

APPENDIX A. Table Structure for AGNPS and WATFLOOD Interfaces

Appendix A describes the structure of the tables in the database together with the variable description, sample values and units for every parameter. The appendix is divided into three sections: AGNPS Input Tables, AGNPS Output Tables and WATFLOOD Input Tables.

Section A.1. AGNPS Input Tables (Reference - Table 4.1a):

Table A1 - Initial Watershed Data ^{One Record/Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Watershed_ID	Title		Watershed Identification
Description	Subtitle		Description
AreaCell	200.00	acres	Area of each cell
NoMajorCells	2		Number of Base Cells (Limit 1000)
NoTotalCells	5		Number of Total Cells (Limit 64,000=3 levels)
Precipitation	1.00	inches	Total Precipitation
Nitrog_Rain	0.80	ppm	Nitrogen Concentration in Rainfall
El_Rfactor	'or' 4.81		Energy-Intensity Value
Duration	0.0	hrs	Storm Duration
StormType	000		Storm Type (I, IA, II, III options)
PeakFlow_Tog	AGNPS		Peak Flow Calculations (SCS-TR55/AGNPS)
Geomorphic_Tog	Yes		Geomorphic Calculations (Yes/No)
HydrShape_Tog	K Coef		Hydrograph Shape Factor (K Coef/% Runoff)
KCoeff_PerRunoff	484.00		Value of K Coef or % Runoff

Table A2 - General Cell Data ^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Rec_CellNo	2		Receiving Cell Number
Rec_CellDiv	100		Receiving Cell Subdivision
FlowDirection	5		Flow Direction
SCS_No	54		SCS Curve Number

Table A2 - General Cell Data^{Grid} (Cont.)

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
LandSlope	3.5	%	Land Slope
SlopeShape	1		Slope Shape
SlopeLength	150	ft	Slope Length
Mannings_n	0.030		Overland Manning's
K_factor	0.60		K - Factor
C_factor	0.3000		C - Factor
P_factor	1.00		P - Factor
SurfCond	0.21		Surface Condition Constant
COD_factor	65	mg/l	COD Factor
Soil_Texture	2		Soil Texture ID
Fert_Ind	On/Off		Fertilizer Indicator
Pest_Ind	On/Off		Pesticide Indicator
Point_Ind	On/Off		Point Source Indicator
Add_Erosion	On/Off		Additional Erosion Indicator
Impound_Ind	On/Off		Impoundment Indicator
Channel_Ind	7		Channel Indicator

Table A3 - Soil^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Soil_Nitro	0.0010	lbN/lbsoil	Nitrogen concentration in soil
Soil_Phos	0.0005	lbN/lbsoil	Phosphorus concentration in soil
PoreW_Nitro	5.00	ppm	Nitrogen concentration in pore water
PoreW_Phos	2.00	ppm	Phosphorus Concentration in pore water
ExtR_Nitro	0.05		Nitrogen extraction coefficient for runoff
ExtR_Phos	0.025		Phosphorus extraction coefficient for runoff
ExtL_Nitro	0.25		Nitrogen extraction coefficient for leaching
ExtL_Phos	0.25		Phosphorus extraction coefficient for leaching
Per_OMS	20	%	Percent of organic matter in soil

Table A4 - Fertilizer^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Applied_Nitro	200	lb/acre	Nitrogen applied
Applied_Phos	80	lb/acre	Phosphorus applied
AvFac_Nitro	45	%	Availability factor for nitrogen
AvFac_Phos	55	%	Availability factor for phosphorus

Table A5 - Pesticide^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Com_Name	ATRAZINE		Common Pesticide Name (DB)
Trad_Name	ATRATOL		Trade Name (DB)
Type_App	Preplant		Type of application (option value)
App_Time	5.0	days	Time since application
App_Rate	2.00	lb/acre	Application rate
App_Effic	75	%	Application efficiency (default=75)
Per_CanCov	20	%	Percent canopy cover (default=20)
SoilRes_Init	0.10	lb/acre	Initial soil residue

Table A5 - Pesticide^{Grid} (Cont.)

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
SoilRes_Half	60.0	days	Soil residue half life (DB)
Inc_Depth	1.00	in	Incorporation depth (default=1.0)
Inc_Effic	75	%	Incorporation efficiency
Solub_Wat	33.000	ppm	Solubility in water (DB)
OrgCar_Koc	100.000		Organic carbon sorption Koc (DB)
FolRes_Init	0.00	lb/acre	Initial foliar residue
FolWash_Thres	0.10	in	Foliar washoff threshold (default=0.10)
FolWash_Frac	45	%	Foliar washoff fraction (DB)
FolRes_Half	5.0	days	Foliar residue half life (DB)

(DB) - Available from Pesticide Data Base

Table A6 - NonFeedlot^{Non-Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Flow_Rate	2.000	cfs	Non-feedlot flow rate
Total_Nitro	2.10	ppm	Non-feedlot nitrogen concentration
Total_Phos	2.20	ppm	Non-feedlot phosphorus concentration
Total_COD	2.30	ppm	Non-feedlot COD concentration
EnterCell	Top		Entrance at Cell

Table A7 - Feedlot^{Non-Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Feed_Area	15.00	acre	Feedlot area
Feed_CN	45.00		Curve number for feedlot
Roof_Area	2.00	acre	Roofed area
Feed_Nitro	300	ppm	Nitrogen concentrations for feedlot runoff
Feed_Phos	85	ppm	Phosphorus concentrations for feedlot runoff
Feed_COD	4500	ppm	COD concentrations for feedlot runoff
Ind_Buffer	AGNPS		Buffer indicator
RedOF_Nitro	12.0	%	Nitrogen reduction in overland flow
RedOF_Phos	13.0	%	Phosphorus reduction in overland flow
RedOF_COD	14.0	%	COD reduction in overland flow
RedGW_Nitro	24.0	%	Nitrogen reduction in grass waterways
RedGW_Phos	23.0	%	Phosphorus reduction in grass waterways
RedGW_COD	22.0	%	COD reduction in grass waterways
Sub_Area2(1)	3.00	acre	Tributary area 2 in feedlot (six subareas)
Sub_Area2(2)	1.00	acre	Tributary area 2 in feedlot
...
Sub_Area2(5)	2.00	acre	Tributary area 2 in feedlot
Sub_Area2(6)	2.00	acre	Tributary area 2 in feedlot
CN_Area2(1)	35.00		Curve number for area 2 (six subareas)
CN_Area2(2)	45.00		Curve number for area 2
...
CN_Area2(5)	15.00		Curve number for area 2
CN_Area2(6)	10.00		Curve number for area 2
Sub_Area3(1)	1.00	acre	Adjacent area 3 in feedlot (six subareas)
Sub_Area3(2)	1.00	acre	Adjacent area 3 in feedlot

Table A7 - Feedlot^{Non-Grid} (Cont.)

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Sub_Area3(5)	0.00	acre	Adjacent area 3 in feedlot
Sub_Area3(6)	0.00	acre	Adjacent area 3 in feedlot
CN_Area3(1)	13.00		Curve number for area 3 (six subareas)
CN_Area3(2)	14.00		Curve number for area 3
...
CN_Area3(5)	0.00		Curve number for area 3
CN_Area3(6)	0.00		Curve number for area 3
Buff_Slope(1)	4.00	%	Slope of buffer area
Buff_Slope(2)	2.00	%	Slope of buffer area
Buff_Slope(3)	3.00	%	Slope of buffer area
Buff_SurfC(1)	0.25		Surface condition in buffer area
Buff_SurfC(2)	0.24		Surface condition in buffer area
Buff_SurfC(3)	0.22		Surface condition in buffer area
Buff_FLeng(1)	100	ft	Length of buffer strip
Buff_FLeng(2)	120	ft	Length of buffer strip
Buff_FLeng(3)	140	ft	Length of buffer strip
Anim_No(1)	100		Number of animals
Anim_No(2)	1000		Number of animals
Anim_No(3)	9999		Number of animals
Anim_COD(1)	0.17		COD ratio produced by each type of animal*
Anim_COD(2)	0.18		COD ratio produced by each type of animal*
Anim_COD(3)	0.01		COD ratio produced by each type of animal*
Anim_Phos(1)	0.07		Phosphorus ratio produced by animal type*
Anim_Phos(2)	0.06		Phosphorus ratio produced by animal type*
Anim_Phos(3)	0.01		Phosphorus ratio produced by animal type*
Anim_Nitro(1)	0.26		Nitrogen ratio produced by animal type*
Anim_Nitro(2)	0.13		Nitrogen ratio produced by animal type*
Anim_Nitro(3)	0.03		Nitrogen ratio produced by animal type*

*A 1,000 pound slaughter steer is used as a standard in representing the amount of each pollutant produced on a regular basis. Thus, the amount of pollutant produced by a beef animal is represented by a value of one, with the amount produced by all other animals being relative to that.

Table A8 - Additional Erosion^{Non-Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Eros_Type	Gully		Type of additional erosion (option)
Eros_Amount	2	tons	Amount of additional erosion
Eros_SoilType	1		Soil texture (default = from cell soil texture)
SoilBack_Nitro	0.2000	lb/lb soil	Nitrogen background concentration in soil
SoilBack_Phos	0.2500	lb/lb soil	Phosphorus background concentration in soil
Desc_ErosType	other...		Description by user for 'other' option

Table A9 - Impoundment^{Non-Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Imp_Area	1.5	acre	Drainage area
Diam_Pipe	1	in	Diameter of pipe outlet
Inf_Rate	0.70	in/hr	Infiltration rate (default)

Table A10 - Channel Information^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Chan_Width	12.00	ft	Channel Width (NonGeomorphic)
Chan_WidthCoef	3.4250		Default =3.4250 -always value
Chan_WidthExp	0.3151		Default =0.3151 -always value
Chan_Depth	2.80	ft	Channel Depth (NonGeomorphic)
Chan_DepthCoef	0.4537		Default =0.4537 -always value
Chan_DepthExp	0.2192		Default =0.2192 -always value
Chan_Length	135.00	ft	Channel Length (NonGeomorphic)
Chan_LengthCoef	153.000		Default =153.000 -always value
Chan_LengthExp	0.6000		Default =0.6000 -always value
Chan_Slope	1.80	%	Default =1/2 LandSlope -always value
Chan_SideSlope	10.00	%	Default =10 -always value
Chan_ManningN	0.040		Default =0.040 -always value
UseDecay	Yes		Use AGNPS Decay values (yes/no)
Decay_Nitro	50	%	Nitrogen decay percent
Decay_Phos	50	%	Phosphorus decay percent
Decay_COD	50	%	COD decay percent
Allow_Clay	x		Allow scouring of Clay
Allow_Silt	x		Allow scouring of Silt
Allow_SAgg	x		Allow scouring of Small Aggregates
Allow_LAgg	x		Allow scouring of Large Aggregates
Allow_Sand	x		Allow scouring of Sand

Section A.2. AGNPS Output Tables (Reference - Table 4.1b):

Table A11 - Watershed Summary^{One Record/Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Watershed_ID	Title		Watershed Identification
DrainArea_Ttl	660.00	acres	Drainage Area of the Watershed
AreaBaseCell	40.00	acres	Area of each Base Cell
Precipitation	4.40	inches	Characteristic Storm Precipitation
EIValue	56.00		Storm Energy-Intensity Value
OutletCell	16,400		Watershed Outlet Cell
RunoffVolume	2.00	inches	Runoff Volume
PeakRate	552.00	cfs	Peak Runoff Rate
SedimentYield	174.68	tons	Total Sediment Yield
NitroSed	0.91	lbs/acre	Total Nitrogen in sediment
NitroRun	0.01	lbs/acre	Total Soluble Nitrogen in Runoff
NitroConcRun	0.02	ppm	Soluble Nitrogen Concentration in Runoff
PhosSed	0.46	lbs/acre	Total Phosphorus in sediment
PhosRun	0.00	lbs/acre	Total Soluble Phosphorus in Runoff
PhosConcRun	0.00	ppm	Soluble Phosphorus Concentration in Runoff
CODRun	0.25	lbs/acre	Total Soluble COD in Runoff
CODConcRun	0.56	ppm	Soluble COD Concentration in Runoff

Table A12 - Sediment Analysis^{One Record/Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
ClayAreaEUpland	0.07	ton/acre	Upland Area Weighted Clay Erosion
ClayDeliverRatio	97	%	Clay Delivery Ratio
ClayEnrichRatio	5		Clay Enrichment Ratio
ClayMeanConc	392.12	ppm	Clay Mean Concentration
ClayAreaYield	0.09	ton/acre	Area Weighted Clay Yield
ClayYield	58.50	tons	Total Clay Yield
SiltAreaEUpland	0.09	ton/acre	Upland Area Weighted Silt Erosion
SiltDeliverRatio	54	%	Silt Delivery Ratio
SiltEnrichRatio	3		Silt Enrichment Ratio
SiltMeanConc	231.49	ppm	Silt Mean Concentration
SiltAreaYield	0.05	ton/acre	Area Weighted Silt Yield
SiltYield	35.54	tons	Total Silt Yield
SAggAreaEUpland	0.58	ton/acre	Upland Area Weighted Small Agg. Erosion
SAggDeliverRatio	15	%	Small Agg. Delivery Ratio
SAggEnrichRatio	1		Small Agg. Enrichment Ratio
SAggMeanConc	381.12	ppm	Small Agg. Mean Concentration
SAggAreaYield	0.09	ton/acre	Area Weighted Small Agg. Yield
SAggYield	56.86	tons	Total Small Agg. Yield
LAggAreaEUpland	0.35	ton/acre	Upland Area Weighted Large Agg. Erosion
LAggDeliverRatio	8	%	Large Agg. Delivery Ratio
LAggEnrichRatio	0		Large Agg. Enrichment Ratio
LAggMeanConc	127.43	ppm	Large Agg. Mean Concentration
LAggAreaYield	0.03	ton/acre	Area Weighted Large Agg. Yield
LAggYield	19.01	tons	Total Large Agg. Yield
SandAreaEUpland	0.07	ton/acre	Upland Area Weighted Sand Erosion
SandDeliverRatio	11	%	Sand Delivery Ratio
SandEnrichRatio	1		Sand Enrichment Ratio
SandMeanConc	38.62	ppm	Sand Mean Concentration
SandAreaYield	0.01	ton/acre	Area Weighted Sand Yield
SandYield	5.76	tons	Total Sand Yield
TotalAreaEUpland	1.17	ton/acre	Upland Area Weighted Total Erosion
TotalDeliverRatio	23	%	Total Delivery Ratio
TotalEnrichRatio	1		Total Enrichment Ratio
TotalMeanConc	1170.76	ppm	Total Mean Concentration
TotalAreaYield	0.26	ton/acre	Area Weighted Total Yield
TotalYield	174.68	tons	Total Sediment Yield

Table A13 - Hydrology^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
DrainArea	80.00	acres	Drainage Area
OverlandRunoff	1.90	in	Overland Runoff
UpStrmRunoff	1.90	in	Upstream Runoff
UpStrmPeakF	97.38	cfs	Peak Flow Upstream
DownStrmRunoff	1.90	in	Downstream Runoff
DownStrmPeakF	133.22	cfs	Peak Flow Downstream
GenAbRunoff	50.0	%	Runoff Generated Above

Table A14 - Sediments^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
ClayCellErosion	0.05	ton/acre	Clay Cell Erosion
ClayGenAbove	1.56	tons	Clay Generated Above Cell
ClayGenWithin	1.93	tons	Clay Generated Within Cell
ClayCellYield	3.30	tons	Clay Cell Yield
ClayDeposition	5	%	Clay Cell Deposition
SiltCellErosion	0.08	ton/acre	Silt Cell Erosion
SiltGenAbove	1.94	tons	Silt Generated Above Cell
SiltGenWithin	3.09	tons	Silt Generated Within Cell
SiltCellYield	1.49	tons	Silt Cell Yield
SiltDeposition	70	%	Silt Cell Deposition
SAggCellErosion	0.48	ton/acre	Small Agg. Cell Erosion
SAggGenAbove	5.04	tons	Small Agg. Generated Above Cell
SAggGenWithin	19.29	tons	Small Agg. Generated Within Cell
SAggCellYield	1.03	tons	Small Agg. Cell Yield
SAggDeposition	96	%	Small Agg. Cell Deposition
LAggCellErosion	0.30	ton/acre	Large Agg. Cell Erosion
LAggGenAbove	0.10	tons	Large Agg. Generated Above Cell
LAggGenWithin	11.96	tons	Large Agg. Generated Within Cell
LAggCellYield	1.48	tons	Large Agg. Cell Yield
LAggDeposition	88	%	Large Agg. Cell Deposition
SandCellErosion	0.06	ton/acre	Sand Cell Erosion
SandGenAbove	0.03	tons	Sand Generated Above Cell
SandGenWithin	2.32	tons	Sand Generated Within Cell
SandCellYield	0.45	tons	Sand Cell Yield
SandDeposition	81	%	Sand Cell Deposition
TotalCellErosion	0.96	ton/acre	Total Cell Erosion
TotalGenAbove	8.67	tons	Total Generated Above Cell
TotalGenWithin	38.59	tons	Total Generated Within Cell
TotalCellYield	7.75	tons	Total Cell Yield
TotalDeposition	85	%	Total Cell Deposition

Table A15 - Nutrients^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
NitroSedWCell	3.07	lbs/acre	Nitrogen in Sediment Within Cell
NitroSedOCell	0.39	lbs/acre	Nitrogen in Sediment Cell Outlet
NitroWatWCell	2.92	lbs/acre	Nitrogen in Water Within Cell
NitroWatOCell	0.46	lbs/acre	Nitrogen in Water Cell Outlet
NitroConc	1.06	ppm	Nitrogen Concentration in Water
PhosSedWCell	1.54	lbs/acre	Phosphorus in Sediment Within Cell
PhosSedOCell	0.20	lbs/acre	Phosphorus in Sediment Cell Outlet
PhosWatWCell	0.59	lbs/acre	Phosphorus in Water Within Cell
PhosWatOCell	0.09	lbs/acre	Phosphorus in Water Cell Outlet
PhosConc	0.22	ppm	Phosphorus Concentration in Water
CODWatWCell	36.93	lbs/acre	COD in Water Within Cell
CODWatOCell	5.69	lbs/acre	COD in Water Cell Outlet
CODConc	13.25	ppm	COD Concentration in Water

Table A16 - Pesticide^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
DrainArea	80.00	acres	Drainage Area
PestMassWatWCell	0.02	lbs/acre	Pesticide Mass in Water Within Cell
PestConcWatWCell	0.04	ppm	Pesticide Concentration in Water Within Cell
PestPtgApWatWCell	0.75	%	Pesticide % of Application in Water Within Cell
PestMassWatOCell	0.01	lbs/acre	Pesticide Mass in Water at Cell Outlet
PestConcWatOCell	0.01	ppm	Pesticide Concentration in Water at Cell Outlet
PestMassSedWCell	0.00	lbs/acre	Pesticide Mass in Sediment Within Cell
PestConcSedWCell	0.95	ppm	Pesticide Concentration in Sediment Within Cell
PestPtgApSedWCell	0.02	%	Pesticide % of Application in Sediment Within Cell
PestMassSedOCell	0.00	lbs/acre	Pesticide Mass in Sediment at Cell Outlet
PestConcSedOCell	0.00	ppm	Pesticide Concentration in Sediment at Cell Outlet
PestMassPercWCell	0.05	lbs/acre	Pesticide Percolation Mass Within Cell
PestPtgApPercWCell	2.00	%	Pesticide Percolation % of Application Within Cell

Table A17 - Landuse Summary^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
BareGround	26	%	*LU - Class(1) = Bare ground
Forests	10	%	*LU - Class(2) = Forests
Crops	53	%	*LU - Class(3) = Fields with crops or low vegetation
Wetlands	10	%	*LU - Class(4) = Wetlands
Water	1	%	*LU - Class(5) = Water (nclass + 1)
Impervious	0	%	*LU - Class(6) = Impervious (nclass + 2)

*The number of variables depend on the classification scheme selected when creating the database structure.

Table A18 - Source_Deposition^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
clay_sheet	5159.86	lbs	Sheet clay source
clay_gully	0.00	lbs	Gully clay source
silt_sheet	8255.77	lbs	Sheet silt source
silt_gully	0.00	lbs	Gully silt source
sagg_sheet	51598.55	lbs	Sheet small aggregates source
sagg_gully	0.00	lbs	Gully small aggregates source
lagg_sheet	31991.10	lbs	Sheet large aggregates source
lagg_gully	0.00	lbs	Gully large aggregates source
sand_sheet	6191.83	lbs	Sheet sand source
sand_gully	0.00	lbs	Gully sand source
sed_n_overland	246.68	lbs	Sediment attached nitrogen in overland flow
sed_n_gully	0.00	lbs	Sediment attached nitrogen in gully erosion
sed_n_impound	246.68	lbs	Sediment attached nitrogen in impoundments
sed_p_overland	0.00	lbs	Sediment attached phosphorus in overland flow
sed_p_gully	1973.42	lbs	Sediment attached phosphorus in gully erosion
sed_p_impound	0.00	lbs	Sediment attached phosphorus in impoundments
sol_n_overland	2466.77	lbs	Soluble nitrogen in overland flow
sol_n_fertilizer	0.00	lbs	Soluble nitrogen due to fertilizer application
sol_n_feedlots	7400.32	lbs	Soluble nitrogen due to feedlots
sol_p_overland	857.98	lbs	Soluble phosphorus in overland flow

Table A18 - Source_Deposition^{Grid} (Cont)

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
sol_p_fertilizer	0.00	lbs	Soluble phosphorus due to fertilizer application
sol_p_feedlots	464.66	lbs	Soluble phosphorus due to feedlots
sol_cod_overland	0.00	lbs	Soluble COD in overland flow
sol_cod_feedlots	476.69	lbs	Soluble COD due to feedlots
runoff_volume	145.13	in-acre	Runoff volume
clay_bed	0.00	lbs	Bed and banks clay
clay_deposition	561.03	lbs	Deposition of clay
silt_bed	0.00	lbs	Bed and banks silt
silt_deposition	7347.65	lbs	Deposition of silt
sagg_bed	0.00	lbs	Bed and banks small aggregates
sagg_deposition	51317.55	lbs	Deposition of small aggregates
lagg_bed	0.00	lbs	Bed and banks large aggregates
lagg_deposition	31586.30	lbs	Deposition of large aggregates
sand_bed	0.00	lbs	Bed and banks sand
sand_deposition	6069.15	lbs	Deposition of sand
sed_n_deposition	246.68	lbs	Sediment attached deposition for nitrogen
sed_p_deposition	0.00	lbs	Sediment attached deposition for phosphorus
sol_n_decay	246.68	lbs	Water soluble decay of nitrogen
sol_p_decay	0.00	lbs	Water soluble decay of phosphorus
sol_cod_decay	1973.42	lbs	Water soluble decay of COD
sol_n_nonfeedlots	0.00	lbs	Water soluble nitrogen yield due to nonfeedlots
sol_p_nonfeedlots	2466.77	lbs	Water soluble phosphorus yield due to nonfeedlots
sol_cod_nonfeedlots	0.00	lbs	Water soluble COD yield due to nonfeedlots
sol_n_impoundments	0.00	lbs	Water soluble nitrogen yield due to impoundments
sol_p_impoundments	0.00	lbs	Water soluble phosphorus yield due to impoundments

*This variables are read from the binary files when AGNPS is executed with the accounting option selected.

Section A.3. WATFLOOD Input Tables (Reference - Table 4.2):

Table A19- Initial Watershed Data^{One Record/Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
<i>Watershed Data</i>			
Watershed_ID	Title		Watershed identification
IYMin	4790	km	Northing coordinate (From Coordinates Table)
IYMax	4900	km	Northing coordinate (From Coordinates Table)
JXMin	500	km	Easting coordinate (From Coordinates Table)
JXMax	580	km	Easting coordinate (From Coordinates Table)
GridSize	10000	m	Converted to m from GridSize in km (Coordinates)
Storms	3		LS - Maximum number of storm events *Not used
PrecStat	1		KS - Number of precipitation stations *Not used
StreamStat	9		JS - Number of streamflow stations *Not used
MaxLenRec	123	hrs	IH - Length of streamflow record *Not used
Local	0		LOCAL - Number of reservoirs *Used by developers
ContInterv	10	m	CINTVL - Contour interval
Impervious	0	%	IMPR - % of urban area that is impervious
PermClasses	5		NTYPE - Number of classes
Conversion	1		ELVCONV - Toggle (1=S.I. ; 0.305=Imperial)
<i>Water Quality Data</i>			
Nitrog_Rain	0.80	ppm	Nitrogen Concentration in Rainfall
Decay_Nitro	50	%	Nitrogen decay percent
Decay_Phos	50	%	Phosphorus decay percent
Soil_Nitro	0.0010	g N/g soil	Nitrogen concentration in soil
Soil_Phos	0.0005	g N/g soil	Phosphorus concentration in soil
PoreW_Nitro	5.00	ppm	Nitrogen concentration in pore water
PoreW_Phos	2.00	ppm	Phosphorus Concentration in pore water
ExtR_Nitro	0.05		Nitrogen extraction coefficient for runoff
ExtR_Phos	0.025		Phosphorus extraction coefficient for runoff

Table A20 - General Cell Data^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
RiverElev	781	m	ELV - Channel invert elevation
DrainArea	100	%	FRAC - Element drainage area
FlowDirection	5		S - Drainage direction
RiverType	1		IBN - River classification (1 to 5)
Contours	4		IROUGH - Contour density (No. of contours)
Channels	1		ICHNL - Channel density (No. of channels)
ExtRouting	0		IREACH - Routing reach number (External routing)
BareGround	26	%	*LU - Class(1) = Bare ground
Forests	10	%	*LU - Class(2) = Forests
Crops	53	%	*LU - Class(3) = Fields with crops or low vegetation
Wetlands	10	%	*LU - Class(4) = Wetlands
Water	1	%	*LU - Class(5) = Water (nclass + 1)
Impervious	0	%	*LU - Class(6) = Impervious (nclass + 2)

*The number of variables depend on the classification scheme selected when creating the database structure.

Table A21 - Soil^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
sand	0.0996	%	Soil type percentage (texture)
loamy sand	0.8120	%	Soil type percentage (texture)
sandy loam	0.7288	%	Soil type percentage (texture)
loam	0.1157	%	Soil type percentage (texture)
silt loam	0.4407	%	Soil type percentage (texture)
silt	0.8084	%	Soil type percentage (texture)
sandy clay loam	0.0996	%	Soil type percentage (texture)
clay loam	0.1470	%	Soil type percentage (texture)
silty clay loam	0.3228	%	Soil type percentage (texture)
sandy clay	0.8084	%	Soil type percentage (texture)
silty clay	0.1157	%	Soil type percentage (texture)
clay	0.7288	%	Soil type percentage (texture)
SizeD50	0.035	mm	d50 - Particle median diameter
SpecWght	2.01	-	Particle specific weight
Erodibility	1.553	g/J	D - Soil erodibility factor

Table A22 - Fertilizer^{Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Applied_Nitro	200	lb/acre	Nitrogen applied
Applied_Phos	80	lb/acre	Phosphorus applied
AvFac_Nitro	45	%	Availability factor for nitrogen
AvFac_Phos	55	%	Availability factor for phosphorus

Table A23 - Pesticide^{One Record/Grid}

<i>Variable</i>	<i>Sample</i>	<i>Unit</i>	<i>Variable Description</i>
Com_Name	ATRAZINE		Common Pesticide Name (DB)
Trad_Name	ATRATOL		Trade Name (DB)
Type_App	Preplant		Type of application (option value)
App_Time	5.0	days	Time since application
App_Rate	2.00	lb/acre	Application rate
App_Effic	75	%	Application efficiency (default=75)
Per_CanCov	20	%	Percent canopy cover (default=20)
SoilRes_Init	0.10	lb/acre	Initial soil residue
SoilRes_Half	60.0	days	Soil residue half life (DB)
Inc_Depth	1.00	in	Incorporation depth (default=1.0)
Inc_Effic	75	%	Incorporation efficiency
Solub_Wat	33.000	ppm	Solubility in water (DB)
OrgCar_Koc	100.000		Organic carbon sorption Koc (DB)
FolRes_Init	0.00	lb/acre	Initial foliar residue
FolWash_Thres	0.10	in	Foliar washoff threshold (default=0.10)
FolWash_Frac	45	%	Foliar washoff fraction (DB)
FolRes_Half	5.0	days	Foliar residue half life (DB)

(DB) - Available from Pesticide Data Base