APPENDIX C

DRASTIC Ranges, Ratings, Numbers, and Indices for Each Hydrogeologic Basin

HYDROGEOLOGIC BASIN: Antlers				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	30-50	5	5	25
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	sand and poorly cemented sandstone	3	7	21
Soil Media	fine sandy loam	2	6	12
Topography (% slope)	2-6	1	9	9
Impact Vadose Zone	poorly cemented sandstone with some clay	5	6	30
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	104

HYDROGEOLOGIC BASIN: Arbuckle-Simpson				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	50-75	5	3	15
Net **R**echarge (in/yr)	4-7	4	6	24
Aquifer Media	layered limestone and dolomite; heavily faulted; some karst	3	9	27
Soil Media	silt loam, loam, and fine sandy loam	2	5	10
Topography (% slope)	2-6	1	9	9
Impact Vadose Zone	karst limestone	5	9	45
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	133

HYDROGEOLOGIC BASIN: Arbuckle-Timbered Hills				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	30-50	5	5	25
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	faulted limestone, dolo-mite, shale, conglomerate	3	6	18
Soil Media	flaggy to silt loam, and loam	2	5	10
Topography (% slope)	2-16	1	9	9
Impact Vadose Zone	faulted limestone & shale	5	6	30
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	99

HYDROGEOLOGIC BASIN: Arkansas Novaculite				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	30-50	5	5	25
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	highly fractured chert with some limestone and shale	3	6	18
Soil Media	very gravelly to fine sandy loam	2	5	10
Topography (% slope)	6-12	1	5	5
Impact Vadose Zone	highly fractured chert	5	6	30
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	95

HYDROGEOLOGIC BASIN: Blaine				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	50-75	5	3	15
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	karst gypsum & dolomite interbedded with shale	3	10	30
Soil Media	clay, silt, & fine sandy loam, and loamy fine sand	2	5	10
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	karst gypsum, dolomite, and shale	5	10	50
Hydraulic **C**onductivity (gpd/ft^2)	300-700	3	4	12
			DRASTIC Index	131

HYDROGEOLOGIC BASIN: Boone				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	50-75	5	3	15
Net **R**echarge (in/yr)	4-7	4	6	24
Aquifer Media	fractured limestone, dolomite, and chert	3	9	27
Soil Media	silt loam, and very cherty to fine sandy loam	2	5	10
Topography (% slope)	2-6	1	9	9
Impact Vadose Zone	fractured limestone, dolomite, and chert	5	9	45
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	133

HYDROGEOLOGIC BASIN: Cedar Hills				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	30-50	5	5	25
Net **R**echarge (in/yr)	2-4	4	3	12
Aquifer Media	sandstone interbedded with siltstone and shale	3	6	18
Soil Media	silt loam and loam	2	4	8
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	sandstone interbedded with siltstone and shale	5	6	30
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	106

HYDROGEOLOGIC BASIN: Central Oklahoma				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	50-75	5	3	15
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	sandstone interbedded with siltstone and shale	3	6	18
Soil Media	very fine sandy loam	2	6	12
Topography (% slope)	2-6%	1	9	9
Impact Vadose Zone	sandstone interbedded with siltstone and shale	5	6	30
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	91

HYDROGEOLOGIC BASIN: Cretaceous				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	50-75	5	3	15
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	interbedded sandstone, limestone, and shale	3	5	15
Soil Media	silt loam, fine sandy loam, and clay	2	6	12
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	interbedded sandstone, limestone, and shale	5	5	25
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	84

HYDROGEOLOGIC BASIN: Elk City				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	30-50	5	5	25
Net **R**echarge (in/yr)	2-4	4	3	12
Aquifer Media	massive, weakly-cemented sandstone	3	7	21
Soil Media	loamy fine sand	2	8	16
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	massive, weakly-cemented sandstone	5	7	35
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	122

HYDROGEOLOGIC BASIN: Mesozoic				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	75-100	5	2	10
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	interbedded sandstone, limestone, shale, dolomite, and conglomerate	3	5	15
Soil Media	loam	2	5	10
Topography (% slope)	2-6	1	9	9
Impact Vadose Zone	interbedded sandstone, limestone, and shale	5	5	25
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	76

HYDROGEOLOGIC BASIN: Ogallala				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	>100	5	1	5
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	sand and gravel	3	7	21
Soil Media	clay loam to fine sandy loam, and loamy fine sand	2	5	10
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	sand and gravel with silt, clay, and caliche	5	6	30
Hydraulic **C**onductivity (gpd/ft^2)	100-300	3	2	6
			DRASTIC Index	86

HYDROGEOLOGIC BASIN: Ouachita Mountains				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	30-50	5	5	25
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	limestone, sandstone, and shale; fractured	3	5	15
Soil Media	stony to loam, and fine sandy loam	2	5	10
Topography (% slope)	6-12	1	5	5
Impact Vadose Zone	limestone, sandstone, and shale; fractured	5	5	25
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
		DRASTIC Index		87

HYDROGEOLOGIC BASIN: Pennsylvanian				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	50-75	5	3	15
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	sandstone interbedded with shale and siltstone; some fractures	3	5	15
Soil Media	clay, silt, and fine sandy loam	2	5	10
Topography (% slope)	2-6	1	9	9
Impact Vadose Zone	interbedded sandstone and shale	5	5	25
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
		DRASTIC Index		81

HYDROGEOLOGIC BASIN: Permian				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	50-75	5	3	15
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	interbedded shale, sandstone, limestone, dolomite, and gypsum	3	5	15
Soil Media	silty clay & silt loam, loam, & fine sandy loam	2	5	10
Topography (% slope)	2-6	1	9	9
Impact Vadose Zone	interbedded shale, sandstone, and limestone	5	5	25
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
		DRASTIC Index		81

HYDROGEOLOGIC BASIN: Rush Springs				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	50-75	5	3	15
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	sandstone with some gypsum, shale, and dolomite	3	7	21
Soil Media	silt loam, loam, and fine sandy loam	2	5	10
Topography (% slope)	2-6	1	9	9
Impact Vadose Zone	sandstone with some gypsum, shale, and dolomite	5	6	30
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
		DRASTIC Index		92

HYDROGEOLOGIC BASIN: Tishomingo Granite				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	75-100	5	2	10
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	igneous	3	2	6
Soil Media	thin or absent	2	10	20
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	igneous	5	3	15
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	68

HYDROGEOLOGIC BASIN: Vamoosa-Ada				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	50-75	5	3	15
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	sandstone interbedded with shale and siltstone	3	6	18
Soil Media	fine sandy loam	2	6	12
Topography (% slope)	2-6	1	9	9
Impact Vadose Zone	bedded sandstone and shale	5	6	30
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	91

HYDROGEOLOGIC BASIN: Washita Igneous				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	75-100	5	2	10
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	igneous	3	2	6
Soil Media	cobbly to loam; clay	2	5	10
Topography (% slope)	6-12	1	5	5
Impact Vadose Zone	igneous	5	3	15
Hydraulic **C**onductivity (gpd/ft^2)	1-100	3	1	3
			DRASTIC Index	53

HYDROGEOLOGIC BASIN: Alluvium and Terrace Deposits of the Arkansas River				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	15-30	5	7	35
Net **R**echarge (in/yr)	2-4	4	3	12
Aquifer Media	sand, gravel, and clay	3	8	24
Soil Media	clay to fine sandy loam, and clay	2	5	10
Topography (% slope)	2-6	1	9	9
Impact Vadose Zone	sand, gravel, and clay	5	8	40
Hydraulic **C**onductivity (gpd/ft^2)	700-1,000	3	6	18
			DRASTIC Index	148

HYDROGEOLOGIC BASIN: Alluvium and Terrace Deposits of the Canadian River				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	15-30	5	7	35
Net **R**echarge (in/yr)	2-4	4	3	12
Aquifer Media	sand, gravel, and clay	3	8	24
Soil Media	silt loam, loam, fine sandy loam, & loamy fine sand	2	5	10
Topography (% slope)	2-6	1	9	9
Impact Vadose Zone	sand, gravel, and clay	5	8	40
Hydraulic **C**onductivity (gpd/ft^2)	700-1,000	3	6	18
			DRASTIC Index	148

HYDROGEOLOGIC BASIN: Alluvium and Terrace Deposits of the Cimarron River				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	15-30	5	7	35
Net **R**echarge (in/yr)	2-4	4	3	12
Aquifer Media	sand, gravel, and clay	3	8	24
Soil Media	clay to fine sandy loam, & loamy fine to fine sand	2	6	12
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	sand, gravel, and clay	5	8	40
Hydraulic **C**onductivity (gpd/ft^2)	300-700	3	4	12
			DRASTIC Index	145

HYDROGEOLOGIC BASIN: Alluvium and Terrace Deposits of the North Canadian River				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	15-30	5	7	35
Net **R**echarge (in/yr)	2-4	4	3	12
Aquifer Media	sand, gravel, and clay	3	8	24
Soil Media	clay to fine sandy loam, & loamy fine to fine sand	2	6	12
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	sand, gravel, and clay	5	8	40
Hydraulic **C**onductivity (gpd/ft^2)	700-1,000	3	4	12
			DRASTIC Index	145

HYDROGEOLOGIC BASIN: Alluvium and Terrace Deposits of the North Fork of the Red River				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	15-30	5	7	35
Net **R**echarge (in/yr)	2-4	4	3	12
Aquifer Media	sand, gravel, and clay	3	8	24
Soil Media	silt to fine sandy loam, & loamy fine sand	2	8	16
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	sand, gravel, and clay	5	8	40
Hydraulic **C**onductivity (gpd/ft^2)	700-1,000	3	6	18
			DRASTIC Index	155

HYDROGEOLOGIC BASIN: Alluvium and Terrace Deposits of the Red River				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	15-30	5	7	35
Net **R**echarge (in/yr)	2-4	4	3	12
Aquifer Media	sand, gravel, and clay	3	8	24
Soil Media	fine sandy loam	2	6	12
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	sand, gravel, and clay	5	8	40
Hydraulic **C**onductivity (gpd/ft^2)	700-1,000	3	6	18
			DRASTIC Index	151

HYDROGEOLOGIC BASIN: Alluvium and Terrace Deposits of the Salt Fork of the Arkansas River				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	15-30	5	7	35
Net **R**echarge (in/yr)	2-4	4	3	12
Aquifer Media	sand, gravel, and clay	3	8	24
Soil Media	clay to fine sandy loam, & loamy fine to fine sand	2	6	12
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	sand, gravel, and clay	5	8	40
Hydraulic **C**onductivity (gpd/ft^2)	700-1,000	3	6	18
			DRASTIC Index	151

HYDROGEOLOGIC BASIN: Alluvium and Terrace Deposits of the Washita River				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	15-30	5	7	35
Net **R**echarge (in/yr)	2-4	4	3	12
Aquifer Media	sand, gravel, and clay	3	8	24
Soil Media	silt loam, loam, and fine sandy loam	2	5	10
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	sand, gravel, and clay	5	8	40
Hydraulic **C**onductivity (gpd/ft^2)	700-1,000	3	6	18
			DRASTIC Index	149

HYDROGEOLOGIC BASIN: Enid Isolated Terrace Deposits				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	15-30	5	7	35
Net **R**echarge (in/yr)	2-4	4	3	12
Aquifer Media	sand, gravel, and clay	3	8	24
Soil Media	clay to fine sandy loam	2	5	10
Topography (% slope)	0-2	1	10	10
Impact Vadose Zone	sand, gravel, and clay	5	8	40
Hydraulic **C**onductivity (gpd/ft^2)	700-1,000	3	6	18
			DRASTIC Index	149

HYDROGEOLOGIC BASIN: Gerty Sand				
HYDROGEOLOGIC FACTOR	**RANGE**	**WEIGHT**	**RATING**	**NUMBER**
Depth to Water (ft)	30-50	5	5	25
Net **R**echarge (in/yr)	0-2	4	1	4
Aquifer Media	sand, gravel, and clay	3	8	24
Soil Media	silt loam, clay, and loamy fine sand	2	6	12
Topography (% slope)	2-6	1	9	9
Impact Vadose Zone	sand, gravel, and clay	5	8	40
Hydraulic **C**onductivity (gpd/ft^2)	300-700	3	4	12
		DRASTIC Index		126