SUPPLEMENTAL APPENDIX

A.1 Tests for Spatial Dependency

In addition to the specification presented in equation 4, we also consider possible spatial dependence. We construct a spatial lag model and a spatial error model based on our main specification, following Anselin (2013). First, we specify the construction of our spatial matrix, W, an n by n matrix, where n is the number of observations. W_{ij} measures the impact of location i on location j. We use the inverse of the distance between the two locations as our spatial weight, and assume zero self-impact (all diagonal elements are zero). A cut-off distance of 300km (186.4 miles) is implemented following Hsiang (2010); namely, the spatial dependency between two locations is set to zero if they are at least 300km (186.4 miles) apart. The weight matrix is not sparse, as the distance between two parcels rarely exceeds 300km. Lastly, each row of the spatial matrix is standardized to have all elements sum to one. Our spatial weight matrix is constructed as:

$$\begin{aligned} W_{ij} &= \frac{1}{D_{ij}} && for\ i \neq j \\ W_{ij} &= 0 && for\ i = j \ \ or \ \ D_{ij} \geq 300km \\ \sum_{j=1}^{N} W_{ij} &= 1 && for\ \forall\ i \end{aligned} \tag{5}$$

Where W_{ij} is an element of the weight matrix W, at i^{th} row and j^{th} column, and D_{ij} denotes the distance between farmland parcels i and j.

This allows us to estimate the following spatial lag model:

$$P_i = \rho WP_i + \beta_1 X_i + \beta_2 fairway + \beta_3 PostMoratorium + \beta_{did} DID + \varepsilon_i \tag{6}$$

This equation has an additional term, ρWP_i, which is added to equation 4 to capture potential spatial dependence. ρ is the spatial lag coefficient and W is our spatial weight matrix constructed by equation 5. P_i is the dependent variable. ρWP_i can cause simultaneity bias (OLS will be biased and inconsistent), so we use maximum likelihood estimation (MLE) (Anselin, 2001).

For the spatial error specification, we specify the error term as a function of the error term itself and the spatial weight matrix, to capture potential spatial dependence:

$$\begin{aligned} &P_i = \beta_1 X_i + \beta_2 fairway + \beta_3 PostMoratorium + \beta_{did} DID + u_i \\ &where\ u_i = \lambda W u_i + \varepsilon_i \end{aligned} \tag{7}$$

In equation 7, λ is the spatial error coefficient, and W is the same spatial weight matrix used in equation 6. We use MLE to estimate equations 6 and 7; full results are reported in the Appendix (table A2).

We run pre and post-estimation tests to establish a preferred specification, based on which model best fits our data. These tests all assume that spatial dependence (if any exists) would be constant over time, which we believe to be reasonable given our short study period. Changes to the underlying nature of markets or geological characteristics would likely only manifest over the long term. In table A1, we present the results of the Moran‘s I test and the LM tests for our DD model. In all cases, we fail to reject the null hypothesis of the Moran’s I test and the LM tests. As we find no evidence of statistically significant spatial dependence in our data, the OLS specification is pre-

ferred.[1] We also report post-estimation Wald Test results (on Rho and Lambda), which are consistent with the Moran's I test and the LM test.footnoteThe Wald Test serves as a complement to Moran's I test and LM test The results of tests for spatial dependency are unexpected due to the spatial nature of farmland data. In particular, spatial dependence could be an inherent characteristic of any dataset that is spatially distributed (Anselin, 2001). We suspect that the spatial nature of farmland data is more likely to be observable when farmland parcels within the dataset are fairly close to each other. Farmland transactions occur infrequently (Sherrick and Barry, 2003) and our study covers a relatively short time frame, so our data largely consists of information from geographically discrete farmland parcels that do not exhibit spatial dependence.

Table A1: Test for Spatial Dependency for The DD Model

H_0: **No spatial dependency**	Test Statistics	Probability
Moran's I test	–0.0072	0.43
LM error test	0.54	0.46
LM lag test	0.95	0.33
Wald test on Rho	0.53	0.46
Wald test on Lambda	0.22	0.64

Probability displayed in the table is Pr(X > x), n =486.

Table A2: Full Results of Specifications with Control Variables

	OLS	Spatial Lag	Spatial Error
Thickness of soil components-total profile[2]	0.023	0.024	0.023
	(0.027)	(0.026)	(0.031)
NCCPI-small grains	–3,513.118	–3,346.629	–3,327.35
	(4,035.371)	(3,896.954)	(2,338.49)
Drought-prone	–374.079	–322.579	–324.801
	(1,748.217)	(1,711.262)	(2,083.31)
NCCPI map unit percent earthy	64.446	92.505	107.1
	(861.302)	(839.112)	(813.963)
Available water estimate-standard layer 5	–24.395	–24.008	–24.454
	(24.092)	(23.322)	(21.101)
Thickness of soil components-standard zone 2	–1,179.262	–1,392.282	–1,433.89
	(4,282.289)	(4,189.619)	(3,185.83)
Distance to NYC	–0.007*	–0.007**	–0.006**
	(0.003)	(0.003)	(0.003)
Distance to the hospital	–0.061**	–0.063**	–0.061***
	(0.025)	(0.025)	(0.024)
Distance to the college	–0.021	–0.022	0.021
	(0.025)	(0.025)	(0.021)
Distance to the golf course	–0.071**	–0.072**	–0.071*
	(0.034)	(0.034)	(0.042)
Distance to the EPA site	–0.130***	–0.131***	–0.128**
	(0.049)	(0.048)	(0.05)
Distance to the nearest ethanol plant	0.026***	0.028***	0.027***
	(0.010)	(0.010)	(0.008)
Tree-cover rate	–48.794**	–49.518**	–49.606**
	(20.790)	(20.361)	(23.878)
Soil organic components-standard layer 6[2]	–0.000*	–0.000*	–0.000*
	(0.000)	(0.000)	(0.000)
Root zone depth[2]	0.104**	0.103**	0.103***
	(0.046)	(0.045)	(0.037)

(continued)

1. Our tests results imply that OLS results would be similar to our specifications that account for spatial dependence–in other words spatial dependence is so small that the spatial coefficients are nearly zero. We hence prefer OLS because it is simpler in construction and computation.

Table A2: Full Results of Specifications with Control Variables *(continued)*

	OLS	Spatial Lag	Spatial Error
Drought-prone[2]	1,305.919	1,260.033	1,252.97
	(1,671.457)	(1,637.652)	(1,836.03)
Thickness of soil components-standard zone 2[2]	41.447	47.451	48.44
	(118.582)	(116.113)	(88.746)
Available water estimate-standard layer 4[2]	0.340	0.337	0.339
	(0.277)	(0.269)	(0.226)
NCCPI map unit percent earthy[2]	–1.361	–1.535	–1.614
	(5.109)	(4.983)	(4.906)
Tree-cover rate[2]	0.307	0.321	0.327
	(0.267)	(0.261)	(0.333)
PostMoratorium	596.000	616.593	622.404
	(457.675)	(448.946)	(424.019)
Fairway	60.689	15.172	42.278
	(726.099)	(715.654)	(532.177)
*Fairway*PostMoratorium*	–1,401.195**	–1,409.062**	–1,405.661**
	(715.843)	(697.219)	(675.251)
year2007	1,243.732*	1,265.446*	1,274.103*
	(707.329)	(693.681)	(699.618)
year2008	433.584	449.823	452.216
	(449.397)	(441.841)	(496.534)
Rho	—	–0.122	—
	—	(0.166)	—
Lambda	—	—	–0.101
	—	—	(0.214)
Observations	486	486	486
R-squared	0.20	—	—

Asterisks (*, **, ***) indicate that the statistic is significant at the confidence level of 10%, 5%, and 1%, respectively. Robust standard errors shown in parentheses

Table A3: Ancillary Analysis Regressions

	Rural Subsample	Urban Subsample
Thickness of soil components-total profile[2]	0.029	0.041*
	(0.050)	(0.025)
NCCPI-small grains	–7,122.345	–1,454.587
	(8,065.538)	(4,478.976)
Drought-prone	1,638.594	–37.409
	(3,903.461)	(1,889.752)
NCCPI map unit percent earthy	–1,173.287	1,380.751
	(1,656.969)	(1,049.900)
Available water estimate-standard layer 5	–28.082	–29.245
	(50.872)	(26.153)
Thickness of soil components-standard zone 2	6,846.256	–7,676.867
	(7,186.451)	(4,752.295)
Distance to NYC	–0.009*	–0.001
	(0.005)	(0.006)
Distance to the hospital	–0.064	–0.014
	(0.039)	(0.030)
Distance to the college	–0.017	0.002
	(0.041)	(0.033)
Distance to the golf course	–0.048	–0.127**
	(0.050)	(0.058)
Distance to the EPA site	–0.126	–0.152***
	(0.077)	(0.056)
Distance to the nearest ethanol plant	0.022	0.054**
	(0.014)	(0.023)

(continued)

Table A3: Ancillary Analysis Regressions *(continued)*

	Rural Subsample	Urban Subsample
Tree-cover rate	–76.778*	–29.854
	(39.595)	(21.473)
Soil organic components-standard layer 6^2	–0.000	–0.000
	(0.000)	(0.000)
Root zone depth^2	0.177**	–0.007
	(0.078)	(0.044)
Drought-prone^2	1,617.629	–1,315.732
	(3,270.704)	(2,259.663)
Thickness of soil components-standard zone 2^2	–179.796	209.590
	(204.356)	(129.395)
Available water estimate-standard layer 4^2	0.635	0.267
	(0.629)	(0.343)
NCCPI map unit percent earthy^2	6.042	–8.659
	(9.830)	(6.219)
Tree-cover rate^2	0.529	0.163
	(0.475)	(0.314)
PostMoratorium	–324.858	1267.245**
	(686.746)	(566.417)
Fairway	223.579	–2,603.523
	(898.544)	(1,714.014)
*Fairway*PostMoratorium*	–1,238.623	223.189
	(940.816)	(925.654)
year2008	–403.939	1,044.095**
	(899.628)	(440.757)
year2009	–298.305	–
	(1,137.439)	–
year2007	–	2,553.938***
	–	(711.692)
Observations	249	237
R-squared	0.26	0.25

Asterisks (*, **, ***) indicate that the statistic is significant at the confidence level of 10%, 5%, and 1%, respectively. Robust standard errors shown in parentheses

Table A4: Results of LASSO, Net-Elastic and Ridge Regressons

VARIABLES	(1) LASSO		(2) Net–Elastic		(3) Ridge
D2 NYC(ft)	–.172	*AWS–Zone2*	146.632	*TKS–Layer2*	0.449
D2 NYC^2 (ft)^2	2.27e–07	*AWS–Zone5*	–7.856	*TKS–Layer3*	0.231
D2 hospital(ft)	–.0649	*AWS–Layer5*	23.56	*TKS–Zone2*	0.346
D2 college(ft)	–.0801	*AWS–Layer6*	22.858	*TKS–Zone3*	0.241
D2 golf course(ft)	–.0194	*TKS–Zone1*^{2}	73.132	*TKS–Zone4*	0.0565
D2 EPA site(ft)	–0.799	musumcpct	472.599	*TKS–Zone5*	0.0298
D2 EPA site^2 (ft)^2	3.15e–05	musumcpcts	–635.770	*TKS–Layer4*	0.0614
Tree cover rate(%)	–129.56	*Treec over rate*	–83.245	*Drought–prone*	0.984
Tree cover rate^2 (%)^2	0.629	*TKS–Layer4*	–114.924	*Drought–prone*^{2}	1.176
TKA-Zone 2	–1370.308	*TKS–Layer5*	–31.225	*TKA–Zone3*	0.232
TKA-Zone 2^2	19.734	*TKS–Layer6*	41.729	*TKA–Zone1*	1.356
TKA-Total Profile^2	0.0808	*TKS–Zone4*	53.615	*TKA–Layer2*	0.456
AWS-Layer 5	–2.775	rootznaws	–31.603	*TKA–Layer3*	0.146
AWS-Layer 4 ^{2}	–0.658	SOC–Layer1	–0.973	*NCCPI–CO*	4.375
PctEarth(%)	–940.934	*rootznmc*^{2}	0.227	*NCCPI–All*	2.0583
PctEarth^2 (%)^2	6.499	*SOC–Layer2*	–0.156	*NCCPI–CS*	3.829
Drought-prone	–5651.084	*Drought–prone*	–6284.911	*NCCPI–SG*	0.850
Drought-prone^2	4371.932	*Drought–prone*^{2}	3150.334	*AWS–Zone3*	0.0237
NCCPI-SG	–3155.547	*NCCPI–SG*	–11514.59	*AWS–Layer6*	–0.0327
Root zone depth^2 (cm)^2	0.127	*NCCPI–CO*	219629.3	*AWS–Layer5*	–0.0164

(continued)

Table A4: Results of LASSO, Net-Elastic and Ridge Regressons *(continued)*

VARIABLES	(1) LASSO		(2) Net–Elastic		(3) Ridge
SOC-Layer 6^2	–1.34e–06	*PctEarth*	–115.8789	*AWS–Layer3*	0.0423
D2 ethanol plant(ft)	–.0961	*NCCPI–All*	5054.235	*musumpcts*	0.0689
D2 ethanol plant^2 (ft)^2	2.27e–07	*D2 EPA site*	–0.781	*PctEarth*	0.183
...	0	...	...	...	...
Observations	18,616		18,616		18,616
R-squared	0.0267		0.0250		0.021
Alpha	1		1		0
Lambda	26.426		43.068		489.78
Cross-validation MSE	1.765e+09		7.59e+09		1.058e+07
Number of folds	10		10		10
Number of alpha tested	–		6		–
Number of lambda tested	100		100		100

All the non-zero coefficients from the LASSO regression and the largest 23 (in absolute value) coefficients from Ridge and Net-elastic regressions are shown. AWS=estimated average water storage, SOC= soil organic carbon stock, TKA = thickness of soil components for AWS calculation, TKS =thickness of soil components for SOC calculation, NCCPI = national commodity crop productivity index (CS for corn and soybeans, CO for cotton, SG for small grains, All for weighted average), musumcpct = sum of SSURGO survey soil components,PctEarth=NCCPI map unit percent earthy, D2= distance to, rootznaws=root zone AWS.

Table A5: Additional Robustness Check Regressions

	48 months NC	48 months main	18 months NC
Thickness of soil components-total profile^2	0.061	0.056	–0.053
	(0.059)	(0.041)	(0.037)
NCCPI-small grains	1,161.639	3,083.239*	–1,946.573
	(1,645.653)	(1,597.482)	(4,264.441)
Drought-prone	1,635.193	–1,259.993	1,914.726
	(1,426.706)	(1,451.578)	(2,094.977)
NCCPI map unit percent earthy	127.677	–198.012	–1,253.993
	(108.753)	(696.602)	(777.429)
Available water estimate-standard layer 5	10.693	4.449	–1.874
	(12.932)	(16.462)	(15.932)
Thickness of soil components-standard zone 2	–388.237	–1,718.676	2,544.976
	(427.461)	(2,085.884)	(2,474.305)
Distance to NYC	–0.010**	–0.003**	–0.008
	(0.004)	(0.001)	(0.009)
Distance to the hospital	–0.041**	–0.069***	–0.014
	(0.019)	(0.019)	(0.032)
Distance to the college	–0.013	–0.031	–0.004
	(0.020)	(0.026)	(0.016)
Distance to the golf course	0.015	–0.061***	0.014
	(0.022)	(0.019)	(0.028)
Distance to the EPA site	0.003	–0.028	–0.069
	(0.025)	(0.025)	(0.052)
Distance to the nearest ethanol plant	0.001	0.006	0.001
	(0.003)	(0.006)	(0.004)
Tree-cover rate	0.815	–19.029	–69.972***
	(24.765)	(23.396)	(23.015)
Soil organic components-standard layer 6^2	–0.000	–0.000	–0.000
	(0.000)	(0.000)	(0.000)
Root zone depth^2	0.100*	0.109***	0.103*
	(0.059)	(0.042)	(0.061)
Drought-prone^2	745.874	3,430.316*	–480.885
	(1,877.094)	(1,936.975)	(2,072.854)
Thickness of soil components-standard zone 2^2	5.525	40.785	–60.701
	(22.016)	(58.049)	(70.330)

(continued)

Table A5: Additional Robustness Check Regressions *(continued)*

	48 months NC	48 months main	18 months NC
Available water estimate-standard layer 4^2	–0.021	–0.059	0.209
	(0.088)	(0.121)	(0.185)
NCCPI map unit percent earthy^2	–1.063	1.180	7.814
	(1.107)	(4.340)	(5.001)
Tree-cover rate^2	–0.099	0.207	0.638**
	(0.281)	(0.244)	(0.285)
PostMoratorium	500.204	656.591**	141.269
	(441.948)	(308.021)	(438.386)
Fairway	1,173.807*	908.853	586.002
	(654.589)	(801.961)	(1,041.516)
*Fairway*PostMoratorium*	–1,300.007**	–1,026.809*	–1,331.319*
	(602.965)	(547.434)	(764.424)
year2006	–762.410	–	–
	(536.738)	–	–
year2007	295.667	665.870*	393.170
	(752.057)	(396.069)	(642.179)
year2008	–324.786	–286.794	614.442**
	(474.194)	(284.129)	(309.176)
year2009	–659.765	–307.204	–
	(475.107)	(401.630)	–
year2010	–	–224.450	–
	–	(422.391)	–
Constant	3,625.672	26,809.001	29,587.780
	(2,237.109)	(19,894.023)	(20,914.941)
Observations	886	1,298	311
R-squared	0.07	0.09	0.15

Asterisks (*, **, ***) indicate that the statistic is significant at the confidence level of 10%, 5%, and 1%, respectively. Robust standard errors shown in parentheses

Table A6: Trajectory of Control Variables (Fairway Region)

VARIABLES	2005	Pre-moratorium	Post-moratorium	2011
Thickness of soil components-total profile^2	23,838	21,883	21,493	21,105
NCCPI-small grains	0.21	0.22	0.20	0.20
Drought-prone	0.78	0.78	0.79	0.81
NCCPI map unit percent earthy	84.60	83.89	83.94	83.45
Available water estimate-standard layer 5	16.17	16.68	15.66	13.11
Thickness of soil components-standard zone 2	18.76	18.21	18.49	18.32
Distance to NYC	303,160	296,243	294,371	306,058
Distance to the hospital	16,525	16,788	16,294	17,059
Distance to the college	21,961	23,830	24,160	25,174
Distance to the golf course	9,877	8,477	10,445	11,232
Distance to the EPA site	6,374	5,946	7,078	7,915
Distance to the nearest ethanol plant	118,726	119,597	122,372	119,739
Tree-cover rate	32.07	27.50	30.68	22.31
Soil organic components-standard layer 6^2	2.92e+07	223,559	3.74e+07	417,229
Root zone depth^2	8,966	11,393	8,554	8,132
Drought-prone^2	0.71	0.70	0.71	0.74
Thickness of soil components-standard zone 2^2	354.29	334.53	334.25	338.48
Available water estimate-standard layer 4^2	1,100	1,111	1,123	801.87
NCCPI map unit percent earthy^2	7,184	7,059	7,061	6,984
Tree-cover rate^2	1,469	1,204	1,340	777.52
Observations	103	78	64	63

NCCPI = national commodity crop productivity index

Table A7: Trajectory of Control Variables (Adjacent Region)

VARIABLES	2005	Pre-moratorium	Post-moratorium	2011
Thickness of soil components-total profile^2	24,668	24,530	25,002	24,308
NCCPI-small grains	0.30	0.31	0.31	0.30
Drought-prone	0.58	0.54	0.52	0.57
NCCPI map unit percent earthy	84.03	83.42	83.58	83.03
Available water estimate-standard layer 5	30.96	35.02	35.83	33.64
Thickness of soil components-standard zone 2	18.38	18.29	18.39	18.23
Distance to NYC	304,047	336,985	337,160	335,120
Distance to the hospital	14,162	13,783	14,349	15,037
Distance to the college	18,899	18,718	19,453	20,044
Distance to the golf course	8,090	7,556	7,619	7,367
Distance to the EPA site	6,515	5,679	6,001	6,119
Distance to the nearest ethanol plant	91,885	84,774	85,661	87,246
Tree-cover rate	23.48	22.45	24.39	23.34
Soil organic components-standard layer 6^2	1.16e+07	1.32e+07	3.15e+07	2.78e+07
Root zone depth^2	13,717	13,606	14,378	13,421
Drought-prone^2	0.50	0.44	0.44	0.47
Thickness of soil components-standard zone 2^2	340.64	337.74	340.49	335.50
Available water estimate-standard layer 4^2	2,205	2,371	2,551	2,288
NCCPI map unit percent earthy^2	7,081	6.984	7,005	6,920
Tree-cover rate^2	990.52	822.59	999.96	922.82
Observations	283	188	156	209

NCCPI = national commodity crop productivity index

Table A8: T-Test for Differences of Means of Control Variables

VARIABLES	2005	Pre-moratorium	Post–moratorium	2011	Difference (long–term)	Difference (short–term)
TKA-total profile^2	0.78	2.21**	2.71***	2.47***	2.03**	0.69
NCCPI-small grains	7.23***	6.18***	7.30***	6.29***	0.56	1.71*
Drought-prone	–4.53***	–4.73***	–4.69***	–4.62***	–0.95	0.53
PctEarth	–1.05	–0.72	–0.56	–0.59	0.23	–0.18
AWS-standard layer 5	5.60***	5.99***	5.79***	6.34***	1.98**	0.56
TKA-standard zone 2	–1.99**	0.31	–0.46	–0.36	1.31	–0.75
D2 NYC	1.42	4.85***	4.56***	3.08***	2.15**	0.23
D2 hospital	–3.05***	–3.18***	–2.01**	–2.03**	0.39	1.11
D2 college	–3.05***	–4.94***	–4.20***	–4.48***	–1.94*	0.38
D2 golf course	–3.64***	–1.78*	–4.58***	–6.55***	–3.89***	–3.37***
D2 EPA site	0.31	–0.59	–1.94*	–3.47***	–4.32***	–1.61
D2 ethanol plant	–9.64***	–12.25***	–9.94***	–9.71	–1.87*	0.58
Tree-cover rate	–3.55***	–1.98**	–2.01**	0.38	3.79***	0.45
SOC-standard layer 6^2	–1.10	1.56	–0.20	0.98	2.09**	–0.85
Root zone depth^2	5.18***	2.08**	5.03***	4.76***	0.54	3.26***
Drought-prone^2	–4.26***	–4.76***	–4.38***	–4.61***	–1.19	–0.19
TKA-standard zone 2^2	–2.00**	0.38	–0.46	–0.33	1.38	–0.83
AWS-standard layer 4^2	4.46***	4.71***	3.97***	4.97***	1.41	0.54
PctEarth^2	–1.14	–0.69	–0.52	–0.55	0.37	0.18
Tree-cover rate^2	–2.80***	–2.15**	–1.57	0.78	3.53***	0.21
Observations	386	266	220	272	658	486

This table displays t-test for differences in means of mean (adjacent region)-mean (fairway region). In the column Difference (1), we test for differences in differences between mean (2011-2005)-mean (post-moratorium-pre-moratorium). In the column Difference (2), we test for differences in differences between Mean(Pre-moratorium) and Mean(Post-moratorium). H_0: Difference =0. AWS=estimated average water storage, SOC= soil organic carbon stock, TKA = thickness of soil components for AWS calculation, NCCPI = national commodity crop productivity index, PctEarth=NCCPI map unit percent earthy, D2= distance to.

Table 1: Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Distance to NYC(ft)	486	324890.8	65380.47	194631	458172.7
Distance to the nearest college(ft)	486	20491.45	7929.79	1128.77	40741.12
Distance to the nearest urban area(ft)	486	8651.73	5985.25	0	30905.88
Distance to the nearest hospital(ft)	486	14778.04	6874.74	1912.74	33983.38
Distance to the nearest golf course(ft)	486	8105.03	4094.70	342.77	21311.63
Distance to the nearest EPA site(ft)	486	6010.28	3557.99	245.40	19128.37
Tree-cover rate(%)	486	24.97	19.66	0	85.09
Tree-cover rate^2 (%)^2	486	1009.03	1391.983	0	7240.119
NCCPI map unit percent earthy(%)	486	83.62	4.69	54.11	95
NCCPI map unit percent earthy^2 (%)^2	486	7013.59	768.34	2928.4	9025
Distance to the nearest ethanol plant(ft)	486	95599.56	28019.65	41126.39	158790.8
Thickness of soil components-standard zone 2	486	18.33	1.67	11.41	20
Thickness of soil components-standard zone 2^2	486	338.97	59.69	130.27	400
Thickness of soil components-total profile^2	486	23857.41	8903.94	1542.51	39864.12
Available water estimate-standard layer 5	486	29.79	24.59	0	160
Available water estimate-standard layer 4^2	486	2062.437	2272.375	0.00	20178.58
NCCPI for small grains	486	0.28	0.11	0.013	0.55
Drought-prone	486	0.60	0.39	0	1
Drought-prone^2	486	0.52	0.43	0	1
Soil organic components-standard layer 6^2	486	2.05e+07	1.36e+07	0	2.27e+08
Root zone depth^2 (*cm*)^2	486	12833.95	8075.89	727.38	22500
Fairway	486	0.29	0.46	0	1
Postmoratorium	486	0.46	0.50	0	1
*Fairway*Postmoratorium*	486	0.13	0.34	0	1
Price($/acre)	486	2874.52	3650.94	50.83	32000

NCCPI stands for National Commodity Corp Productivity Index

Figure A1: Housing Prices Trends Across Regions

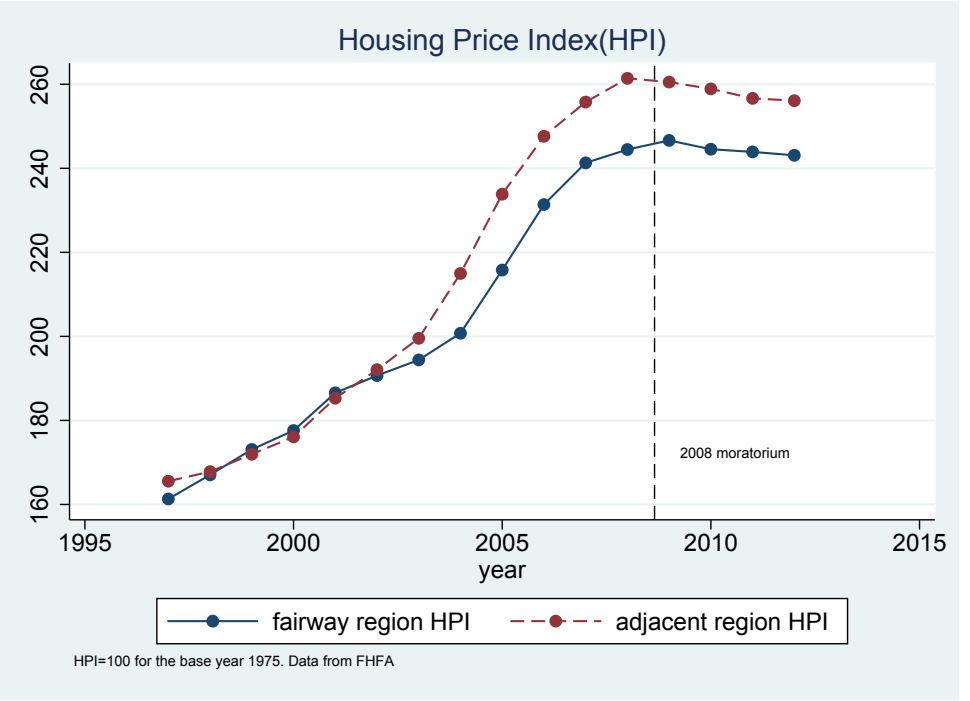


Figure A2: Farm Sales Trends Across Regions

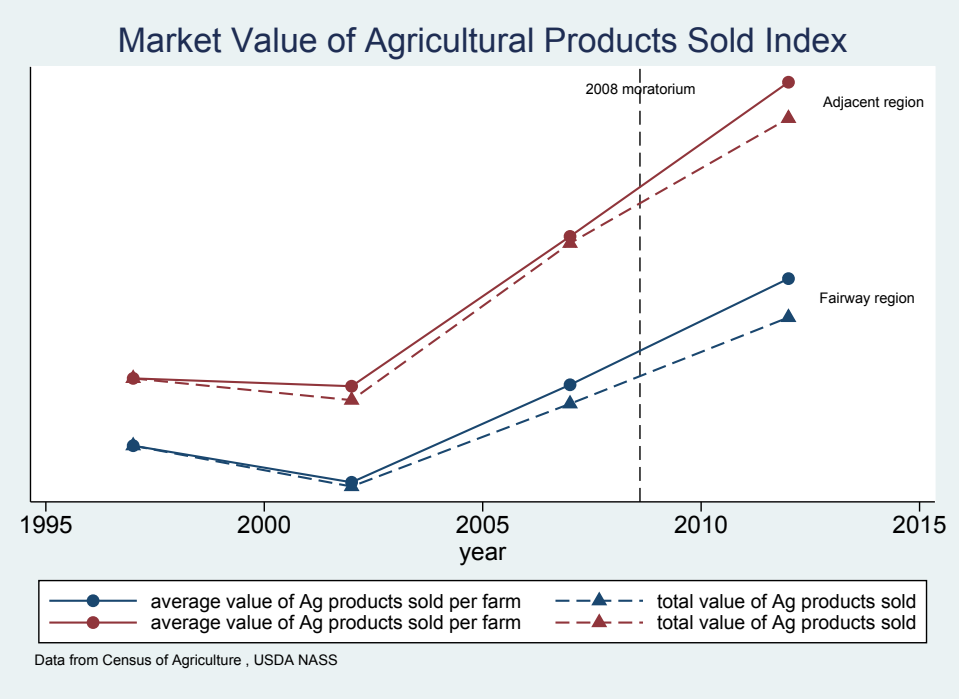


Figure A3: Timeline of NYS Shale Gas Development Regulations

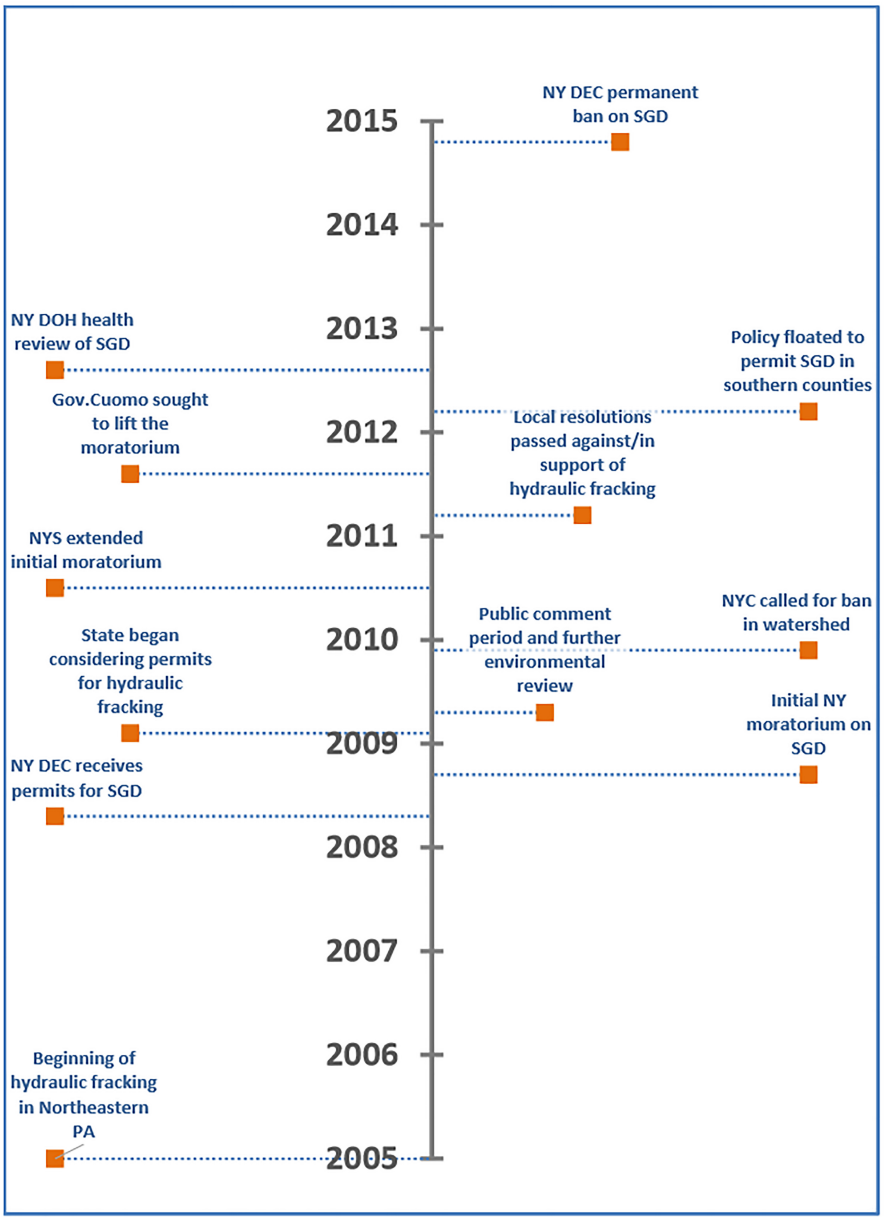
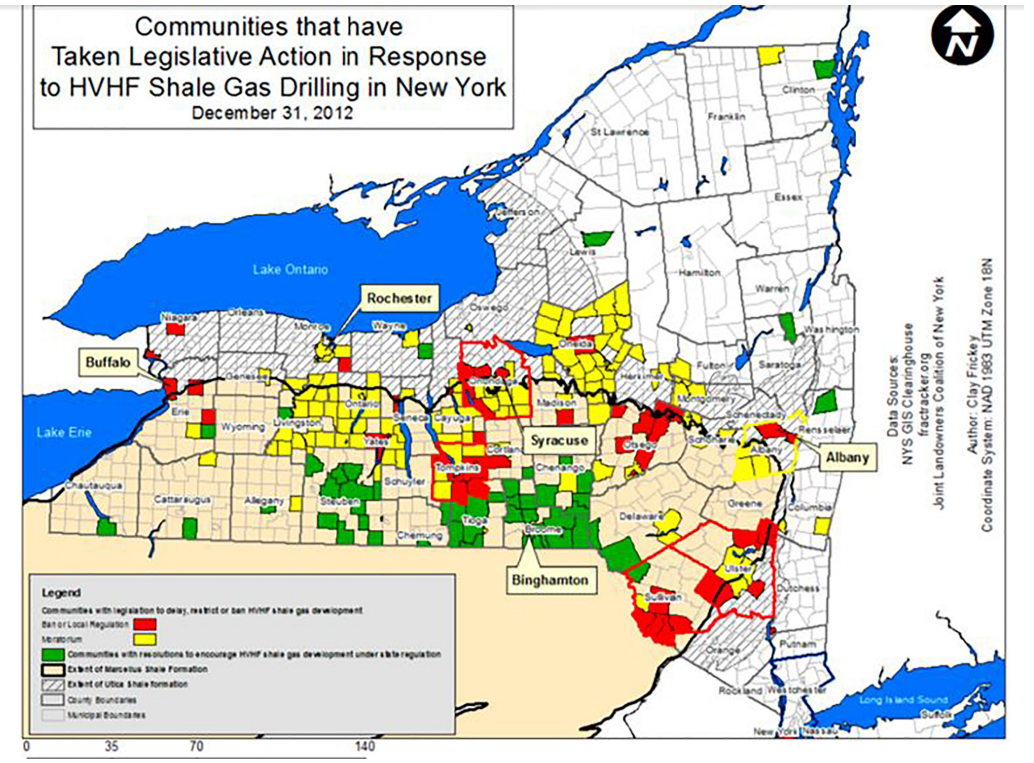
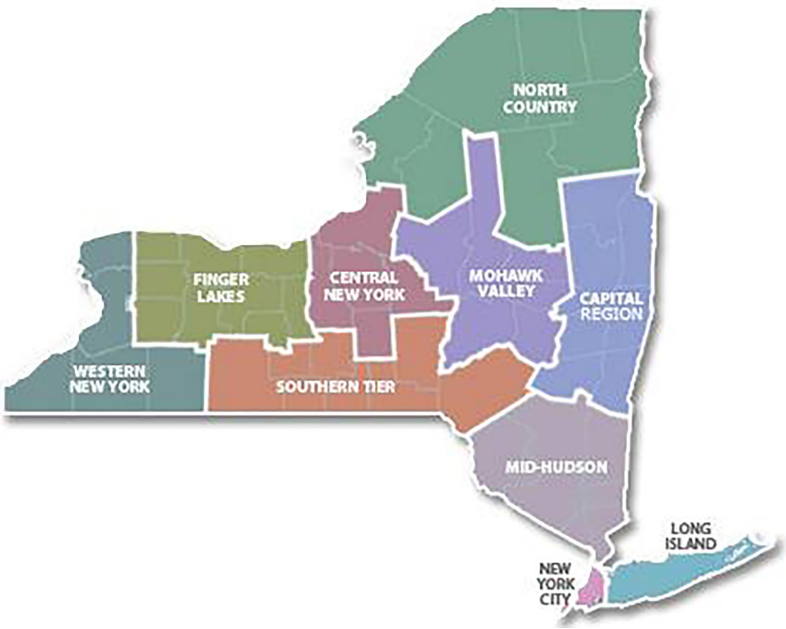


Figure A4: Local responses to shale gas development largely follow geological boundaries



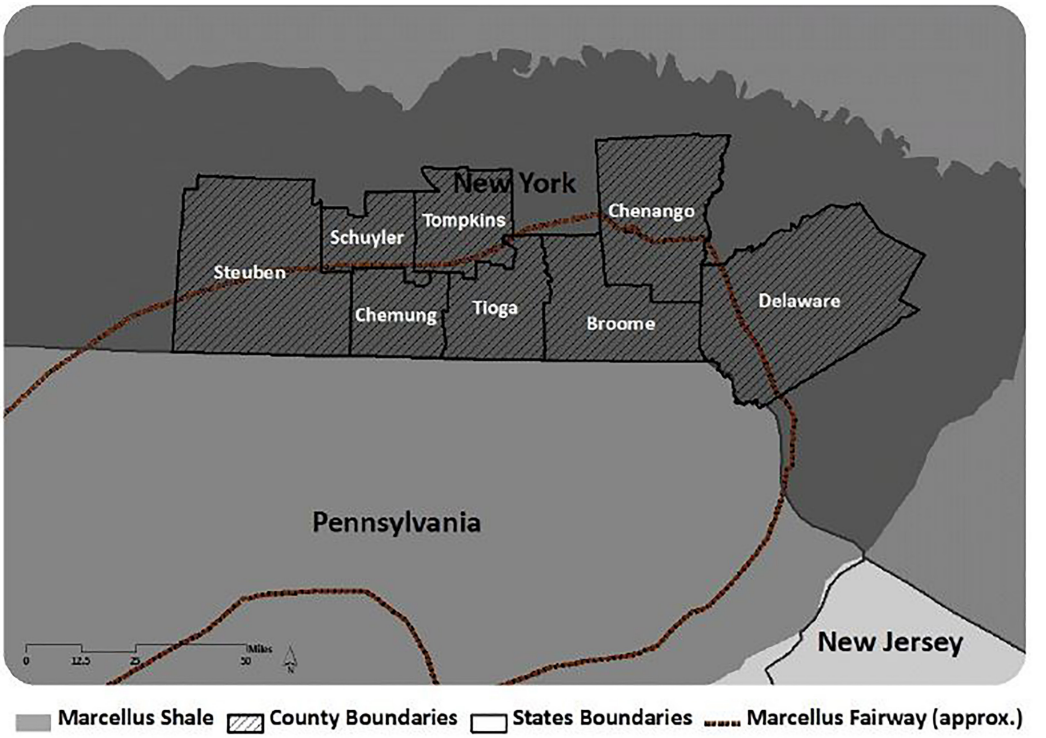
Sources: https://www.fractracker.org

Figure A5: New York State Geographical Regions



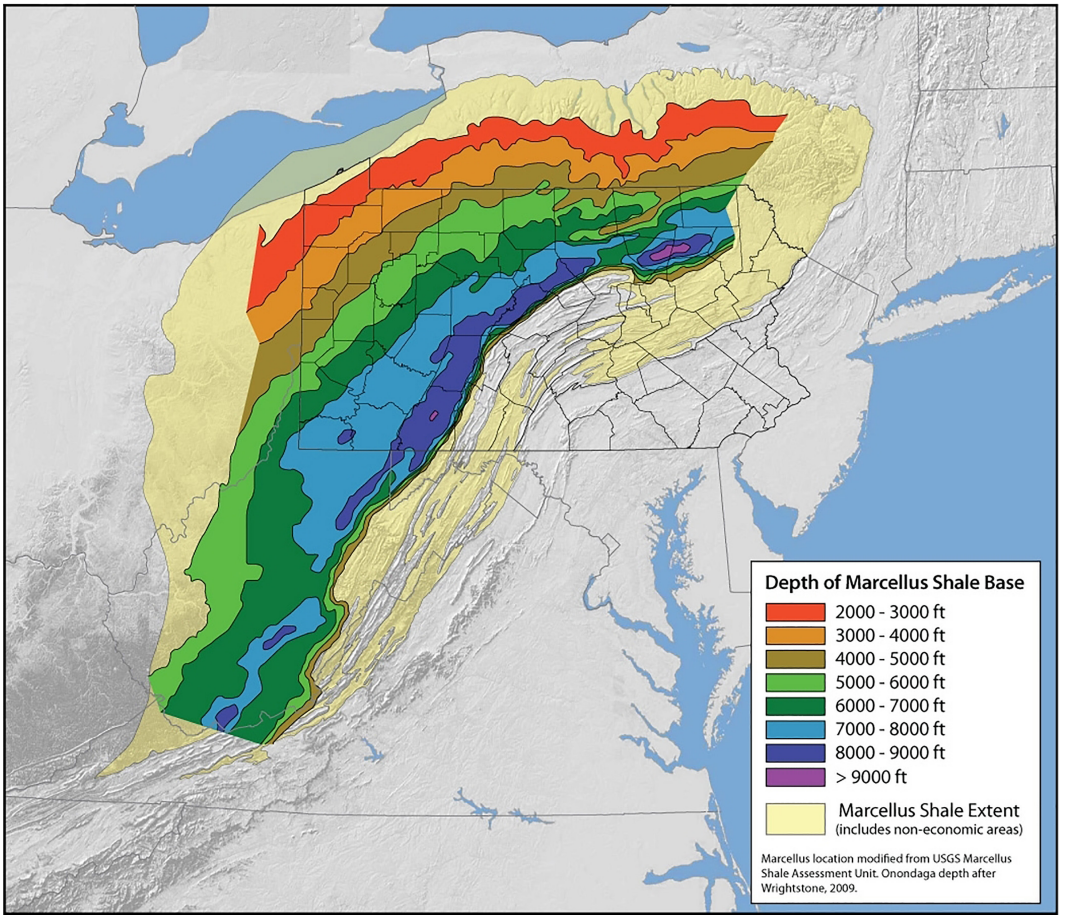
Sources: https://www.nysenate.gov/newsroom/press-releases/patrick-m-gallivan/senator-gallivan-congratulates-regional-economic

Figure A6: Fairway Region Boundary (Approximation)



Source: Jacquet and Stedman (2011)

Figure A7: Overall Marcellus Depth (Approximation)



Sources: Pennsylvanian State University's Marcellus Center for Outreach and Research (MCOR).