BMP scenario	Land use groups[a]	Model	Model structure and variable
No-BMP	crop-groups_2, nonvegetated lands, forestry	Dis1	Discharge $= f$ (PCP, TMP, SOL_K, land-use-groups_2)
Tillage	general crops, grains, grasses	Dis2	Discharge $= f$ (PCP, TMP, SOL_K)
FDT + tillage	general crops, grains, grasses	Dis3	Discharge $= f$ (PCP, TMP, SOL_K)
No-BMP	crop-groups_1, grasses	Sed1_1	$\text{Sediment}^{(1/10)} = f$ (USLE_LS, PCP, TMP, SOL_K, land-use-groups_1)
	nonvegetated lands,	Sed1_2	$\text{Sediment}^{(1/10)} = f$ (USLE_LS, PCP)
	forestry	Sed1_3	$\text{Sediment}^{(1/10)} = f$ (USLE_LS, PCP, SOL_K)
Tillage	crop-groups_1, grasses	Sed2	$\text{Sediment}^{(1/10)} = f$(USLE_LS, PCP, TMP, SOL_K, land-use-groups_1)
FDT + tillage	general crops, grains, grasses	Sed3	Sediment = Sed1_1 × TERR_P
No-BMP	general crops, grains, grasses	N1_1	$\log(NO_3 - N) = f$ (N_APP, PCP, TMP, SOL_K, land use groups)
	nonvegetated lands,	N1_2[b]	$NO_3 - N = 24\,\text{kg ha}^{-1}$
	forestry	N1_3	$\log(NO_3 - N) = f$ (PCP, TMP, SOL_K)
Tillage	general crops, grains, grasses	N2	$\log(NO_3 - N) = f$ (N_APP, PCP, TMP, SOL_K, land use groups)
FDT + tillage	crop-groups_3, grains	N3	$\log(NO_3 - N) = f$ (N_APP, PCP, TMP, SOL_K, land-use-groups_3)
No-BMP	crop-groups_1, grasses	P1_1	$\log(\text{Sol} - \text{P}) = f$ (P_APP, PCP, TMP, SOL_K, land-use-groups_1)
	nonvegetated lands,	P1_2[b]	$\text{Sol} - \text{P} = 0.61\,\text{kg ha}^{-1}$
	forestry	P1_3	$\log(\text{Sol} - \text{P}) = f$ (PCP, TMP, SOL_K)
Tillage	crop-groups_1, grasses	P2	$\log(\text{Sol} - \text{P}) = f$ (P_APP, PCP, TMP, SOL_K, land-use-groups_1)
FDT + tillage	general crops, grains, grasses	P3	$\log(\text{Sol} - \text{P}) = f$ (P_APP, PCP, TMP, SOL_K, land use groups)