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/** ----- Models A, B, and C raster data classed by Natural Breaks -----
/** FILE NAME:      Mods_ABC_NBs.txt
/** AUTHOR:        RENEE SCHICKER
/** CREATED:       26 JANUARY 2010
/** MODIFIED:      22 FEBRUARY 2010
/**
/** The scripts may be supplied in a more readily useable format if the work is acknowledged
/** CONTACT:       Renee_Schicker@hotmail.com
/**
/** SCRIPTS USED:      CheckProgGrid.txt
/**
/** PURPOSE:        Classify the weights of evidence raster landslide susceptibility data for the
/**                  three models of interest using the Natural Breaks intervals observed for
/**                  each in ArcMap. The resulting raster data layer will have only 5 different
/**                  values (1 = Very Low to 5 = Very High).
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&CALL W_slxLG_NB          /* Model A (Slope, Max Rain, Land Cover, Geology)
&CALL W_slxLGF_NB        /* Model B (Slope, Max Rain, Land Cover, Geology, Faults)
&CALL W_slxLGAs_NB       /* Model C (Slope, Max Rain, Land Cover, Geology, Aspect)
&RETURN

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/*****
&ROUTINE SETUP
&RUN d:\renee_gis\scripts\checkproggrid.txt
&TYPE set window to rain98av...
SETWINDOW D:\Renee_GIS\Output_data\Organised\11_Rain\rain98av
SETMASK D:\Renee_GIS\Output_data\Organised\11_Rain\rain98av
&TYPE setmask complete
&RETURN

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/*****
&ROUTINE W_slxLG_NB

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&SETVAR .NB_B1 = 30.50654411
&SETVAR .NB_B2 = 55.94763947
&SETVAR .NB_B3 = 68.86739349
&SETVAR .NB_B4 = 82.18554688

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&CALL SETUP
WoEVL = CON(pwslmxlcg le %.NB_B1%, 1, 0)
WoEL = CON(pwslmxlcg gt %.NB_B1% and pwslmxlcg le %.NB_B2%, 2, 0)
WoEM = CON(pwslmxlcg gt %.NB_B2% and pwslmxlcg le %.NB_B3%, 3, 0)
WoEH = CON(pwslmxlcg gt %.NB_B3% and pwslmxlcg le %.NB_B4%, 4, 0)
WoEVH = CON(pwslmxlcg gt %.NB_B4%, 5, 0)
LSIClass = (WoEVL + WoEL + WoEM + WoEH + WoEVH)
KILL WoEVL
KILL WoEL
KILL WoEM

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KILL WoEH
KILL WoEVH
SETMASK off
Q
&IF [EXIST SlxLG_NB -COVER] &THEN KILL slxLG_NB
&IF [EXIST QGLI_SlxLG_NB -COVER] &THEN KILL QGLI_SlxLG_NB
GRIDPOLY LSIClass SlxLG_NB
KILL LSIClass
UNION D:\Renee_GIS\Output_data\Organised\04_Inventory\li_extent SlxLG_NB QLI_SlxLG_NB
&RETURN

/*****
&ROUTINE W_slxLGF_NB

&SETVAR .NB_B1 = 43.80463028
&SETVAR .NB_B2 = 58.25192642
&SETVAR .NB_B3 = 70.79692078
&SETVAR .NB_B4 = 83.34189606

&CALL SETUP
WoEVL = CON(pwslmxlcgfl le %.NB_B1%, 1, 0)
WoEL = CON(pwslmxlcgfl gt %.NB_B1% and pwslmxlcgfl le %.NB_B2%, 2, 0)
WoEM = CON(pwslmxlcgfl gt %.NB_B2% and pwslmxlcgfl le %.NB_B3%, 3, 0)
WoEH = CON(pwslmxlcgfl gt %.NB_B3% and pwslmxlcgfl le %.NB_B4%, 4, 0)
WoEVH = CON(pwslmxlcgfl gt %.NB_B4%, 5, 0)
LSIClass = (WoEVL + WoEL + WoEM + WoEH + WoEVH)
KILL WoEVL
KILL WoEL
KILL WoEM
KILL WoEH
KILL WoEVH
SETMASK off
Q
&IF [EXIST SlxLGF_NB -COVER] &THEN KILL slxLGF_NB
&IF [EXIST QGLI_SlxLGF_NB -COVER] &THEN KILL QGLI_SlxLGF_NB
GRIDPOLY LSIClass SlxLGF_NB
KILL LSIClass
UNION D:\Renee_GIS\Output_data\Organised\04_Inventory\li_extent SlxLGF_NB QLI_SlxLGF_NB
&RETURN

/*****
&ROUTINE W_slxLGAs_NB

&SETVAR .NB_B1 = 32.24298859
&SETVAR .NB_B2 = 57.73624039
&SETVAR .NB_B3 = 70.35306549
&SETVAR .NB_B4 = 82.76220703

&CALL SETUP
WoEVL = CON(pwsaslcmrge le %.NB_B1%, 1, 0)
WoEL = CON(pwsaslcmrge gt %.NB_B1% and pwsaslcmrge le %.NB_B2%, 2, 0)

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WoEM = CON(pwsaslcmrge gt %.NB_B2% and pwsaslcmrge le %.NB_B3%, 3, 0)
WoEH = CON(pwsaslcmrge gt %.NB_B3% and pwsaslcmrge le %.NB_B4%, 4, 0)
WoEVH = CON(pwsaslcmrge gt %.NB_B4%, 5, 0)
LSIClass = (WoEVL + WoEL + WoEM + WoEH + WoEVH)
KILL WoEVL
KILL WoEL
KILL WoEM
KILL WoEH
KILL WoEVH
SETMASK off
Q
&IF [EXIST slxLGAs_NB -COVER] &THEN KILL slxLGAs_NB
&IF [EXIST QGLI_sxLGA_NB -COVER] &THEN KILL QGLI_sxLGA_NB
GRIDPOLY LSIClass slxLGAs_NB
KILL LSIClass
UNION D:\Renee_GIS\Output_data\Organised\04_Inventory\li_extent slxLGAs_NB QLI_sxLGA_NB
&RETURN
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/*****
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