

```

/** ----- VALIDATION/EVALUATION PREPARATION -----
/** FILE NAME: Valid_prep.txt
/** AUTHOR: RENEE SCHICKER
/** CREATED: 12 JANUARY 2010
/** MODIFIED: 09 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: GE_Grids.txt
/**
/** PURPOSE: Split the susceptibility output into four parts as the covers are too large and
/** detailed (too much information) for ARC to process, as an ERROR kept
/** resulting part way through the union process when attempted on all data at
/** once.
/** PROCESSES:
/** Divisions Convert the shapefiles of the four divisions (Auckland, Waikato,
/** North Rotorua, and South Rotorua) to cover and also to grid format.
/**
/** Div_LI Clip the landslide inventory to each of the divisions.
/**
/** All others: All remaining processes relate to a susceptibility output. The
/** majority of these are using weights of evidence. Logistic regression
/** is included also (LR_Set1_Eqn2).
/**
/** *****

```

WORKSPACE D:\Renee_GIS\Valid_temp

```
/*&CALL Divisions
```

```
/*&CALL Div_LI
```

```
/*&CALL WoE_All
```

```
/*&CALL WoE_No_Asp
```

```
&CALL WoE_No_AvR
```

```
/*&CALL WoE_No_Elv
```

```
/*&CALL WoE_No_Flt
```

```
/*&CALL WoE_No_MxR
```

```
/*&CALL WoE_No_Rds
```

```
/*&CALL WoE_No_Riv
```

```
/*&CALL WoE_No_Slp
```

```
/*&CALL WoE_No_Soil
```

```
/*&CALL WoE_No_Geol
```

```
/*&CALL WoE_No_LndU
```

```
/*&CALL WoE_No_QMap
```

```
/*&CALL WoE_No_Rain
```

```
/*&CALL WoE_No_Lin
```

```
/*&CALL WoE_No_LinRn
```

```
/*&CALL WoE_SIAvRLUGe
```

```
/*&CALL WOE_SAXLGEFV
```

```
/*&CALL WOE_SAXLGEV
```

```

/*&CALL WOE_SAXLGFV
/*&CALL WOE_SAXLGEF
/*&CALL WOE_SAXLGF
/*&CALL WOE_SAXLGE
/*&CALL WOE_SAXLGV
&CALL LR_Set1_Eqn2
/*&CALL Signif_sC
/*&CALL Signif_Wf
/*&CALL W_SAsLCMR
/*&CALL W_SAsLCSMR
/*&CALL W_SAsLCMRGe
&CALL W_SIMxLG
&CALL W_SlxLGF
&CALL W_SlxLGA
&R D:\renee_gis\scripts\GE_Grids.txt
&RETURN

```

```

/*****

```

```

&ROUTINE Divisions

```

```

/* Convert regional divisions from shape file to cover

```

```

&IF [EXIST N_Roto_Area -COVER] &THEN KILL N_Roto_Area
SHAPEARC D:\Renee_GIS\Valid_temp\Roto_N_Area temp
BUILD temp POLY
CLEAN temp N_Roto_Area
KILL temp

```

```

&IF [EXIST S_Roto_Area -COVER] &THEN KILL S_Roto_Area
SHAPEARC D:\Renee_GIS\Valid_temp\Roto_S_Area temp
BUILD temp POLY
CLEAN temp S_Roto_Area
KILL temp

```

```

&IF [EXIST Auckland_Area -COVER] &THEN KILL Auckland_Area
SHAPEARC D:\Renee_GIS\Valid_temp\Auck_Area temp
BUILD temp POLY
CLEAN temp Auckland_Area
KILL temp

```

```

&IF [EXIST Waikato_Area -COVER] &THEN KILL Waikato_Area
SHAPEARC D:\Renee_GIS\Valid_temp\Waik_Area temp
BUILD temp POLY
CLEAN temp Waikato_Area
KILL temp

```

```

/* Convert division masks to raster

```

```

&IF [EXIST AuckDiv -GRID] &THEN KILL AuckDiv
POLYGRID Auckland_Area AuckDiv
25
y

```

```
&IF [EXIST WaikDiv -GRID] &THEN KILL WaikDiv
POLYGRID Waikato_Area WaikDiv
25
Y
```

```
&IF [EXIST NRotoDiv -GRID] &THEN KILL NRotoDiv
POLYGRID N_Roto_Area NRotoDiv
25
Y
```

```
&IF [EXIST SRotoDiv -GRID] &THEN KILL SRotoDiv
POLYGRID S_Roto_Area SRotoDiv
25
Y
```

```
&RETURN
```

```
/*****
&ROUTINE Div_LI
/* Copy landslide inventory
```

```
COPY D:\Renee_GIS\Output_data\Organised\04_Inventory\li_extent L_inventory
DROPITEM L_inventory.pat L_inventory.pat QMAP_W_LANDSL# QMAP_W_LANDSL-ID
QMAP_A_LANDSL# QMAP_A_LANDSL-ID
DROPITEM L_inventory.pat L_inventory.pat QMAP_LANDSL# QMAP_LANDSL-ID LI_EXTENT#
LI_EXTENT-ID
```

```
CLIP L_Inventory Auckland_Area Auck_LI POLY
CLIP L_Inventory Waikato_Area Waik_LI POLY
CLIP L_Inventory N_Roto_Area N_Roto_LI POLY
CLIP L_Inventory S_Roto_Area S_Roto_LI POLY
```

```
&RETURN
/*****
```

```
&ROUTINE WoE_All
&TYPE Weights of Evidence using All factors
&CALL Setup
```

```
SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoEAll = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoEAll)
SETMASK off
```

```
SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoEAll = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoEAll)
SETMASK off
```

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoEAll = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoEAll)
SETMASK off

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpWoEAll = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoEAll)
SETMASK off
Q

&TYPE Grid to cover stage
GRIDPOLY ApWoEAll A_W_All
GRIDPOLY WpWoEAll W_W_All
GRIDPOLY NRpWoEAll NR_W_All
GRIDPOLY SRpWoEAll SR_W_All

KILL ApWoEAll
KILL WpWoEAll
KILL NRpWoEAll
KILL SRpWoEAll

&Type unioning with landslide inventory
UNION A_W_All Auck_LI WAllI1
UNION W_W_All Waik_LI WAllI2
UNION NR_W_All N_Roto_LI WAllI3
UNION SR_W_All S_Roto_LI WAllI4

KILL A_W_All
KILL W_W_All
KILL NR_W_All
KILL SR_W_All

DROPITEM wAllI1.pat wAllI1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id a_W_All#
a_W_All-id
DROPITEM wAllI2.pat wAllI2.pat waik_li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_All# w_W_All-id
DROPITEM wAllI3.pat wAllI3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
nr_W_All# nr_W_All-id
DROPITEM wAllI4.pat wAllI4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
sr_W_All# sr_W_All-id
&RETURN

/*****
&ROUTINE WoE_No_Asp
&TYPE Weights of Evidence Excluding Aspect factor
&CALL Setup

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region

```
ApWoExAsp =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoAsp)  
SETMASK off
```

```
SETMASK WaikDiv  
&TYPE Mask set for Waikato division of Waikato Region  
WpWoExAsp =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoAsp)  
SETMASK off
```

```
SETMASK NRotoDiv  
&TYPE Mask set for Northern Rotorua division of Waikato Region  
NRpWoExAsp =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoAsp)  
SETMASK off
```

```
SETMASK SRotoDiv  
&TYPE Mask set for Southern Rotorua division of Waikato Region  
SRpWoExAsp =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoAsp)  
SETMASK off  
Q
```

```
&TYPE Grid to cover stage  
GRIDPOLY ApWoExAsp A_W_xAsp  
GRIDPOLY WpWoExAsp W_W_xAsp  
GRIDPOLY NRpWoExAsp NR_W_xAsp  
GRIDPOLY SRpWoExAsp SR_W_xAsp
```

```
KILL ApWoExAsp  
KILL WpWoExAsp  
KILL NRpWoExAsp  
KILL SRpWoExAsp
```

```
&Type unioning with landslide inventory  
UNION A_W_xAsp Auck_LI WxAspLI1  
UNION W_W_xAsp Waik_LI WxAspLI2  
UNION NR_W_xAsp N_Roto_LI WxAspLI3  
UNION SR_W_xAsp S_Roto_LI WxAspLI4
```

```
KILL A_W_xAsp  
KILL W_W_xAsp  
KILL NR_W_xAsp  
KILL SR_W_xAsp
```

```
DROPITEM wxAspli1.pat wxAspli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id  
a_W_xAsp# a_W_xAsp-id  
DROPITEM wxAspli2.pat wxAspli2.pat waik_li# waik_li-id radius QMap_Landsl# Qmap_landsl-id  
w_W_xAsp# w_W_xAsp-id  
DROPITEM wxAspli3.pat wxAspli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl# Qmap_landsl-  
id nr_W_xAsp# nr_W_xAsp-id
```

```
DROPITEM wxAspli4.pat wxAspli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
sr_W_xAsp# sr_W_xAsp-id
&RETURN
```

```
/*****
```

```
&ROUTINE WoE_No_AvR
&TYPE Weights of Evidence Excluding Mean Rainfall factor
&CALL Setup
```

```
SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoExAvR =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoAvR)
SETMASK off
```

```
SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoExAvR =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoAvR)
SETMASK off
```

```
SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoExAvR =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoAvR)
SETMASK off
```

```
SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpWoExAvR =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoAvR)
SETMASK off
```

```
Q
```

```
&TYPE Grid to cover stage
GRIDPOLY ApWoExAvR A_W_xAvR
GRIDPOLY WpWoExAvR W_W_xAvR
GRIDPOLY NRpWoExAvR NR_W_xAvR
GRIDPOLY SRpWoExAvR SR_W_xAvR
```

```
KILL ApWoExAvR
KILL WpWoExAvR
KILL NRpWoExAvR
KILL SRpWoExAvR
```

```
&Type unioning with landslide inventory
UNION A_W_xAvR Auck_LI WxAvRLI1
UNION W_W_xAvR Waik_LI WxAvRLI2
UNION NR_W_xAvR N_Roto_LI WxAvRLI3
UNION SR_W_xAvR S_Roto_LI WxAvRLI4
```

KILL A_W_xAvR
KILL W_W_xAvR
KILL NR_W_xAvR
KILL SR_W_xAvR

DROPITEM wxAvRli1.pat wxAvRli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_xAvR# a_W_xAvR-id
DROPITEM wxAvRli2.pat wxAvRli2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_xAvR# w_W_xAvR-id
DROPITEM wxAvRli3.pat wxAvRli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl# Qmap_landsl-
id nr_W_xAvR# nr_W_xAvR-id
DROPITEM wxAvRli4.pat wxAvRli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
sr_W_xAvR# sr_W_xAvR-id
&RETURN

/*****

&ROUTINE WoE_No_Elv
&TYPE Weights of Evidence Excluding Elevation factor
&CALL Setup

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoExElv =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoElv)
SETMASK off

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoExElv =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoElv)
SETMASK off

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoExElv =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoElv)
SETMASK off

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpWoExElv =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoElv)
SETMASK off
Q

&TYPE Grid to cover stage
GRIDPOLY ApWoExElv A_W_xElv
GRIDPOLY WpWoExElv W_W_xElv
GRIDPOLY NRpWoExElv NR_W_xElv
GRIDPOLY SRpWoExElv SR_W_xElv

KILL ApWoExElv
KILL WpWoExElv
KILL NRpWoExElv
KILL SRpWoExElv

&Type unioning with landslide inventory
UNION A_W_xElv Auck_LI WxElvLI1
UNION W_W_xElv Waik_LI WxElvLI2
UNION NR_W_xElv N_Roto_LI WxElvLI3
UNION SR_W_xElv S_Roto_LI WxElvLI4

KILL A_W_xElv
KILL W_W_xElv
KILL NR_W_xElv
KILL SR_W_xElv

DROPITEM wxElvli1.pat wxElvli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_xElv# a_W_xElv-id
DROPITEM wxElvli2.pat wxElvli2.pat waik_li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_xElv# w_W_xElv-id
DROPITEM wxElvli3.pat wxElvli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
nr_W_xElv# nr_W_xElv-id
DROPITEM wxElvli4.pat wxElvli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
sr_W_xElv# sr_W_xElv-id
&RETURN

/*****

&ROUTINE WoE_No_Flt
&TYPE Weights of Evidence Excluding Distance from Faults factor
&CALL Setup

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoExFlt =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoFlt)
SETMASK off

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoExFlt =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoFlt)
SETMASK off

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoExFlt =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoFlt)
SETMASK off

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region


```
SRpWoExFlt =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoFlt)  
SETMASK off  
Q
```

```
&TYPE Grid to cover stage  
GRIDPOLY ApWoExFlt A_W_xFlt  
GRIDPOLY WpWoExFlt W_W_xFlt  
GRIDPOLY NRpWoExFlt NR_W_xFlt  
GRIDPOLY SRpWoExFlt SR_W_xFlt
```

```
KILL ApWoExFlt  
KILL WpWoExFlt  
KILL NRpWoExFlt  
KILL SRpWoExFlt
```

```
&Type unioning with landslide inventory  
UNION A_W_xFlt Auck_LI WxFltLI1  
UNION W_W_xFlt Waik_LI WxFltLI2  
UNION NR_W_xFlt N_Roto_LI WxFltLI3  
UNION SR_W_xFlt S_Roto_LI WxFltLI4
```

```
KILL A_W_xFlt  
KILL W_W_xFlt  
KILL NR_W_xFlt  
KILL SR_W_xFlt
```

```
DROPITEM wxFltli1.pat wxFltli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id  
a_W_xFlt# a_W_xFlt-id  
DROPITEM wxFltli2.pat wxFltli2.pat waik_li# waik_li-id radius QMap_Landsl# Qmap_landsl-id  
w_W_xFlt# w_W_xFlt-id  
DROPITEM wxFltli3.pat wxFltli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl# Qmap_landsl-id  
nr_W_xFlt# nr_W_xFlt-id  
DROPITEM wxFltli4.pat wxFltli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-id  
sr_W_xFlt# sr_W_xFlt-id  
&RETURN
```

```
/*****
```

```
&ROUTINE WoE_No_MxR  
&TYPE Weights of Evidence Excluding Maximum Rainfall factor  
&CALL Setup
```

```
SETMASK AuckDiv  
&TYPE Mask set for Auckland division of Waikato Region  
ApWoExMxR =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoMxR)  
SETMASK off
```

```
SETMASK WaikDiv  
&TYPE Mask set for Waikato division of Waikato Region
```

```
WpWoExMxR =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoMxR)  
SETMASK off
```

```
SETMASK NRotoDiv  
&TYPE Mask set for Northern Rotorua division of Waikato Region  
NRpWoExMxR =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoMxR)  
SETMASK off
```

```
SETMASK SRotoDiv  
&TYPE Mask set for Southern Rotorua division of Waikato Region  
SRpWoExMxR =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoMxR)  
SETMASK off
```

Q

```
&TYPE Grid to cover stage  
GRIDPOLY ApWoExMxR A_W_xMxR  
GRIDPOLY WpWoExMxR W_W_xMxR  
GRIDPOLY NRpWoExMxR NR_W_xMxR  
GRIDPOLY SRpWoExMxR SR_W_xMxR
```

```
KILL ApWoExMxr  
KILL WpWoExMxr  
KILL NRpWoExMxr  
KILL SRpWoExMxr
```

```
&Type unioning with landslide inventory  
UNION A_W_xMxR Auck_LI WxMxRLI1  
UNION W_W_xMxR Waik_LI WxMxRLI2  
UNION NR_W_xMxR N_Roto_LI WxMxRLI3  
UNION SR_W_xMxR S_Roto_LI WxMxRLI4
```

```
KILL A_W_xMxr  
KILL W_W_xMxr  
KILL NR_W_xMxr  
KILL SR_W_xMxr
```

```
DROPITEM wxMxrli1.pat wxMxrli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id  
a_W_xMxr# a_W_xMxr-id  
DROPITEM wxMxrli2.pat wxMxrli2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-id  
w_W_xMxr# w_W_xMxr-id  
DROPITEM wxMxrli3.pat wxMxrli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl# Qmap_landsl-  
id nr_W_xMxr# nr_W_xMxr-id  
DROPITEM wxMxrli4.pat wxMxrli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-  
id sr_W_xMxr# sr_W_xMxr-id  
&RETURN
```

```
/*****  
&ROUTINE WoE_No_Rds
```

&TYPE Weights of Evidence Excluding Distance from Roads factor
&CALL Setup

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoExRds =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoRds)
SETMASK off

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoExRds =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoRds)
SETMASK off

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoExRds =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoRds)
SETMASK off

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpWoExRds =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoRds)
SETMASK off
Q

&TYPE Grid to cover stage
GRIDPOLY ApWoExRds A_W_xRds
GRIDPOLY WpWoExRds W_W_xRds
GRIDPOLY NRpWoExRds NR_W_xRds
GRIDPOLY SRpWoExRds SR_W_xRds

KILL ApWoExRds
KILL WpWoExRds
KILL NRpWoExRds
KILL SRpWoExRds

&Type unioning with landslide inventory
UNION A_W_xRds Auck_LI WxRdsLI1
UNION W_W_xRds Waik_LI WxRdsLI2
UNION NR_W_xRds N_Roto_LI WxRdsLI3
UNION SR_W_xRds S_Roto_LI WxRdsLI4

KILL A_W_xRds
KILL W_W_xRds
KILL NR_W_xRds
KILL SR_W_xRds

```

DROPITEM wxRdsli1.pat wxRdsli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_xRds# a_W_xRds-id
DROPITEM wxRdsli2.pat wxRdsli2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_xRds# w_W_xRds-id
DROPITEM wxRdsli3.pat wxRdsli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl# Qmap_landsl-
id nr_W_xRds# nr_W_xRds-id
DROPITEM wxRdsli4.pat wxRdsli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
sr_W_xRds# sr_W_xRds-id
&RETURN

```

```

/*****

```

```

&ROUTINE WoE_No_Riv
&TYPE Weights of Evidence Excluding Distance from Rivers factor
&CALL Setup

```

```

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoExRiv =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoRiv)
SETMASK off

```

```

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoExRiv =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoRiv)
SETMASK off

```

```

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoExRiv =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoRiv)
SETMASK off

```

```

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpWoExRiv =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoRiv)
SETMASK off

```

Q

```

&TYPE Grid to cover stage
GRIDPOLY ApWoExRiv A_W_xRiv
GRIDPOLY WpWoExRiv W_W_xRiv
GRIDPOLY NRpWoExRiv NR_W_xRiv
GRIDPOLY SRpWoExRiv SR_W_xRiv

```

```

KILL ApWoExRiv
KILL WpWoExRiv
KILL NRpWoExRiv
KILL SRpWoExRiv

```

```
&Type unioning with landslide inventory
UNION A_W_xRiv Auck_LI WxRivLI1
UNION W_W_xRiv Waik_LI WxRivLI2
UNION NR_W_xRiv N_Roto_LI WxRivLI3
UNION SR_W_xRiv S_Roto_LI WxRivLI4
```

```
KILL A_W_xRiv
KILL W_W_xRiv
KILL NR_W_xRiv
KILL SR_W_xRiv
```

```
DROPITEM wxRivli1.pat wxRivli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_xRiv# a_W_xRiv-id
DROPITEM wxRivli2.pat wxRivli2.pat waik_li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_xRiv# w_W_xRiv-id
DROPITEM wxRivli3.pat wxRivli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
nr_W_xRiv# nr_W_xRiv-id
DROPITEM wxRivli4.pat wxRivli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
sr_W_xRiv# sr_W_xRiv-id
&RETURN
```

```
/*****
```

```
&ROUTINE WoE_No_Slp
&TYPE Weights of Evidence Excluding Slope factor
&CALL Setup
```

```
SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoExSlp =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoSlp)
SETMASK off
```

```
SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoExSlp =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoSlp)
SETMASK off
```

```
SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoExSlp =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoSlp)
SETMASK off
```

```
SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpWoExSlp =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoSlp)
SETMASK off
```

```
Q
```

```
&TYPE Grid to cover stage
GRIDPOLY ApWoExSlp A_W_xSlp
GRIDPOLY WpWoExSlp W_W_xSlp
GRIDPOLY NRpWoExSlp NR_W_xSlp
GRIDPOLY SRpWoExSlp SR_W_xSlp
```

```
KILL ApWoExSlp
KILL WpWoExSlp
KILL NRpWoExSlp
KILL SRpWoExSlp
```

```
&Type unioning with landslide inventory
UNION A_W_xSlp Auck_LI WxSlpLI1
UNION W_W_xSlp Waik_LI WxSlpLI2
UNION NR_W_xSlp N_Roto_LI WxSlpLI3
UNION SR_W_xSlp S_Roto_LI WxSlpLI4
```

```
KILL A_W_xSlp
KILL W_W_xSlp
KILL NR_W_xSlp
KILL SR_W_xSlp
```

```
DROPITEM wxSlpli1.pat wxSlpli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_xSlp# a_W_xSlp-id
DROPITEM wxSlpli2.pat wxSlpli2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_xSlp# w_W_xSlp-id
DROPITEM wxSlpli3.pat wxSlpli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
nr_W_xSlp# nr_W_xSlp-id
DROPITEM wxSlpli4.pat wxSlpli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
sr_W_xSlp# sr_W_xSlp-id
&RETURN
```

```
/*****
```

```
&ROUTINE WoE_No_Soil
&TYPE Weights of Evidence Excluding Soil Order factor
&CALL Setup
```

```
SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoExSoil =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoSoil)
SETMASK off
```

```
SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoExSoil =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoSoil)
SETMASK off
```

```
SETMASK NRotoDiv
```

```
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoExSoil =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoSoil)
SETMASK off
```

```
SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpWoExSoil =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoSoil)
SETMASK off
Q
```

```
&TYPE Grid to cover stage
GRIDPOLY ApWoExSoil A_W_xSoil
GRIDPOLY WpWoExSoil W_W_xSoil
GRIDPOLY NRpWoExSoil NR_W_xSoil
GRIDPOLY SRpWoExSoil SR_W_xSoil
```

```
KILL ApWoExSoil
KILL WpWoExSoil
KILL NRpWoExSoil
KILL SRpWoExSoil
```

```
&Type unioning with landslide inventory
UNION A_W_xSoil Auck_LI WxSoilLI1
UNION W_W_xSoil Waik_LI WxSoilLI2
UNION NR_W_xSoil N_Roto_LI WxSoilLI3
UNION SR_W_xSoil S_Roto_LI WxSoilLI4
```

```
KILL A_W_xSoil
KILL W_W_xSoil
KILL NR_W_xSoil
KILL SR_W_xSoil
```

```
DROPITEM wxSoilli1.pat wxSoilli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_xSoil# a_W_xSoil-id
DROPITEM wxSoilli2.pat wxSoilli2.pat waik_Li# waik_Li-id radius QMap_Landsl# Qmap_landsl-id
w_W_xSoil# w_W_xSoil-id
DROPITEM wxSoilli3.pat wxSoilli3.pat N_Roto_Li# N_Roto_Li-id radius QMap_Landsl# Qmap_landsl-
id nr_W_xSoiln# nr_W_xSoil-id
DROPITEM wxSoilli4.pat wxSoilli4.pat S_Roto_Li# S_Roto_Li-id radius QMap_Landsl# Qmap_landsl-id
sr_W_xSoil# sr_W_xSoil-id
&RETURN
```

```
/*****
&ROUTINE WoE_No_Geol
&TYPE Weights of Evidence Excluding Geology factor
&CALL Setup
```

```
SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
```

```
ApWoExGeol =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoGeol)
SETMASK off
```

```
SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoExGeol =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoGeol)
SETMASK off
```

```
SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoExGeol =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoGeol)
SETMASK off
```

```
SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpWoExGeol =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoGeol)
SETMASK off
Q
```

```
&TYPE Grid to cover stage
GRIDPOLY ApWoExGeol A_W_xGeol
GRIDPOLY WpWoExGeol W_W_xGeol
GRIDPOLY NRpWoExGeol NR_W_xGeol
GRIDPOLY SRpWoExGeol SR_W_xGeol
```

```
KILL ApWoExGeol
KILL WpWoExGeol
KILL NRpWoExGeol
KILL SRpWoExGeol
```

```
&Type unioning with landslide inventory
UNION A_W_xGeol Auck_LI WxGeolLI1
UNION W_W_xGeol Waik_LI WxGeolLI2
UNION NR_W_xGeol N_Roto_LI WxGeolLI3
UNION SR_W_xGeol S_Roto_LI WxGeolLI4
```

```
KILL A_W_xGeol
KILL W_W_xGeol
KILL NR_W_xGeol
KILL SR_W_xGeol
```

```
DROPITEM wxGeolli1.pat wxGeolli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_xGeol# a_W_xGeol-id
DROPITEM wxGeolli2.pat wxGeolli2.pat waik_li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_xGeoln# w_W_xGeol-id
DROPITEM wxGeolli3.pat wxGeolli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_xGeol# nr_W_xGeol-id
```



```
DROPITEM wxGeolli4.pat wxGeolli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-  
id sr_W_xGeol# sr_W_xGeol-id  
&RETURN
```

```
/*****
```

```
&ROUTINE WoE_No_LndU  
&TYPE Weights of Evidence Excluding Land Use / Land Cover factor  
&CALL Setup
```

```
SETMASK AuckDiv  
&TYPE Mask set for Auckland division of Waikato Region  
ApWoExLndU =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoLndU)  
SETMASK off
```

```
SETMASK WaikDiv  
&TYPE Mask set for Waikato division of Waikato Region  
WpWoExLndU =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoLndU)  
SETMASK off
```

```
SETMASK NRotoDiv  
&TYPE Mask set for Northern Rotorua division of Waikato Region  
NRpWoExLndU =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoLndU)  
SETMASK off
```

```
SETMASK SRotoDiv  
&TYPE Mask set for Southern Rotorua division of Waikato Region  
SRpWoExLndU =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoLndU)  
SETMASK off
```

```
Q
```

```
&TYPE Grid to cover stage  
GRIDPOLY ApWoExLndU A_W_xLndU  
GRIDPOLY WpWoExLndU W_W_xLndU  
GRIDPOLY NRpWoExLndU NR_W_xLndU  
GRIDPOLY SRpWoExLndU SR_W_xLndU
```

```
KILL ApWoExLndU  
KILL WpWoExLndU  
KILL NRpWoExLndU  
KILL SRpWoExLndU
```

```
&Type unioning with landslide inventory  
UNION A_W_xLndU Auck_LI WxLndULI1  
UNION W_W_xLndU Waik_LI WxLndULI2  
UNION NR_W_xLndU N_Roto_LI WxLndULI3  
UNION SR_W_xLndU S_Roto_LI WxLndULI4
```

KILL A_W_xLndU
KILL W_W_xLndU
KILL NR_W_xLndU
KILL SR_W_xLndU

DROPITEM wxLndUli1.pat wxLndUli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_xLndU# a_W_xLndU-id
DROPITEM wxLndUli2.pat wxLndUli2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_xLndU# w_W_xLndU-id
DROPITEM wxLndUli3.pat wxLndUli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_xLndU# nr_W_xLndU-id
DROPITEM wxLndUli4.pat wxLndUli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_W_xLndU# sr_W_xLndU-id
&RETURN

/*****

&ROUTINE WoE_No_QMap
&TYPE Weights of Evidence Excluding Geology and Distance from Faults factors
&CALL Setup

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoExQMap =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoQMap)
SETMASK off

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoExQMap =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoQMap)
SETMASK off

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoExQMap =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoQMap)
SETMASK off

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpWoExQMap =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoQMap)
SETMASK off
Q

&TYPE Grid to cover stage
GRIDPOLY ApWoExQMap A_W_xQMap
GRIDPOLY WpWoExQMap W_W_xQMap
GRIDPOLY NRpWoExQMap NR_W_xQMap
GRIDPOLY SRpWoExQMap SR_W_xQMap

KILL ApWoExQMap
KILL WpWoExQMap
KILL NRpWoExQMap
KILL SRpWoExQMap

&Type unioning with landslide inventory
UNION A_W_xQMap Auck_LI WxQMapLI1
UNION W_W_xQMap Waik_LI WxQMapLI2
UNION NR_W_xQMap N_Roto_LI WxQMapLI3
UNION SR_W_xQMap S_Roto_LI WxQMapLI4

KILL A_W_xQMap
KILL W_W_xQMap
KILL NR_W_xQMap
KILL SR_W_xQMap

DROPITEM wxQMapli1.pat wxQMapli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_xQMap# a_W_xQMap-id
DROPITEM wxQMapli2.pat wxQMapli2.pat waik_li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_xQMap# w_W_xQMap-id
DROPITEM wxQMapli3.pat wxQMapli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_xQMap# nr_W_xQMap-id
DROPITEM wxQMapli4.pat wxQMapli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_W_xQMap# sr_W_xQMap-id
&RETURN

/*****

&ROUTINE WoE_No_Rain
&TYPE Weights of Evidence Excluding Mean and Maximum Rainfall factors
&CALL Setup

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoExRain =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoRain)
SETMASK off

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoExRain =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoRain)
SETMASK off

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoExRain =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoRain)
SETMASK off

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region

```
SRpWoExRain =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoRain)
SETMASK off
Q
```

```
&TYPE Grid to cover stage
GRIDPOLY ApWoExRain A_W_xRain
GRIDPOLY WpWoExRain W_W_xRain
GRIDPOLY NRpWoExRain NR_W_xRain
GRIDPOLY SRpWoExRain SR_W_xRain
```

```
KILL ApWoExRain
KILL WpWoExRain
KILL NRpWoExRain
KILL SRpWoExRain
```

```
&Type unioning with landslide inventory
UNION A_W_xRain Auck_LI WxRainLI1
UNION W_W_xRain Waik_LI WxRainLI2
UNION NR_W_xRain N_Roto_LI WxRainLI3
UNION SR_W_xRain S_Roto_LI WxRainLI4
```

```
KILL A_W_xRain
KILL W_W_xRain
KILL NR_W_xRain
KILL SR_W_xRain
```

```
DROPITEM wxRainli1.pat wxRainli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_xRain# a_W_xRain-id
DROPITEM wxRainli2.pat wxRainli2.pat waik_li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_xRain# w_W_xRain-id
DROPITEM wxRainli3.pat wxRainli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_xRain# nr_W_xRain-id
DROPITEM wxRainli4.pat wxRainli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-
id sr_W_xRain# sr_W_xRain-id
&RETURN
```

```
/*****
```

```
&ROUTINE WoE_No_Lin
&TYPE Weights of Evidence Excluding Distance from Faults, Roads and Rivers factors
&CALL Setup
```

```
SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoExLin =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoLin)
SETMASK off
```

```
SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
```

```
WpWoExLin =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoLin)
SETMASK off
```

```
SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoExLin =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoLin)
SETMASK off
```

```
SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpWoExLin =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoLin)
SETMASK off
```

Q

```
&TYPE Grid to cover stage
GRIDPOLY ApWoExLin A_W_xLin
GRIDPOLY WpWoExLin W_W_xLin
GRIDPOLY NRpWoExLin NR_W_xLin
GRIDPOLY SRpWoExLin SR_W_xLin
```

```
KILL ApWoExLin
KILL WpWoExLin
KILL NRpWoExLin
KILL SRpWoExLin
```

```
&Type unioning with landslide inventory
UNION A_W_xLin Auck_LI WxLinLI1
UNION W_W_xLin Waik_LI WxLinLI2
UNION NR_W_xLin N_Roto_LI WxLinLI3
UNION SR_W_xLin S_Roto_LI WxLinLI4
```

```
KILL A_W_xLin
KILL W_W_xLin
KILL NR_W_xLin
KILL SR_W_xLin
```

```
DROPITEM wxLinli1.pat wxLinli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_xLin# a_W_xLin-id
DROPITEM wxLinli2.pat wxLinli2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_xLin# w_W_xLin-id
DROPITEM wxLinli3.pat wxLinli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
nr_W_xLin# nr_W_xLin-id
DROPITEM wxLinli4.pat wxLinli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-id
sr_W_xLin# sr_W_xLin-id
&RETURN
```

```
/*****
&ROUTINE WoE_No_LinRn
```

&TYPE Weights of Evidence Excluding Distance from Faults, Roads and Rivers factors and Mean and Maximum Rainfall factors
&CALL Setup

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoExLinRn =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoLinRn)
SETMASK off

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoExLinRn =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoLinRn)
SETMASK off

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoExLinRn =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoLinRn)
SETMASK off

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpWoExLinRn =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoENoLinRn)
SETMASK off

Q

&TYPE Grid to cover stage
GRIDPOLY ApWoExLinRn A_W_xLinRn
GRIDPOLY WpWoExLinRn W_W_xLinRn
GRIDPOLY NRpWoExLinRn NR_W_xLinRn
GRIDPOLY SRpWoExLinRn SR_W_xLinRn

KILL ApWoExLinRn
KILL WpWoExLinRn
KILL NRpWoExLinRn
KILL SRpWoExLinRn

&Type unioning with landslide inventory
UNION A_W_xLinRn Auck_LI WxLinRnLI1
UNION W_W_xLinRn Waik_LI WxLinRnLI2
UNION NR_W_xLinRn N_Roto_LI WxLinRnLI3
UNION SR_W_xLinRn S_Roto_LI WxLinRnLI4

KILL A_W_xLinRn
KILL W_W_xLinRn
KILL NR_W_xLinRn
KILL SR_W_xLinRn

```

DROPITEM wxLinRnli1.pat wxLinRnli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_xLinRn# a_W_xLinRn-id
DROPITEM wxLinRnli2.pat wxLinRnli2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_xLinRn# w_W_xLinRn-id
DROPITEM wxLinRnli3.pat wxLinRnli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_xLinRn# nr_W_xLinRn-id
DROPITEM wxLinRnli4.pat wxLinRnli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_W_xLinRn# sr_W_xLinRn-id
&RETURN

```

```

/*****
&ROUTINE WoE_SIAvRLUGe
&TYPE Weights of Evidence Including just Slope, Mean Rainfall, Land Use / Land Cover, and Geology
&CALL Setup

```

```

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApWoESArLuG =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoESIAvRLUGe)
SETMASK off

```

```

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpWoESArLuG =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoESIAvRLUGe)
SETMASK off

```

```

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpWoESArLuG =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoESIAvRLUGe)
SETMASK off

```

```

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpWoESArLuG =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pWoESIAvRLUGe)
SETMASK off

```

Q

```

&TYPE Grid to cover stage
GRIDPOLY ApWoESArLuG A_W_SArLuG
GRIDPOLY WpWoESArLuG W_W_SArLuG
GRIDPOLY NRpWoESArLuG NR_W_SArLuG
GRIDPOLY SRpWoESArLuG SR_W_SArLuG

```

```

KILL ApWoESArLuG
KILL WpWoESArLuG
KILL NRpWoESArLuG
KILL SRpWoESArLuG

```

```
&Type unioning with landslide inventory
UNION A_W_SArLuG Auck_LI WSArLuGLI1
UNION W_W_SArLuG Waik_LI WSArLuGLI2
UNION NR_W_SArLuG N_Roto_LI WSArLuGLI3
UNION SR_W_SArLuG S_Roto_LI WSArLuGLI4
```

```
KILL A_W_SArLuG
KILL W_W_SArLuG
KILL NR_W_SArLuG
KILL SR_W_SArLuG
```

```
DROPITEM wSArLuGLI1.pat wSArLuGLI1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_SArLuG# a_W_SArLuG-id
DROPITEM wSArLuGLI2.pat wSArLuGLI2.pat waik_li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_W_SArLuG# w_W_SArLuG-id
DROPITEM wSArLuGLI3.pat wSArLuGLI3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_SArLuG# nr_W_SArLuG-id
DROPITEM wSArLuGLI4.pat wSArLuGLI4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_W_SArLuG# sr_W_SArLuG-id
&RETURN
```

```
/*****
&ROUTINE WoE_SAXLGEFV
&TYPE Weights of Evidence Including just Slope, Mean Rainfall, Land Use / Land Cover, and Geology
&CALL Setup
```

```
SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApSAXLGEFV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGEFV)
SETMASK off
```

```
SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpSAXLGEFV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGEFV)
SETMASK off
```

```
SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpSAXLGEFV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGEFV)
SETMASK off
```

```
SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpSAXLGEFV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGEFV)
SETMASK off
```

```
Q
```



```
&TYPE Grid to cover stage
GRIDPOLY ApSAXLGEFV A_W_SAXLGEFV
GRIDPOLY WpSAXLGEFV W_W_SAXLGEFV
GRIDPOLY NRpSAXLGEFV NR_W_SAXLGEFV
GRIDPOLY SRpSAXLGEFV SR_W_SAXLGEFV
```

```
KILL ApSAXLGEFV
KILL WpSAXLGEFV
KILL NRpSAXLGEFV
KILL SRpSAXLGEFV
```

```
&Type unioning with landslide inventory
UNION A_W_SAXLGEFV Auck_LI WSAXLGEFVLI1
UNION W_W_SAXLGEFV Waik_LI WSAXLGEFVLI2
UNION NR_W_SAXLGEFV N_Roto_LI WSAXLGEFVLI3
UNION SR_W_SAXLGEFV S_Roto_LI WSAXLGEFVLI4
```

```
KILL A_W_SAXLGEFV
KILL W_W_SAXLGEFV
KILL NR_W_SAXLGEFV
KILL SR_W_SAXLGEFV
```

```
DROPITEM wSAXLGEFVli1.pat wSAXLGEFVli1.pat auck_li# auck_li-id radius QMap_Landsl#
Qmap_landsl-id a_W_SAXLGEFV# a_W_SAXLGEFV-id
DROPITEM wSAXLGEFVli2.pat wSAXLGEFVli2.pat waik_li# waik_li-id radius QMap_Landsl#
Qmap_landsl-id w_W_SAXLGEFV# w_W_SAXLGEFV-id
DROPITEM wSAXLGEFVli3.pat wSAXLGEFVli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_SAXLGEFV# nr_W_SAXLGEFV-id
DROPITEM wSAXLGEFVli4.pat wSAXLGEFVli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_W_SAXLGEFV# sr_W_SAXLGEFV-id
&RETURN
```

```
/*****
&ROUTINE WoE_SAXLGEV
&TYPE Weights of Evidence Including just Slope, Mean Rainfall, Land Use / Land Cover, and Geology
&CALL Setup
```

```
SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApSAXLGEV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGEV)
SETMASK off
```

```
SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpSAXLGEV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGEV)
SETMASK off
```

```
SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
```

```
NRpSAXLGEV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGEV)
SETMASK off
```

```
SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpSAXLGEV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGEV)
SETMASK off
Q
```

```
&TYPE Grid to cover stage
GRIDPOLY ApSAXLGEV A_W_SAXLGEV
GRIDPOLY WpSAXLGEV W_W_SAXLGEV
GRIDPOLY NRpSAXLGEV NR_W_SAXLGEV
GRIDPOLY SRpSAXLGEV SR_W_SAXLGEV
```

```
KILL ApSAXLGEV
KILL WpSAXLGEV
KILL NRpSAXLGEV
KILL SRpSAXLGEV
```

```
&Type unioning with landslide inventory
UNION A_W_SAXLGEV Auck_LI WSAXLGEVLI1
UNION W_W_SAXLGEV Waik_LI WSAXLGEVLI2
UNION NR_W_SAXLGEV N_Roto_LI WSAXLGEVLI3
UNION SR_W_SAXLGEV S_Roto_LI WSAXLGEVLI4
```

```
KILL A_W_SAXLGEV
KILL W_W_SAXLGEV
KILL NR_W_SAXLGEV
KILL SR_W_SAXLGEV
```

```
DROPITEM wSAXLGEVli1.pat wSAXLGEVli1.pat auck_li# auck_li-id radius QMap_Landsl#
Qmap_landsl-id a_W_SAXLGEV# a_W_SAXLGEV-id
DROPITEM wSAXLGEVli2.pat wSAXLGEVli2.pat waik_li# waik_li-id radius QMap_Landsl#
Qmap_landsl-id w_W_SAXLGEV# w_W_SAXLGEV-id
DROPITEM wSAXLGEVli3.pat wSAXLGEVli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_SAXLGEV# nr_W_SAXLGEV-id
DROPITEM wSAXLGEVli4.pat wSAXLGEVli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_W_SAXLGEV# sr_W_SAXLGEV-id
```

```
&RETURN
```

```
/*****
&ROUTINE WoE_SAXLGFV
&TYPE Weights of Evidence Including just Slope, Mean Rainfall, Land Use / Land Cover, and Geology
&CALL Setup
```

```
SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
```

ApSAXLGFV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGFV)
SETMASK off

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpSAXLGFV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGFV)
SETMASK off

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpSAXLGFV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGFV)
SETMASK off

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpSAXLGFV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGFV)
SETMASK off
Q

&TYPE Grid to cover stage
GRIDPOLY ApSAXLGFV A_W_SAXLGFV
GRIDPOLY WpSAXLGFV W_W_SAXLGFV
GRIDPOLY NRpSAXLGFV NR_W_SAXLGFV
GRIDPOLY SRpSAXLGFV SR_W_SAXLGFV

KILL ApSAXLGFV
KILL WpSAXLGFV
KILL NRpSAXLGFV
KILL SRpSAXLGFV

&Type unioning with landslide inventory
UNION A_W_SAXLGFV Auck_LI WSAXLGFVLI1
UNION W_W_SAXLGFV Waik_LI WSAXLGFVLI2
UNION NR_W_SAXLGFV N_Roto_LI WSAXLGFVLI3
UNION SR_W_SAXLGFV S_Roto_LI WSAXLGFVLI4

KILL A_W_SAXLGFV
KILL W_W_SAXLGFV
KILL NR_W_SAXLGFV
KILL SR_W_SAXLGFV

DROPITEM wSAXLGFVli1.pat wSAXLGFVli1.pat auck_li# auck_li-id radius QMap_Landsl#
Qmap_landsl-id a_W_SAXLGFV# a_W_SAXLGFV-id
DROPITEM wSAXLGFVli2.pat wSAXLGFVli2.pat waik_li# waik_li-id radius QMap_Landsl#
Qmap_landsl-id w_W_SAXLGFV# w_W_SAXLGFV-id
DROPITEM wSAXLGFVli3.pat wSAXLGFVli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_SAXLGFV# nr_W_SAXLGFV-id

```
DROPITEM wSAXLGFVli4.pat wSAXLGFVli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_W_SAXLGFV# sr_W_SAXLGFV-id
&RETURN
```

```
/*****
&ROUTINE WoE_SAXLGEF
&TYPE Weights of Evidence Including just Slope, Mean Rainfall, Land Use / Land Cover, and Geology
&CALL Setup
```

```
SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApSAXLGEF =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGEF)
SETMASK off
```

```
SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpSAXLGEF =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGEF)
SETMASK off
```

```
SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpSAXLGEF =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGEF)
SETMASK off
```

```
SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpSAXLGEF =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGEF)
SETMASK off
```

```
Q
```

```
&TYPE Grid to cover stage
GRIDPOLY ApSAXLGEF A_W_SAXLGEF
GRIDPOLY WpSAXLGEF W_W_SAXLGEF
GRIDPOLY NRpSAXLGEF NR_W_SAXLGEF
GRIDPOLY SRpSAXLGEF SR_W_SAXLGEF
```

```
KILL ApSAXLGEF
KILL WpSAXLGEF
KILL NRpSAXLGEF
KILL SRpSAXLGEF
```

```
&Type unioning with landslide inventory
UNION A_W_SAXLGEF Auck_LI WSAXLGEFLI1
UNION W_W_SAXLGEF Waik_LI WSAXLGEFLI2
UNION NR_W_SAXLGEF N_Roto_LI WSAXLGEFLI3
UNION SR_W_SAXLGEF S_Roto_LI WSAXLGEFLI4
```

KILL A_W_SAXLGEF
KILL W_W_SAXLGEF
KILL NR_W_SAXLGEF
KILL SR_W_SAXLGEF

DROPITEM wSAXLGEFl1.pat wSAXLGEFl1.pat auck_li# auck_li-id radius QMap_Landsl#
Qmap_landsl-id a_W_SAXLGEF# a_W_SAXLGEF-id
DROPITEM wSAXLGEFl2.pat wSAXLGEFl2.pat waik_li# waik_li-id radius QMap_Landsl#
Qmap_landsl-id w_W_SAXLGEF# w_W_SAXLGEF-id
DROPITEM wSAXLGEFl3.pat wSAXLGEFl3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_SAXLGEF# nr_W_SAXLGEF-id
DROPITEM wSAXLGEFl4.pat wSAXLGEFl4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_W_SAXLGEF# sr_W_SAXLGEF-id
&RETURN

/*****
&ROUTINE WoE_SAXLGF
&TYPE Weights of Evidence Including just Slope, Mean Rainfall, Land Use / Land Cover, and Geology
&CALL Setup

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApSAXLGF = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGF)
SETMASK off

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpSAXLGF = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGF)
SETMASK off

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpSAXLGF =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGF)
SETMASK off

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpSAXLGF = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGF)
SETMASK off
Q

&TYPE Grid to cover stage
GRIDPOLY ApSAXLGF A_W_SAXLGF
GRIDPOLY WpSAXLGF W_W_SAXLGF
GRIDPOLY NRpSAXLGF NR_W_SAXLGF
GRIDPOLY SRpSAXLGF SR_W_SAXLGF

KILL ApSAXLGF
KILL WpSAXLGF
KILL NRpSAXLGF

KILL SRpSAXLGF

&Type unioning with landslide inventory

UNION A_W_SAXLGF Auck_LI WSAXLGFLI1

UNION W_W_SAXLGF Waik_LI WSAXLGFLI2

UNION NR_W_SAXLGF N_Roto_LI WSAXLGFLI3

UNION SR_W_SAXLGF S_Roto_LI WSAXLGFLI4

KILL A_W_SAXLGF

KILL W_W_SAXLGF

KILL NR_W_SAXLGF

KILL SR_W_SAXLGF

DROPITEM wSAXLGFLI1.pat wSAXLGFLI1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_SAXLGF# a_W_SAXLGF-id

DROPITEM wSAXLGFLI2.pat wSAXLGFLI2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-
id w_W_SAXLGF# w_W_SAXLGF-id

DROPITEM wSAXLGFLI3.pat wSAXLGFLI3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_SAXLGF# nr_W_SAXLGF-id

DROPITEM wSAXLGFLI4.pat wSAXLGFLI4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_W_SAXLGF# sr_W_SAXLGF-id

&RETURN

/*****

&ROUTINE WoE_SAXLGE

&TYPE Weights of Evidence Including just Slope, Mean Rainfall, Land Use / Land Cover, and Geology

&CALL Setup

SETMASK AuckDiv

&TYPE Mask set for Auckland division of Waikato Region

ApSAXLGE = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGE)

SETMASK off

SETMASK WaikDiv

&TYPE Mask set for Waikato division of Waikato Region

WpSAXLGE = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGE)

SETMASK off

SETMASK NRotoDiv

&TYPE Mask set for Northern Rotorua division of Waikato Region

NRpSAXLGE =

int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGE)

SETMASK off

SETMASK SRotoDiv

&TYPE Mask set for Southern Rotorua division of Waikato Region

SRpSAXLGE =

int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGE)

SETMASK off

Q

```
&TYPE Grid to cover stage
GRIDPOLY ApSAXLGE A_W_SAXLGE
GRIDPOLY WpSAXLGE W_W_SAXLGE
GRIDPOLY NRpSAXLGE NR_W_SAXLGE
GRIDPOLY SRpSAXLGE SR_W_SAXLGE
```

```
KILL ApSAXLGE
KILL WpSAXLGE
KILL NRpSAXLGE
KILL SRpSAXLGE
```

```
&Type unioning with landslide inventory
UNION A_W_SAXLGE Auck_LI WSAXLGEI1
UNION W_W_SAXLGE Waik_LI WSAXLGEI2
UNION NR_W_SAXLGE N_Roto_LI WSAXLGEI3
UNION SR_W_SAXLGE S_Roto_LI WSAXLGEI4
```

```
KILL A_W_SAXLGE
KILL W_W_SAXLGE
KILL NR_W_SAXLGE
KILL SR_W_SAXLGE
```

```
DROPITEM wSAXLGEI1.pat wSAXLGEI1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_W_SAXLGE# a_W_SAXLGE-id
DROPITEM wSAXLGEI2.pat wSAXLGEI2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-
id w_W_SAXLGE# w_W_SAXLGE-id
DROPITEM wSAXLGEI3.pat wSAXLGEI3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_SAXLGE# nr_W_SAXLGE-id
DROPITEM wSAXLGEI4.pat wSAXLGEI4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_W_SAXLGE# sr_W_SAXLGE-id
&RETURN
```

```
/*****
&ROUTINE WoE_SAXLGV
&TYPE Weights of Evidence Including just Slope, Mean Rainfall, Land Use / Land Cover, and Geology
&CALL Setup
```

```
SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApSAXLGV = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGV)
SETMASK off
```

```
SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpSAXLGV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGV)
SETMASK off
```

```
SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
```

```
NRpSAXLGV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGV)
SETMASK off
```

```
SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpSAXLGV =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwSAXLGV)
SETMASK off
Q
```

```
&TYPE Grid to cover stage
GRIDPOLY ApSAXLGV A_W_SAXLGV
GRIDPOLY WpSAXLGV W_W_SAXLGV
GRIDPOLY NRpSAXLGV NR_W_SAXLGV
GRIDPOLY SRpSAXLGV SR_W_SAXLGV
```

```
KILL ApSAXLGV
KILL WpSAXLGV
KILL NRpSAXLGV
KILL SRpSAXLGV
```

```
&Type unioning with landslide inventory
UNION A_W_SAXLGV Auck_LI WSAXLGVLI1
UNION W_W_SAXLGV Waik_LI WSAXLGVLI2
UNION NR_W_SAXLGV N_Roto_LI WSAXLGVLI3
UNION SR_W_SAXLGV S_Roto_LI WSAXLGVLI4
```

```
KILL A_W_SAXLGV
KILL W_W_SAXLGV
KILL NR_W_SAXLGV
KILL SR_W_SAXLGV
```

```
DROPITEM wSAXLGVli1.pat wSAXLGVli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-
id a_W_SAXLGV# a_W_SAXLGV-id
DROPITEM wSAXLGVli2.pat wSAXLGVli2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-
id w_W_SAXLGV# w_W_SAXLGV-id
DROPITEM wSAXLGVli3.pat wSAXLGVli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_W_SAXLGV# nr_W_SAXLGV-id
DROPITEM wSAXLGVli4.pat wSAXLGVli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_W_SAXLGV# sr_W_SAXLGV-id
```

```
&RETURN
```

```
/*****
&ROUTINE LR_Set1_Eqn2
&TYPE Logistic Regression based on Set 1 data using Equation 2
&CALL Setup
```

```
SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
```


ALRS1E2M = int(D:\Renee_GIS\Output_data\Organised\15_Multi_Reg\200m_set1\logiteq2int)
SETMASK off

SETMASK WaikDiv

&TYPE Mask set for Waikato division of Waikato Region

WLRs1E2M = int(D:\Renee_GIS\Output_data\Organised\15_Multi_Reg\200m_set1\logiteq2int)
SETMASK off

SETMASK NRotoDiv

&TYPE Mask set for Northern Rotorua division of Waikato Region

NRLRS1E2M = int(D:\Renee_GIS\Output_data\Organised\15_Multi_Reg\200m_set1\logiteq2int)
SETMASK off

SETMASK SRotoDiv

&TYPE Mask set for Southern Rotorua division of Waikato Region

SRLRS1E2M = int(D:\Renee_GIS\Output_data\Organised\15_Multi_Reg\200m_set1\logiteq2int)
SETMASK off

Q

&TYPE Grid to cover stage

GRIDPOLY ALRS1E2M A_LR_S1E2

GRIDPOLY WLRs1E2M W_LR_S1E2

GRIDPOLY NRLRS1E2M NR_LR_S1E2

GRIDPOLY SRLRS1E2M SR_LR_S1E2

KILL ALRS1E2M

KILL WLRs1E2M

KILL NRLRS1E2M

KILL SRLRS1E2M

&Type unioning with landslide inventory

UNION A_LR_S1E2 Auck_LI LR_S1E2_LI1

UNION W_LR_S1E2 Waik_LI LR_S1E2_LI2

UNION NR_LR_S1E2 N_Roto_LI LR_S1E2_LI3

UNION SR_LR_S1E2 S_Roto_LI LR_S1E2_LI4

KILL A_LR_S1E2

KILL W_LR_S1E2

KILL NR_LR_S1E2

KILL SR_LR_S1E2

DROPITEM LR_S1E2_li1.pat LR_S1E2_li1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-
id a_LR_S1E2# a_LR_S1E2-id

DROPITEM LR_S1E2_Li2.pat LR_S1E2_Li2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-
id w_LR_S1E2# w_LR_S1E2-id

DROPITEM LR_S1E2_Li3.pat LR_S1E2_Li3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_LR_S1E2# nr_LR_S1E2-id

DROPITEM LR_S1E2_Li4.pat LR_S1E2_Li4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_LR_S1E2# sr_LR_S1E2-id

&RETURN

```
/******  
/*&ROUTINE Signif_sC
```

```
&TYPE Standardised Weights of Evidence Including just Slope, Elevation, Aspect, Land Use / Land  
Cover, and Geology  
&CALL Setup
```

```
SETMASK AuckDiv  
&TYPE Mask set for Auckland division of Waikato Region  
ApSEALG_sC =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\My_Sc_WoE_Per)  
SETMASK off
```

```
SETMASK WaikDiv  
&TYPE Mask set for Waikato division of Waikato Region  
WpSEALG_sC =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\My_Sc_WoE_Per)  
SETMASK off
```

```
SETMASK NRotoDiv  
&TYPE Mask set for Northern Rotorua division of Waikato Region  
NRpSEALG_sC =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\My_Sc_WoE_Per)  
SETMASK off
```

```
SETMASK SRotoDiv  
&TYPE Mask set for Southern Rotorua division of Waikato Region  
SRpSEALG_sC =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\My_Sc_WoE_Per)  
SETMASK off  
Q
```

```
&TYPE Grid to cover stage  
GRIDPOLY ApSEALG_sC A_SEALG_sC  
GRIDPOLY WpSEALG_sC W_SEALG_sC  
GRIDPOLY NRpSEALG_sC NR_SEALG_sC  
GRIDPOLY SRpSEALG_sC SR_SEALG_sC
```

```
KILL ApSEALG_sC  
KILL WpSEALG_sC  
KILL NRpSEALG_sC  
KILL SRpSEALG_sC
```

```
&Type unioning with landslide inventory  
UNION A_SEALG_sC Auck_LI WSEALG_sCLI1  
&ROUTINE Signif_sC  
UNION W_SEALG_sC Waik_LI WSEALG_sCLI2  
UNION NR_SEALG_sC N_Roto_LI WSEALG_sCLI3  
UNION SR_SEALG_sC S_Roto_LI WSEALG_sCLI4
```

```
KILL A_SEALG_sC
```

KILL W_SEALG_sC
KILL NR_SEALG_sC
KILL SR_SEALG_sC

DROPITEM wSEALG_sCli1.pat wSEALG_sCli1.pat auck_li# auck_li-id radius QMap_Landsl#
Qmap_landsl-id a_SEALG_sC# a_SEALG_sC-id
DROPITEM wSEALG_sCli2.pat wSEALG_sCli2.pat waik_li# waik_li-id radius QMap_Landsl#
Qmap_landsl-id w_SEALG_sC# w_SEALG_sC-id
DROPITEM wSEALG_sCli3.pat wSEALG_sCli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_SEALG_sC# nr_SEALG_sC-id
DROPITEM wSEALG_sCli4.pat wSEALG_sCli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_SEALG_sC# sr_SEALG_sC-id
&RETURN
/*****

&ROUTINE Signif_Wf
&TYPE Weights of Evidence Including just Slope, Elevation, Aspect, Land Use / Land Cover, and
Geology
&CALL Setup

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApSIEAsLCG =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWSIEIAsLCGe)
SETMASK off

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpSIEAsLCG =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWSIEIAsLCGe)
SETMASK off

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpSIEAsLCG =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWSIEIAsLCGe)
SETMASK off

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpSIEAsLCG =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWSIEIAsLCGe)
SETMASK off
Q

&TYPE Grid to cover stage
GRIDPOLY ApSIEAsLCG A_SIEAsLCG
GRIDPOLY WpSIEAsLCG W_SIEAsLCG
GRIDPOLY NRpSIEAsLCG NR_SIEAsLCG
GRIDPOLY SRpSIEAsLCG SR_SIEAsLCG

KILL ApSIEAsLCG
KILL WpSIEAsLCG
KILL NRpSIEAsLCG
KILL SRpSIEAsLCG

&Type unioning with landslide inventory
UNION A_SIEAsLCG Auckland LI WSIEAsLCGLI1
UNION W_SIEAsLCG Waikato LI WSIEAsLCGLI2
UNION NR_SIEAsLCG Northern Rotorua LI WSIEAsLCGLI3
UNION SR_SIEAsLCG Southern Rotorua LI WSIEAsLCGLI4

KILL A_SIEAsLCG
KILL W_SIEAsLCG
KILL NR_SIEAsLCG
KILL SR_SIEAsLCG

DROPITEM wSIEAsLCGLI1.pat wSIEAsLCGLI1.pat auck_li# auck_li-id radius QMap_Landsl#
Qmap_landsl-id a_SIEAsLCG# a_SIEAsLCG-id
DROPITEM wSIEAsLCGLI2.pat wSIEAsLCGLI2.pat waik_li# waik_li-id radius QMap_Landsl#
Qmap_landsl-id w_SIEAsLCG# w_SIEAsLCG-id
DROPITEM wSIEAsLCGLI3.pat wSIEAsLCGLI3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_SIEAsLCG# nr_SIEAsLCG-id
DROPITEM wSIEAsLCGLI4.pat wSIEAsLCGLI4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_SIEAsLCG# sr_SIEAsLCG-id
&RETURN

/*****

&ROUTINE W_SAsLCMRGe
&TYPE Weights of Evidence Including just Slope, Aspect, Land Use / Land Cover, Max Rain, and
Geology
&CALL Setup

SETMASK AucklandDiv
&TYPE Mask set for Auckland division of Waikato Region
ApSALCMRG =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWsaslcmrge)
SETMASK off

SETMASK WaikatoDiv
&TYPE Mask set for Waikato division of Waikato Region
WpSALCMRG =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWsaslcmrge)
SETMASK off

SETMASK NorthernRotoruaDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpSALCMRG =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWsaslcmrge)
SETMASK off

SETMASK SouthernRotoruaDiv

&TYPE Mask set for Southern Rotorua division of Waikato Region

SRpSALCMRG =

int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWsaslcmrge)

SETMASK off

Q

&TYPE Grid to cover stage

GRIDPOLY ApSALCMRG A_SALCMRG

GRIDPOLY WpSALCMRG W_SALCMRG

GRIDPOLY NRpSALCMRG NR_SALCMRG

GRIDPOLY SRpSALCMRG SR_SALCMRG

KILL ApSALCMRG

KILL WpSALCMRG

KILL NRpSALCMRG

KILL SRpSALCMRG

&Type unioning with landslide inventory

UNION A_SALCMRG Auck_LI WSALCMRGLI1

UNION W_SALCMRG Waik_LI WSALCMRGLI2

UNION NR_SALCMRG N_Roto_LI WSALCMRGLI3

UNION SR_SALCMRG S_Roto_LI WSALCMRGLI4

KILL A_SALCMRG

KILL W_SALCMRG

KILL NR_SALCMRG

KILL SR_SALCMRG

DROPITEM wsalcmrgli1.pat wsalcmrgli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id a_salcmrg# a_salcmrg-id

DROPITEM wsalcmrgli2.pat wsalcmrgli2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-id w_salcmrg# w_salcmrg-id

DROPITEM wsalcmrgli3.pat wsalcmrgli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl# Qmap_landsl-id nr_salcmrg# nr_salcmrg-id

DROPITEM wsalcmrgli4.pat wsalcmrgli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-id sr_salcmrg# sr_salcmrg-id

&RETURN

/*****

&ROUTINE W_SAsLCSMR

&TYPE Weights of Evidence Including just Slope, Aspect, Land Use / Land Cover, Soil, and Max Rian

&CALL Setup

SETMASK AuckDiv

&TYPE Mask set for Auckland division of Waikato Region

ApSALCSMR =

int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWsaslcsmr)

SETMASK off

SETMASK WaikDiv

&TYPE Mask set for Waikato division of Waikato Region

```
WpSALCSMR =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWsaslcsmr)  
SETMASK off
```

```
SETMASK NRotoDiv  
&TYPE Mask set for Northern Rotorua division of Waikato Region  
NRpSALCSMR =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWsaslcsmr)  
SETMASK off
```

```
SETMASK SRotoDiv  
&TYPE Mask set for Southern Rotorua division of Waikato Region  
SRpSALCSMR =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWsaslcsmr)  
SETMASK off
```

Q

```
&TYPE Grid to cover stage  
GRIDPOLY ApSALCSMR A_SALCSMR  
GRIDPOLY WpSALCSMR W_SALCSMR  
GRIDPOLY NRpSALCSMR NR_SALCSMR  
GRIDPOLY SRpSALCSMR SR_SALCSMR
```

```
KILL ApSALCSMR  
KILL WpSALCSMR  
KILL NRpSALCSMR  
KILL SRpSALCSMR
```

```
&Type unioning with landslide inventory  
UNION A_SALCSMR Auck_LI WSALCSMRI1  
UNION W_SALCSMR Waik_LI WSALCSMRI2  
UNION NR_SALCSMR N_Roto_LI WSALCSMRI3  
UNION SR_SALCSMR S_Roto_LI WSALCSMRI4
```

```
KILL A_SALCSMR  
KILL W_SALCSMR  
KILL NR_SALCSMR  
KILL SR_SALCSMR
```

```
DROPITEM wsalcsMRI1.pat wsalcsMRI1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id  
a_salcsmr# a_salcsmr-id  
DROPITEM wsalcsMRI2.pat wsalcsMRI2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-  
id w_salcsmr# w_salcsmr-id  
DROPITEM wsalcsMRI3.pat wsalcsMRI3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#  
Qmap_landsl-id nr_salcsmr# nr_salcsmr-id  
DROPITEM wsalcsMRI4.pat wsalcsMRI4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#  
Qmap_landsl-id sr_salcsmr# sr_salcsmr-id  
&RETURN
```

/*****

```
&ROUTINE W_SAsLCMR
```

```
&TYPE Weights of Evidence Including just Slope, Aspect, Land Use / Land Cover, and Max Rain
```

&CALL Setup

SETMASK AuckDiv

&TYPE Mask set for Auckland division of Waikato Region

ApSALCMR =

int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWsaslcmr)

SETMASK off

SETMASK WaikDiv

&TYPE Mask set for Waikato division of Waikato Region

WpSALCMR =

int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWsaslcmr)

SETMASK off

SETMASK NRotoDiv

&TYPE Mask set for Northern Rotorua division of Waikato Region

NRpSALCMR =

int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWsaslcmr)

SETMASK off

SETMASK SRotoDiv

&TYPE Mask set for Southern Rotorua division of Waikato Region

SRpSALCMR =

int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\PWsaslcmr)

SETMASK off

Q

&TYPE Grid to cover stage

GRIDPOLY ApSALCMR A_SALCMR

GRIDPOLY WpSALCMR W_SALCMR

GRIDPOLY NRpSALCMR NR_SALCMR

GRIDPOLY SRpSALCMR SR_SALCMR

KILL ApSALCMR

KILL WpSALCMR

KILL NRpSALCMR

KILL SRpSALCMR

&Type unioning with landslide inventory

UNION A_SALCMR Auck_LI WSALCMRLI1

UNION W_SALCMR Waik_LI WSALCMRLI2

UNION NR_SALCMR N_Roto_LI WSALCMRLI3

UNION SR_SALCMR S_Roto_LI WSALCMRLI4

KILL A_SALCMR

KILL W_SALCMR

KILL NR_SALCMR

KILL SR_SALCMR

DROPITEM wsalcmrli1.pat wsalcmrli1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_salcmr# a_salcmr-id

```

DROPITEM wsalcmrli2.pat wsalcmrli2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_salcmr# w_salcmr-id
DROPITEM wsalcmrli3.pat wsalcmrli3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_salcmr# nr_salcmr-id
DROPITEM wsalcmrli4.pat wsalcmrli4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_salcmr# sr_salcmr-id
&RETURN

```

```

/*****

```

```

&ROUTINE W_SIMxLG
&TYPE Weights of Evidence Including just Slope, Max Rain, Land Use / Land Cover, and Geology
&CALL Setup

```

```

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApSlxLG = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwsImxlg)
SETMASK off

```

```

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpSlxLG = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwsImxlg)
SETMASK off

```

```

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpSlxLG = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwsImxlg)
SETMASK off

```

```

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region
SRpSlxLG = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwsImxlg)
SETMASK off
Q

```

```

&TYPE Grid to cover stage
GRIDPOLY ApSlxLG A_SlxLG
GRIDPOLY WpSlxLG W_SlxLG
GRIDPOLY NRpSlxLG NR_SlxLG
GRIDPOLY SRpSlxLG SR_SlxLG

```

```

KILL ApSlxLG
KILL WpSlxLG
KILL NRpSlxLG
KILL SRpSlxLG

```

```

&Type unioning with landslide inventory
UNION A_SlxLG Auck_LI WSlxLGLI1
UNION W_SlxLG Waik_LI WSlxLGLI2
UNION NR_SlxLG N_Roto_LI WSlxLGLI3
UNION SR_SlxLG S_Roto_LI WSlxLGLI4

```


KILL A_SlxLG
KILL W_SlxLG
KILL NR_SlxLG
KILL SR_SlxLG

DROPITEM wSxlGLi1.pat wSxlGLi1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_SlxLG# a_SlxLG-id
DROPITEM wSxlGLi2.pat wSxlGLi2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_SlxLG# w_SlxLG-id
DROPITEM wSxlGLi3.pat wSxlGLi3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl# Qmap_landsl-
id nr_SlxLG# nr_SlxLG-id
DROPITEM wSxlGLi4.pat wSxlGLi4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl# Qmap_landsl-
id sr_SlxLG# sr_SlxLG-id
&RETURN

/*****

&ROUTINE W_SlxLGF

&TYPE Weights of Evidence Including just Slope, Max Rain, Land Use / Land Cover, Geology and
Faults

&CALL Setup

SETMASK AuckDiv

&TYPE Mask set for Auckland division of Waikato Region

ApSxlGf = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwsImxlcgfl)

SETMASK off

SETMASK WaikDiv

&TYPE Mask set for Waikato division of Waikato Region

WpSxlGf = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwsImxlcgfl)

SETMASK off

SETMASK NRotoDiv

&TYPE Mask set for Northern Rotorua division of Waikato Region

NRpSxlGf =

int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwsImxlcgfl)

SETMASK off

SETMASK SRotoDiv

&TYPE Mask set for Southern Rotorua division of Waikato Region

SRpSxlGf = int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwsImxlcgfl)

SETMASK off

Q

&TYPE Grid to cover stage

GRIDPOLY ApSxlGf A_SlxLGF

GRIDPOLY WpSxlGf W_SlxLGF

GRIDPOLY NRpSxlGf NR_SlxLGF

GRIDPOLY SRpSxlGf SR_SlxLGF

KILL ApSxlGf

KILL WpSlxLGF
KILL NRpSlxLGF
KILL SRpSlxLGF

&Type unioning with landslide inventory
UNION A_SlxLGF Auck_LI WSlxLGFLI1
UNION W_SlxLGF Waik_LI WSlxLGFLI2
UNION NR_SlxLGF N_Roto_LI WSlxLGFLI3
UNION SR_SlxLGF S_Roto_LI WSlxLGFLI4

KILL A_SlxLGF
KILL W_SlxLGF
KILL NR_SlxLGF
KILL SR_SlxLGF

DROPITEM wSlxLGFLI1.pat wSlxLGFLI1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id
a_SlxLGF# a_SlxLGF-id
DROPITEM wSlxLGFLI2.pat wSlxLGFLI2.pat waik_Li# waik_li-id radius QMap_Landsl# Qmap_landsl-id
w_SlxLGF# w_SlxLGF-id
DROPITEM wSlxLGFLI3.pat wSlxLGFLI3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id nr_SlxLGF# nr_SlxLGF-id
DROPITEM wSlxLGFLI4.pat wSlxLGFLI4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#
Qmap_landsl-id sr_SlxLGF# sr_SlxLGF-id
&RETURN

/*****
&ROUTINE W_SlxLGA
&TYPE Weights of Evidence Including just Slope, Aspect, Land Use / Land Cover, and Max Rain
&CALL Setup

SETMASK AuckDiv
&TYPE Mask set for Auckland division of Waikato Region
ApSlxLGA =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwsaslcmrge)
SETMASK off

SETMASK WaikDiv
&TYPE Mask set for Waikato division of Waikato Region
WpSlxLGA =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwsaslcmrge)
SETMASK off

SETMASK NRotoDiv
&TYPE Mask set for Northern Rotorua division of Waikato Region
NRpSlxLGA =
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwsaslcmrge)
SETMASK off

SETMASK SRotoDiv
&TYPE Mask set for Southern Rotorua division of Waikato Region

```
SRpSlxLGA =  
int(D:\Renee_GIS\Output_data\Organised\14_Wghts_of_Ev\Percent_form\pwsaslcmrge)  
SETMASK off  
Q
```

```
&TYPE Grid to cover stage  
GRIDPOLY ApSlxLGA A_SlxLGA  
GRIDPOLY WpSlxLGA W_SlxLGA  
GRIDPOLY NRpSlxLGA NR_SlxLGA  
GRIDPOLY SRpSlxLGA SR_SlxLGA
```

```
KILL ApSlxLGA  
KILL WpSlxLGA  
KILL NRpSlxLGA  
KILL SRpSlxLGA
```

```
&Type unioning with landslide inventory  
UNION A_SlxLGA Auck_LI WSlxLGALI1  
UNION W_SlxLGA Waik_LI WSlxLGALI2  
UNION NR_SlxLGA N_Roto_LI WSlxLGALI3  
UNION SR_SlxLGA S_Roto_LI WSlxLGALI4
```

```
KILL A_SlxLGA  
KILL W_SlxLGA  
KILL NR_SlxLGA  
KILL SR_SlxLGA
```

```
DROPITEM wSlxLGALI1.pat wSlxLGALI1.pat auck_li# auck_li-id radius QMap_Landsl# Qmap_landsl-id  
a_SlxLGA# a_SlxLGA-id  
DROPITEM wSlxLGALI2.pat wSlxLGALI2.pat waik_li# waik_li-id radius QMap_Landsl# Qmap_landsl-id  
w_SlxLGA# w_SlxLGA-id  
DROPITEM wSlxLGALI3.pat wSlxLGALI3.pat N_Roto_Li# N_Roto_li-id radius QMap_Landsl#  
Qmap_landsl-id nr_SlxLGA# nr_SlxLGA-id  
DROPITEM wSlxLGALI4.pat wSlxLGALI4.pat S_Roto_Li# S_Roto_li-id radius QMap_Landsl#  
Qmap_landsl-id sr_SlxLGA# sr_SlxLGA-id  
&RETURN
```

```
&ROUTINE Setup  
&RUN d:\renee_gis\scripts\checkproggrid.txt  
&TYPE set window to MyBnds...  
SETWINDOW D:\Renee_GIS\Output_data\Organised\03_DEM\MyBnds  
&RETURN
```