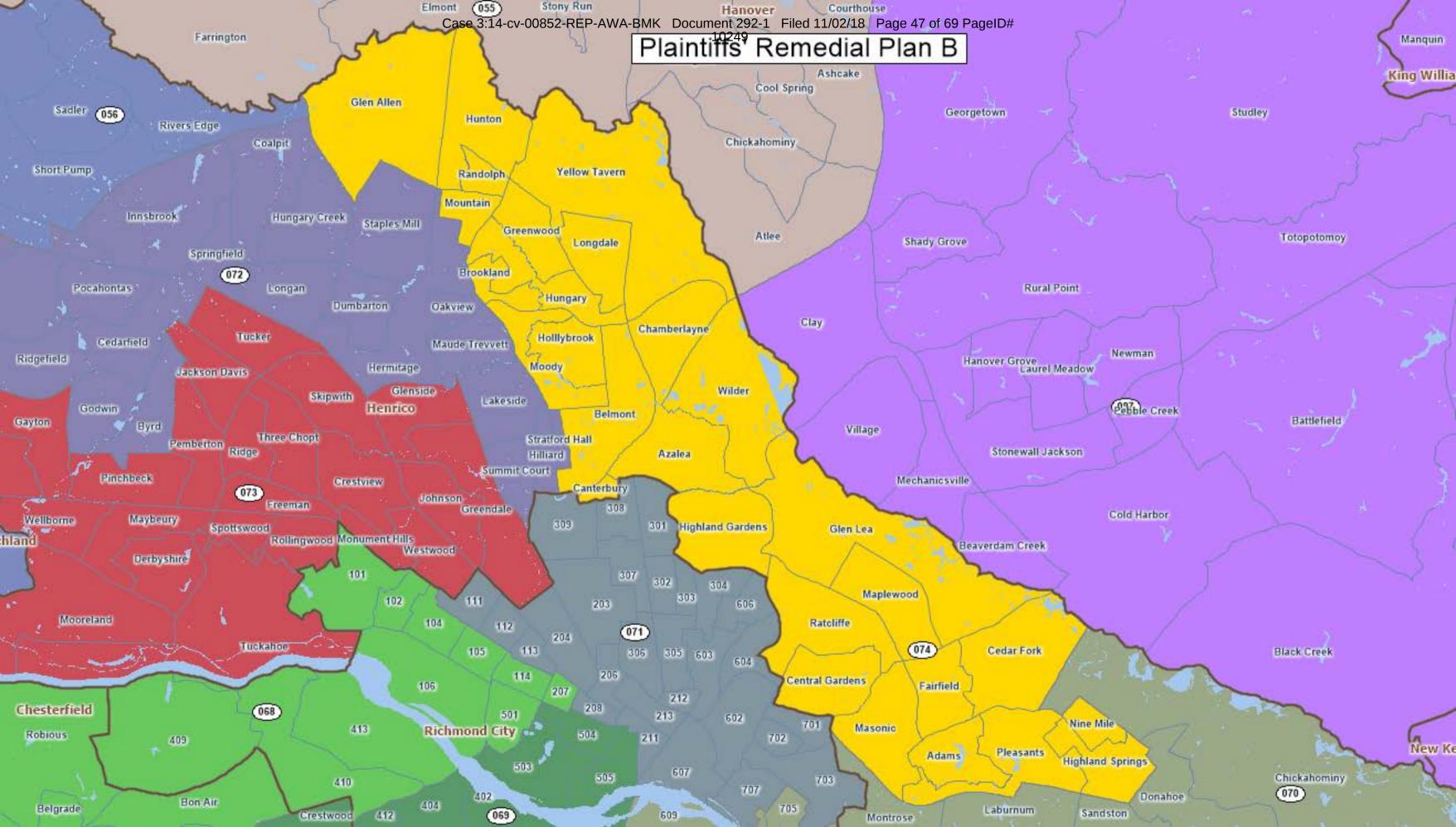
## **EXHIBIT G**

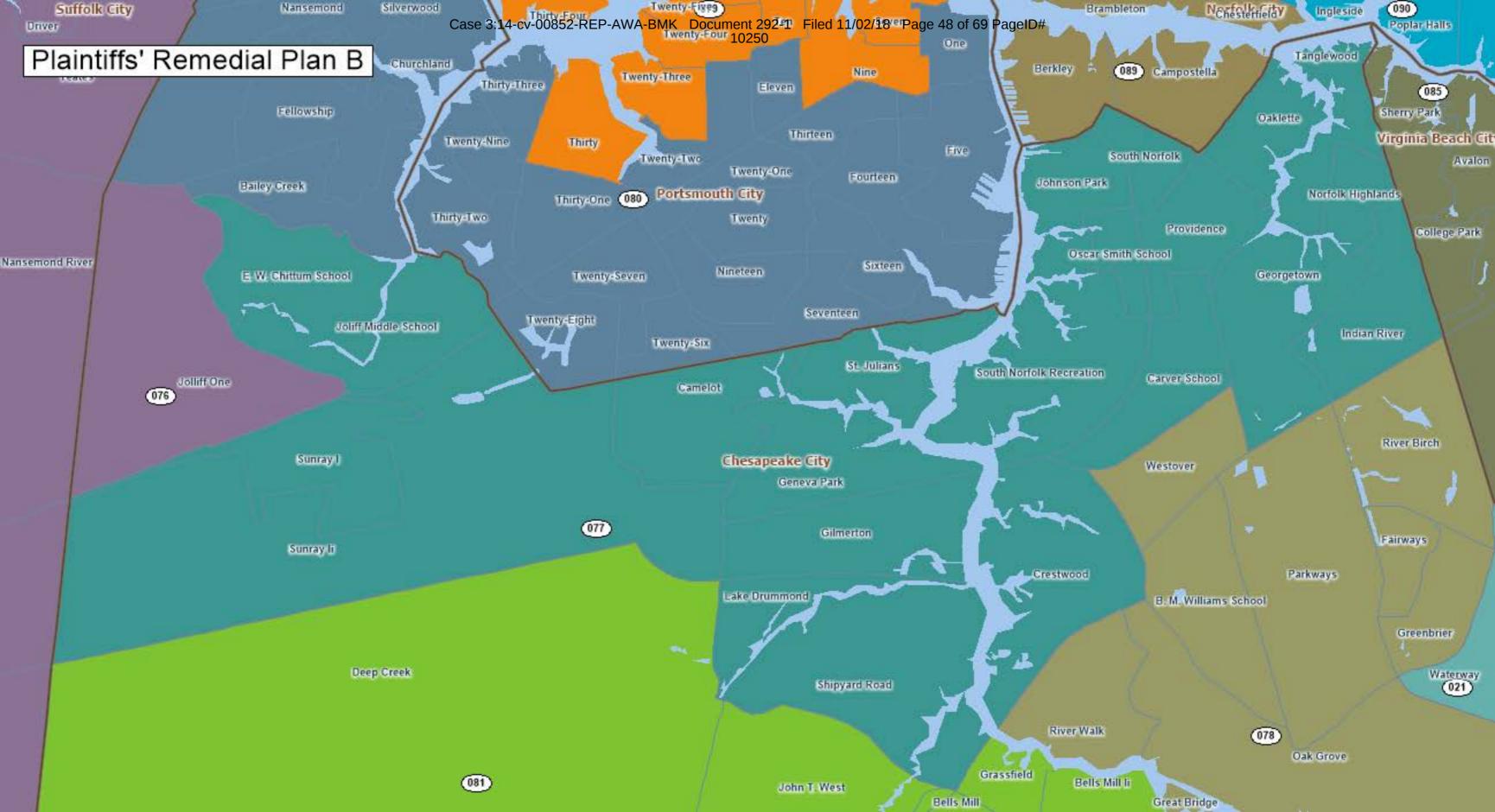


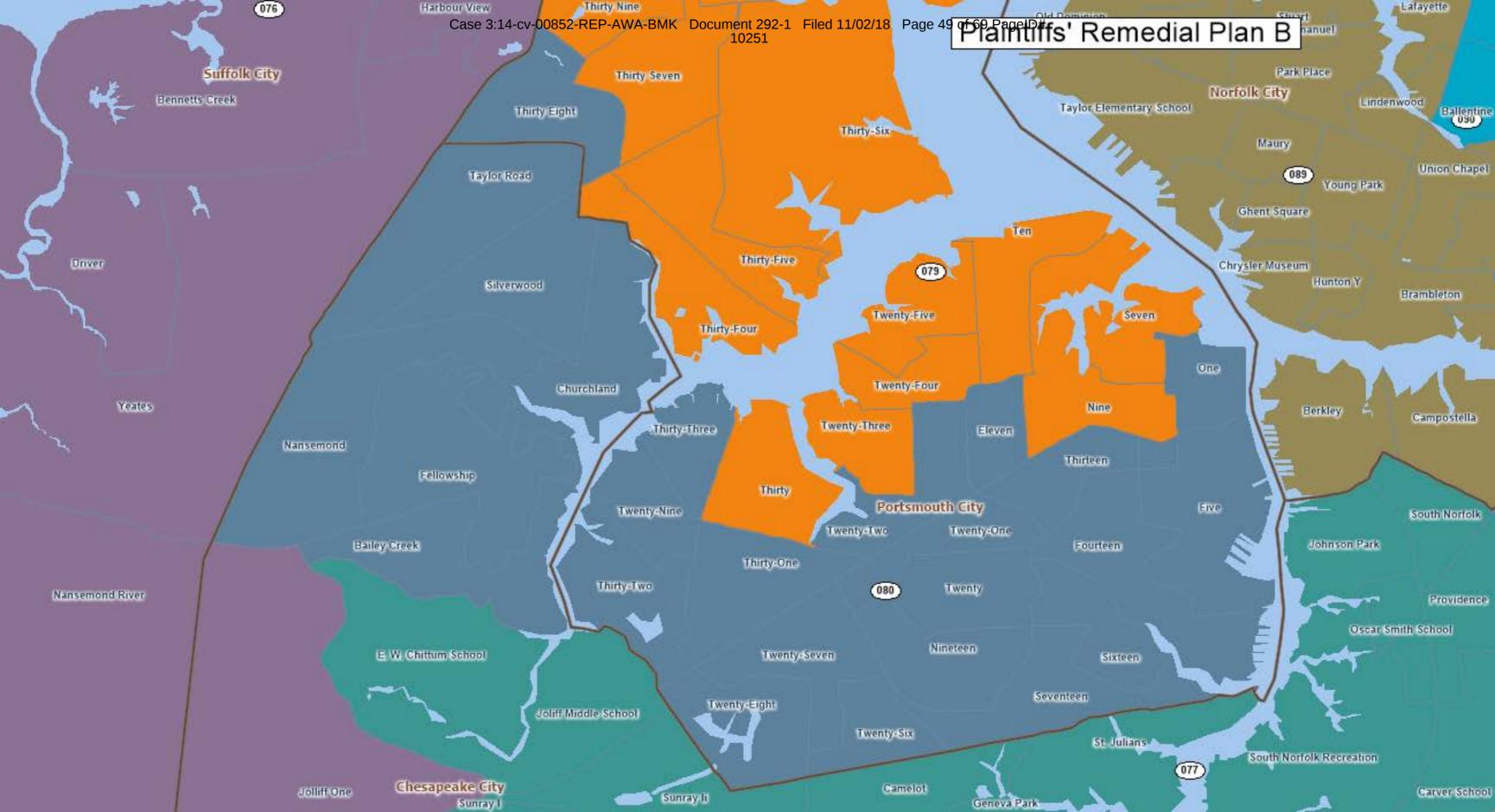


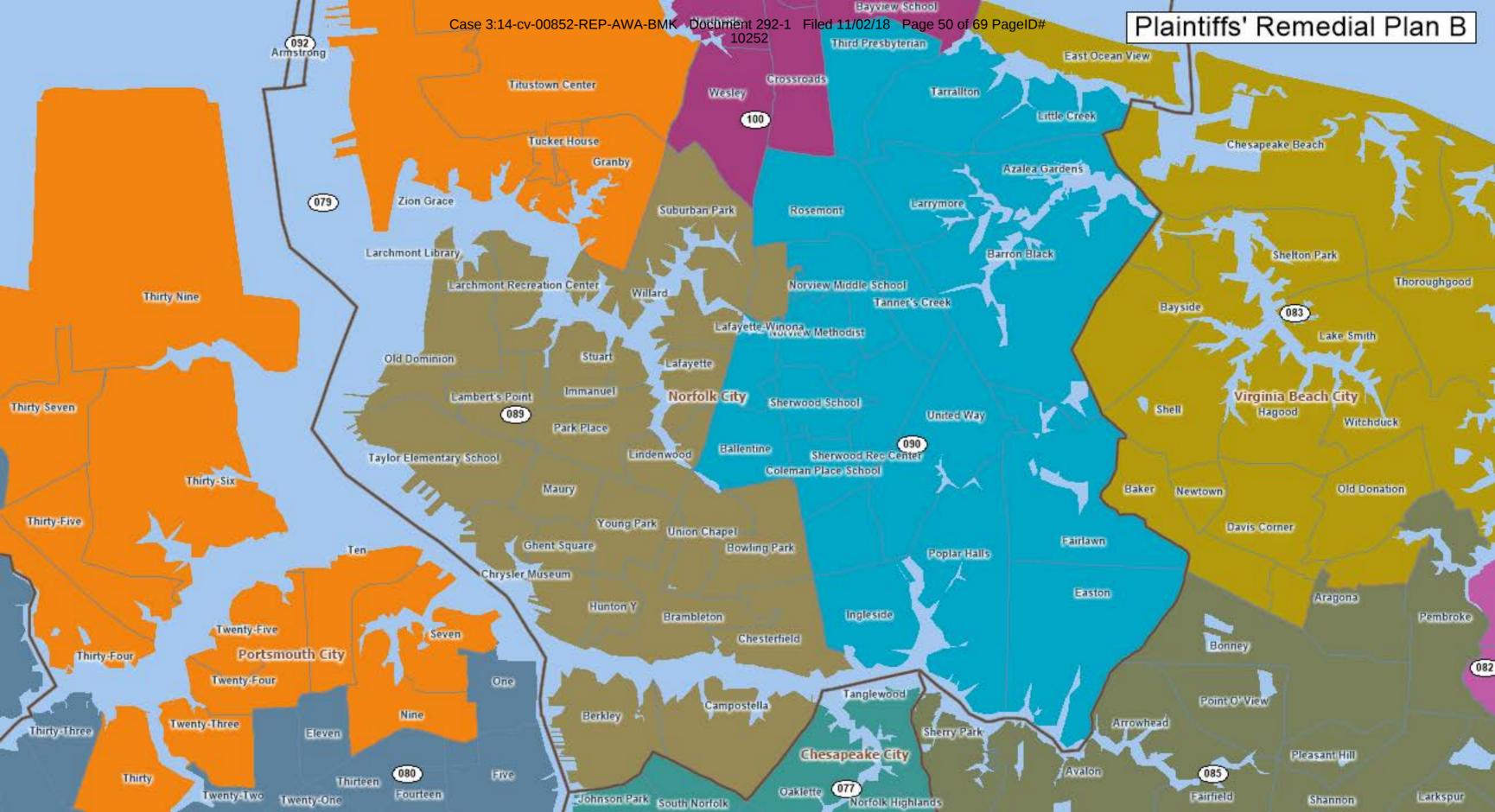


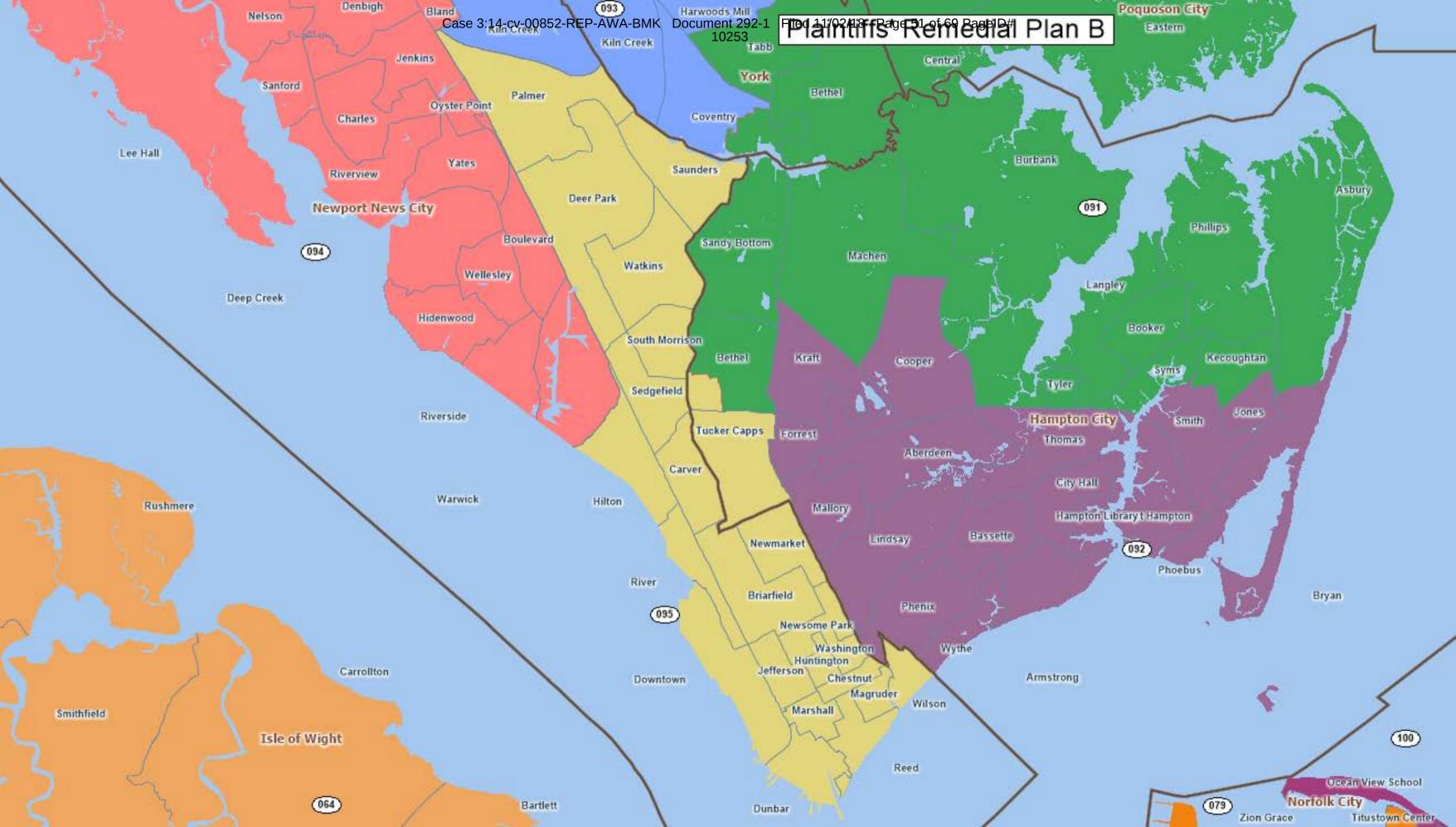












## **EXHIBIT H**

#### Plaintiffs' Remedial Plan B Population Summary

	Taral		.,			Disabilatore	% Black												
HD	Total Population	Deviation	% Deviation	White		Black (alone or in Part)	(alone or in Part)	Black	% Black		% Hispanic	AIAN	% AIAN	Aslan	% Asian	HawPi	% HawPl	Other	% Other
51001	80,508	498		76,238	94.7%	2,938	3.6%	2,642	3.3%	1,032	1.3%	198	0.2%	273	0.3%	21	0.0%	378	0.5%
51002	79,491	-519		45,289	57.0%	21,234		19,305	24.3%	14,019	17.6%	389	0.5%	4,714	5.9%	143	0.2%	5,537	7.0%
51003 51004	80,583 80,446	573 436		77,178 77,768	95.8% 96.7%	2,453 1,687	3.0% 2.1%	2,187 1,487	2.7% 1.8%	471 833	0.6% 1.0%	89 127	0.1% 0.2%	361 215	0.4% 0.3%	10 9	0.0% 0.0%	141 323	0.2% 0.4%
51005	80,600	590		76,060	94.4%	2,670	3.3%	2,217	2.8%	2,219	2.8%	149	0.2%	279	0.3%	24	0.0%	963	1.2%
51006	79,608	-402		76,371	95.9%	1,847	2.3%	1,491	1.9%	1,348	1.7%	144	0.2%	233	0.3%	11	0.0%	620	0.8%
51007 51008	80,146 80,685	136 675		74,108 74,011	92.5% 91.7%	3,719 3,761	4.6% 4.7%	3,148 3,262	3.9% 4.0%	1,636 1,558	2.0% 1.9%	144 167	0.2% 0.2%	1,036 1,519	1.3% 1.9%	18 18	0.0%	445 595	0.6% 0.7%
51009	80,574	564		69,709	86.5%	8,461	10.5%	7,855	9.7%	2,349	2.9%	205	0.3%	272	0.3%	13	0.0%	1,447	1.8%
51010	80,617	607		60,881	75.5%	7,711	9.6%		8.2%	9,800	12.2%	276	0.3%	5,836	7.2%	34	0.0%	3,995	5.0%
51011 51012	80,132 80,492	122 482		47,632 70,200	59.4% 87.2%	28,095 4,022	35.1% 5.0%	26,464 3,428	33.0% 4.3%	4,734 1,959	5.9% 2.4%	213 160	0.3%	1,374 4,443	1.7% 5.5%	49 22	0.1% 0.0%	2,072 587	2.6% 0.7%
51013	80,579	569		48,642	50.4%	11,894		10,402	12.9%	20,063	24.9%	397	0.5%	7,610	9.4%	65	0.1%	9,494	11.8%
S1014	79,407	-603		47,862	60.3%	29,125		28,510	35.9%	2,407	3.0%	145	0.2%	561	0.7%	24	0.0%	1,271	1.6%
51015 51016	80,630 79,692	620 -318		75,913 54,827	94.1% 68.8%	1,994 22,513	2.5%	1,507 21,837	1.9% 27.4%	3,386 2,678	4.2% 3.3%	189 189	0.2% 0.2%	361 368	0.4% 0.5%	17 7	0.0%	1,474 1,389	1.8% 1.7%
51017	80,631	621		71,273	88.4%	5,959	7.4%		6.4%	2,059	2.6%	157	0.2%	1,880	2.3%	22	0.0%	639	0.8%
51018	79,450	-560		69,073	86.9%	6,596	8.3%		7.2%	4,292	5.4%	260	0.3%	943	1.2%	45	0.1%	1,563	2.0%
51019 51020	80,080 79,334	70 -676		73,554 69,268	91.9% 87.3%	5,190 7,701	6.5% 9.7%	4,655 6,665	5.8% 8.4%	1,019 2,580	1.3% 3.3%	217 173	0.3% 0.2%	332 494	0.4% 0.6%	20 21	0.0% 0.0%	241 1,054	0.3% 1.3%
51020	79,608	-402		45,487	57.1%	21,051		19,164	24.1%	2,560 5,567	7.0%	225	0.3%	9,178	11.5%	95	0.0%	1,559	2.0%
51022	79,307	-703		59,135	74.6%	17,825	22.5%	17,029	21.5%	1,773	2.2%	192	0.2%	1,019	1.3%	26	0.0%	565	0.7%
51023 51024	79,330 79,678	-680 -332		62,083	78.3%	13,394		12,524	15.8%	2,087	2.6%	313 428	0.4%	2,010 442	2.5%	34	0.0%	914	1.2%
51024	80,011	-332 1		70,684 73,736	88.7% 92.2%	7,017 3,245	8.8% 4.1%	6,459 2,727	8.1% 3.4%	1,424 2,893	1.8% 3.6%	148	0.5% 0.2%	950	0.6% 1.2%	21 11	0.0%	446 1,258	0.6% 1.6%
51026	80,688	678	0.85%	67,806	84.0%	4,260	5.3%		4.4%	9,906	12.3%	264	0.3%	1,878	2.3%	64	0.1%	5,170	6.4%
51027 51028	79,675 79,304	-335 -706		52,878	66.4%	20,369 16,476		19,073	23.9%	5,362	6.7%	328	0.4%	2,453	3.1%	41	0.1%	2,531	3.2%
51028	79,304 79,851	-700 -159		56,206 68,575	70.9% 85.9%	5,669	7.1%	14,841 4,732	18.7% 5.9%	7,076 6, <b>59</b> 7	8.9% 8.3%	403 248	0.5% 0.3%	1,961 1,106	2.5% 1.4%	85 20	0.1% 0.0%	2,658 3,382	3.4% 4.2%
51030	80,583	573	0.72%	62,914	78.1%	13,207		11,938	14.8%	5,030	6.2%	275	0.3%	802	1.0%	59	0.1%	2,448	3.0%
51031	79,210	-800		50,345	63.6%	17,494		15,955	20.1%	11,324	14.3%	470	0.6%	4,561	5.8%	130	0.2%	4,161	5.3%
51032 51033	80,268 80,550	258 540		55,738 70,393	69.4% 87.4%	6,846 4,657	8.5% 5.8%	-	7.4% 4.8%	7,420 5,090	9.2% 6.3%	213 194	0.3% 0.2%	12,951 2,203	16.1% 2.7%	40 47	0.0% 0.1%	2,189 1,784	2.7% 2.2%
51034	80,722	712		61,693	76.4%	3,137	3.9%		3.2%	5,819	7.2%	152	0.2%	-	14.5%	37	0.0%	1,729	2.1%
51035	80,213	203		53,780	67.0%	4,431	5.5%	-	4.8%	8,037	10.0%	212		16,330	20.4%	56	0.1%	2,780	3.5%
51036 51037	79,746 80,255	-264 245		53,210 47,377	66.7% 59.0%	8,034 7,154	10.1% 8.9%		9.0% 7.8%	8,819 10,555	11.1% 13.2%	247 258		12,776 19,197	16.0% 23.9%	32 47	0.0% 0.1%	3,187 3,605	4.0% 4.5%
51038	80,758	748		42,448	52.6%	8,542	10.6%	•	9.8%	25,694	31.8%	508	0.6%		18.9%	63	0.1%	10,919	13.5%
51039	80,710	700		46,876	58.1%	8,318	10.3%		9.4%	15,374	19.0%	384		15,794	19.6%	77	0.1%	6,603	8.2%
51040 51041	80,729 80,792	719 782		55,837 54,579	69.2% 67.6%	5,891 5,343	7.3% 6.6%	5,095 4,637	6.3% 5.7%	7,868 9,941	9.7% 12.3%	240 183	0.3%	13,863 15,266	17.2% 18.9%	78 62	0.1% 0.1%	2,649 2,885	3.3% 3.6%
51042	79,964	-46		55,174	69.0%	9,089	11.4%		10.1%	7,451	9.3%	261	0.3%	-	13.8%	104	0.1%	1,939	2.4%
51043	80,750	740		47,821	59.2%	15,299		14,109	17.5%	12,611	15.6%	291	0.4%	9,989	12.4%	81	0.1%	4,915	6.1%
51044 51045	80,796 80,240	786 230		44,799 59,905	55.4% 74.7%	18,844 10,197	23.3% 12.7%	17,690 9,434	21.9% 11.8%	19,469 11,072	24.1% 13.8%	413 363	0.5% 0.5%	5,310 3,145	6.6% 3.9%	90 63	0.1% 0.1%	9,136 4,791	11.3% 6.0%
51046	80,333	323		41,531	51.7%	23,914		22,577	28.1%	13,746	17.1%	293	0.4%	6,546	8.1%	87	0.1%	5,911	7.4%
51047	80,757	747		61,673	76.4%	4,477	5.5%	-	4.8%	10,754	13.3%	427	0.5%	7,508	9.3%	56	0.1%	4,263	5.3%
51048 51049	79,492 80,609	-518 599		63,919 42,754	80.4% 53.0%	3,802 14,797	4.8%	3,291 13,754	4.1% 17.1%	5,831 21,749	7.3% 27.0%	179 497	0.2% 0.6%	8,184 10,174	10.3% 12.6%	48 105	0.1% 0.1%	1,318 9,557	1.7% 11.9%
51050	80,677	667	0.83%	-	62.0%	12,619		11,036	13.7%	21,171	25.2%	450	0.6%	5,698	7.1%	114	0.1%	9,436	11.7%
51051	80,372	362	0.45%	55,264	68.8%	13,854	17.2%	12,462	15.5%	10,775	13.4%	444	0.6%	4,757	5.9%	85	0.1%	3,777	4.7%
51052 51053	79,290 80,049	-720 39		33,564 48,549	42.3% 60.6%	26,018 4,895		23,892 4,294	30.1% 5.4%	23,127 16,791	29.2% 21.0%	663 400	0.8%	5,377 16,424	6.8% 20.5%	99 45	0.1% 0.1%	10,940 7,101	13.8% 8.9%
51054	80,155			58,394	72.9%	15,595		14,128	17.6%	6,404	8.0%	283	0.4%	1,915		86	0.1%	2,577	3.2%
51055	79,578	-432		63,245	79.5%	13,636		12,766	16.0%	2,068	2.6%	305	0.4%	881	1.1%	36	0.0%	695	0.9%
51056 51057	79,641 80,778	-369 768		62,464 55,937	78.4% 69.2%	11,307 14,978		10,499 13,861	13.2% 17.2%	1,859 5,761	2.3% 7.1%	212 250	0.3% 0.3%	4,355 5,807	5.5% 7.2%	24 49	0.0% 0.1%	503 2,396	0.6% 3.0%
51058	80,767	757		71,271	88.2%	6,129		5,290	6.5%	2,569	3.2%	160	0.2%			20	0.0%	1,071	1.3%
51059	79,345			61,136	77.1%	16,499		15,647	19.7%	1,436	1.8%	203	0.3%	457	0.6%	34	0.0%	529	0.7%
51060 51061	79,219 79,792	-791 -218		50,287 50,089	63.5% 62.8%	27,314 27,647		26,636 26,906	33.6% 33.7%	1,407 2,085	1.8% 2.6%	227 259	0.3% 0.3%	368 345		22 23	0.0%	620 958	0.8% 1.2%
51062	-			45,082	56.4%	25,766		24,391	30.5%	9,308	11.6%	421	0.5%	2,393		97	0.1%	5,117	6.4%
51063	79,436			32,019	40.3%	45,165		44,174	55.6%	2,391	3.0%	245	0.3%	535		37	0.0%	999	1.3%
51064 51065	79,452 79,871	-558 -139		\$2,144 65,874	65.6% 82.5%	24,508 10,508		23,500 9,876	29.6% 12.4%	2,744 1,890	3.5% 2.4%	359 167	0.5% 0.2%	789 2,044		119 29	0.1% 0.0%	767 514	1.0% 0.6%
51066		-613		60,025	75.6%	14,502		13,536		3,767	4.7%	298	0.4%			46	0.1%	1,470	1.9%
51067	79,633	-377	-0.47%	53,298	66.9%	4,972	6.2%	4,333	5.4%	7,838	9.8%	142				75	0.1%	2,654	3.3%
51068 51069	79,334 80,340	-676 330		65,701 27,681	82.8% 34.5%	8,977 42,643		8,330 41,317	10.5% 51.4%	2,922 11,228	3.7% 14.0%	193 408	0.2% 0.5%			23 100	0.0% 0.1%	960 7,001	1.2% 8.7%
51070				29,522	37.2%	46,279		45,096		3,020	3.8%	925	1.2%	549		48	0.1%	1,468	1.9%
51071	79,515			30,507	38.4%	44,831		43,728	55.0%	1,909	2.4%	203	0.3%			38	0.0%	597	0.8%
51072 51073	80,257 79,730	247 -280		57,681 58,639	71.9% 73.5%	11,779 11,104		10,908 10,286	13.6% 12.9%	4,576 6,005	5.7% 7.5%	215 234	0.3% 0.3%			30 39	0.0% 0.0%		2.3% 3.4%
51074	79,242	-768	-0.96%	25,109	31.7%	49,976	63.1%	48,632	61.4%	2,725	3.4%	230	0.3%	2,133	2.7%	41	0.1%	1,196	1.5%
51075	79,287	-723		35,158	44.3%	42,555		41,910	52.9%	1,616		203	0.3%	295		24	0.0%	761 644	1.0% 0.8%
51076 51077	79,530 80,448	-480 438		40,644 35,638	51.1% 44.3%	35,826 40,456		34,734 39,019	43.7% 48.5%	2,350 4,100	3.0% 5.1%	248 331	0.3% 0.4%			52 60	0.1% 0.1%		1.9%
51078	80,037	27	0.03%	59,510	74.4%	14,949	18.7%	13,932	17.4%	3,395	4.2%	333	0.4%	2,979	3.7%	49	0.1%	750	0.9%
S1079	80,217	207	0.26%	46,482	57.9%	27,375	34.1%	26,253	32.7%	5,989	7.5%	563	0.7%	2,242	2.8%	187	0.2%	1,734	2.2%

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51080	79.924	-86	-0.11%	32,607	40.8%	44,098	55.2% 42,761	53.5%	2,389	3.0%	336	0.4%	1,229	1.5%	102	0.1%	820	1.0%
51081	80,691	681	0.85%	-	75.6%	14,384	17.8% 13,174	16.3%	4,450	5.5%	298	0.4%	2,119	2.6%	96	0.1%	1,245	1.5%
51082	79,504	-506	-0.63%	64,133	80.7%	10,250	12.9% 9,023	11.3%	4,668	5.9%	309	0.4%	2,043	2.6%	98	0.1%	1,350	1.7%
51083	80,774	764	0.95%	53,040	65.7%	20,669	25.6% 19,256	23.8%	5,123	6.3%	332	0.4%	3,478	4.3%	133	0.2%	1,647	2.0%
51084	79,655	-355	-0.44%	50,866	63.9%	18,664	23.4% 17,068	21.4%	6,111	7.7%	301	0.4%	5,968	7.5%	160	0.2%	1,730	2.2%
51085	80,754	744	0.93%	52,551	65.1%	19,037	23.6% 17,489	21.7%	5,050	6.3%	378	0.5%	5,295	6.6%	117	0.1%	1,634	2.0%
51086	80,747	737	0.92%	46,400	57.5%	7,132	8.8% 6,369	7.9%	17,163	21.3%	351	0.4%	15,998	19.8%	42	0.1%	8,162	10.1%
51087	79,275	-735	-0.92%	44,093	55.6%	7,429	9.4% 6,483	8.2%	11,761	14.8%	236	0.3%	19,678	24.8%	54	0.1%	5,109	6.4%
51088	80,191	181	0.23%	60,158	75.0%	12,879	16.1% 11,480	14.3%	7,188	9.0%	261	0.3%	2,106	2.6%	95	0.1%	3,356	4.2%
51089	80,517	507	0.63%	31,318	38.9%	45,497	56.5% 44,279	55.0%	2,558	3.2%	232	0.3%	1,913	2.4%	56	0.1%	751	0.9%
51090	79,22B	-782	-0.9B%	33,391	42.1%	38,860	49.0% 37,049	46.8%	5,285	6.7%	341	0.4%	3,379	4.3%	114	0.1%	1,859	2.3%
51091	79,503	-507	-0.63%	51,706	65.0%	22,177	27.9% 20,508	25.8%	3,604	4.5%	332	0.4%	2,719	3.4%	94	0.1%	1,009	1.3%
51092	79,959	-51	-0.06%	27,332	34.2%	49,076	61.4% 47,056	58.9%	3,528	4.4%	347	0.4%	1,317	1.6%	82	0.1%	1,037	1.3%
51093	79,232	-778	-0.97%	53,806	67.9%	18,041	22.8% 16,524	20.9%	5,061	6.4%	268	0.3%	3,804	4.8%	137	0.2%	1,673	2.1%
51094	79,268	-742	-0.93%	45,286	57.1%	27,456	34.6% 25,249	31.9%	6,442	8.1%	389	0.5%	2,547	3.2%	159	0.2%	2,051	2.6%
51095	79,667	-343	-0.43%	32,062	40.2%	42,862	53.8% 40,935	51.4%	4,917	6.2%	367	0.5%	1,271	1.6%	81	0.1%	2,105	2.6%
51096	79,217	-793	-0.99%	62,755	79.2%	11,949	15.1% 10,948	13.8%	3,357	4.2%	266	0.3%	2,069	2.6%	78	0.1%	1,001	1.3%
51097	79,386	-624	-0.78%	67,533	85.1%	8,951	11.3% 8,379	10.6%	1,606	2.0%	597	0.8%	947	1.2%	29	0.0%	503	0.6%
51098	79,251	-759	-0.95%	63,155	79.7%	13,769	17.4% 12,959	16.4%	1,870	2.4%	403	0.5%	519	0.7%	23	0.0%	536	0.7%
S1099	80,332	322	0.40%	56,801	70.7%	20,709	25.8% 19,785	24.6%	2,971	3.7%	353	0.4%	551	0.7%	27	0.0%	1,183	1.5%
51100	80,680	670	0.84%	50,700	62.8%	24,232	30.0% 23,019	28.5%	5,746	8.4%	403	0.5%	1,280	1.6%	125	0.2%	2,785	3.5%

#### Plaintiffs' Remedial Plan B Voting Age Population Summary

	Marina Asa						% Black			,	_								
	Voting Age Population		% Deviation	White	% White	Black (alone or in Part)	in Part)	Black	% Black	Hispanic	% Hispanic	AIAN	% AIAN	Aslan	% Asian	HawPl	% HawPl	Other	% Other
51001	64,221	498	0.62%	60,648	94.4%		4.0%	-	3.8%	754	1.2%	170	0.2%	226	0.4%	12		284	0.4%
51002 51003	56,163 64,745	-519 573	-0.65% 0.72%	33,408 62,065	59.5% 95.9%		25.1% 3.0%	13,382	23.8% 2.9%	8,879 327	15.8% 0.5%	264 70	0.3% 0.1%	3,477 294	6.2% 0.5%	100 8		3,616 83	4.5% 0.1%
51004	64,195	436	0.54%	62,070	96.7%		2.2%		2.1%	541	0.8%	97	0.1%	161	0.3%	3		230	0.3%
51005	64,337	590	0.74%	61,274	95.2%		2.7%	•	2.6%	1,353			0.1%	211	0.3%	18		622	0.8%
51006 51007	62,988 64,401	-402 136	-0.50% 0.17%	60,788 59,855	96.5% 92.9%	-	2.0% 4.2%	-	1.8% 3.8%	813 1,137	1.3% 1.8%		0.1% 0.1%	171 922	0.3% 1.4%	11 18	0.0%	374 302	0.5% 0.4%
51003	63,203	675	0.84%	58,658	92.8%	2,576	4.1%	2,427	3.8%	1,012	1.6%	128	0.2%	1,064	1.7%	16	0.0%	397	0.5%
51009 51010	64,142 57,050	564 607	0.70% 0.76%	56,131 44,095	87.5% 77.3%		10.0% 9.0%		9.8% 8.4%	1,388 6,259	2.2% 11.0%	165 173	0.2% 0.2%	208 4,041	0.3% 7.1%	13 28	0.0%	896 2,676	1.1% 3.3%
51011	62,356	122	0.15%		63.4%			19,127	30.7%	3,146	5.0%		0.2%	1,049	1.7%	33	0.0%	1,402	1.7%
51012	69,034	482	0.60%	60,408	87.5%		4.6%	•	4.2%	1,618	2.3%		0.2%	3,927	5.7%	22		484	0.6%
51013 51014	58,290 62,379	569 -603	0.71% -0.75%	36,735 39,414	63.0% 63.2%		13.7% 34.3%	7,432 21,176	12.8% 33.9%	12,955 1,461	22.2% 2.3%		0.4% 0.1%	5,600 415	9.6% 0.7%	46 15		6,227 774	7.7% 1.0%
51015	62,907	620	0.77%	59,863	95.2%	•	2.0%		1.8%	2,048	3.3%		0.2%	281	0.4%	14		920	1.1%
51016 51017	63,086 63,576	-318 621	-0.40% 0.78%	44,381 57,265	70.4% 90.1%	•	27.3% 6.2%	16,985 3,751	26.9% 5.9%	1,595 1,309	2.5% 2.1%		0.2% 0.1%	276 1,368	0.4% 2.2%	5 19		849 412	1.1% 0.5%
51017	59,686	-560	-0.70%	52,508	88.0%		7.9%		7.5%				0.1%	686		36		990	1.2%
51019	62,844	70	0.09%		92.6%		6.0%		5.8%		1.0%		0.2%	249	0.4%	15		140	0.2%
51020 51021	62,717 58,656	-676 -402	-0.84% -0.50%	55,842 34,776	89.0% 59.3%	•	8.5% 24.5%	5,030 13,706	8.0% 23.4%	1,608 3,432	2.6% 5.9%		0.2% 0.2%	390 7,249	0.6% 12.4%	16 69		614 1,080	0.8% 1.4%
51022	61,467	-703	-0.88%	47,057	76.6%	-		12,479	20.3%	-	1.9%		0.2%	729	1.2%	21		385	0.5%
51023	63,982	-680	-0.85%	-	80.4%		15.2%		14.7%		2.4%		0.3%	•	2.3%	28		680	0.9%
51024 51025	64,424 61,585	-332 1	-0.41% 0.00%	57,333 57,373	89.0% 93.2%	-	8.7% 3.7%	-	8.4% 3.5%				0.4% 0.1%	375 656	0.6% 1.1%	19 10		327 783	0.4% 1.0%
51026	65,566	678	0.85%	56,466	86.1%	-	4.6%		4.1%	-			0.2%		2.5%	62		3,382	4.2%
51027	59,300	-335	-0.42%	41,068	69.3%	-		13,465	22.7%	-	5.6%		0.3%	-	3.1%	32		1,618	2.0%
5102B 51029	58,388 61,320	-706 -159	-0.88% -0.20%	43,126 53,930	73.9% 87.9%	_	6.1%	10,399 3,482	17.8% 5.7%	4,374 4,035	7.5% 6.6%		0.4% 0.2%	1,491 849	2.6% 1.4%	56 16		1,689 2,074	2.1% 2.6%
51030	61,276	573	0.72%	48,944	79.9%	-	15.4%		14.8%	3,171			0.3%	595	1.0%	42		1,541	1.9%
51031 51032	56,743 55,263	-800 258	-1.00% 0.32%	37,294 39,133	65.7% 70.8%		20.9% 8.2%	11,228 4,228	19.8% 7.7%	7,182 4,881			0.4% 0.2%	•	5.9% 15.9%	102 32		2,740 1,500	3.5% 1.9%
51033	57,140	540	0.67%	50,780	88.9%	-	5.1%	-	4.8%	3,123			0.2%		2.7%	38		1,127	1.4%
51034	57,978	712	0.89%	-	77.5%		3.7%	-	3.4%	-			0.1%			29		1,138	1.4%
51035 51036	62,743 61,859	203 -264	0.25% -0.33%	42,985 43,038	68.5% 69.6%	•	5.4% 9.0%	-	4.9% 8.4%	-	9.5% 9.8%		0.2% 0.2%	•	20.1% 15.4%	51 29		2,065 2,172	2.6% 2.7%
51037	63,480	245	0.31%	•	61.4%	-	8.4%	•	7.7%	•				14,688	23.1%	39		2,639	3.3%
51038	62,463	748	0.93%		54.3%		9.8%		9.2%		29.9%			12,217	19.6%	41			9.7%
51039 51040	61,870 58,415	700 719	0.87% 0.90%	•	60.3% 70.3%	-	9.4% 6.8%	-	8.9% 6.3%					12,080 10,133		58 52		-	S.9% 2.3%
51041	60,765	782	0.98%		69.1%	-	5.9%		5.5%	-				11,598		46		2,058	2.5%
51042 51043	58,066	-46 740	-0.06%	-	70.7%	-	10.1%		9.5%	-			0.2%			75		-	1.6%
51043	67,318 59,112	740	0.92% 0.98%	38,605 33,967	61.9% 57.5%			10,418 12,763	16.7% 21.6%	-			0.3% 0.3%	•		65 63		•	4.2% 7.7%
51045	67,692	230	0.29%	•	76.5%	-	11.8%	-		-					4.1%	57		-	4.4%
51046 51047	66,262 68,384	323 747	0.40% 0.93%	•	54.1% 77.7%	•	28.3% 5.2%	17,958 3,223	27.1% 4.7%					•	8.3% 9.5%	74 42		•	5.4% 4.1%
51048	64,068	-518	-0.65%	,	81.0%		4.9%		4.4%							42		1,000	1.3%
51049	66,373	599	0.75%		55.5%			10,818		-			0.5%		12.8%	79			8.8%
51050 51051	55,689 58,448	667 362	0.83% 0.45%	35,574 41,641	63.9% 71.2%	•	14.8% 15.8%		13.8% 15.0%				0.3% 0.4%			77 67		6,115 2,469	7.6% 3.1%
51052	56,592	-720	-0.90%	25,644	45.3%	17,626	31.1%	16,793		•		414	0.5%		-	80		-	9.1%
51053 51054	62,827 57,249	39 145			62.3% 74.9%			-						13,039 1,416		40			5.4%
51055	59,680	-432			80.0%		17.0%			-						57 24		462	2.1% 0.6%
51056	59,215	-369			79.0%		14.6%			-								295	0.4%
51057 51058	68,024 61,395	768 757		48,829 54,936	71.8% 89.5%			10,520 4,117	15.5% 6.7%									1,682 642	2.1% 0.8%
51059	62,208	-665			77.8%			12,344		-								361	0.5%
51060	62,712	-791		41,036	65.4%			20,290								19		389	0.5%
51061 51062	63,280 59,456	-218 •94		40,447 35,685	63.9% 60.0%			21,112 16,925								15 64		657 3,453	0.8% 4.3%
51063	62,461	-574	-0.72%	25,695	41.1%	35,129	56.2%	34,613	55.4%	1,578		203	0.3%	443	0.7%	28	0.0%	677	0.9%
51064 51065	61,617 59,390	-558 -139		41,079 49,180	66.7% 82.8%			18,163 7,754					0.4% 0.2%			72 20		530 332	0.7% 0.4%
51066	58,534	-613		45,692	78.1%											42		895	1.1%
51067	57,154	-377	-0.47%	39,122	68.5%	3,391	5.9%	3,116	5.5%	5,329	9.3%			11,455	20.0%				2.3%
51068 51069	62,977 62,908	-676 330		52,913 23,938	84.0% 38.1%		10.6% 50.0%	6,403 30,751										665 5,052	0.8% 6.3%
51070	60,305	-660	-0.82%	24,680	40.9%	33,035	54.8%	32,442	53.8%	1,990	3.3%	743	0.9%	465	0.8%	35	0.0%	982	1.2%
51071	66,240 61,588	-495 247			42.5% 73.8%		51.6% 13.9%	33,396 8 264					0.2% 0.2%					506 1,222	0.6% 1.5%
51072 51073	62,345	-280			75.3%	-		8,264 7,661		-				-					
51074	59,860	-768	-0.96%	21,246	35.5%	35,699	59.6%	35,105	\$8.6%	1,755	2.9%	177	0.2%	1,582	2.6%	27	0.0%	792	1.0%
51075 51076	63,665 58,364	-723 -480		-	45.6% \$3.7%			33,315 24,593										516 431	0.7% 0.5%
51077	58,834	438		-	47.2%	-		27,445		-				-					1.4%
51078	60,316	27	0.03%	45,422	75.3%	11,068	18.4%	10,711	17.8%	2,127	3.5%	251	0.3%	2,294	3.8%	37		519	0.6%
51079	66,380	207	0.26%	39,913	60.1%	21,110	31.8%	20,649	31.1%	4,858	7.3%	494	0.6%	1,987	3.0%	155	0.2%	1,483	1.8%

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51080	60,143	-86	-0.11%	26,160	43.5%	31,588	52.5%	31,021	51.6%	1,616	2.7%	254	0.3%	988	1.6%	73	0.1%	643	0.8%
51081	59,929	681	0.85%	46,145	77.0%	10,247	17.1%	9,827	16.4%	2,736	4.6%	247	0.3%	1,606	2.7%	75	0.1%	833	1.0%
51082	62,865	-506	-0.63%	52,024	82.8%	7,125	11.3%	6,572	10.5%	3,146	5.0%	245	0.3%	1,644	2.6%	78	0.1%	973	1.2%
51083	62,705	764	0.95%	43,306	69.1%	14,282	22.8%	13,702	21.9%	3,440	5.5%	252	0.3%	2,769	4.4%	82	0.1%	1,174	1.5%
S1084	58,375	-355	-0.44%	38,245	65.5%	12,905	22.1%	12,315	21.1%	3,880	6.6%	23\$	0.3%	4,662	8.0%	122	0.2%	1,205	1.5%
51085	62,044	744	0.93%	42,008	67.7%	13,228	21.3%	12,636	20.4%	3,335	5.4%	294	0.4%	4,279	6.9%	102	0.1%	1,171	1.5%
51086	59,286	737	0.92%	34,944	58.9%	5,108	8.6%	4,802	8.1%	12,059	20,3%	219	0.3%	11,609	19.6%	33	0.0%	5,779	7.2%
51087	55,787	-735	-0.92%	32,124	57.6%	5,006	9.0%	4,654	8.3%	7,895	14.2%	147	0.2%	13,563	24.3%	42	0.1%	3,505	4.4%
51088	58,354	181	0.23%	45,104	77.3%	8,479	14.5%	7,991	13.7%	4,545	7.8%	197	0.2%	1,584	2.7%	78	0.1%	2,206	2.8%
51089	62,820	507	0.63%	26,850	42.7%	32,912	52.4%	32,204	51.3%	1,899	3.0%	192	0.2%	1,700	2.7%	47	0.1%	577	0.7%
51090	60,733	-782	-0.98%	27,546	45.4%	27,979	46.1%	27,252	44.9%	3,513	5.8%	273	0.3%	2,736	4.5%	92	0.1%	1,350	1.7%
51091	58,986	-507	-0.63%	39,836	67.5%	15,250	25.9%	14,558	24.7%	2,217	3.8%	229	0.3%	2,108	3.6%	74	0.1%	671	0.8%
51092	62,382	-51	-0.06%	22,724	36.4%	36,972	59.3%	35,936	57.6%	2,373	3.8%	282	0.4%	1,067	1.7%	64	0.1%	766	1.0%
51093	62,281	-778	-0.97%	44,052	70.7%	12,756	20.5%	12,119	19.5%	3,443	5.5%	217	0.3%	3,088	5.0%	101	0.1%	1,169	1.5%
51094	60,264	-742	-0.93%	36,779	61.0%	18,647	30.9%	17,735	29.4%	4,254	7.1%	305	0.4%	2,080	3.5%	117	0.1%	1,485	1.9%
51095	60,645	-343	-0.43%	26,657	44.0%	30,437	50.2%	29,594	48.8%	3,319	5.5%	283	0.4%	1,049	1.7%	61	0.1%	1,545	1.9%
S1096	61,067	-793	-0. <del>9</del> 9%	49,447	81.0%	8,583	14.1%	8,227	13.5%	2,119	3.5%	192	0.2%	1,578	2.6%	57	0.1%	661	0.8%
51097	60,024	-624	-0.78%	51,473	85.8%	6,626	11.0%	6,433	10.7%	969	1.6%	451	0.6%	702	1.2%	20	0.0%	322	0.4%
51098	62,740	-759	-0.95%	50,614	80.7%	10,481	16.7%	10,201	16.3%	1,205	1.9%	322	0.4%	395	0.6%	17	0.0%	385	0.5%
51099	63,534	322	0.40%	46,161	72.7%	15,464	24.3%	15,150	23.8%	1,916	3.0%	278	0.3%	421	0.7%	22	0.0%	747	0.9%
51100	63,387	670	0.84%	41,814	66.0%	17,524	27.6%	17,066	26.9%	4,344	5.9%	322	0.4%	1,030	1.6%	104	0.1%	1,858	2.3%

## **EXHIBIT I**

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Plan Type:

Date: 11/2/2018Time: 1:31:20AM

Administrator:

# **Measures of Compactness** 11/2/2018

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Sum	N/A	N/A	N/A
Min	0.16	1.23	0.09
Max	0.62	2.95	0.63
Mean	0.36	1.90	0.26
Std. Dev.	0.11	0.31	0.10

			Polsby-
DISTRICT	Reock	Schwartzberg	Popper
51001	0.26	1.69	0.30
51002	0.30	2.17	0.18
51003	0.28	1.84	0.21
51004	0.49	1.97	0.20
51005	0.19	2.29	0.17
51006	0.27	1.82	0.26
51007	0.50	1.81	0.25
51008	0.47	1.83	0.26
51009	0.35	1.83	0.24
51010	0.23	2.16	0.18
51011	0.59	1.80	0.26
51012	0.39	1.95	0.22
51013	0.16	2.53	0.13
51014	0.24	2.34	0.16
51015	0.55	1.52	0.34
51016	0.36	2.11	0.18
51017	0.25	2.95	0.09
51018	0.62	1.92	0.24
51019	0.43	2.09	0.17
51020	0.27	2.28	0.15
51021	0.42	1.74	0.31
51022	0.20	2.59	0.11
51023	0.26	2.25	0.15
51024	0.44	1.78	0.25
51025	0.26	2.14	0.18
51026	0.46	1.57	0.36
51027	0.50	1.93	0.24
51028	0.39	1.82	0.26
51029	0.36	1.98	0.21
51030	0.53	1.49	0.36
51031	0.38	2.11	0.19
51032	0.46	1.64	0.31
51033	0.33	1.89	0.23
51034	0.24	1.91	0.22
51035	0.20	2.11	0.19
51036	0.43	1.66	0.30
51037	0.18	2.24	0.18
51038	0.62	1.44	0.45
51039	0.35	2.16	0.19
51040	0.26	2.20	0.17

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			Polsby-	
DISTRICT	Reock	Schwartzberg	Popper	
51041	0.36	1.72	0.32	
51042	0.35	2.09	0.20	
51043	0.22	2.10	0.21	
51044	0.43	1.69	0.32	
51045	0.49	1.81	0.26	
51045	0.52	1.28	0.55	
51047	0.41	1.73	0.33	
51047	0.18	2.24	0.16	
51048	0.18	2.35	0.16	
51050	0.46	1.62	0.34	
51050	0.40	2.15	0.18	
51052	0.23	1.92	0.25	
51052	0.23	1.69	0.23	
51053	0.47	1.89	0.25	
51054	0.47	1.69	0.28	
51055	0.37	1.87	0.26	
51057	0.45	1.47	0.41 0.19	
51058	0.32	2.11	0.19	
51059	0.30	1.98		
51060	0.38	1.62	0.31 0.17	
51061	0.32	2.21		
51062	0.30	2.52	0.12	
51063	0.59	1.27	0.51	
51064	0.29	2.12	0.17	
51065	0.34	1.88	0.25	
51066	0.31	1.79	0.27	
51067	0.32	1.84	0.25	
51068	0.36	1.98	0.24	
51069	0.46	1.60	0.37	
51070	0.30	1.78	0.20	
51071	0.38	1.78	0.29	
51072	0.32	1.96	0.25	
51073	0.39	1.93	0.24	
51074	0.21	1.93	0.22	
51075	0.41	1.56	0.32	
51076	0.45	1.44	0.47	
51077	0.26	1.99	0.25	
51078	0.44	1.74	0.32	
51079	0.44	1.76	0.27	
51080	0.39	1.85	0.28	
51081	0.37	1.81	0.28	
51082	0.55	1.47	0.45	
51083	0.44	1.72	0.32	
51084	0.41	1.74	0.30	
51085	0.39	1.89	0.27	
51086	0.35	1.98	0.25	
51087	0.22	2.30	0.17	
51088	0.28	2.56	0.13	
51089	0.50	1.47	0.43	
51090	0.48	1.44	0.46	
51091	0.48	1.41	0.49	
51092	0.32	1.74	0.31	
51093	0.21	2.46	0.15	
51094	0.48	1.23	0.63	
51095	0.25	1.69	0.34	
51096	0.20	2.19	0.17	

# Casens:14<sup>P</sup>civi00852<sup>II</sup>REPBAWA ABINIK<sup>trat</sup>Document 292-1 Filed 11/02/18 Page 60 of 69 PageID# Plan Type: 10262

DISTRICT	Reock	Schwartzberg	Polsby- Popper
-100-	0.42	4.50	2.21
51097	0.43	1.73	0.21
51098	0.28	1.78	0.26
51099	0.27	1.97	0.21
51100	0.29	1.51	0.39

## **EXHIBIT J**

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Plan Name: Plaintiffs' Remedial Plan B

Plan Type: Administrator:

#### **Political Subdivisions Split Between Districts**

Friday November 2, 2018 12:13 AM

Number of subdivisions not split:

County 82 Voting District 2,291

Number of subdivisions split into more than one district:

County 52 Voting District 82

Number of subdivision splits which affect *no* population:

County 2
Voting District 3

Split Counts

County

Cases where an area is split among 2 Districts: 25
Cases where an area is split among 3 Districts: 14
Cases where an area is split among 4 Districts: 5
Cases where an area is split among 5 Districts: 2
Cases where an area is split among 6 Districts: 1
Cases where an area is split among 7 Districts: 3
Cases where an area is split among 8 Districts: 1
Cases where an area is split among 17 Districts: 1

Voting District

Cases where an area is split among 2 Districts: 81 Cases where an area is split among 3 Districts: 1

County	Voting District	District	Population
Split Counties:			
Albemarle VA		51025	21,420
Albemarle VA		51057	37,303
Albemarle VA		51058	30,929
Albemarle VA		51059	9,318
Alexandria City VA		51045	59,633
Alexandria City VA		51046	80,333
Amherst VA		51023	10,678
Amherst VA		51024	21,675
Arlington VA		51045	14,388

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Plan Name: Plan Type:	Plaintiffs' Remedial Plan B Administrator: User:		
County	Voting District	District	Population
Split Counties	(continued):		
Arlington VA		51047	80,757
Arlington VA		51048	55,008
Arlington VA		51049	57,474
Augusta VA		51020	24,485
Augusta VA		51024	17,273
Augusta VA		51025	31,992
Bedford VA		51019	22,948
Bedford VA		51022	28,780
Bedford VA		51023	16,948
Botetourt VA		51017	4,449
Botetourt VA		51019	28,699
Campbell VA		51022	17,154
Campbell VA		51059	30,664
Campbell VA		51060	7,024
Caroline VA		51054	2,484
Caroline VA		51055	19,742
Caroline VA		51099	6,319
Chesapeake Ci	tv VA	51021	5,030
Chesapeake Ci		51076	2,057
Chesapeake Ci	•	51077	80,448
Chesapeake Ci		51078	80,037
Chesapeake Ci		51080	21,946
Chesapeake Ci		51081	32,691
Chesterfield V		51027	79,675
Chesterfield V		51062	57,325
Chesterfield V		51063	13,302
Chesterfield V		51065	40,407
Chesterfield V		51066	61,986
Chesterfield V		51068	44,543
Chesterfield V		51069	18,998
Clarke VA		51010	4,309
Clarke VA		51033	9,725
Culpeper VA		51018	12,895
Culpeper VA		51030	33,794
Fairfax VA		51034	53,301
Fairfax VA		51035	80,213
Fairfax VA		51036	79,746
Fairfax VA		51037	57,690
Fairfax VA		51038	80,758
Fairfax VA		51039	80,710
Fairfax VA		51040	66,026
Fairfax VA		51041	80,792
Fairfax VA		51042	79,964
Fairfax VA		51043	80,750
Fairfax VA		51044	80,796
Fairfax VA		51045	6,219
Fairfax VA		51048	24,484
Fairfax VA		51049	23,135
Fairfax VA		51053	67,717
Fairfax VA		51067	70,636

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Plan Name: Plan Type:	Plaintiffs' Remedial Plan B Administrator: User:		
County	Voting District	District	Population
Split Counties	(continued):		
Fairfax VA		51086	68,789
Fauquier VA		51018	40,915
Fauquier VA		51031	15,101
Fauquier VA		51088	9,187
Fluvanna VA		51058	18,460
Fluvanna VA		51065	7,231
Franklin VA		51009	46,650
Franklin VA		51022	9,509
Frederick VA		51010	13,649
Frederick VA		51029	43,969
Frederick VA		51033	20,687
Fredericksburg	g City VA	51028	8,950
Fredericksburg		51088	15,336
Goochland VA	•	51056	17,530
Goochland VA		51065	4,187
Hampton City		51091	50,673
Hampton City		51092	79,959
Hampton City		51095	6,804
Hanover VA		51055	50,481
Hanover VA		51097	49,382
Henrico VA		51056	24,178
Henrico VA		51070	43,528
Henrico VA		51072	80,257
Henrico VA		51073	79,730
Henrico VA		51074	79,242
Henry VA		51009	15,434
Henry VA		51014	15,368
Henry VA		51016	23,349
James City VA		51093	20,694
James City VA		51096	46,315
King William		51097	11,575
King William		51098	4,360
Loudoun VA		51010	62,659
Loudoun VA		51032	80,268
Loudoun VA		51033	50,138
Loudoun VA		51034	27,421
Loudoun VA		51067	8,997
Loudoun VA		51086	11,958
Loudoun VA		51087	70,870
Lunenburg VA		51061	8,470
Lunenburg VA		51075	4,444
Lynchburg Cit		51022	23,864
Lynchburg Cit		51023	51,704
Montgomery V		51007	35,026
Montgomery V		51008	17,599
Montgomery V		51012	41,767
Nelson VA		51020	7,776
Nelson VA		51059	7,244
Newport News	s City VA	51093	28,588
Newport News		51094	79,268
-			•

# Case 3:14-cv-00852-REP-AWA-BMK Document 292-1 Filed 11/02/18 Page 65 of 69 PageID# 10267

Plan Name: Plaintiffs' Remedial Plan B Administrator: Plan Type: User:		
County Voting District	District	Population
Split Counties (continued):		
Newport News City VA	51095	72,863
Norfolk City VA	51079	42,660
Norfolk City VA	51083	5,271
Norfolk City VA	51089	80,517
Norfolk City VA	51090	79,228
Norfolk City VA	51100	35,127
Pittsylvania VA	51014	20,984
Pittsylvania VA	51016	42,522
Portsmouth City VA	51079	37,557
Portsmouth City VA	51080	57,978
Prince George VA	51062	0
Prince George VA	51063	5,713
Prince George VA	51064	30,012
Prince William VA	51002	45,961
Prince William VA	51013	66,306
Prince William VA	51031	64,109
Prince William VA	51040	14,703
Prince William VA	51050	42,856
Prince William VA	51051	80,372
Prince William VA	51052	79,290
Prince William VA	51087	8,405
Pulaski VA	51007	29,841
Pulaski VA	51012	5,031
Richmond City VA	51068	34,791
Richmond City VA	51069	61,342
Richmond City VA	51070	28,566
Richmond City VA	51071	79,515
Roanoke City VA	51011	80,132
Roanoke City VA	51017	16,900
Roanoke VA	51008	33,094
Roanoke VA	51017	59,282
Rockingham VA	51015	4,966
Rockingham VA	51025	26,599
Rockingham VA	51026	31,774
Rockingham VA	51058	12,975
Russell VA	51003	4,583
Russell VA	51004	24,314
Smyth VA	51005	11,877
Smyth VA	51006	20,331
Spotsylvania VA	51054	77,671
Spotsylvania VA	51055	9,355
Spotsylvania VA	51056	4,780
Spotsylvania VA	51088	30,591
Stafford VA	51002	33,530
Stafford VA	51028	70,354
Stafford VA	51088	25,077
Suffolk City VA	51064	7,112
Suffolk City VA	51076	77,473
Virginia Beach City VA	51021	74,578
Virginia Beach City VA	51081	48,000

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Plan Name: P Plan Type:	laintiffs' Remedial Plan B	Administrator: User:		
County	Voting District		District	Population
Split Counties (c	continued):			
Virginia Beach Ci			51082	79,504
Virginia Beach Ci	-		51083	75,503
Virginia Beach Ci	-		51084	79,655
Virginia Beach Ci	-		51085	80,754
Virginia Beach Ci	ity VA		51100	0
Warren VA			51015	9,629
Warren VA			51018	18,267
Warren VA			51029	9,679
Washington VA			51004	26,563
Washington VA			51005	28,313
Wise VA			51001	27,786
Wise VA			51004	13,666
York VA			51091	16,680
York VA			51093	15,882
York VA			51096	32,902
Split VTDs :				
Albemarle VA	East Ivy		51025	1,145
Albemarle VA	East Ivy		51057	2,444
Albemarle VA	Free Bridge		51057	4,095
Albemarle VA	Free Bridge		51058	460
Amherst VA	Amelon		51023	1,337
Amherst VA	Amelon		51024	3,458
Amherst VA	Elon		51023	834
Amherst VA	Elon		51024	2,764
Arlington VA	Jefferson		51047	1,410
Arlington VA	Jefferson		51049	3,019
Arlington VA	Oakridge		51045	1,705
Arlington VA	Oakridge		51049	3,511
Augusta VA	Fishersville		51020	707
Augusta VA	Fishersville		51025	4,104
Augusta VA	White Hill		51020	1,157
Augusta VA	White Hill		51024	2,331
Bedford VA	Liberty High School		51019	838
Bedford VA	Liberty High School		51023	2,152
Bedford VA	Thaxton Elem School		51019	765
Bedford VA	Thaxton Elem School		51023	1,843
Chesapeake City			51078	546
Chesapeake City			51081	2,760
Chesterfield VA	Bailey Bridge		51027	4,353
Chesterfield VA	Bailey Bridge		51066	1,557
Chesterfield VA	Evergreen		51027	4,519
Chesterfield VA	Evergreen		51065	2,713
Clarke VA	Millwood		51010	1,693
Clarke VA	Millwood		51033	78
Fairfax VA	Baileys		51038	4,068
Fairfax VA	Baileys		51049	3,004
Fairfax VA	Belle Haven		51044	3,232
Fairfax VA	Belle Haven		51045	179
Fairfax VA	Belvoir		51043	3,167

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Plan Name: Plain Plan Type:	tiffs' Remedial Plan B	Administrator: User:		
County	Voting District		District	Population
Split VTDs (continu	ed):			
Fairfax VA	Belvoir		51044	2,216
Fairfax VA	Camelot		51039	1,381
Fairfax VA	Camelot		51053	407
Fairfax VA	Flint Hill		51035	2,035
Fairfax VA	Flint Hill		51036	3,897
Fairfax VA	Franklin		51067	1,228
Fairfax VA	Franklin		51086	3,530
Fairfax VA	Hayfield		51043	658
Fairfax VA	Hayfield		51044	3,178
Fairfax VA	Huntington		51043	5,464
Fairfax VA	Huntington		51045	320
Fairfax VA	Kinross		51067	3,186
Fairfax VA	Kinross		51086	3,128
Fairfax VA	Lake Braddock		51039	388
Fairfax VA	Lake Braddock		51041	6,417
Fairfax VA	Lane		51039	3,307
Fairfax VA	Lane		51043	2,015
Fairfax VA	Lees Corner West		51067	3,177
Fairfax VA	Lees Corner West		51086	2,463
Fairfax VA	London Towne West		51037	4,019
Fairfax VA	London Towne West		51040	1,825
Fairfax VA	Lorton		51042	0
Fairfax VA	Lorton		51043	4,353
Fairfax VA	Mosby		51035	2,906
Fairfax VA	Mosby		51037	6,928
Fairfax VA	Pohick		51041	3,303
Fairfax VA	Pohick		51042	2,489
Fairfax VA	Salona		51034	1,236
Fairfax VA	Salona		51048	2,387
Fairfax VA	Stone		51037	3,052
Fairfax VA	Stone		51067	2,902
Fairfax VA	Vale		51036	907
Fairfax VA	Vale		51067	3,094
Fairfax VA	Weyanoke		51038	5,130
Fairfax VA	Weyanoke		51039	1,022
Fairfax VA	Willow Springs		51037	3,327
Fairfax VA	Willow Springs		51040	3,764
Fairfax VA	Woodson		51037	4,956
Fairfax VA	Woodson		51041	2,358
Fairfax VA	Woodyard		51040	1,101
Fairfax VA	Woodyard		51042	1,646
Frederick VA	Parkins Mill		51010	6,942
Frederick VA	Parkins Mill		51029	1,263
Fredericksburg City			51028	698
Fredericksburg City			51088	1,523
Goochland VA	Hadensville		51056	715
Goochland VA	Hadensville		51065	1,621
Hampton City VA	Bethel		51003	4,800
Hampton City VA	Bethel		51095	548
1 j 2				2 .0

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Plan Name: Plaintiff Plan Type:	s' Remedial Plan B	Administrator: User:		
County	Voting District		District	Population
Split VTDs (continued)	):			
Henrico VA	Causeway		51056	767
Henrico VA	Causeway		51072	2,162
Henry VA	Axton		51014	353
Henry VA	Axton		51016	1,782
King William VA	Courthouse		51097	2,129
King William VA	Courthouse		51098	143
Loudoun VA	Belmont Ridge		51010	3,034
Loudoun VA	Belmont Ridge		51032	4,058
Loudoun VA	Countryside		51032	948
Loudoun VA	Countryside		51087	1,928
Loudoun VA	Dulles South		51067	6,329
Loudoun VA	Dulles South		51087	11
Loudoun VA	Mill Run		51032	3,722
Loudoun VA	Mill Run		51087	1,180
Loudoun VA	Park View		51086	2,336
Loudoun VA	Park View		51087	2,766
Loudoun VA	Philomont		51010	1,402
Loudoun VA	Philomont		51033	1,105
Loudoun VA	Pinebrook		51010	2,399
Loudoun VA	Pinebrook		51087	2,325
Lunenburg VA	Brown's Store		51061	1,040
Lunenburg VA	Brown's Store		51075	265
Lunenburg VA	Peoples Community Center		51061	725
Lunenburg VA	Peoples Community Center		51075	207
Lunenburg VA	Rosebud		51061	557
Lunenburg VA	Rosebud		51075	747
Lunenburg VA	Victoria Public Library		51061	1,086
Lunenburg VA	Victoria Public Library		51075	1,336
Montgomery VA	E-1		51007	10,740
Montgomery VA	E-1		51012	654
Newport News City VA			51093	3,023
Newport News City VA			51094	6,789
Newport News City VA			51093	2,317
Newport News City VA			51094	2,340
Norfolk City VA	Lafayette-Winona		51089	1,026
Norfolk City VA	Lafayette-Winona		51090	2,339
Portsmouth City VA	Nine		51079	2,752
Portsmouth City VA	Nine		51080	402
Prince George VA	Courts Bldg		51062	0
Prince George VA	Courts Bldg		51064	3,810
Prince George VA	Templeton		51063	1,044
Prince George VA	Templeton		51064	3,579
Prince William VA	Alvey		51040	2,244
Prince William VA	Alvey		51087	4,913
Prince William VA	Battlefield		51013	80
Prince William VA	Battlefield		51040	5,599
Prince William VA	Benton		51031	2,848
Prince William VA	Benton		51051	1,805
Prince William VA	Godwin		51031	3,710

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Plan Name: Plaint Plan Type:	iffs' Remedial Plan B	Administrator: User:		
County	Voting District		District	Population
Split VTDs (continue	d):			
Prince William VA	Godwin		51052	4,449
Prince William VA	Henderson		51031	3,800
Prince William VA	Henderson		51052	2,700
Prince William VA	Minnieville		51031	456
Prince William VA	Minnieville		51052	4,819
Prince William VA	Stonewall		51013	5,472
Prince William VA	Stonewall		51050	1,141
Richmond City VA	707		51070	86
Richmond City VA	707		51071	5,576
Roanoke VA	Penn Forest		51008	1,911
Roanoke VA	Penn Forest		51017	417
Rockingham VA	Plains		51015	1,664
Rockingham VA	Plains		51026	1,998
Russell VA	Honaker		51003	1,463
Russell VA	Honaker		51004	2,591
Spotsylvania VA	Brokenburg		51054	1,530
Spotsylvania VA	Brokenburg		51055	1,384
Spotsylvania VA	Brokenburg		51056	1,562
Stafford VA	Hampton		51028	4,244
Stafford VA	Hampton		51088	1,168
Stafford VA	Whitson		51002	1,537
Stafford VA	Whitson		51088	3,512
Virginia Beach City V	A Aragona		51083	3,841
Virginia Beach City V	A Aragona		51085	3,439
Virginia Beach City V	A Chesapeake Beach		51083	8,310
Virginia Beach City V	A Chesapeake Beach		51100	0
Virginia Beach City V	A London Bridge		51082	4,803
Virginia Beach City V	A London Bridge		51084	763
Wise VA	East Pound		51001	1,168
Wise VA	East Pound		51004	1,416
York VA	Coventry		51091	3,668
York VA	Coventry		51093	5,134
York VA	Edgehill		51093	2,346
York VA	Edgehill		51096	2,989