

Supplementary Materials: Generalized Extreme Value Statistics, Physical Scaling and Forecasts of Oil Production in the Bakken Shale

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- 1 Supporting Online Materials-2: Infill Potential Maps and Infill Drilling Schedules

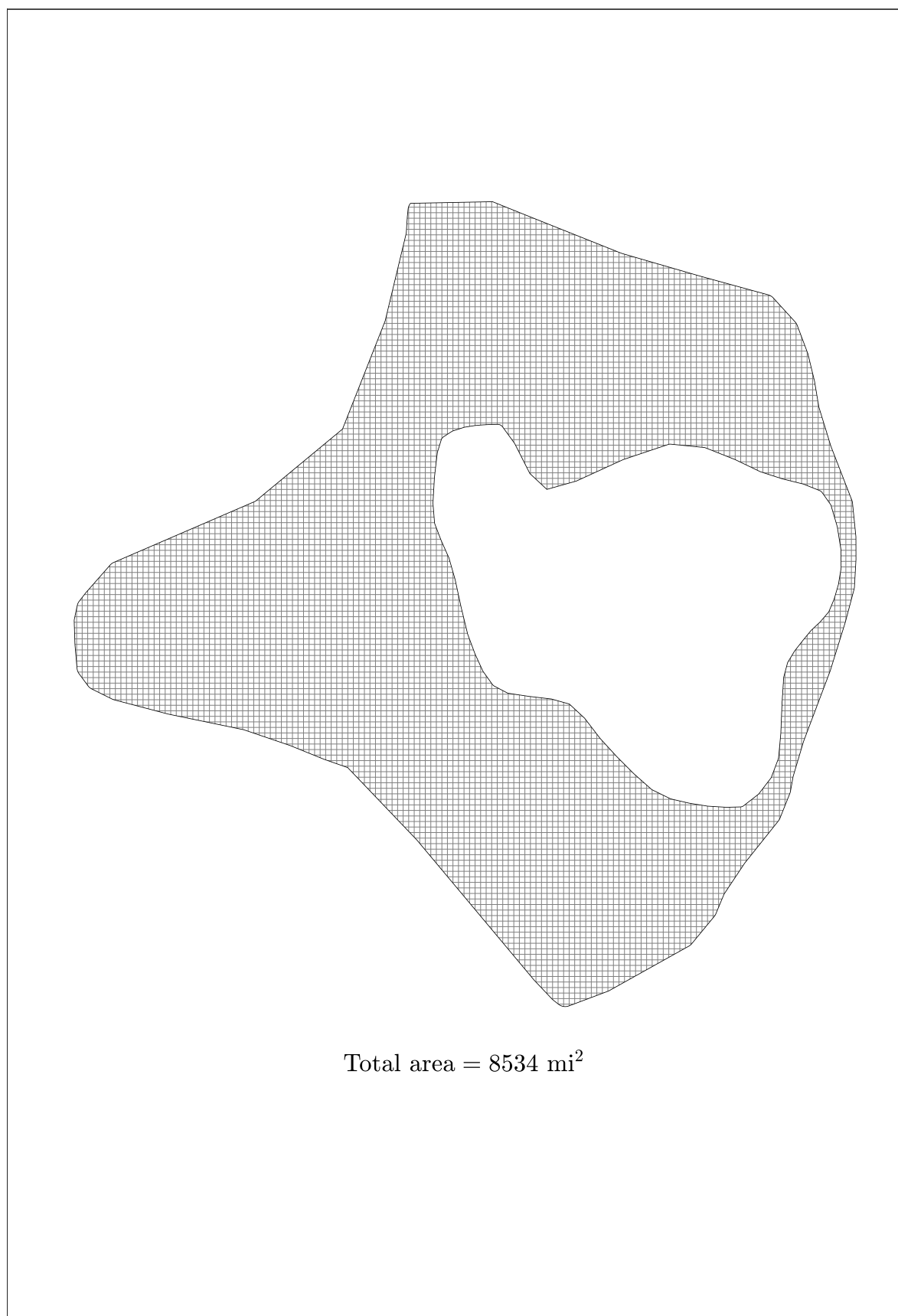


Figure S1. One-square-mile fishnet gridding of Middle Bakken noncore.

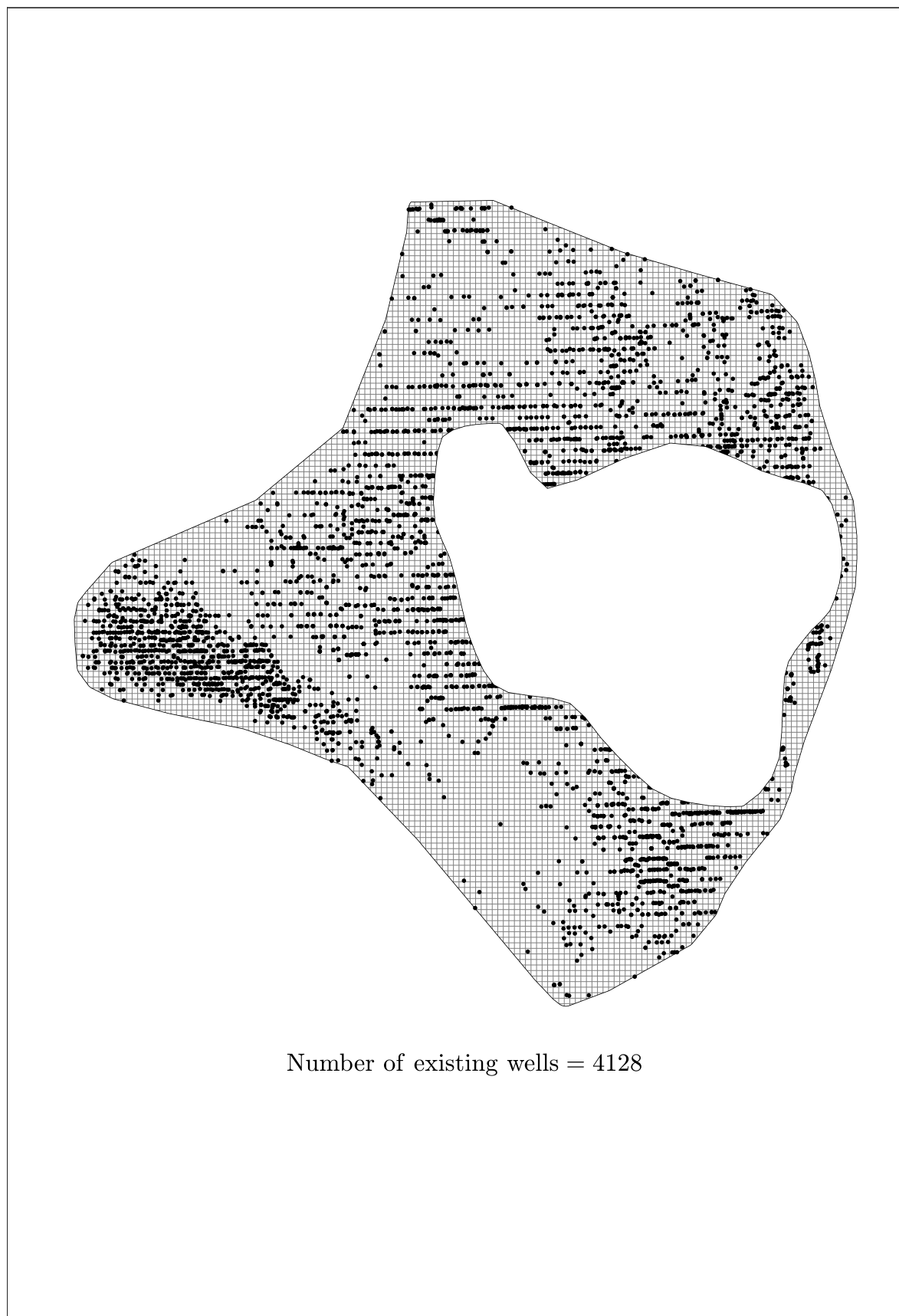


Figure S2. Map of wellhead locations in the Middle Bakken noncore.

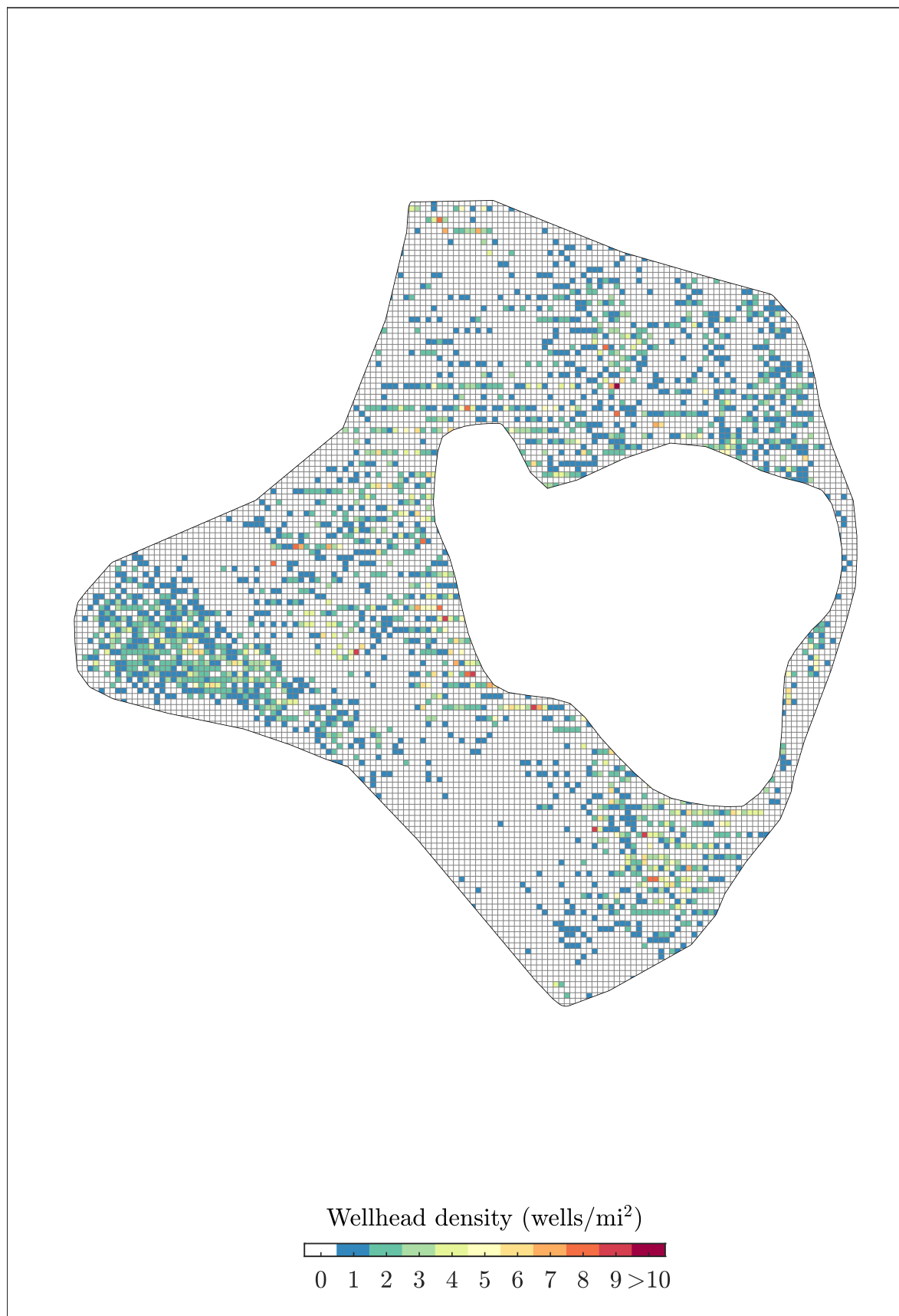


Figure S3. Map of wellhead density in the Middle Bakken noncore.

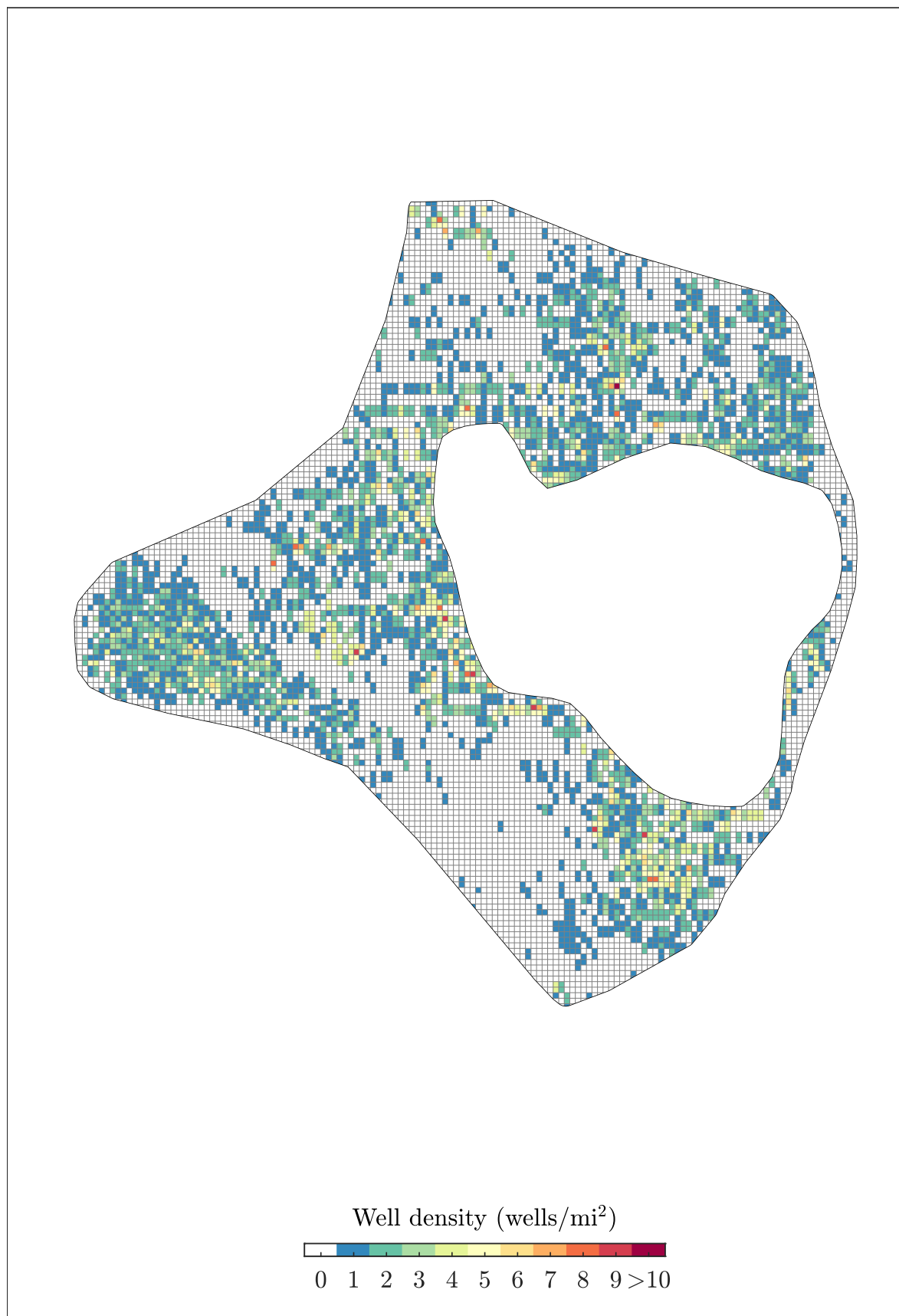


Figure S4. Map of well density in the Middle Bakken noncore.

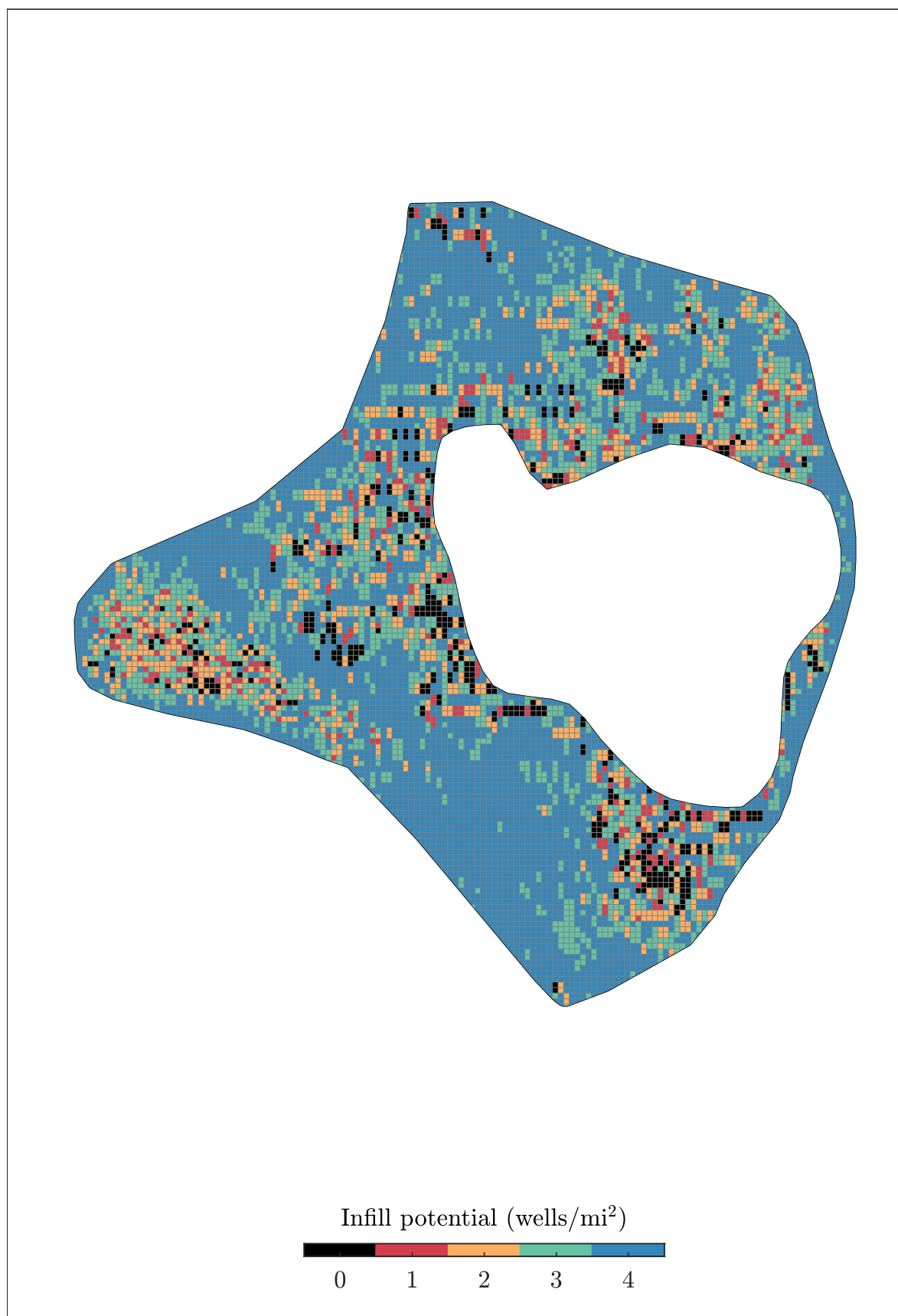


Figure S5. Map of infill potential in the Middle Bakken noncore.

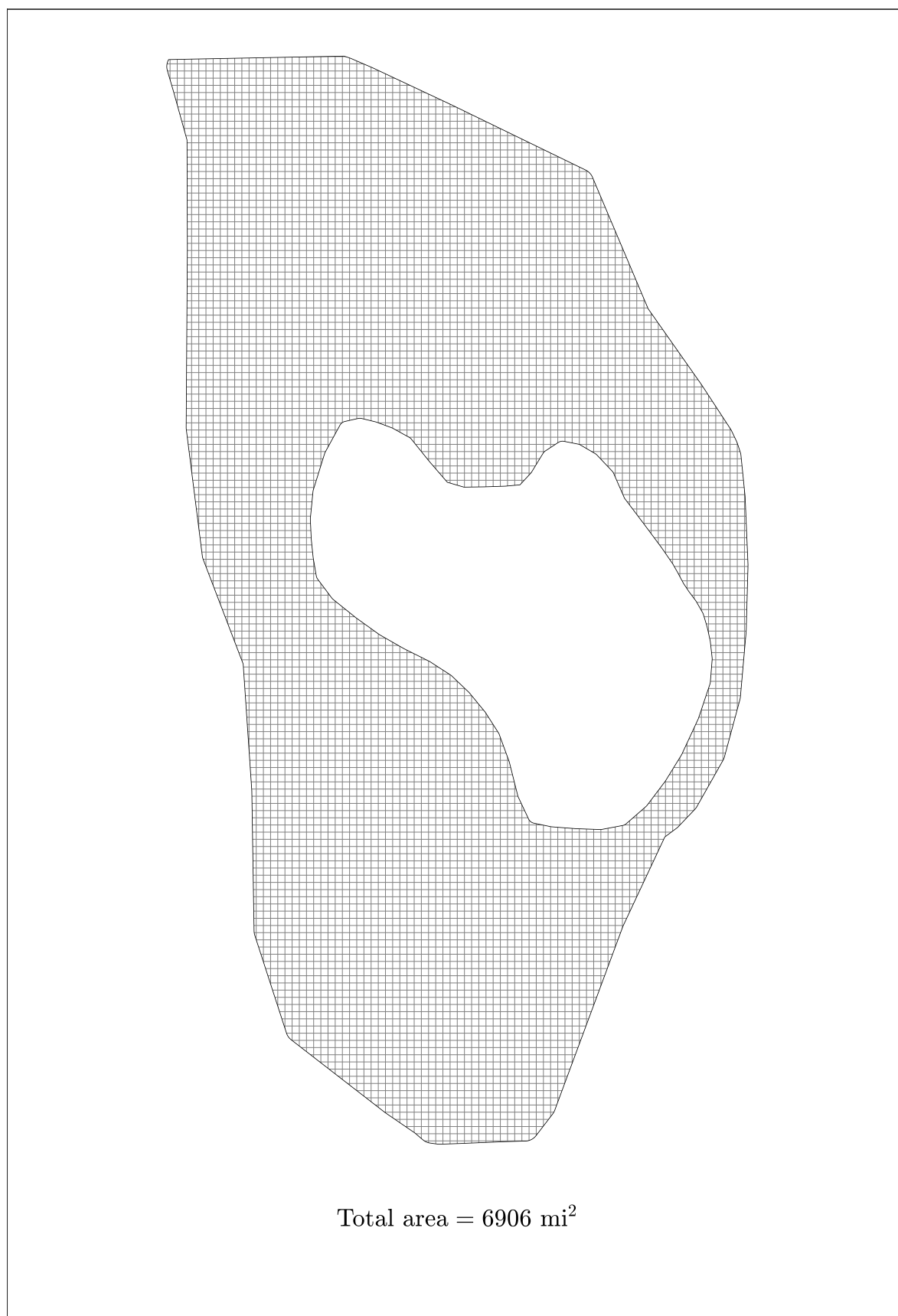
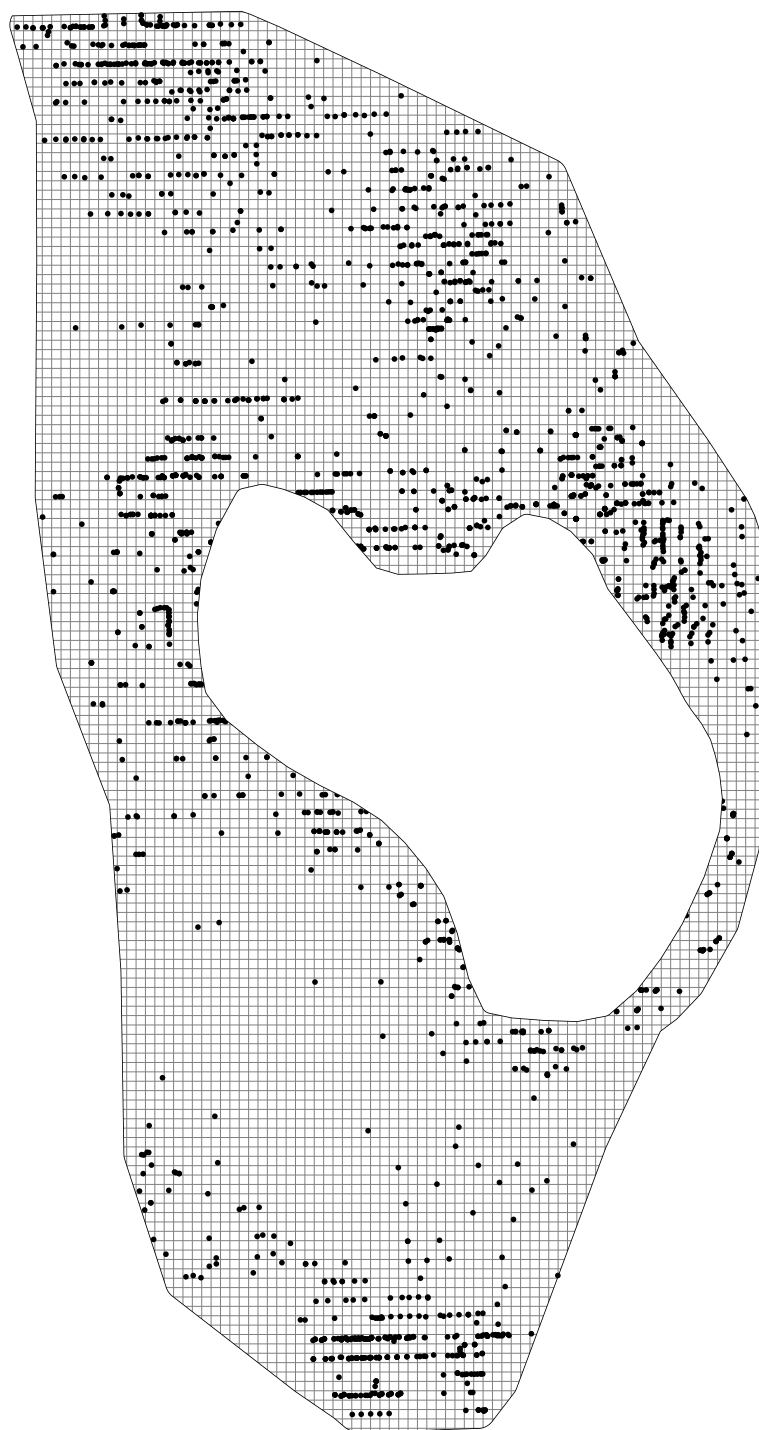


Figure S6. One-square-mile fishnet gridding of Three Forks noncore.



Number of existing wells = 2146

Figure S7. Map of wellhead locations in the Three Forks noncore.

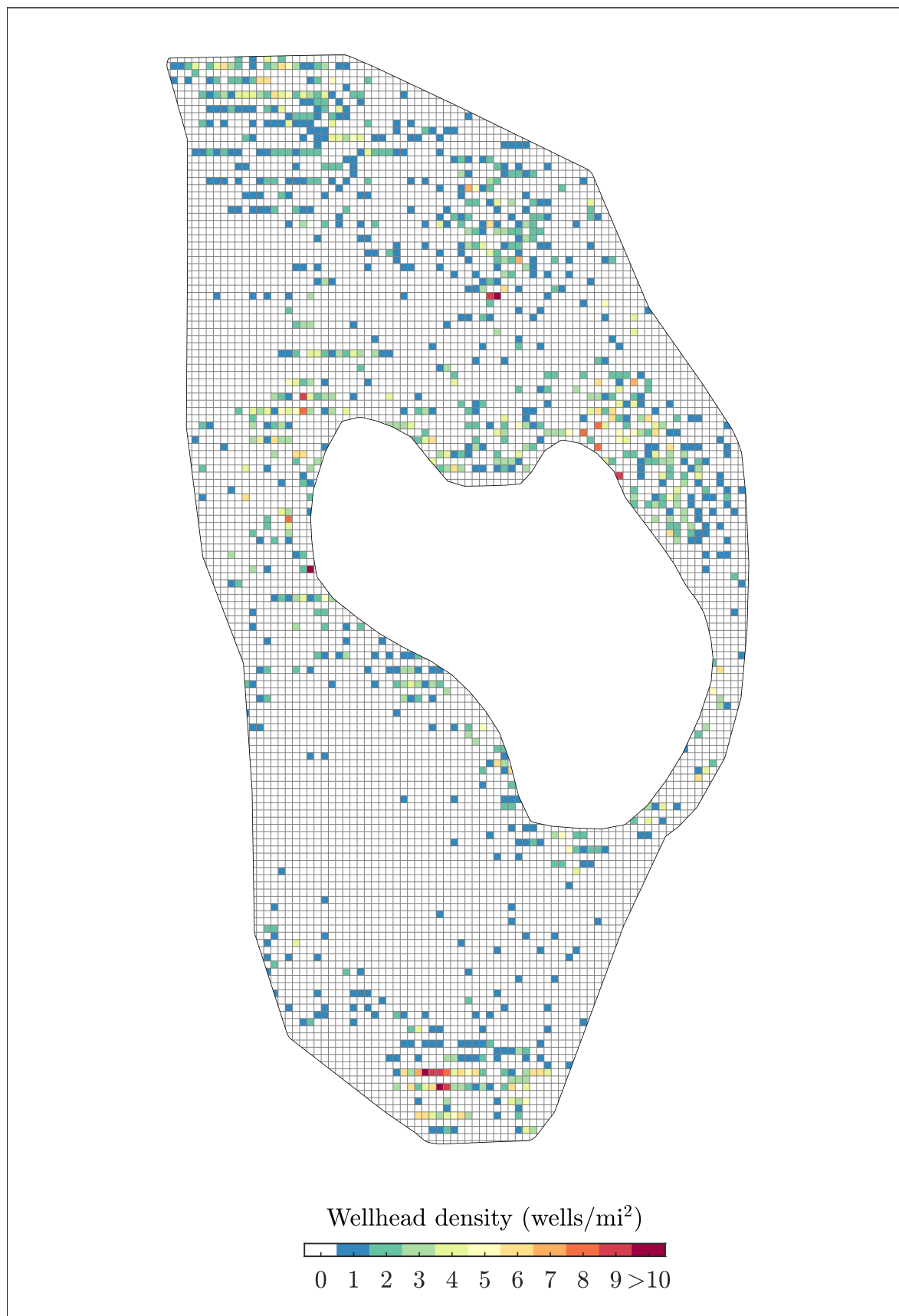


Figure S8. Map of wellhead density in the Three Forks noncore.

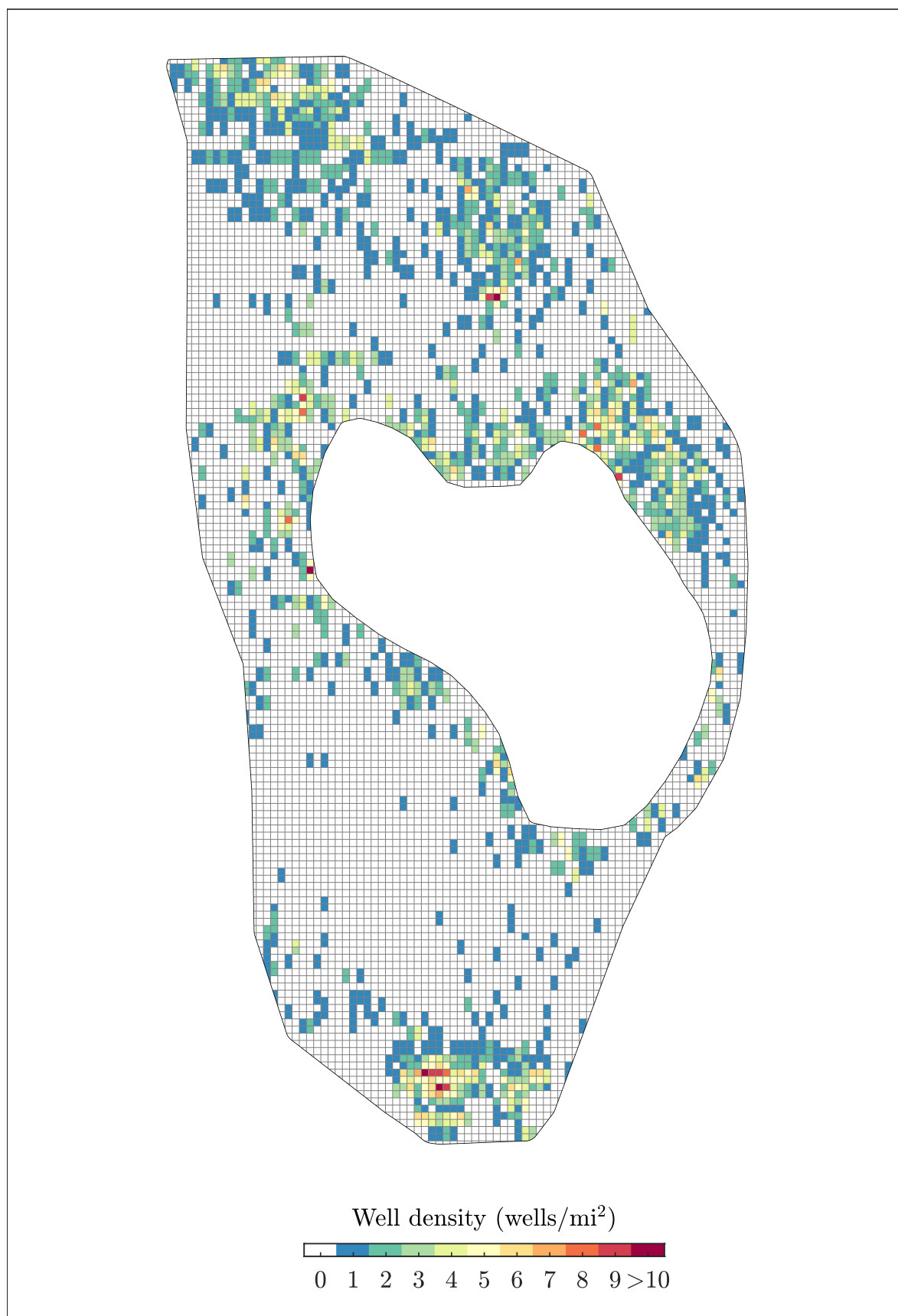


Figure S9. Map of well density in the Three Forks noncore.

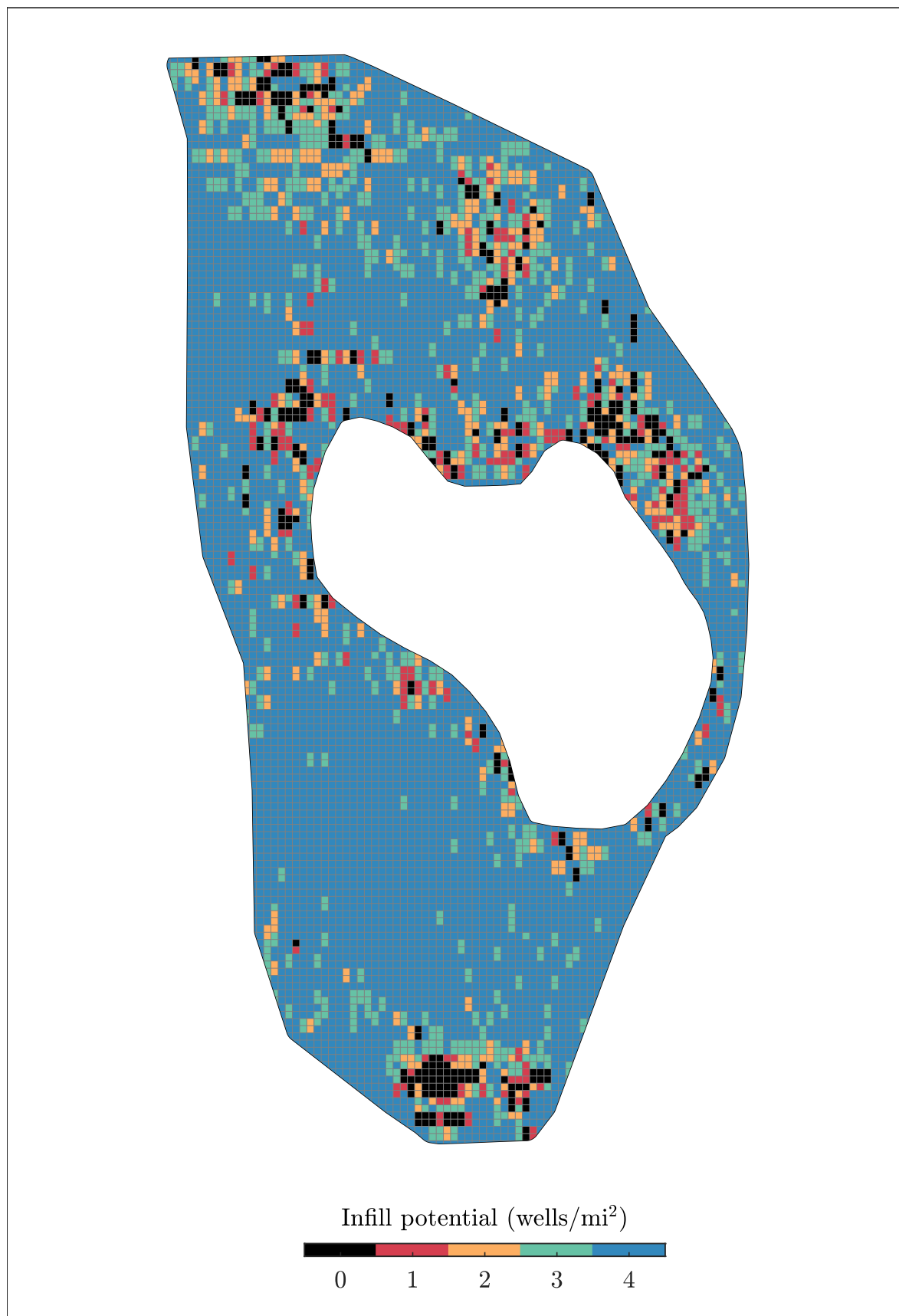


Figure S10. Map of infill potential in the Three Forks noncore.

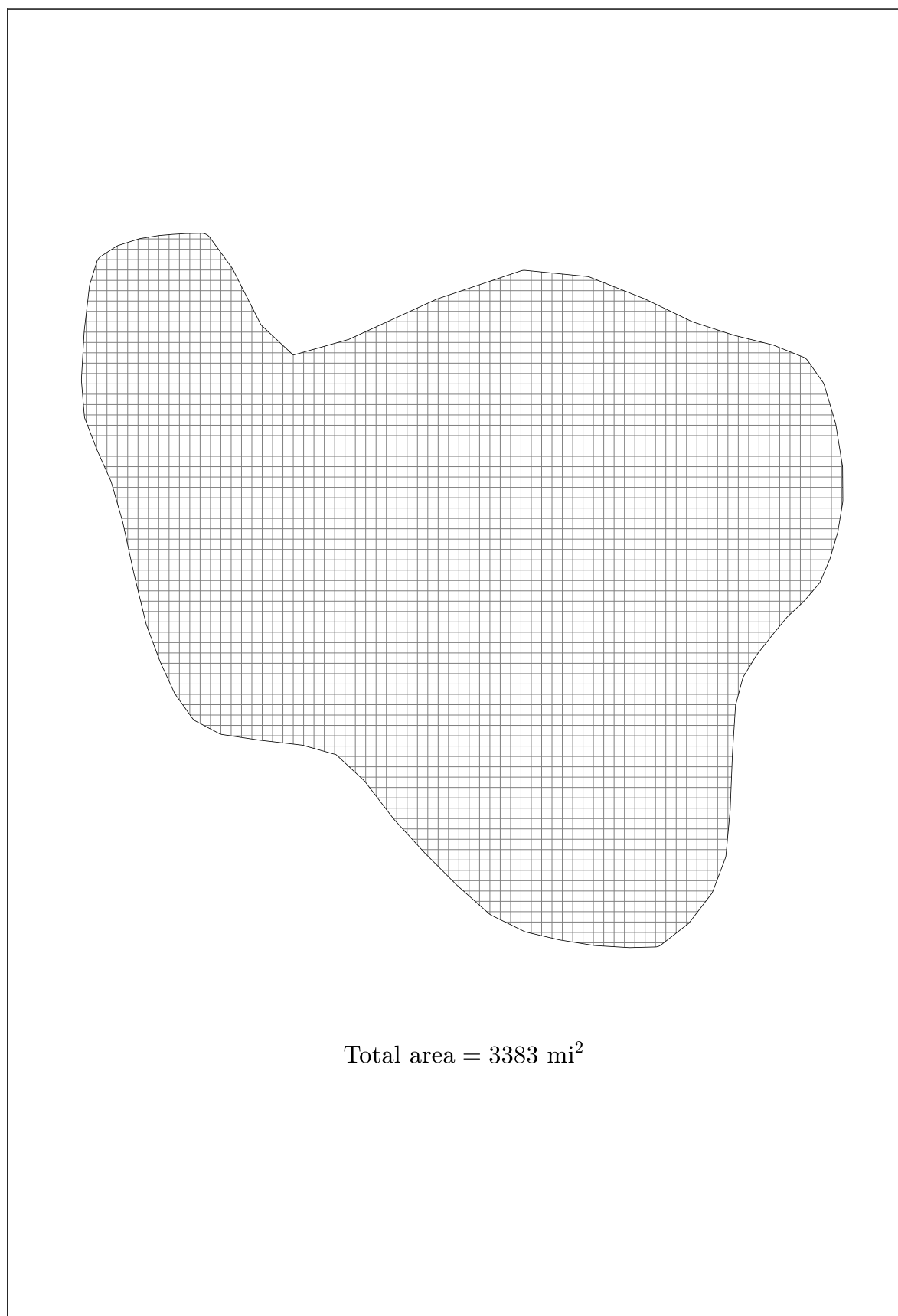


Figure S11. One-square-mile fishnet gridding of Middle Bakken core.



Number of existing wells = 5732

Figure S12. Map of wellhead locations in the Middle Bakken core.

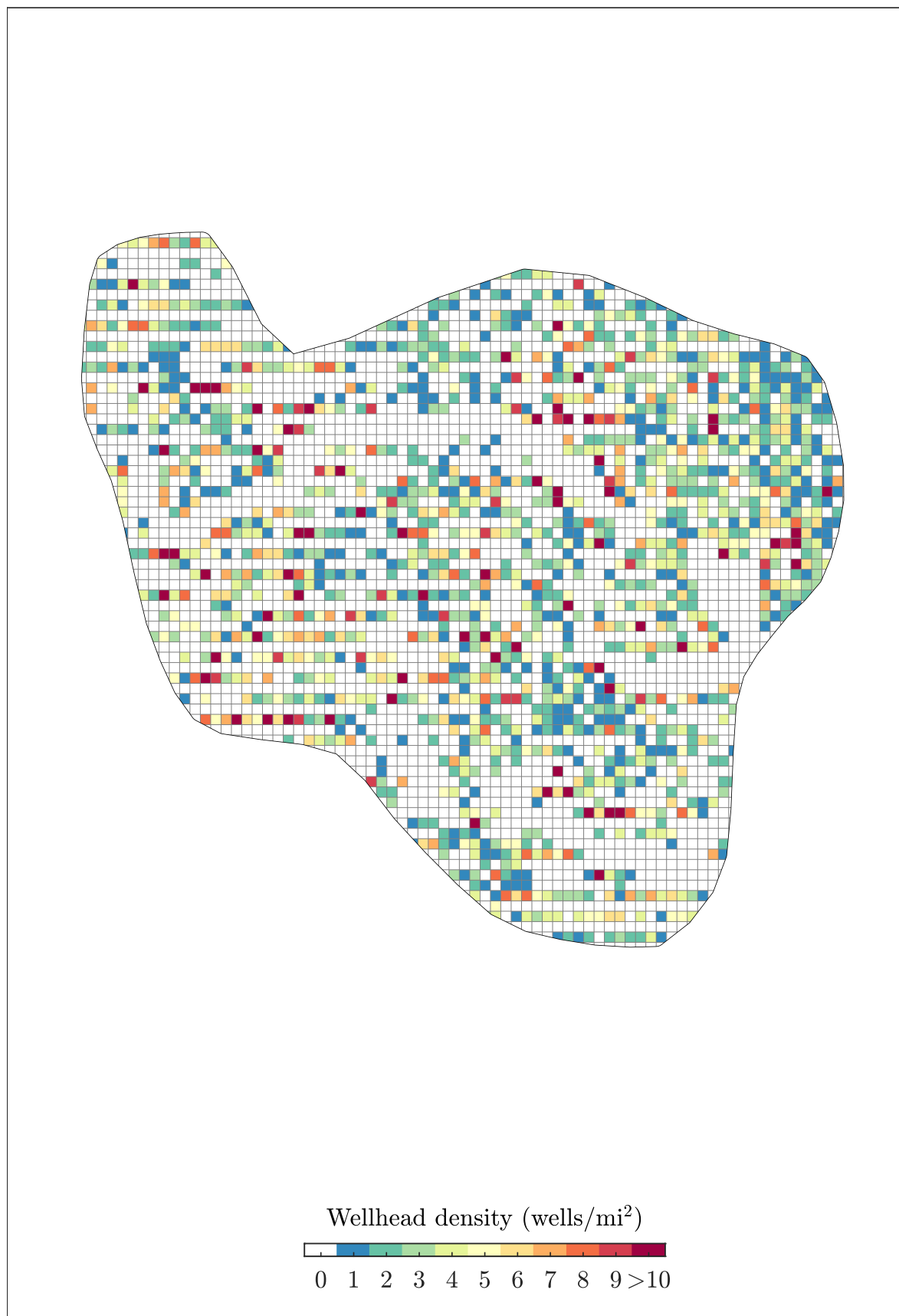


Figure S13. Map of wellhead density in the Middle Bakken core.



Figure S14. Map of well density in the Middle Bakken core.

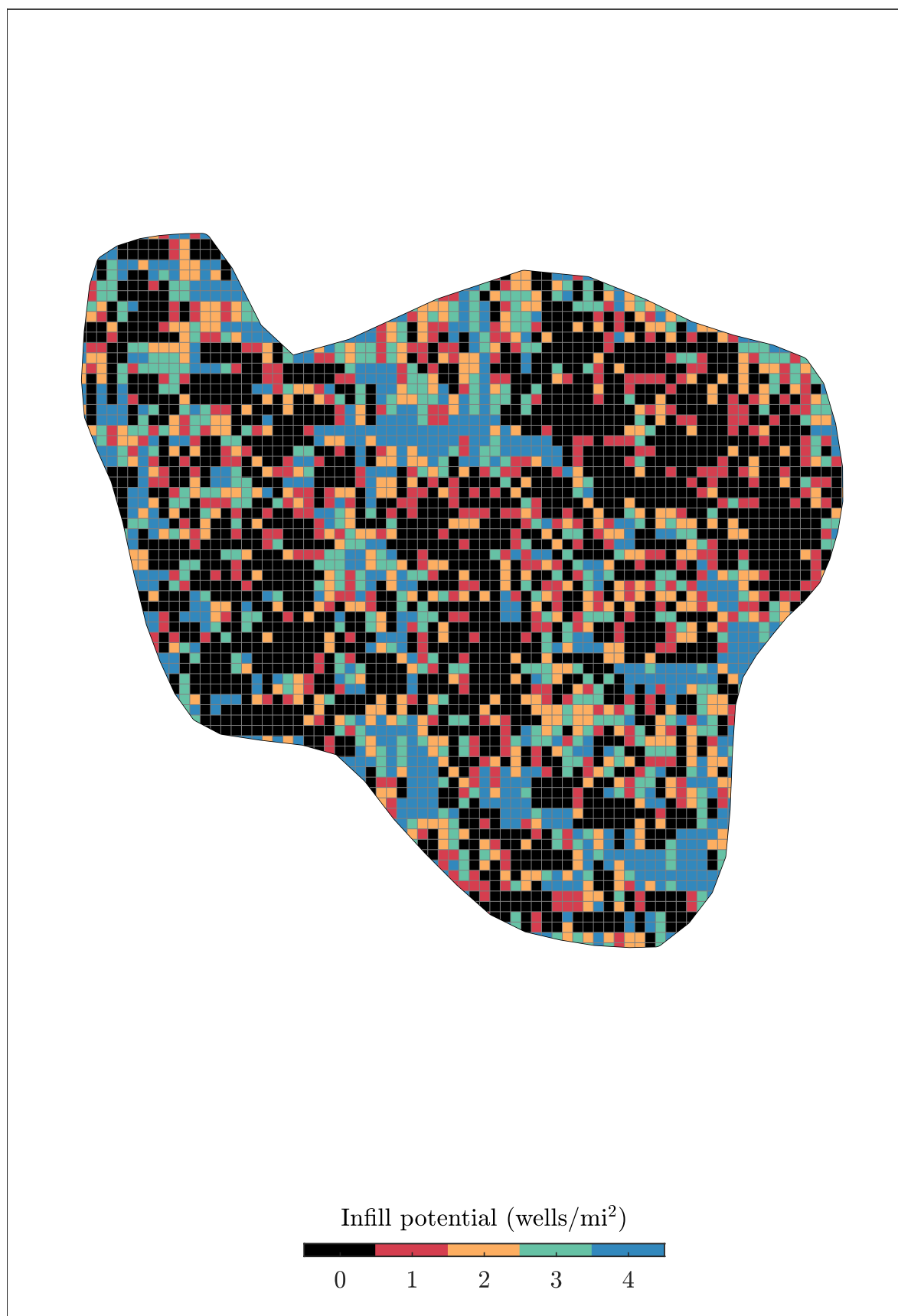


Figure S15. Map of infill potential in the Middle Bakken core.

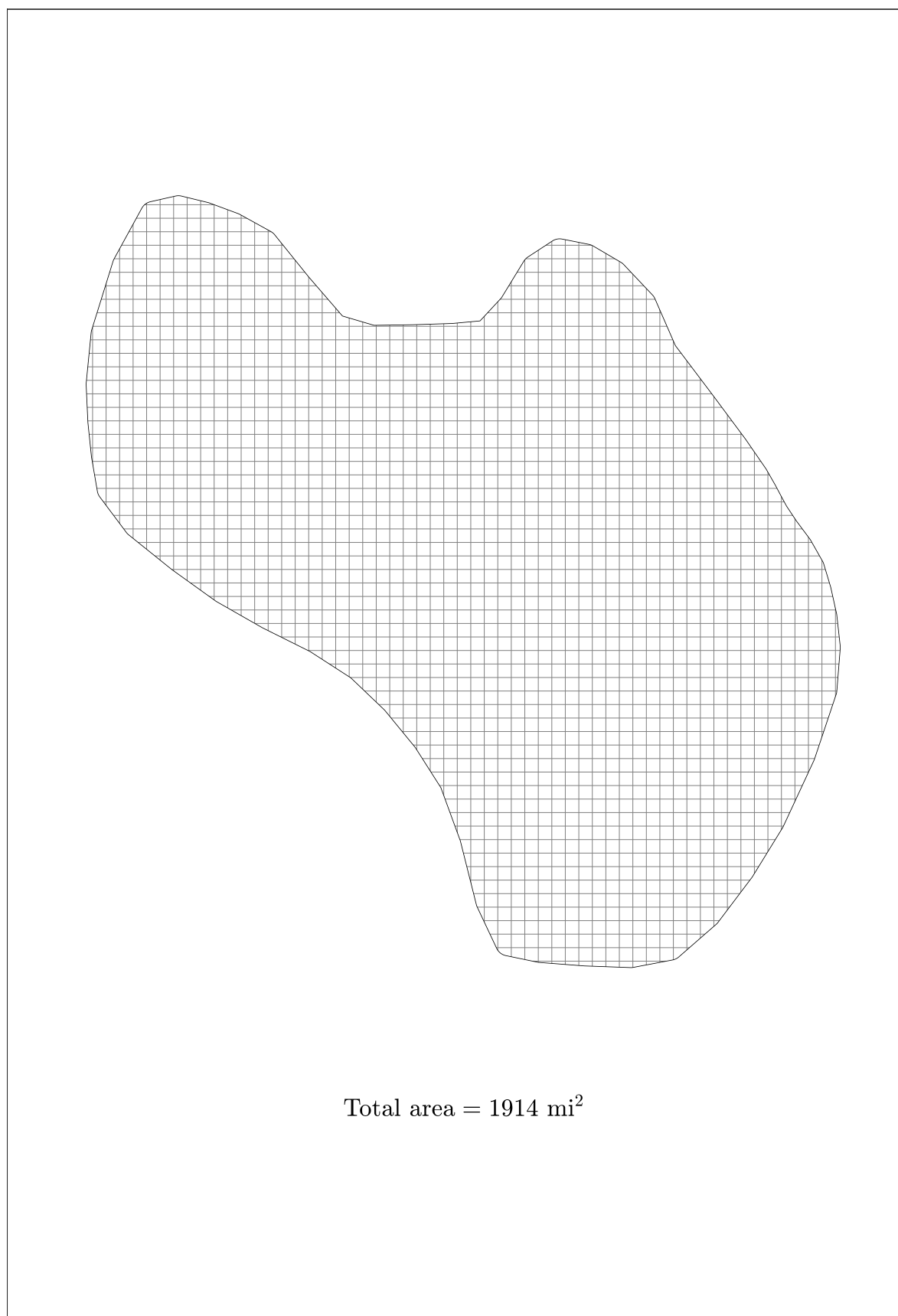


Figure S16. One-square-mile fishnet gridding of Three Forks core.

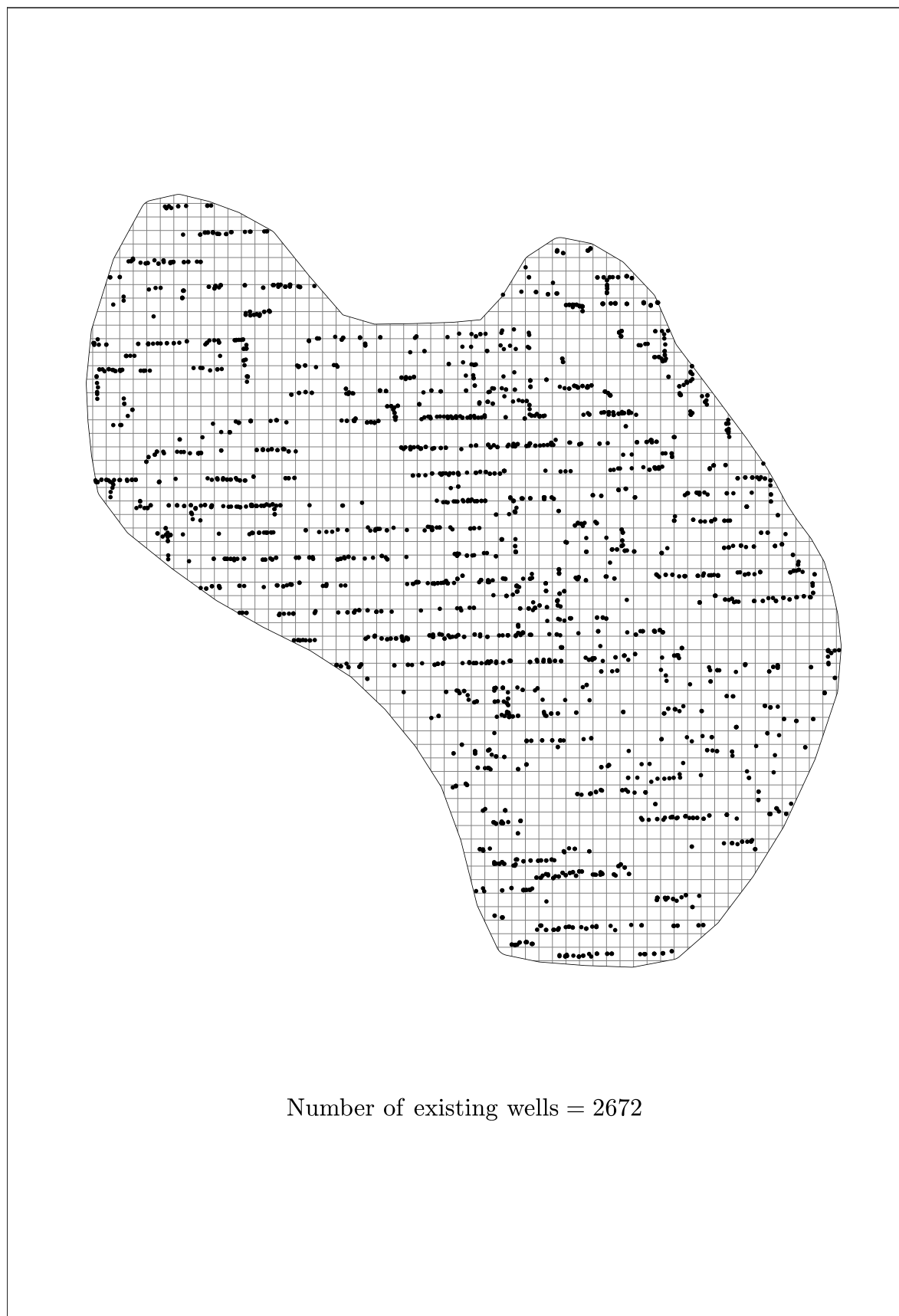


Figure S17. Map of wellhead locations in the Three Forks core.

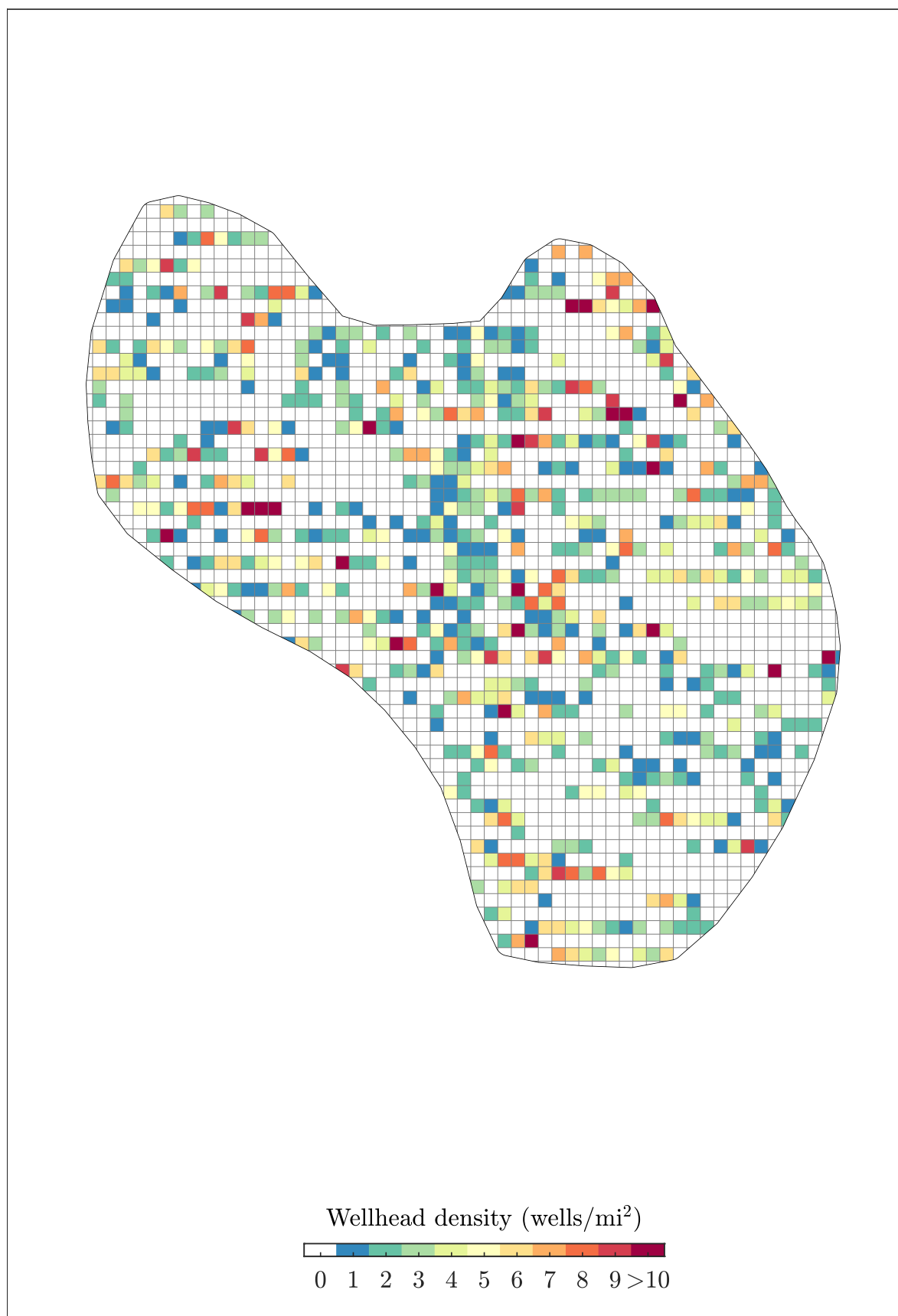


Figure S18. Map of wellhead density in the Three Forks core.



Figure S19. Map of well density in the Three Forks core.

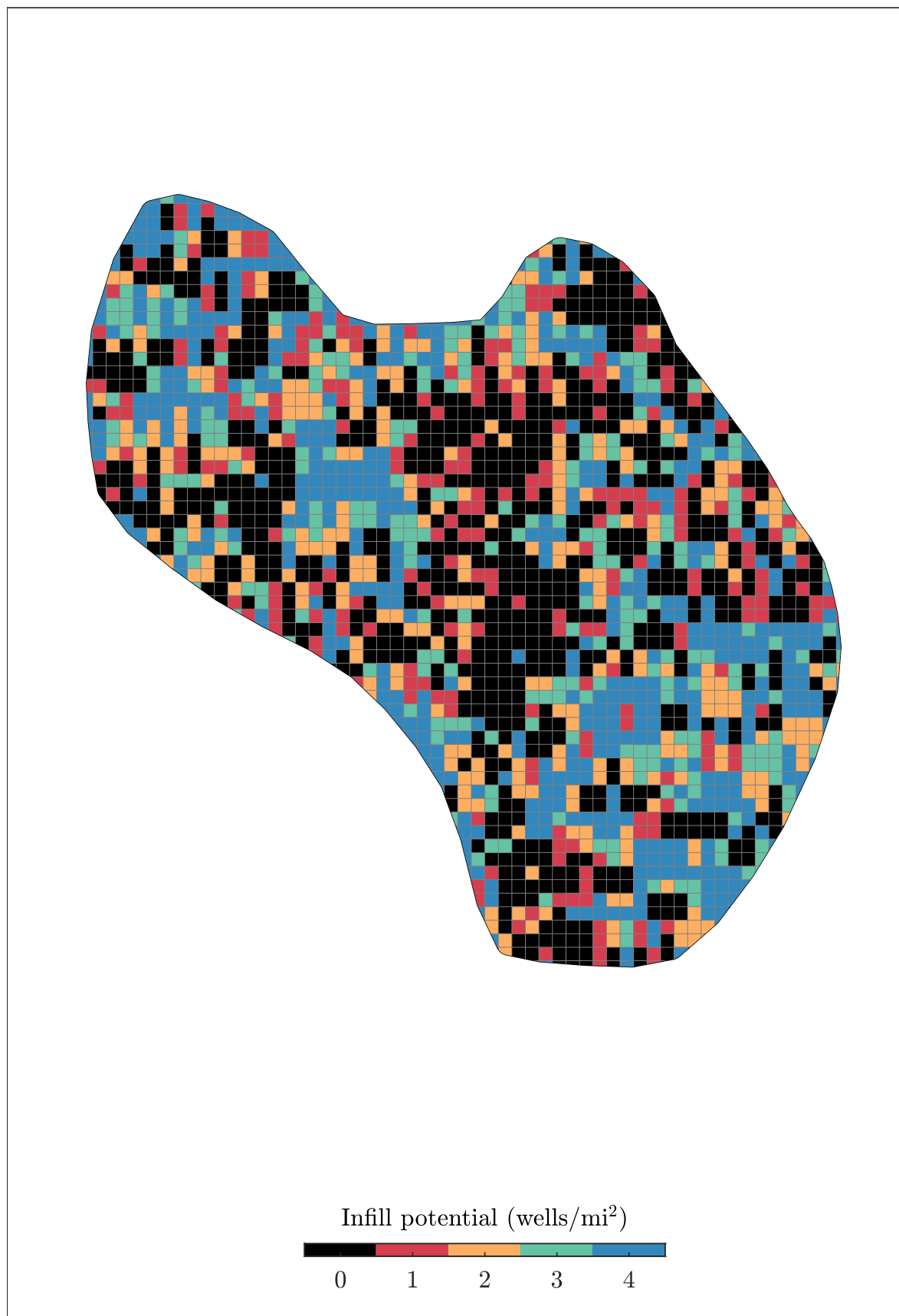


Figure S20. Map of infill potential in the Three Forks core.

Table S1. Infill drilling schedules

Date	Noncore area		Core area		Total infill wells
	Middle Bakken	Three Forks	Middle Bakken	Three Forks	
7/1/2019	0	0	60	60	120
8/1/2019	0	0	60	60	240
9/1/2019	0	0	60	60	360
10/1/2019	0	0	60	60	480
11/1/2019	0	0	60	60	600
12/1/2019	0	0	60	60	720
1/1/2020	0	0	60	60	840
2/1/2020	0	0	60	60	960
3/1/2020	0	0	60	60	1080
4/1/2020	0	0	60	60	1200
5/1/2020	0	0	60	60	1320
6/1/2020	0	0	60	60	1440
7/1/2020	0	0	60	60	1560
8/1/2020	0	0	60	60	1680
9/1/2020	0	0	60	60	1800
10/1/2020	0	0	60	60	1920
11/1/2020	0	0	60	60	2040
12/1/2020	0	0	60	60	2160
1/1/2021	0	0	60	60	2280
2/1/2021	0	0	60	60	2400
3/1/2021	0	0	60	60	2520
4/1/2021	0	0	60	60	2640
5/1/2021	0	0	60	60	2760
6/1/2021	0	0	60	60	2880
7/1/2021	0	0	60	60	3000
8/1/2021	0	0	60	60	3120
9/1/2021	0	0	60	60	3240
10/1/2021	0	0	60	60	3360
11/1/2021	0	0	60	60	3480
12/1/2021	0	0	60	60	3600
1/1/2022	0	0	95	25	3720
2/1/2022	0	0	120	0	3840
3/1/2022	0	0	120	0	3960
4/1/2022	0	0	120	0	4080
5/1/2022	0	0	120	0	4200
6/1/2022	0	0	120	0	4320
7/1/2022	0	0	82	0	4402
8/1/2022	60	60	0	0	4522
9/1/2022	60	60	0	0	4642
10/1/2022	60	60	0	0	4762
11/1/2022	60	60	0	0	4882
12/1/2022	60	60	0	0	5002
1/1/2023	60	60	0	0	5122
2/1/2023	60	60	0	0	5242
3/1/2023	60	60	0	0	5362
4/1/2023	60	60	0	0	5482

5/1/2023	60	60	0	0	5602
6/1/2023	60	60	0	0	5722
7/1/2023	60	60	0	0	5842
8/1/2023	60	60	0	0	5962
9/1/2023	60	60	0	0	6082
10/1/2023	60	60	0	0	6202
11/1/2023	60	60	0	0	6322
12/1/2023	60	60	0	0	6442
1/1/2024	60	60	0	0	6562
2/1/2024	60	60	0	0	6682
3/1/2024	60	60	0	0	6802
4/1/2024	60	60	0	0	6922
5/1/2024	60	60	0	0	7042
6/1/2024	60	60	0	0	7162
7/1/2024	60	60	0	0	7282
8/1/2024	60	60	0	0	7402
9/1/2024	60	60	0	0	7522
10/1/2024	60	60	0	0	7642
11/1/2024	60	60	0	0	7762
12/1/2024	60	60	0	0	7882
1/1/2025	60	60	0	0	8002
2/1/2025	60	60	0	0	8122
3/1/2025	60	60	0	0	8242
4/1/2025	60	60	0	0	8362
5/1/2025	60	60	0	0	8482
6/1/2025	60	60	0	0	8602
7/1/2025	60	60	0	0	8722
8/1/2025	60	60	0	0	8842
9/1/2025	60	60	0	0	8962
10/1/2025	60	60	0	0	9082
11/1/2025	60	60	0	0	9202
12/1/2025	60	60	0	0	9322
1/1/2026	60	60	0	0	9442
2/1/2026	60	60	0	0	9562
3/1/2026	60	60	0	0	9682
4/1/2026	60	60	0	0	9802
5/1/2026	60	60	0	0	9922
6/1/2026	60	60	0	0	10042
7/1/2026	60	60	0	0	10162
8/1/2026	60	60	0	0	10282
9/1/2026	60	60	0	0	10402
10/1/2026	60	60	0	0	10522
11/1/2026	60	60	0	0	10642
12/1/2026	60	60	0	0	10762
1/1/2027	60	60	0	0	10882
2/1/2027	60	60	0	0	11002
3/1/2027	60	60	0	0	11122
4/1/2027	60	60	0	0	11242
5/1/2027	60	60	0	0	11362
6/1/2027	60	60	0	0	11482

7/1/2027	60	60	0	0	11602
8/1/2027	60	60	0	0	11722
9/1/2027	60	60	0	0	11842
10/1/2027	60	60	0	0	11962
11/1/2027	60	60	0	0	12082
12/1/2027	60	60	0	0	12202
1/1/2028	60	60	0	0	12322
2/1/2028	60	60	0	0	12442
3/1/2028	60	60	0	0	12562
4/1/2028	60	60	0	0	12682
5/1/2028	60	60	0	0	12802
6/1/2028	60	60	0	0	12922
7/1/2028	60	60	0	0	13042
8/1/2028	60	60	0	0	13162
9/1/2028	60	60	0	0	13282
10/1/2028	60	60	0	0	13402
11/1/2028	60	60	0	0	13522
12/1/2028	60	60	0	0	13642
1/1/2029	60	60	0	0	13762
2/1/2029	60	60	0	0	13882
3/1/2029	60	60	0	0	14002
4/1/2029	60	60	0	0	14122
5/1/2029	60	60	0	0	14242
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11/1/2029	60	60	0	0	14962
12/1/2029	60	60	0	0	15082
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3/1/2030	60	60	0	0	15442
4/1/2030	60	60	0	0	15562
5/1/2030	60	60	0	0	15682
6/1/2030	60	60	0	0	15802
7/1/2030	60	60	0	0	15922
8/1/2030	60	60	0	0	16042
9/1/2030	60	60	0	0	16162
10/1/2030	60	60	0	0	16282
11/1/2030	60	60	0	0	16402
12/1/2030	60	60	0	0	16522
1/1/2031	60	60	0	0	16642
2/1/2031	60	60	0	0	16762
3/1/2031	60	60	0	0	16882
4/1/2031	60	60	0	0	17002
5/1/2031	60	60	0	0	17122
6/1/2031	60	60	0	0	17242
7/1/2031	60	60	0	0	17362
8/1/2031	60	60	0	0	17482

9/1/2031	60	60	0	0	17602
10/1/2031	60	60	0	0	17722
11/1/2031	60	60	0	0	17842
12/1/2031	60	60	0	0	17962
1/1/2032	60	60	0	0	18082
2/1/2032	60	60	0	0	18202
3/1/2032	60	60	0	0	18322
4/1/2032	60	60	0	0	18442
5/1/2032	60	60	0	0	18562
6/1/2032	60	60	0	0	18682
7/1/2032	60	60	0	0	18802
8/1/2032	60	60	0	0	18922
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10/1/2032	60	60	0	0	19162
11/1/2032	60	60	0	0	19282
12/1/2032	60	60	0	0	19402
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3/1/2033	60	60	0	0	19762
4/1/2033	60	60	0	0	19882
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11/1/2035	60	60	0	0	23602
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9/1/2038	60	60	0	0	27682
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5/1/2040	120	0	0	0	30082
6/1/2040	120	0	0	0	30202
7/1/2040	120	0	0	0	30322
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9/1/2040	120	0	0	0	30562
10/1/2040	120	0	0	0	30682
11/1/2040	120	0	0	0	30802
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