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/** ----- Quick Landslide Inventory -----
/** FILE NAME: Selected_LI.txt
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/** CREATED: 30 SEPTEMBER 2009
/**
/** The scripts may be supplied in a more readily useable format if the work is acknowledged
/** CONTACT: Renee_Schicker@hotmail.com
/**
/** SCRIPTS USED: CheckProgEdit.txt
/** INPUT COVERS:
/** D:\Renee_GIS\Output_data\Organised\02_Setup\mylandslides
/** D:\Renee_GIS\Output_data\Organised\03_DEM\dem_bnd
/**
/** WORKSPACE: D:\Renee_GIS\Output_data\Organised\04_Inventory
/**
/** OUTPUT COVERS: LI_Selection Islidematchd
/**
/** OUTPUT GRID MyLSldsgrid
/**
/** DETAILS: This is script is shorter to run than the 04_Inventory.txt script with its
/** supporting scripts, however, the output does not contain any information
/** on the landslides.
/**
/*****
/*****

```

```

&CALL MATCH
&CALL PREPARE
&CALL BUFFER_ETC
&CALL QMAP_LSI
&CALL UNION_BOTH
&CALL RASTERISE
&RETURN

```

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/*****
&ROUTINE MATCH
/** Match up landslides used in analysis already
/** Initial landslide inventory script missed two landslide polygons that had a radius < 2.5 km
/** As a result of the looped union going in order of increasing auto_ID
/** rather than decreasing radius size (which would have been more appropriate but
/** perhaps a longer process).

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&IF [EXIST LslidesMatchd -COVER] &THEN KILL LslidesMatchd
COPY D:\Renee_GIS\Output_data\Organised\02_Setup\mylandslides LslidesMatchd

```

```

&RUN d:\renee_gis\scripts\CheckProgEdit.txt

```

```

EC LslidesMatchd
EF point

```

```

SELECT FOR Auto_ID = 64

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```

DELETE
SELECT FOR Auto_ID = 95
DELETE
SAVE
Q
&RETURN
/*****
&ROUTINE PREPARE
COPY LslidesMatchd LSld10mRad
COPY LslidesMatchd LSld100mRad
COPY LslidesMatchd LSld200mRad
COPY LslidesMatchd LSld250mRad
COPY LslidesMatchd LSld300mRad
COPY LslidesMatchd LSld450mRad
COPY LslidesMatchd LSld500mRad
COPY LslidesMatchd LSld1000mRad
COPY LslidesMatchd LSld1500mRad
COPY LslidesMatchd LSld2000mRad
COPY LslidesMatchd LSld2500mRad

&RUN d:\renee_gis\scripts\CheckProgEdit.txt

EC LSld10mRad
EF point
SELECT FOR radius_m ne 10
DELETE
SAVE

EC LSld100mRad
EF point
SELECT FOR radius_m ne 100
DELETE
SAVE

EC LSld200mRad
EF point
SELECT FOR radius_m ne 200
DELETE
SAVE

EC LSld250mRad
EF point
SELECT FOR radius_m ne 250
DELETE
SAVE

EC LSld300mRad
EF point
SELECT FOR radius_m ne 300
DELETE
SAVE

```

```
EC LSld450mRad
EF point
SELECT FOR radius_m ne 450
DELETE
SAVE
```

```
EC LSld500mRad
EF point
SELECT FOR radius_m ne 500
DELETE
SAVE
```

```
EC LSld1000mRad
EF point
SELECT FOR radius_m ne 1000
DELETE
SAVE
```

```
EC LSld1500mRad
EF point
SELECT FOR radius_m ne 1500
DELETE
SAVE
```

```
EC LSld2000mRad
EF point
SELECT FOR radius_m ne 2000
DELETE
SAVE
```

```
EC LSld2500mRad
EF point
SELECT FOR radius_m ne 2500
DELETE
SAVE
Q
&RETURN
```

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

```
&ROUTINE BUFFER_ETC
&IF [EXIST MyBuffLslides -COVER] &THEN KILL MyBuffLslides
```

```
BUFFER LSld10mRad Lslds10m RADIUS_M # # 1 POINT ROUND
BUFFER LSld100mRad Lslds100m RADIUS_M # # 1 POINT ROUND
BUFFER LSld200mRad Lslds200m RADIUS_M # # 1 POINT ROUND
BUFFER LSld250mRad Lslds250m RADIUS_M # # 1 POINT ROUND
BUFFER LSld300mRad Lslds300m RADIUS_M # # 1 POINT ROUND
BUFFER LSld450mRad Lslds450m RADIUS_M # # 1 POINT ROUND
BUFFER LSld500mRad Lslds500m RADIUS_M # # 1 POINT ROUND
BUFFER LSld1000mRad Lslds1000m RADIUS_M # # 1 POINT ROUND
```

BUFFER LSlD1500mRad Lslds1500m RADIUS_M # # 1 POINT ROUND
BUFFER LSlD2000mRad Lslds2000m RADIUS_M # # 1 POINT ROUND
BUFFER LSlD2500mRad Lslds2500m RADIUS_M # # 1 POINT ROUND

&IF [EXIST LSlD10mRad -COVER] &THEN KILL LSlD10mRad
&IF [EXIST LSlD100mRad -COVER] &THEN KILL LSlD100mRad
&IF [EXIST LSlD200mRad -COVER] &THEN KILL LSlD200mRad
&IF [EXIST LSlD250mRad -COVER] &THEN KILL LSlD250mRad
&IF [EXIST LSlD300mRad -COVER] &THEN KILL LSlD300mRad
&IF [EXIST LSlD450mRad -COVER] &THEN KILL LSlD450mRad
&IF [EXIST LSlD500mRad -COVER] &THEN KILL LSlD500mRad
&IF [EXIST LSlD1000mRad -COVER] &THEN KILL LSlD1000mRad
&IF [EXIST LSlD1500mRad -COVER] &THEN KILL LSlD1500mRad
&IF [EXIST LSlD2000mRad -COVER] &THEN KILL LSlD2000mRad
&IF [EXIST LSlD2500mRad -COVER] &THEN KILL LSlD2500mRad

ADDITEM Lslds10m.pat Lslds10m.pat RAD10 5 5 I
ADDITEM Lslds100m.pat Lslds100m.pat RAD100 5 5 I
ADDITEM Lslds200m.pat Lslds200m.pat RAD200 5 5 I
ADDITEM Lslds250m.pat Lslds250m.pat RAD250 5 5 I
ADDITEM Lslds300m.pat Lslds300m.pat RAD300 5 5 I
ADDITEM Lslds450m.pat Lslds450m.pat RAD450 5 5 I
ADDITEM Lslds500m.pat Lslds500m.pat RAD500 5 5 I
ADDITEM Lslds1000m.pat Lslds1000m.pat RAD1000 5 5 I
ADDITEM Lslds1500m.pat Lslds1500m.pat RAD1500 5 5 I
ADDITEM Lslds2000m.pat Lslds2000m.pat RAD2000 5 5 I
ADDITEM Lslds2500m.pat Lslds2500m.pat RAD2500 5 5 I

&RUN d:\renee_gis\scripts\CheckProgEdit.txt

EC Lslds10m
EF POLYGON
SELECT FOR INSIDE = 100
CALCULATE RAD10 = 10
SAVE

EC Lslds100m
EF POLYGON
SELECT FOR INSIDE = 100
CALCULATE RAD100 = 100
SAVE

EC Lslds200m
EF POLYGON
SELECT FOR INSIDE = 100
CALCULATE RAD200 = 200
SAVE

EC Lslds250m
EF POLYGON
SELECT FOR INSIDE = 100

CALCULATE RAD250 = 250
SAVE

EC Lslds300m
EF POLYGON
SELECT FOR INSIDE = 100
CALCULATE RAD300 = 300
SAVE

EC Lslds450m
EF POLYGON
SELECT FOR INSIDE = 100
CALCULATE RAD450 = 450
SAVE

EC Lslds500m
EF POLYGON
SELECT FOR INSIDE = 100
CALCULATE RAD500 = 500
SAVE

EC Lslds1000m
EF POLYGON
SELECT FOR INSIDE = 100
CALCULATE RAD1000 = 1000
SAVE

EC Lslds1500m
EF POLYGON
SELECT FOR INSIDE = 100
CALCULATE RAD1500 = 1500
SAVE

EC Lslds2000m
EF POLYGON
SELECT FOR INSIDE = 100
CALCULATE RAD2000 = 2000
SAVE

EC Lslds2500m
EF POLYGON
SELECT FOR INSIDE = 100
CALCULATE RAD2500 = 2500
SAVE
Q

UNION Lslds2000m Lslds2500m Rad_union1
UNION Lslds1500m Rad_union1 Rad_union2
UNION Lslds1000m Rad_union2 Rad_union3
UNION Lslds500m Rad_union3 Rad_union4
UNION Lslds450m Rad_union4 Rad_union5

UNION Lslds300m Rad_union5 Rad_union6
UNION Lslds250m Rad_union6 Rad_union7
UNION Lslds200m Rad_union7 Rad_union8
UNION Lslds100m Rad_union8 Rad_union9
UNION Lslds10m Rad_union9 MyBuffLslides

&IF [EXIST Lslds2500m -COVER] &THEN KILL Lslds2500m
&IF [EXIST Lslds2000m -COVER] &THEN KILL Lslds2000m
&IF [EXIST Lslds1500m -COVER] &THEN KILL Lslds1500m
&IF [EXIST Lslds1000m -COVER] &THEN KILL Lslds1000m
&IF [EXIST Lslds500m -COVER] &THEN KILL Lslds500m
&IF [EXIST Lslds450m -COVER] &THEN KILL Lslds450m
&IF [EXIST Lslds300m -COVER] &THEN KILL Lslds300m
&IF [EXIST Lslds250m -COVER] &THEN KILL Lslds250m
&IF [EXIST Lslds200m -COVER] &THEN KILL Lslds200m
&IF [EXIST Lslds100m -COVER] &THEN KILL Lslds100m
&IF [EXIST Lslds10m -COVER] &THEN KILL Lslds10m
&IF [EXIST Rad_union1 -COVER] &THEN KILL Rad_union1
&IF [EXIST Rad_union2 -COVER] &THEN KILL Rad_union2
&IF [EXIST Rad_union3 -COVER] &THEN KILL Rad_union3
&IF [EXIST Rad_union4 -COVER] &THEN KILL Rad_union4
&IF [EXIST Rad_union5 -COVER] &THEN KILL Rad_union5
&IF [EXIST Rad_union6 -COVER] &THEN KILL Rad_union6
&IF [EXIST Rad_union7 -COVER] &THEN KILL Rad_union7
&IF [EXIST Rad_union8 -COVER] &THEN KILL Rad_union8
&IF [EXIST Rad_union9 -COVER] &THEN KILL Rad_union9

ADDITEM MyBuffLslides.pat MyBuffLslides.pat RADIUS 5 5 I

&RUN d:\renee_gis\scripts\CheckProgEdit.txt

EC MyBuffLslides
EF POLYGON

SELECT FOR RAD10 = 10
CALCULATE RADIUS = 10
SELECT FOR RAD100 = 100
CALCULATE RADIUS = 100
SELECT FOR RAD200 = 200
CALCULATE RADIUS = 200
SELECT FOR RAD250 = 250
CALCULATE RADIUS = 250
SELECT FOR RAD300 = 300
CALCULATE RADIUS = 300
SELECT FOR RAD450 = 450
CALCULATE RADIUS = 450
SELECT FOR RAD500 = 500
CALCULATE RADIUS = 500
SELECT FOR RAD1000 = 1000
CALCULATE RADIUS = 1000
SELECT FOR RAD1500 = 1500

```

CALCULATE RADIUS = 1500
SELECT FOR RAD2000 = 2000
CALCULATE RADIUS = 2000
SELECT FOR RAD2500 = 2500
CALCULATE RADIUS = 2500
SAVE
Q

```

```

DROPITEM MyBuffLslides.pat MyBuffLslides.pat RAD10 RAD100 RAD200 RAD250 RAD300 RAD450
DROPITEM MyBuffLslides.pat MyBuffLslides.pat RAD500 RAD1000 RAD1500 RAD2000 RAD2500
DROPITEM MyBuffLslides.pat MyBuffLslides.pat RAD_union1# RAD_union2# RAD_union3#
RAD_union4#
DROPITEM MyBuffLslides.pat MyBuffLslides.pat RAD_union5# RAD_union6# RAD_union7#
RAD_union8#
DROPITEM MyBuffLslides.pat MyBuffLslides.pat RAD_union1-ID RAD_union2-ID RAD_union3-ID
RAD_union4-ID
DROPITEM MyBuffLslides.pat MyBuffLslides.pat RAD_union5-ID RAD_union6-ID RAD_union7-ID
RAD_union8-ID
DROPITEM MyBuffLslides.pat MyBuffLslides.pat RAD_union9# RAD_union9-ID Lslds10m# Lslds10m-
ID
DROPITEM MyBuffLslides.pat MyBuffLslides.pat Lslds100m# Lslds100m-ID Lslds200m# Lslds200m-ID
DROPITEM MyBuffLslides.pat MyBuffLslides.pat Lslds250m# Lslds250m-ID Lslds300m# Lslds300m-ID
DROPITEM MyBuffLslides.pat MyBuffLslides.pat Lslds450m# Lslds450m-ID Lslds500m# Lslds500m-ID
DROPITEM MyBuffLslides.pat MyBuffLslides.pat Lslds1000m# Lslds1000m-ID Lslds1500m#
Lslds1500m-ID
DROPITEM MyBuffLslides.pat MyBuffLslides.pat Lslds2000m# Lslds2000m-ID Lslds2500m#
Lslds2500m-ID
&RETURN
/*****
&ROUTINE QMAP_LSI

/* JOIN QMAP landslide coverages for Auckland and Waikato.

&IF [EXIST QMAP_Landsl -COVER] &THEN KILL QMAP_Landsl

COPY d:\renee_gis\input_data\GNS_QMAP\Auckland\covers\landslides qmap_a_landsl
COPY d:\renee_gis\input_data\GNS_QMAP\Waikato\covers\landslides qmap_w_landsl

UNION qmap_w_landsl qmap_a_landsl QMAP_Landsl

&IF [EXIST qmap_a_landsl -COVER] &THEN KILL qmap_a_landsl
&IF [EXIST qmap_w_landsl -COVER] &THEN KILL qmap_w_landsl

DROPITEM QMAP_Landsl.pat QMAP_Landsl.pat MAIN_ROCK SUB_ROCKS MAP_UNIT STRAT_UNIT
DROPITEM QMAP_Landsl.pat QMAP_Landsl.pat SEQUENCE TERRANE STRAT_AGE ABS_MIN
ABS_MAX
DROPITEM QMAP_Landsl.pat QMAP_Landsl.pat CONFIDENCE DESCRIPTION ROCK_GROUP
ROCK_CLASS

&RETURN

```

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/*****
&ROUTINE UNION_BOTH

/* Join QMAP landslide inventory with buffered Geonet landslide catalog.
&IF [EXIST LI_selection -COVER] &THEN KILL LI_selection
&IF [EXIST Lslides_2500m -COVER] &THEN KILL Lslides_2500m
UNION MyBuffLslides qmap_landsl Lslides_2500m

/*&IF [EXIST MyBuffLslides -COVER] &THEN KILL MyBuffLslides
/*&IF [EXIST qmap_landsl -COVER] &THEN KILL qmap_landsl

&RUN d:\renee_gis\scripts\CheckProgEdit.txt

EC Lslides_2500m
EF polygon

SELECT ALL
CALCULATE INSIDE = 1
SAVE
Q

CLIP Lslides_2500m D:\Renee_GIS\Output_data\Organised\03_DEM\dem_bnd LI_selection
&IF [EXIST Lslides_2500m -COVER] &THEN KILL Lslides_2500m

&RETURN
/*****
&ROUTINE RASTERISE

DROPITEM LI_selection.pat LI_selection.pat Presence
ADDITEM LI_selection.pat LI_selection.pat Presence 5 5 I

&RUN d:\renee_gis\scripts\CheckProgEdit.txt
EC LI_selection
EF polygon

SELECT FOR INSIDE = 1
CALCULATE Presence = 1
SAVE
Q

&IF [EXIST LI_Extent -COVER] &THEN KILL LI_Extent
UNION LI_selection D:\Renee_GIS\Output_data\Organised\03_DEM\dem_bnd LI_Extent

&RUN d:\renee_gis\scripts\CheckProgEdit.txt
EC LI_Extent
EF polygon

SELECT FOR Presence ne 1
CALCULATE Presence = 0
SAVE
Q

```



```
DROPITEM LI_Extent.pat LI_Extent.pat UNIT_CODE GRID-CODE MYBUFFLSLIDES# MYBUFFLSLIDES-ID  
DROPITEM LI_Extent.pat LI_Extent.pat LI_SELECTION# LI_SELECTION-ID DEM_BND# DEM_BND-ID
```

```
&IF [EXIST MyLSldsgrid-GRID] &THEN KILL MyLSldsgridALL
```

```
POLYGRID LI_Extent MyLSldsgrid Presence
```

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```

```
y
```

```
&RETURN
```