

**APPENDIX IV**

LAND USE/LAND COVER	AREAS IN HUC-12 SUBWATERSHEDS (ACRES)				
	0101	0102	0103	0104	0105
Bare Rock/Sand/Clay		12	25	1	
Deciduous Forest	10,987	18,751	19,739	13,272	14,595
Developed Open Space	760	1,091	1,202	765	294
Emergent Herbaceous Wetlands	1	1			
Evergreen Forest	89	703	373	270	224
Grassland/Herbaceous	492	375	180	243	755
High Intensity Development	27	12		1	1
Low Intensity Development	170	244	179	141	8
Medium Intensity Development	82	16	40	5	5
Mixed Forest	54	340	327	226	63
Open Water	342	943	48	1	19
Pasture/Hay	1,952	3,368	1,414	928	1,517
Row Crops	178	549	802	773	380
Shrub/Scrub	33	57	209	25	33
Woody Wetlands	11	48	95	48	6
<b>Total</b>	<b>15,177</b>	<b>26,511</b>	<b>24,633</b>	<b>16,700</b>	<b>17,901</b>

*Table A4-1a.*

LAND USE/LAND COVER	AREAS IN HUC-12 SUBWATERSHEDS (ACRES)				
	0201	0202	0203	0204	0205
Bare Rock/Sand/Clay	65	8	7	120	34
Deciduous Forest	20,264	24,953	7,022	19,794	13,953
Developed Open Space	3,317	2,470	1,002	3,522	3,400
Evergreen Forest	411	1,405	661	1,227	981
Grassland/Herbaceous	439	361	134	401	156
High Intensity Development	176	4		187	84
Low Intensity Development	1,763	824	342	1,644	2,392
Medium Intensity Development	627	49	11	474	454
Mixed Forest	906	602	467	965	634
Open Water	91	429	14	126	138
Pasture/Hay	5,563	8,859	2,396	9,799	7,395
Row Crops	11,263	2,772	2,880	11,651	9,855
Shrub/Scrub	80	27	3	63	4
Woody Wetlands	29	258	10	86	137
<b>Total</b>	<b>44,995</b>	<b>43,021</b>	<b>14,950</b>	<b>50,059</b>	<b>39,616</b>

*Table A4-1b.*

LAND USE/LAND COVER	AREAS IN HUC-12 SUBWATERSHEDS (ACRES)				
	0301	0302	0303	0304	0305
Bare Rock/Sand/Clay	31	1	1	33	2
Deciduous Forest	17,680	41,628	8,779	11,118	14,400
Developed Open Space	1,368	843	224	716	1,409
Emergent Herbaceous Wetlands				1	
Evergreen Forest	1,866	596	890	1,372	894
Grassland/Herbaceous	572	831	265	716	292
High Intensity Development	21				
Low Intensity Development	225	28	9	25	285
Medium Intensity Development	84	5		2	41
Mixed Forest	672	238	262	880	178
Open Water	1,547	301	150	2,193	232
Pasture/Hay	2,850	2,009	432	2,917	2,710
Row Crops	300	1,170	139	183	707
Shrub/Scrub	78	103	14	79	51
Woody Wetlands	38	12	1	22	49
<b>Total</b>	<b>27,330</b>	<b>47,765</b>	<b>11,164</b>	<b>20,256</b>	<b>21,250</b>

**Table A4-1c.**

LAND USE/LAND COVER	AREAS IN HUC-12 SUBWATERSHEDS (ACRES)			
	0306	0307	0308	0309
Bare Rock/Sand/Clay	3	32		10
Deciduous Forest	21,010	18,263	14,265	2,469
Developed Open Space	1,531	1,357	566	231
Evergreen Forest	1,947	2,600	1,191	149
Grassland/Herbaceous	257	1,141	526	170
High Intensity Development	2	2	1	20
Low Intensity Development	430	208	32	32
Medium Intensity Development	56	8	9	30
Mixed Forest	356	1,240	598	206
Open Water	488	4,932	504	189
Pasture/Hay	2,040	3,926	1,750	664
Row Crops	1,686	695	129	214
Shrub/Scrub	45	109	23	2
Woody Wetlands	270	90	4	18
<b>Total</b>	<b>30,121</b>	<b>34,605</b>	<b>19,597</b>	<b>4,405</b>

**Table A4-1d.**

**Table A4-1a-d. Land Use Distribution in the Cordell Hull Lake Watershed by HUC-12.** Data are from 1992 Multi-Resolution Land Characterization (MRLC) derived by applying a generalized Anderson Level II system to mosaics of Landsat thematic mapper images collected every five years.

<b>HYDROLOGIC SOIL GROUPS</b>
<b>GROUP A SOILS</b> have low runoff potential and high infiltration rates even when wet. They consist chiefly of sand and gravel and are well to excessively drained.
<b>GROUP B SOILS</b> have moderate infiltration rates when wet and consist chiefly of soils that are moderately deep to deep, moderately to well drained, and moderately coarse to coarse textures.
<b>GROUP C SOILS</b> have low infiltration rates when wet and consist chiefly of soils having a layer that impedes downward movement of water with moderately fine to fine texture.
<b>GROUP D SOILS</b> have high runoff potential, very low infiltration rates, and consist chiefly of clay soils.

*Table A4-2. Hydrologic Soil Groups in Tennessee as Described in WCS. Soils are grouped into four hydrologic soil groups that describe a soil's permeability and, therefore, its susceptibility to runoff.*

STATION	HUC 10	STREAM	AREA (MI <sup>2</sup> )	DAILY FLOW			3Q2	1Q10	3Q10	7Q10	3Q20
				AVG	MAX	MIN					
3417500	0513010601	Cumberland River	7307.00	11670.4	142000.0	69.0	na	na	na	154.0	112.0
3417700	0513010602	UT to Matthews Branch	0.49	na	na	na	na	na	na	na	na
3418000	0513010602	Roaring River	78.70	110.7	8000.0	2.4	6.2	3.5	3.8	3.9	3.3
3418070	0513010602	Roaring River	210.00	268.6	15800.0	0.0	na	na	na	na	na

*Table A4-3. Stream Flow Data from USGS Gaging Stations in the Cordell Hull Lake Watershed. Data are in cubic feet per second (CFS). Data were obtained from the USGS web application StreamStats at <http://water.usgs.gov/osw/streamstats>. (na, data not available)*

AGENCY	STATION	LOCATION	HUC-12
TDECWPC	MILL001.3CY	Mill Creek @ RM 1.3	051301060103
TDECWPC	MILL013.2OV	Mill Creek @ RM 13.2	051301060103
TDECWPC	MILL014.8OV	Mill Creek @ RM 14.8	051301060103
TDECWPC	DRY000.5CY	Dry Fork @ RM 0.5	051301060104
TDECWPC	BRIMS002.5CY	Brimstone Creek @ RM 2.5	051301060105
TDECWPC	CARR001.0OV	Carr Creek @ RM 1.0	051301060201
TDECWPC	CARR003.6OV	Carr Creek @ RM 3.6	051301060201
TDECWPC	CARR004.6OV	Carr Creek @ RM 4.6	051301060201
TDECWPC	ROARI029.2OV	Roaring River @ RM 29.2	051301060201
TDECWPC	TOWN000.5OV	Town Creek @ RM 0.5	051301060201
TDECWPC	TOWN000.9OV	Town Creek @ RM 0.9	051301060201
TDECWPC	MORRI000.7JA	Morrison Creek @ RM 0.7	051301060202
TDECWPC	ECO71G03	Flat Creek @ RM 1.8	051301060203
TDECWPC	FLAT008.3OV	Flat Creek @ RM 8.3	051301060203
TDECWPC	BEAR000.2OV	Bear Creek @ RM 0.2	051301060204
TDECWPC	ECO71G04	Spring Creek @ RM 16.2	051301060204
TDECWPC	LMILL000.1PU	Little Mill Creek @ RM 0.1	051301060204
TDECWPC	MILL000.8PU	Mill Creek @ RM 0.8	051301060204
TDECWPC	BLACK014.5JA	Blackburn Fork @ RM 14.5	051301060205
TDECWPC	EBLAC000.1JA	East Blackburn Fork @ RM 0.1	051301060205
TDECWPC	LITTL000.7PU	Little Creek @ RM 0.7	051301060205
TDECWPC	WBLAC000.1JA	West Blackburn Fork @ RM 0.1	051301060205
TDECWPC	DOE001.0JA	Doe Creek @ RM 1.0	051301060301
TDECWPC	JENNI007.2JA	Jennings Creek @ RM 7.2	051301060302
TDECWPC	PLICK000.8JA	Pine Lick Creek @ RM 0.8	051301060302
TDECWPC	SLICK002.7JA	Salt Lick Creek @ RM 2.7	051301060304
TDECWPC	ECO71H03	Flynn Creek @ RM 10.2	051301060305
TDECWPC	MARTI004.2PU	Martin Creek @ RM 4.2	051301060306
TDECWPC	DEFEA006.2SM	Defeated Creek @ RM 6.2	051301060308

**Table A4-4. STORET Water Quality Monitoring Stations in the Cordell Hull Lake Watershed.**  
TDECWPC, Tennessee Department of Environment and Conservation Division of Water Pollution Control; UT, Unnamed Tributary.

FACILITY NUMBER	FACILITY NAME	SIC	SIC NAME	MADI	WATERBODY	HUC-12
TN0063886	Celina STP	4952	Sewerage System	Minor	Cumberland River @ RM 380.2	051301060101
TN0059838	Nielsen and Bainbridge	3471	Electroplating, Plating, and Polishing	Minor	Cumberland River @ RM 358.2	051301060102
TN0073105	Standing Stone State Park	4952	Sewerage System	Minor	Mill Creek @ RM 15.0	051301060103
TN0021873	Livingston STP	4952	Sewerage System	Major	Town Creek @ RM 0.8	051301060201
TN0002593	Bon L. Mfg Company	3354	Aluminum Extruded Products	Minor	Caney Fork @ RM 8.6	051301060205
TN0026581	Gainesboro STP	4952	Sewerage System	Minor	Cumberland River @ RM 357.3	051301060301
TN0024465	USACOE Cordell Hull Dam	4952	Sewerage System	Minor	Cumberland River @ RM 313.2	051301060309
TN0068161	Cordell Hull Hydro Power Plant	4911	Electric Services	Minor	Cumberland River	051301060309

**Table A4-5. NPDES Permittees in the Cordell Hull Lake Watershed.** SIC, Standard Industrial Classification; MADI, Major Discharge Indicator.

FACILITY NUMBER	PERMITEE	COUNTY	LIVESTOCK	WATERBODY	HUC-12
TN000128	Ridgetop Farms	Clay	Poultry	Brannon Creek	051301060101
TNA00099	Running Late Farms	Clay	Poultry	Little Brimstone Creek	051301060105
TN000088	Cherry's Rooster Ridge	Clay	Poultry	Pine Lick Creek	051301060302

**Table A4-6. CAFO Sites in the Cordell Hull Lake Watershed.**

FACILITY NUMBER	PERMITEE	SIC	SIC NAME	WATERBODY	HUC-12
TN0063495	Livingston Limestone Co. (Allons Mine)	1422	Crushed and Broken Limestone	Mill Creek	051301060103
TN0065668	Overton County Highway Dept (Overton County Quarry)	1422	Crushed and Broken Limestone	UT to Carr Creek	051301060201
TN0072508	Livingston Limestone Co. (Gainesboro Quarry)	1422	Crushed and Broken Limestone	UT to Roaring River	051301060202
TN0063517	Rogers Group, Inc. (Algood Quarry)	1422	Crushed and Broken Limestone	UT to Bear Creek	051301060204
TN0064289	Mossy Creek Mining, LLC (Cumberland Mine)	1031	Lead and Zinc Ore	UT to Cumberland River	051301060309
TN0072737	LoJac Enterprises, Inc. (LoJac Smith County Quarry)	1422	Crushed and Broken Limestone	UT to Turkey Creek	051301060309

**Table A4-7. Active Permitted Mining Sites in the Cordell Hull Lake Watershed.** SIC, Standard Industrial Classification; UT, Unnamed Tributary.

FACILITY NUMBER	FACILITY NAME	WATERBODY	HUC-12
TNG110281	IMI Tennessee, Inc.	Unnamed Tributary	051301060201
TNG110287	Livingston Ready Mix	Sinkhole	051301060201

**Table A4-8. Ready Mix Concrete Plants in the Cordell Hull Lake Watershed.**

LOG NUMBER	COUNTY	DESCRIPTION	WATERBODY	HUC-12
NRS04.156	Clay	Bridge Repair	Mill Creek	051301060201
NRS04.156B	Clay	Bridge Repair	Mill Creek	051301060201
NRS02.341	Overton	Replace Drainage Structure	Town Creek	051301060201
NRS02.043	Overton		Spring Creek	051301060204
NRS02.012	Putnam		Little Creek	051301060205
NRS03.243	Putnam	Bridge Replacement	East Prong Blackburn Fork Creek	051301060205
NRS01.069	Jackson	Slab Culvert	Cub Creek	051301060301
NRS03.241	Jackson	Rip-Rap	Doe Creek	051301060301
NRS03.220	Jackson	Bridge and Approaches	Wartrace Creek	051301060303
NRS00.258	Smith	Stream Relocation	Hoggstown Branch	051301060307

**Table A4-9. Individual ARAP Permits Issued January 2000 Through June 2004 in the Cordell Hull Lake Watershed.**

FACILITY NUMBER	FACILITY NAME	SECTOR	RECEIVING STREAM	AREA*	HUC-12
TNR051371	Sola/Hevi-Duty	AC	Obey River	10	051301060101
TNR050526	Nielsen and Bainbridge	A, AA, F	Cumberland River @ RM 358.5	14	051301060102
TNR056389	Crotty Corporation	V	Cumberland River	3.5	051301060102
TNR051274	Livingston Sawmill, Incorporated	A	Town Creek	5.9	051301060201
TNR051851	Berkline Plant 5	W	Town Creek	8.66	051301060201
TNR055041	Eaton INOAC Company	Y	Carr Creek	2.5	051301060201
TNR055997	LoJac Materials, Inc.	E	Town Creek	2	051301060201
TNR056330	Hutchinson FTS, Incorporated	AA	Sinkholes (2)	16	051301060201
TNR053830	Lester Boles Wrecker Service	M	Buffalo Branch	25	051301060203
TNR053551	United Parcel Service	P	Bear Creek	2.02	051301060204
TNR054329	Harris Metals Company	AB	Burtons Branch	0.75	051301060204
TNR054487	Forest Flavors International	C, A	Turkey Creek	2	051301060204
TNR054569	WW Manufacturing	AB	Danner Creek	11.38	051301060204
TNR051241	Russell Stover Candies	U, P	Burtons Branch	44	051301060205
TNR051279	Highway 56 Sawmill, Inc.	A	UT to Flynn Creek	4.5	051301060305
TNR052005	Preferred Pallets	A	Cane Creek	7.2	051301060205
TNR053828	LoJac Enterprises, Incorporated	D	Falling Water River	5.35	051301060205
TNR053972	Harris Metals Corporation	F	Not Reported	10	051301060205
TNR054553	Mid-South Machine and Supply	AA	West Blackburn Fork	16.5	051301060205
TNR056342	Corky's Auto Sales and Parts	M	WWC to Martin Creek	1	051301060305
TNR053189	Heavy Equipment Division	P	Cumberland River @ RM 285.0	1300	051301060308
TNR053477	Smith County Land Fill	L	UT to Cumberland River	153.37	051301060309

**Table A4-10. Active Permitted TMSP Facilities in the Cordell Hull Lake Watershed.** Area, acres of property associated with industrial activity; UT, Unnamed Tributary; WWC, Wet Weather Conveyance. Sector details may be found in Table A4-11.

<b>SECTOR</b>	<b>TMSP SECTOR NAME</b>
A	Timber Products Facilities
AA	Facilities That Manufacture Metal Products including Jewelry, Silverware and Plated Ware
AB	Facilities That Manufacture Transportation Equipment, Industrial or Commercial Machinery
AC	Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods
AD	Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Required)
AE	Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Not Required)
B	Paper and Allied Products Manufacturing Facilities
C	Chemical and Allied Products Manufacturing Facilities
D	Asphalt Paving, Roofing Materials, and Lubricant Manufacturing Facilities
E	Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities
F	Primary Metals Facilities
G	Metal Mines (Ore Mining and Dressing) (RESERVED)
H	Inactive Coal Mines and Inactive Coal Mining-Related Facilities
I	Oil or Gas Extraction Facilities
J	Construction Sand and Gravel Mining and Processing and Dimension Stone Mining and Quarrying Facilities
K	Hazardous Waste Treatment Storage or Disposal Facilities
L	Landfills and Land Application Sites
M	Automobile Salvage Yards
N	Scrap Recycling and Waste and Recycling Facilities
O	Steam Electric Power Generating Facilities
P	Vehicle Maintenance or Equipment Cleaning areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, the United States Postal Service, or Railroad Transportation Facilities
Q	Vehicle Maintenance Areas and Equipment Cleaning Areas of Water Transportation Facilities
R	Ship or Boat Building and Repair Yards
S	Vehicle Maintenance Areas, Equipment Cleaning Areas or From Airport Deicing Operations located at Air Transportation Facilities
T	Wastewater Treatment Works
U	Food and Kindred Products Facilities
V	Textile Mills, Apparel and other Fabric Product Manufacturing Facilities
W	Furniture and Fixture Manufacturing Facilities
X	Printing and Platemaking Facilities
Y	Rubber and Miscellaneous Plastic Product Manufacturing Facilities
Z	Leather Tanning and Finishing Facilities

**Table A4-11. TMSP Sectors and Descriptions.**