Jordan Lake Nutrient Sensitive Water Management Strategy

Haw River Annual Report for CY 2010

County: Orange

Cropland Acreage and Fertilization Rate

Crops, Hay, Pasture	Baseline (ac)	N Rate (lbs/ac)	2010 (ac)	N Rate (lbs/ac)
Bahiagrass (Hay)				
Barley (Grain)	127	89		
Broccoli				
Cabbage				
Caucasion/Old World Bluestem (Hay)				
Common Bermudagrass (Hay)				
Corn (Grain)	315	144	38	140
Corn (Grain) - no-till	79	144	713	140
Corn (Silage)	621	152		
Corn (Silage) - no till	155	152		
Cotton				
Cucumber				
Cucumber (Plasticulture)				
Dallisgrass (Hay)				
Eggplant				
Eggplant (Plasticulture)				
Fescue (Hay)				
Hybrid Bermudagrass (Hay)				
Hybrid Bermudagrass O/S with Rescuegrass (Hay)				
Irish Potatoes				
Leafy Greens				
Lettuce (Head)				
Lettuce (Leaf)				
Lima Bean				
Melons				
Mixed Cool Season Grass (Hay)	4113	83	5196	65
Oats (Grain)	90	89		
Okra				
Onion				
Orchardgrass (Hay)				
Peanuts*				
Pearl Millet (Hay)				
Peppers				
Peppers (Plasticulture)				
Pumpkins				
Rescuegrass (Hay)				
Rutabaga/Turnip				
Rye (Grain)				
Small Grain (Silage)				
Snap Bean				
Sorghum (Grain)				
Sorghum (Silage)				
Sorghum Sudan (Hay)				
Southern Peas				
Soybeans (Double Cropped - Manured)				
Soybeans (Double Cropped)				
Soybeans (Full Season - Manured)				
Soybeans (Full Season)	794	18	970	17
Squash (Summer)				
Squash (Winter)				
Sweat Potatoes (Jewel)				
Sweet Corn				
Sweet Potatoes				
Timothy Grass (Hay)				
Tobacco (Burley)				
Tobacco (Flue Cured)	570	92	244	81
Tomatoes				
Tomatoes (Plasticulture)				
Triticale (Grain)				
Tropical Corn (Silage)				
Watermelons				
Watermelons (Seeded - Plasticulture)				
Watermelons (Seedless - Plasticulture)				
Wheat (Grain)	720	95	407	92
Total crop acreage (acres)	**7,584**		**7,568**	

Reduction Progress

	Baseline	2010
lbs	235,230	**152,648**
Reduction (%)		35.11%

Changes in Cropland Acreage from Baseline

	Baseline	2010
Cropland Acreage	7,584	**7,568**
Change		-16
% Change		0.21%

Best Management Practices Installed (cumulative)

	Baseline	2010	Change
Scavenger Crop (acres)			
Wheat			0
Oats			0
Rye	63	**160**	97
Triticale			0
Barley			0
No-till Corn Piedmont*			0
Nutrient Management (acres)			0
Buffers (acres)			
Buffer:min. 20ft	708	**699**	-9
Buffer:min. 30ft	344	**341**	-3
Buffer:min. 50ft	665	**657**	-8
Buffer:min. 100ft	1,550	**1,529**	-21
Exclusion fencing (feet)			0

Primary Source of Cropland Data :	NCDA&CS Ag Stats
Primary Source of N Rate Data :	Local producers

Jordan Lake Nutrient Sensitive Water Management Strategy

Upper New Hope Annual Report for CY 2010

County: Orange

Cropland Acreage and Fertilization Rate

Crops, Hay, Pasture	Baseline (ac)	N Rate (lbs/ac)	2010 (ac)	N Rate (lbs/ac)
Bahiagrass (Hay)				
Barley (Grain)	38	89		
Broccoli				
Cabbage				
Caucasion/Old World Bluestem (Hay)				
Common Bermudagrass (Hay)				
Corn (Grain)	94	145	11	140
Corn (Grain) - no-till	24	145	215	140
Corn (Silage)	186	152		
Corn (Silage) - no till	47	152		
Cotton				
Cucumber				
Cucumber (Plasticulture)				
Dallisgrass (Hay)				
Eggplant				
Eggplant (Plasticulture)				
Fescue (Hay)				
Hybrid Bermudagrass (Hay)				
Hybrid Bermudagrass O/S with Rescuegrass (Hay)				
Irish Potatoes				
Leafy Greens				
Lettuce (Head)				
Lettuce (Leaf)				
Lima Bean				
Melons				
Mixed Cool Season Grass (Hay)	1235	83	1560	65
Oats (Grain)	27	89		
Okra				
Onion				
Orchardgrass (Hay)				
Peanuts*				
Pearl Millet (Hay)				
Peppers				
Peppers (Plasticulture)				
Pumpkins				
Rescuegrass (Hay)				
Rutabaga/Turnip				
Rye (Grain)				
Small Grain (Silage)				
Snap Bean				
Sorghum (Grain)				
Sorghum (Silage)				
Sorghum Sudan (Hay)				
Southern Peas				
Soybeans (Double Cropped - Manured)				
Soybeans (Double Cropped)				
Soybeans (Full Season - Manured)				
Soybeans (Full Season)	239	19	291	17
Squash (Summer)				
Squash (Winter)				
Sweat Potatoes (Jewel)				
Sweet Corn				
Sweet Potatoes				
Timothy Grass (Hay)				
Tobacco (Burley)				
Tobacco (Flue Cured)				
Tomatoes				

Tomatoes (Plasticulture)				
Triticale (Grain)				
Tropical Corn (Silage)				
Watermelons				
Watermelons (Seeded - Plasticulture)				
Watermelons (Seedless - Plasticulture)				
Wheat (Grain)	216	95	122	92
Total crop acreage (acres)	**2,106**		**2,199**	

Reduction Progress

	Baseline	**2010**
lbs	64,594	**44,310**
Reduction (%)		31.40%

Changes in Cropland Acreage from Baseline

	Baseline	**2010**
Cropland Acreage	2,106	**2,199**
Change		93
% Change		-4.42%

Best Management Practices Installed (cumulative)

	Baseline	**2010**	**Change**
Scavenger Crop (acres)			
Wheat			0
Oats			0
Rye			0
Triticale			0
Barley			0
No-till Corn Piedmont*			0
Nutrient Management (acres)			0
Buffers (acres)			
Buffer:min. 20ft	177	**168**	-9
Buffer:min. 30ft	86	**82**	-4
Buffer:min. 50ft	169	**160**	-9
Buffer:min. 100ft	416	**390**	-26
Exclusion fencing (feet)			0

Primary Source of Cropland Data : NCDA&CS Ag Stats

Primary Source of N Rate Data : Local producers

NLEW Aggregate LakeJordan v6.01
ORANGE COUNTY Aggregate Results 8/13/2012 3:59:56 PM

INPUTS

SMG	SMGAcres	Crops	CropAcres	CropNRate	% of Total
SMG20	0	Barley (Grain)	38	89	2
SMG102	58	Corn (Grain): Conventional	94	145	4
SMG103	161	Corn (Grain): No-Till	24	145	1
SMG105	11	Corn (Silage): Conventional	186	152	9
SMG107	36	Corn (Silage): No-Till	47	152	2
SMG109	28	Mixed Cool Season Grass (Hay)	1,235	83	59
SMG110	134	Oats (Grain)	27	89	1
SMG111	346	Soybeans (Full Season)	239	19	11
SMG112	14	Wheat (Grain)	216	95	10
SMG113	1,295				
SMG117	23				
Tot_SMGs	2,106	Tot_Crops	2,106		

BMP	Acres
Buffer: Minimum 20 ft	177
Buffer: Minimum 30 ft	86
Buffer: Minimum 50 ft	169
Buffer: Minimum 100 ft	416

OUTPUTS

Total N Needed	=	275,564 lbs
Total N (APPLIED)	=	185,877 lbs
Excess N	=	0 lbs
Surface N (Excess)	=	0 lbs
SubSurface N (Excess)	=	0 lbs
SubSurface After Crop	=	73,422 lbs
Total SubSurface	=	73,422 lbs
SubSurface Intercepted By BMP	=	8,827 lbs
SubSurface Loss	=	64,594 lbs
**** TOTAL NITROGEN LOST**	**=**	**64,594 lbs**

*** The Total Nitrogen Lost value is for comparative purposes only. It may not represent actual loss from the Soil Management Unit.*

Comments:
Upper New Hope 97-2001 No-Till/Conventional

NLEW Aggregate LakeJordan v6.01
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INPUTS

SMG	SMGAcres	Crops	CropAcres	CropNRate	% of Total
SMG20	0	Corn (Grain): Conventional	11	140	1
SMG102	61	Corn (Grain): No-Till	215	140	10
SMG103	168	Mixed Cool Season Grass (Hay)	1,560	65	71
SMG105	11	Soybeans (Full Season)	291	17	13
SMG107	38	Wheat (Grain)	122	92	6
SMG109	29				
SMG110	140				
SMG111	361				
SMG112	15				
SMG113	1,352				
SMG117	24				
Tot_SMGs	2,199	Tot_Crops	2,199		

BMP	Acres
Buffer: Minimum 20 ft	168
Buffer: Minimum 30 ft	82
Buffer: Minimum 50 ft	160
Buffer: Minimum 100 ft	390

OUTPUTS

Total N Needed	=	264,253 lbs
Total N (APPLIED)	=	149,211 lbs
Excess N	=	0 lbs
Surface N (Excess)	=	0 lbs
SubSurface N (Excess)	=	0 lbs
SubSurface After Crop	=	49,702 lbs
Total SubSurface	=	49,702 lbs
SubSurface Intercepted By BMP	=	5,393 lbs
SubSurface Loss	=	44,310 lbs
**** TOTAL NITROGEN LOST**	**=**	**44,310 lbs**

*** The Total Nitrogen Lost value is for comparative purposes only. It may not represent actual loss from the Soil Management Unit.*

Comments:
Upper New Hope 2010 No-Till/Conventional

NLEW Aggregate LakeJordan v6.01
ORANGE COUNTY Aggregate Results 8/13/2012 3:47:31 PM

INPUTS

SMG	SMGAcres	Crops	CropAcres	CropNRate	% of Total
SMG20	1	Barley (Grain)	127	89	2
SMG102	209	Corn (Grain): Conventional	315	144	4
SMG103	579	Corn (Grain): No-Till	79	144	1
SMG105	39	Corn (Silage): Conventional	621	152	8
SMG107	131	Corn (Silage): No-Till	155	152	2
SMG109	100	Mixed Cool Season Grass (Hay)	4,113	83	54
SMG110	482	Oats (Grain)	90	89	1
SMG111	1,245	Soybeans (Full Season)	794	18	10
SMG112	52	Tobacco (Flue Cured)	570	92	8
SMG113	4,662	Wheat (Grain)	720	95	9
SMG117	84				
Tot_SMGs	7,584	Tot_Crops	7,584		

CoverCrops	Acres
Rye	63

BMP	Acres
Buffer: Minimum 20 ft	708
Buffer: Minimum 30 ft	344
Buffer: Minimum 50 ft	665
Buffer: Minimum 100 ft	1,550

OUTPUTS

Total N Needed	=	961,622 lbs
Total N (APPLIED)	=	670,512 lbs
Excess N	=	0 lbs
Surface N (Excess)	=	0 lbs
SubSurface N (Excess)	=	0 lbs
SubSurface After Crop	=	270,098 lbs
Total SubSurface	=	270,098 lbs
SubSurface Intercepted By BMP	=	34,868 lbs
SubSurface Loss	=	235,230 lbs
**** TOTAL NITROGEN LOST**	**=**	**235,230 lbs**

*** The Total Nitrogen Lost value is for comparative purposes only. It may not represent actual loss from the Soil Management Unit.*

Comments:
Haw River 97-2001 No-Till/Conventional

NLEW Aggregate LakeJordan v6.01
ORANGE COUNTY Aggregate Results 8/13/2012 12:49:01 PM

INPUTS

SMG	SMGAcres	Crops	CropAcres	CropNRate	% of Total
SMG20	1	Corn (Grain): Conventional	38	140	1
SMG102	209	Corn (Grain): No-Till	713	140	9
SMG103	578	Mixed Cool Season Grass (Hay)	5,196	65	69
SMG105	39	Soybeans (Full Season)	970	17	13
SMG107	131	Tobacco (Flue Cured)	244	81	3
SMG109	100	Wheat (Grain)	407	92	5
SMG110	481				
SMG111	1,243				
SMG112	52				
SMG113	4,650				
SMG117	84				
Tot_SMGs	7,568	Tot_Crops	7,568		

CoverCrops	Acres
Rye	160

BMP	Acres
Buffer: Minimum 20 ft	699
Buffer: Minimum 30 ft	341
Buffer: Minimum 50 ft	657
Buffer: Minimum 100 ft	1,529

OUTPUTS

Total N Needed	=	898,725 lbs
Total N (APPLIED)	=	516,578 lbs
Excess N	=	0 lbs
Surface N (Excess)	=	0 lbs
SubSurface N (Excess)	=	0 lbs
SubSurface After Crop	=	175,390 lbs
Total SubSurface	=	175,390 lbs
SubSurface Intercepted By BMP	=	22,742 lbs
SubSurface Loss	=	152,648 lbs
**** TOTAL NITROGEN LOST**	**=**	**152,648 lbs**

*** The Total Nitrogen Lost value is for comparative purposes only. It may not represent actual loss from the Soil Management Unit.*

Comments:
Haw River 2010 No-Till/Conventional