

These tables summarize transect survey data obtained from the USDA-DATCP. This data was used to assess tillage practices by watershed and crop. A complete summary is available from the USDA-DATCP.

**Summary by WDNR Watershed for Corn:**

WDNR Watershed Name	SWAT ID	Crop	Conventional		Conservation		No-till		Other		Total
			Acres	%	Acres	%	Acres	%	Acres	%	
Turtle Creek	LR01	Corn	31467	61%	4828	9%	1280	2%	14008	27%	51583
Blackhawk Creek	LR02	Corn	11417	62%	1757	10%	878	5%	4391	24%	18443
Bass Creek	LR03	Corn	6441	37%	1464	8%	1171	7%	8197	47%	17273
Rock River/Milton	LR04	Corn	2635	47%	586	11%	293	5%	2049	37%	5563
Marsh Creek	LR05	Corn	5562	70%	878	11%	293	4%	1171	15%	7904
Yahara River and Lake Kegonsa	LR06	Corn	1757	50%	586	17%	0	0%	1171	33%	3514
Badfish Creek	LR07	Corn	1757	67%	586	22%	0	0%	293	11%	2636
Yahara River and Lake Monona	LR08	Corn	359	33%	717	67%	0	0%	0	0%	1076
Yahara River and Lake Mendota	LR09	Corn	12201	32%	22039	59%	1055	3%	2373	6%	37668
Six Mile and Pheasant Branch Creek	LR10	Corn	0	0%	0	0%	0	0%	0	0%	0
Lower Koshkonong Creek	LR11	Corn	9180	35%	8453	32%	2578	10%	6130	23%	26341
Upper Koshkonong Creek	LR12	Corn	9945	30%	16757	51%	6454	19%	0	0%	33156
Bark River	LR13	Corn	5503	41%	1881	14%	1817	14%	4209	31%	13410
Whitewater Creek	LR14	Corn	4634	45%	2310	23%	586	6%	2702	26%	10232
Scuppernong Creek	LR15	Corn	2454	32%	1446	19%	523	7%	3146	42%	7569
Middle Rock River	UR01	Corn	3999	37%	1206	11%	793	7%	4761	44%	10759
Lower Crawfish River	UR02	Corn	11392	43%	5976	23%	2591	10%	6442	24%	26401
Beaver Dam River	UR03	Corn	40304	65%	7000	11%	1352	2%	13018	21%	61674
Calamus Creek	UR04	Corn	2887	39%	1237	17%	412	6%	2887	39%	7423
Maunasha River	UR05	Corn	1058	40%	264	10%	264	10%	1058	40%	2644
Upper Crawfish River	UR06	Corn	12265	45%	2935	11%	527	2%	11522	42%	27249

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WDNR Watershed Name	SWAT ID	Crop	Conventional		Conservation		No-till		Other		Total
			Acres	%	Acres	%	Acres	%	Acres	%	
Johnson Creek	UR07	Corn	2116	73%	0	0%	0	0%	793	27%	2909
Sinissippi Lake	UR08	Corn	25627	67%	2591	7%	1766	5%	8124	21%	38108
Oconomowoc River	UR09	Corn	6692	48%	1928	14%	932	7%	4288	31%	13840
Ashippun River	UR10	Corn	4219	41%	1940	19%	647	6%	3543	34%	10349
Rubicon River	UR11	Corn	5680	64%	1346	15%	568	6%	1237	14%	8831
Upper Rock River	UR12	Corn	31660	67%	3714	8%	803	2%	10995	23%	47172
East Branch Rock River	UR13	Corn	19312	84%	933	4%	1136	5%	1650	7%	23031

Summary by WDNR Watershed for Soybeans:

WDNR Watershed Name	SWAT ID	Crop	Conventional		Conservation		No-till		Other		Total
			Acres	%	Acres	%	Acres	%	Acres	%	
Turtle Creek	LR01	Soybeans	6877	18%	11106	29%	10595	28%	9717	25%	38295
Blackhawk Creek	LR02	Soybeans	4099	41%	1464	15%	2928	29%	1464	15%	9955
Bass Creek	LR03	Soybeans	1171	8%	6148	40%	1464	9%	6733	43%	15516
Rock River/Milton	LR04	Soybeans	586	9%	878	13%	3220	48%	2049	30%	6733
Marsh Creek	LR05	Soybeans	2342	32%	1757	24%	1171	16%	2049	28%	7319
Yahara River and Lake Kegonsa	LR06	Soybeans	878	43%	293	14%	586	29%	293	14%	2050
Badfish Creek	LR07	Soybeans	586	15%	586	15%	1464	38%	1171	31%	3807
Yahara River and Lake Monona	LR08	Soybeans	0	0%	0	0%	0	0%	0	0%	0
Yahara River and Lake Mendota	LR09	Soybeans	2057	22%	3754	40%	3659	39%	0	0%	9470
Six Mile and Pheasant Branch Creek	LR10	Soybeans	0	0%	0	0%	0	0%	0	0%	0
Lower Koshkonong Creek	LR11	Soybeans	3467	15%	8774	38%	7301	32%	3495	15%	23037

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WDNR Watershed Name	SWAT ID	Crop	Conventional		Conservation		No-till		Other		Total
			Acres	%	Acres	%	Acres	%	Acres	%	
Upper Koshkonong Creek	LR12	Soybeans	2510	13%	6454	33%	10765	55%	0	0%	19729
Bark River	LR13	Soybeans	1425	12%	5072	43%	1973	17%	3421	29%	11891
Whitewater Creek	LR14	Soybeans	1611	14%	5149	46%	1341	12%	3023	27%	11124
Scuppernon Creek	LR15	Soybeans	793	10%	2110	26%	1170	15%	3950	49%	8023
Middle Rock River	UR01	Soybeans	2645	22%	2909	24%	3734	31%	2909	24%	12197
Lower Crawfish River	UR02	Soybeans	5712	36%	3766	24%	4622	29%	1587	10%	15687
Beaver Dam River	UR03	Soybeans	7561	33%	3564	16%	6715	29%	5031	22%	22871
Calamus Creek	UR04	Soybeans	412	25%	825	50%	412	25%	0	0%	1649
Maunasha River	UR05	Soybeans	1322	31%	793	19%	1058	25%	1058	25%	4231
Upper Crawfish River	UR06	Soybeans	1352	9%	2522	17%	7302	49%	3692	25%	14868
Johnson Creek	UR07	Soybeans	1851	35%	264	5%	1058	20%	2116	40%	5289
Sinissippi Lake	UR08	Soybeans	1560	16%	1237	13%	2972	31%	3945	41%	9714
Oconomowoc River	UR09	Soybeans	3804	32%	2130	18%	4516	38%	1441	12%	11891
Ashippun River	UR10	Soybeans	930	19%	156	3%	3156	63%	776	15%	5018
Rubicon River	UR11	Soybeans	467	13%	467	13%	2218	62%	412	12%	3564
Upper Rock River	UR12	Soybeans	6100	36%	3188	19%	2453	14%	5409	32%	17150
East Branch Rock River	UR13	Soybeans	2995	36%	879	11%	2015	24%	2475	30%	8364

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**Summary by WDNR Watershed for Forage:**

(Note: In some cases forage estimates did not balance. This was due to proceeding crop rotations)

WDNR Watershed Name	SWAT ID	Crop	Conventional		Conservation		No-till		Other		Total
			Acres	%	Acres	%	Acres	%	Acres	%	
Turtle Creek	LR01	Forage	2527	25%	2527	25%			5053	50%	10106
Blackhawk Creek	LR02	Forage									1464
Bass Creek	LR03	Forage									7319
Rock River/Milton	LR04	Forage									586
Marsh Creek	LR05	Forage									3513
Yahara River and Lake Kegonsa	LR06	Forage									878
Badfish Creek	LR07	Forage									1464
Yahara River and Lake Monona	LR08	Forage		0%		0%				0%	0
Yahara River and Lake Mendota	LR09	Forage	2510	58%	1793	42%	0	0%	0	0%	4303
Six Mile and Pheasant Branch Creek	LR10	Forage		0%		0%				0%	0
Lower Koshkonong Creek	LR11	Forage	8425	100%							8425
Upper Koshkonong Creek	LR12	Forage	264	100%							264
Bark River	LR13	Forage	12124	100%							12124
Whitewater Creek	LR14	Forage									3260
Scuppernong Creek	LR15	Forage	4283	100%							4283
Middle Rock River	UR01	Forage	4304	40%	1399	13%	2259.39	21%	2797	26%	10759
Lower Crawfish River	UR02	Forage	4215	29%					10319	71%	14534
Beaver Dam River	UR03	Forage	19707	100%							19707
Calamus Creek	UR04	Forage									2062
Maunasha River	UR05	Forage	595	25%	595	25%			1190	50%	2380

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WDNR Watershed Name	SWAT ID	Crop	Conventional		Conservation		No-till		Other		Total
			Acres	%	Acres	%	Acres	%	Acres	%	
Upper Crawfish River	UR06	Forage									6248
Johnson Creek	UR07	Forage									3438
Sinissippi Lake	UR08	Forage	28865	91%					2855	9%	31720
Oconomoc River	UR09	Forage									5290
Ashippun River	UR10	Forage	5003	100%							5003
Rubicon River	UR11	Forage	8730	100%							8730
Upper Rock River	UR12	Forage	4296	20%	17184	80%					21480
East Branch Rock River	UR13	Forage	25411	100%							25411

**Summary Table by WDNR Watershed and Crop:**

This table summarizes the data above however percentages are rounded to the nearest tenth for generation of SWAT input files.

DNR Watershed Name	SWAT ID	Crop	Conv		Mulch		Notill		Other		Total
			acres	%	acres	%	acres	%	acres	%	
Turtle Creek	LR01	Corn	31467	60%	4828	10%	1280	0%	14008	30%	51583
Turtle Creek	LR01	Forage	2526	30%	2526	30%		0%	5053	50%	10106
Turtle Creek	LR01	Soybeans	6877	20%	11106	30%	10595	30%	9717	30%	38295
Blackhawk Creek	LR02	Corn	11417	60%	1757	10%	878	0%	4391	20%	18443
Blackhawk Creek	LR02	Forage	1464	0%		0%		0%		0%	1464
Blackhawk Creek	LR02	Soybeans	4099	40%	1464	10%	2928	30%	1464	10%	9955
Bass Creek	LR03	Corn	6441	40%	1464	10%	1171	10%	8197	50%	17273
Bass Creek	LR03	Forage	7319	0%		0%		0%		0%	7319
Bass Creek	LR03	Soybeans	1171	10%	6148	40%	1464	10%	6733	40%	15516

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DNR Watershed Name	SWAT ID	Crop	Conv acres	Conv %	Mulch acres	Mulch %	Notill acres	Notill %	Other acres	Other %	Total
Rock River/Milton	LR04	Corn	2635	50%	586	10%	293	10%	2049	40%	5563
Rock River/Milton	LR04	Forage	586	0%		0%		0%		0%	586
Rock River/Milton	LR04	Soybeans	586	10%	878	10%	3220	50%	2049	30%	6733
Marsh Creek	LR05	Corn	5562	70%	878	10%	293	0%	1171	10%	7904
Marsh Creek	LR05	Forage	3513	0%		0%		0%		0%	3513
Marsh Creek	LR05	Soybeans	2342	30%	1757	20%	1171	20%	2049	30%	7319
Yahara River and Lake Kegonsa	LR06	Corn	1757	50%	586	20%	0	0%	1171	30%	3514
Yahara River and Lake Kegonsa	LR06	Forage	878	0%		0%		0%		0%	878
Yahara River and Lake Kegonsa	LR06	Soybeans	878	40%	293	10%	586	30%	293	10%	2050
Badfish Creek	LR07	Corn	1757	70%	586	20%	0	0%	293	10%	2636
Badfish Creek	LR07	Forage	1464	0%		0%		0%		0%	1464
Badfish Creek	LR07	Soybeans	586	20%	586	20%	1464	40%	1171	30%	3807
Yahara River and Lake Monona	LR08	Corn	359	30%	717	70%	0	0%	0	0%	1076
Yahara River and Lake Monona	LR08	Forage		0%		0%		0%		0%	0
Yahara River and Lake Monona	LR08	Soybeans	0	0%	0	0%	0	0%	0	0%	0

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DNR Watershed Name	SWAT ID	Crop	Conv acres	Conv %	Mulch acres	Mulch %	Notill acres	Notill %	Other acres	Other %	Total
Yahara River and Lake Mendota	LR09	Corn	12201	30%	22039	60%	1055	0%	2373	10%	37668
Yahara River and Lake Mendota	LR09	Forage	2510	60%	1793	40%	0	0%	0	0%	4303
Yahara River and Lake Mendota	LR09	Soybeans	2057	20%	3754	40%	3659	40%	0	0%	9470
Six Mile Pheasant Branch Creek	LR10	Corn	0	0%	0	0%	0	0%	0	0%	0
Six Mile Pheasant Branch Creek	LR10	Forage		0%		0%		0%		0%	0
Six Mile Pheasant Branch Creek	LR10	Soybeans	0	0%	0	0%	0	0%	0	0%	0
Lower Koshkonong Creek	LR11	Corn	9180	30%	8453	30%	2578	10%	6130	20%	26341
Lower Koshkonong Creek	LR11	Forage	8425	100%		0%		0%		0%	8425
Lower Koshkonong Creek	LR11	Soybeans	3467	20%	8774	40%	7301	30%	3495	20%	23037
Upper Koshkonong Creek	LR12	Corn	9945	30%	16757	50%	6454	20%	0	0%	33156
Upper Koshkonong Creek	LR12	Forage	264	100%		0%		0%		0%	264
Upper Koshkonong Creek	LR12	Soybeans	2510	10%	6454	30%	10765	50%	0	0%	19729
Bark River	LR13	Corn	5503	40%	1881	10%	1817	10%	4209	30%	13410
Bark River	LR13	Forage	12124	100%		0%		0%		0%	12124
Bark River	LR13	Soybeans	1425	10%	5072	40%	1973	20%	3421	30%	11891
Whitewater Creek	LR14	Corn	4634	50%	2310	20%	586	10%	2702	30%	10232

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Prediction of Phosphorus Loads in the Rock River Basin, WI  
Using SWAT (Soil & Water Assessment Tool)

Appendix A: Transect Survey Data

DNR Watershed Name	SWAT ID	Crop	Conv acres	Conv %	Mulch acres	Mulch %	Notill acres	Notill %	Other acres	Other %	Total
Whitewater Creek	LR14	Forage	3260	0%		0%		0%		0%	3260
Whitewater Creek	LR14	Soybeans	1611	10%	5149	50%	1341	10%	3023	30%	11124
Scuppernong Creek	LR15	Corn	2454	30%	1446	20%	523	10%	3146	40%	7569
Scuppernong Creek	LR15	Forage	4283	100%		0%		0%		0%	4283
Scuppernong Creek	LR15	Soybeans	793	10%	2110	30%	1170	10%	3950	50%	8023
Middle Rock River	UR01	Corn	3999	40%	1206	10%	793	10%	4761	40%	10759
Middle Rock River	UR01	Forage	4303.6	40%	1398.67	10%	2259.39	20%	2797.34	30%	10759
Middle Rock River	UR01	Soybeans	2645	20%	2909	20%	3734	30%	2909	20%	12197
Lower Crawfish River	UR02	Corn	11392	40%	5976	20%	2591	10%	6442	20%	26401
Lower Crawfish River	UR02	Forage	4214.9	30%		0%		0%	10319.1	70%	14534
Lower Crawfish River	UR02	Soybeans	5712	40%	3766	20%	4622	30%	1587	10%	15687
Beaver Dam River	UR03	Corn	40304	70%	7000	10%	1352	0%	13018	20%	61674
Beaver Dam River	UR03	Forage	19707	100%		0%		0%		0%	19707
Beaver Dam River	UR03	Soybeans	7561	30%	3564	20%	6715	30%	5031	20%	22871
Calamus Creek	UR04	Corn	2887	40%	1237	20%	412	10%	2887	40%	7423
Calamus Creek	UR04	Forage	2062	0%		0%		0%		0%	2062
Calamus Creek	UR04	Soybeans	412	20%	825	50%	412	20%	0	0%	1649
Maunasha River	UR05	Corn	1058	40%	264	10%	264	10%	1058	40%	2644
Maunasha River	UR05	Forage	595	30%	595	30%		0%	1190	50%	2380

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DNR Watershed Name	SWAT ID	Crop	Conv acres	Conv %	Mulch acres	Mulch %	Notill acres	Notill %	Other acres	Other %	Total
Maunsha River	UR05	Soybeans	1322	30%	793	20%	1058	30%	1058	30%	4231
Upper Crawfish River	UR06	Corn	12265	50%	2935	10%	527	0%	11522	40%	27249
Upper Crawfish River	UR06	Forage	6248	0%		0%		0%		0%	6248
Upper Crawfish River	UR06	Soybeans	1352	10%	2522	20%	7302	50%	3692	20%	14868
Johnson Creek	UR07	Corn	2116	70%	0	0%	0	0%	793	30%	2909
Johnson Creek	UR07	Forage	3438	0%		0%		0%		0%	3438
Johnson Creek	UR07	Soybeans	1851	30%	264	0%	1058	20%	2116	40%	5289
Sinissippi Lake	UR08	Corn	25627	70%	2591	10%	1766	0%	8124	20%	38108
Sinissippi Lake	UR08	Forage	28865	90%		0%		0%	2854.8	10%	31720
Sinissippi Lake	UR08	Soybeans	1560	20%	1237	10%	2972	30%	3945	40%	9714
Oconomowoc River	UR09	Corn	6692	50%	1928	10%	932	10%	4288	30%	13840
Oconomowoc River	UR09	Forage	5290	0%		0%		0%		0%	5290
Oconomowoc River	UR09	Soybeans	3804	30%	2130	20%	4516	40%	1441	10%	11891
Ashippun River	UR10	Corn	4219	40%	1940	20%	647	10%	3543	30%	10349
Ashippun River	UR10	Forage	5003	100%		0%		0%		0%	5003
Ashippun River	UR10	Soybeans	930	20%	156	0%	3156	60%	776	20%	5018
Rubicon River	UR11	Corn	5680	60%	1346	20%	568	10%	1237	10%	8831
Rubicon River	UR11	Forage	8730	100%		0%		0%		0%	8730
Rubicon River	UR11	Soybeans	467	10%	467	10%	2218	60%	412	10%	3564
Upper Rock River	UR12	Corn	31660	70%	3714	10%	803	0%	10995	20%	47172

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DNR Watershed Name	SWAT ID	Crop	Conv		Mulch		Notill		Other %	Total
			acres	%	acres	%	acres	%		
Upper Rock River	UR12	Forage	4296	20%	17184	80%		0%	0%	21480
Upper Rock River	UR12	Soybeans	6100	40%	3188	20%	2453	10%	30%	17150
East Branch Rock River	UR13	Corn	19312	80%	933	0%	1136	0%	10%	23031
East Branch Rock River	UR13	Forage	25411	100%		0%		0%	0%	25411
East Branch Rock River	UR13	Soybeans	2995	40%	879	10%	2015	20%	30%	8364

The Transect Survey was performed statewide by county. All data was summarized in the same manner except for Dane County that used a different format. Below is a summary of the Dane County data. This data was inserted into the tables listed above.

**Number of acres with indicated present crop for each tillage:**

Crop	Conventional		mulch-till		No-till		Other		Total
	Acres	%	Acres	%	Acres	%	Acres	%	
Corn	75451	40%	93159	49%	20018	11%	0	0%	188628
Soybeans	18478	23%	34261	43%	27717	34%	0	0%	80456
Small Grains	13858	49%	13088	46%	1540	5%	0	0%	28486
Forage	385	50%		0%		0%	385	50%	770
Idle	385	33%	770	67%	0	0%	0	0%	1155
Other	7699	95%	0	0%	0	0%	385	5%	8084

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**Number of present corn acres with indicated tillage system for each previous crop:**

**Conventional      mulch-till      No-till      Other**

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