Ongoing Water Budget Details

ESHMC 14 March 2011

B. Contor

Outline

- Crop Mix
- *.iar
- Deficit irrigation & CIR
  - Last ESHMC
    - Minidoka, Mud Lake, Monteview
  - Last week

Crop Mix

www.idwr.idaho.gov - /Browse/WaterInfo/ESPAM/model_files/Version_2.0_Development/Superseded_Da

File Edit View History Bookmarks Tools Help

http://www.idwr.idaho.gov/Browse/WaterInfo/ESPAM/model_files/Version_2.0_Development/Superseded_Data/Crop Mix/

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[To Parent Directory]

Monday, August 25, 2008 12
Wednesday, July 15, 2009 9

Microsoft Excel - ESPAM2_CROP_MIX_07_14_2009.xls [Read-Only]

File Edit View Insert Format Tools Data Window Help

B446 = 0.593650793650794

	A	B	C	D	E	F	G	H	I	J	
422	Madison	0.14	0.35	0.00	0.00	0.00	0.00	0.27	0.00	0.23	
423	Minidoka	0.13	0.16	0.03	0.00	0.00	0.00	0.13	0.24	0.20	
424	Power	0.07	0.06	0.00	0.03	0.00	0.00	0.29	0.10	0.24	
425	Twin Falls	0.28	0.30	0.10	0.01	0.08	0.00	0.07	0.07	0.07	
426	2005	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	Wir
427	Bannock	0.51	0.12	0.00	0.00	0.00	0.02	0.12	0.00	0.00	
428	Bingham	0.22	0.09	0.00	0.00	0.00	0.00	0.19	0.07	0.15	
429	Blaine	0.52	0.36	0.00	0.00	0.00	0.01	0.04	0.00	0.05	
430	Bonneville	0.18	0.44	0.00	0.01	0.03	0.00	0.19	0.00	0.11	
431	Butte	0.00	0.61	0.00	0.00	0.00	0.03	0.04	0.00	0.27	
432	Cassia	0.23	0.12	0.03	0.01	0.07	0.00	0.12	0.13	0.09	
433	Clark	0.39	0.39	0.00	0.00	0.00	0.01	0.12	0.00	0.08	
434	Fremont	0.13	0.28	0.00	0.00	0.00	0.00	0.23	0.00	0.18	
435	Gooding	0.34	0.03	0.02	0.06	0.36	0.00	0.08	0.02	0.02	
436	Jefferson	0.36	0.42	0.00	0.00	0.00	0.00	0.10	0.00	0.11	
437	Jerome	0.00	0.18	0.12	0.05	0.27	0.00	0.10	0.15	0.05	
438	Lincoln	0.30	0.27	0.00	0.01	0.09	0.01	0.03	0.12	0.11	
439	Madison	0.14	0.32	0.00	0.00	0.00	0.00	0.26	0.00	0.25	
440	Minidoka	0.00	0.24	0.03	0.01	0.03	0.00	0.15	0.30	0.17	
441	Power	0.07	0.06	0.00	0.00	0.00	0.00	0.32	0.11	0.21	

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www.idwr.idaho.gov - /Browse/WaterInfo/ESPAM/model_files/Versio /Superseded_Data/Crop Mix/

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Monday, August 25, 2008 12
Wednesday, July 15, 2009 9

Microsoft Excel - ESPAM2_CROP_MIX_07_14_2009.xls [Read-Only]

File Edit View Insert Format Tools Data Window Help

B484 = =B467

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460	2007	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht
461	Bannock	0.49	0.09	0.00	0.00	0.00	0.01	0.11	0.00	0.09
462	Bingham	0.21	0.12	0.00	0.00	0.00	0.00	0.19	0.08	0.16
463	Blaine	0.53	0.35	0.00	0.00	0.00	0.01	0.05	0.01	0.04
464	Bonneville	0.20	0.40	0.00	0.00	0.02	0.00	0.20	0.00	0.15
465	Butte	0.51	0.30	0.00	0.00	0.00	0.02	0.04	0.00	0.09
466	Cassia	0.23	0.16	0.03	0.00	0.04	0.00	0.12	0.14	0.09
467	Clark	0.42	0.31	0.00	0.00	0.00	0.00	0.12	0.00	0.13
468	Fremont	0.15	0.34	0.00	0.00	0.00	0.00	0.25	0.00	0.12
469	Gooding	0.38	0.03	0.01	0.07	0.32	0.00	0.08	0.03	0.03
470	Jefferson	0.39	0.36	0.00	0.00	0.02	0.00	0.12	0.00	0.07
471	Jerome	0.24	0.15	0.08	0.03	0.19	0.00	0.08	0.11	0.06
472	Lincoln	0.34	0.23	0.01	0.02	0.07	0.01	0.03	0.11	0.12
473	Madison	0.15	0.32	0.00	0.00	0.00	0.00	0.27	0.00	0.24
474	Minidoka	0.12	0.19	0.03	0.01	0.02	0.00	0.14	0.25	0.17
475	Power	0.08	0.06	0.00	0.01	0.00	0.00	0.30	0.10	0.22
476	Twin Falls	0.31	0.19	0.11	0.02	0.11	0.00	0.06	0.06	0.05
477	2008	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht
478	Bannock	0.49	0.09	0.00	0.00	0.00	0.01	0.11	0.00	0.09
479	Bingham	0.21	0.12	0.00	0.00	0.00	0.00	0.19	0.08	0.16

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Wednesday, July 15, 2009 9

Microsoft Excel - ESPAM2_CropMix_20110309.xls

File Edit View Insert Format Tools Data Window Help

A421 = Lincoln

	A	B	C	D	E	F	G	H	I	J
421	Lincoln	0.35	0.26	0.01	0.01	0.04	0.00	0.03	0.07	0.12
422	Madison	0.14	0.35	0.00	0.00	0.00	0.00	0.27	0.00	0.23
423	Minidoka	0.13	0.16	0.03	0.00	0.00	0.00	0.13	0.24	0.20
424	Power	0.07	0.06	0.00	0.03	0.00	0.00	0.29	0.10	0.24
425	Twin Falls	0.28	0.30	0.10	0.01	0.08	0.00	0.07	0.07	0.07
426	2005	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht
427	Bannock	0.51	0.12	0.00	0.00	0.00	0.02	0.12	0.00	0.00
428	Bingham	0.22	0.09	0.00	0.00	0.00	0.00	0.19	0.07	0.15
429	Blaine	0.52	0.36	0.00	0.00	0.00	0.01	0.04	0.00	0.05
430	Bonneville	0.18	0.44	0.00	0.01	0.03	0.00	0.19	0.00	0.11
431	Butte	0.64	0.22	0.00	0.00	0.00	0.01	0.01	0.00	0.10
432	Cassia	0.23	0.12	0.03	0.01	0.07	0.00	0.12	0.13	0.09
433	Clark	0.39	0.39	0.00	0.00	0.00	0.01	0.12	0.00	0.08
434	Fremont	0.13	0.28	0.00	0.00	0.00	0.00	0.23	0.00	0.18
435	Gooding	0.34	0.03	0.02	0.06	0.36	0.00	0.08	0.02	0.02
436	Jefferson	0.36	0.42	0.00	0.00	0.00	0.00	0.10	0.00	0.11
437	Jerome	0.31	0.12	0.08	0.03	0.19	0.00	0.07	0.10	0.04
438	Lincoln	0.30	0.27	0.00	0.01	0.09	0.01	0.03	0.12	0.11
439	Madison	0.14	0.32	0.00	0.00	0.00	0.00	0.26	0.00	0.25
440	Minidoka	0.16	0.20	0.03	0.01	0.03	0.00	0.12	0.25	0.15

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http://www.idwr.idaho.gov/Browse/WaterInfo/ESPAM/model_files/Version_2.0_Development/Current_Data/Crop Mix/

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www.idwr.idaho.gov - /Browse/WaterInfo/ESPAM/model_files/Versio /Current_Data/Crop Mix/

[To Parent Directory]

Tuesday, March 01, 2011 4
Wednesday, July 15, 2009 9

Microsoft Excel - ESPAM2_CropMix_20110309.xls

File Edit View Insert Format Tools Data Window Help

A483 = Cassia

	A	B	C	D	E	F	G	H	I	J	
460	2007	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	Wir
461	Bannock	0.52	0.09	0.00	0.00	0.00	0.00	0.13	0.00	0.07	
462	Bingham	0.25	0.05	0.00	0.00	0.00	0.00	0.23	0.09	0.16	
463	Blaine	0.64	0.34	0.00	0.00	0.00	0.02	0.00	0.00	0.00	
464	Bonneville	0.25	0.32	0.00	0.00	0.00	0.02	0.19	0.00	0.22	
465	Butte	0.69	0.25	0.00	0.00	0.00	0.01	0.00	0.00	0.04	
466	Cassia	0.28	0.17	0.03	0.00	0.00	0.01	0.15	0.16	0.00	
467	Clark	0.65	0.09	0.00	0.00	0.00	0.00	0.11	0.00	0.14	
468	Fremont	0.19	0.26	0.00	0.00	0.00	0.01	0.25	0.00	0.29	
469	Gooding	0.33	0.02	0.00	0.12	0.39	0.00	0.08	0.02	0.01	
470	Jefferson	0.49	0.23	0.00	0.00	0.00	0.01	0.12	0.00	0.16	
471	Jerome	0.33	0.11	0.06	0.02	0.20	0.01	0.09	0.09	0.03	
472	Lincoln	0.54	0.09	0.00	0.01	0.07	0.00	0.04	0.14	0.11	
473	Madison	0.18	0.27	0.00	0.00	0.00	0.01	0.25	0.00	0.28	
474	Minidoka	0.19	0.19	0.02	0.04	0.03	0.01	0.15	0.25	0.12	
475	Power	0.10	0.02	0.00	0.00	0.00	0.00	0.32	0.09	0.32	
476	Twin Falls	0.36	0.10	0.08	0.08	0.17	0.01	0.04	0.04	0.03	
477	2008	Alfalfa	Barley	DrBean	GrCorn	SilCorn	Oats	Potatoes	SugBeet	SprWht	Wir
478	Bannock	0.52	0.10	0.00	0.00	0.00	0.00	0.11	0.00	0.07	
479	Bingham	0.25	0.07	0.00	0.00	0.00	0.00	0.21	0.07	0.17	

New *.iar

Mozilla Firefox

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http://www.idwr.idaho.gov/Browse/WaterInfo/ESPAM/model_files/Version_2.0_Development/Current_

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Explanation of P110209A

P110209A differes from E101027A only in modifications to the trib underflow and mto the *.mdl file. Everything else is identical to E101027A, which was described as follows:

1) The new model boundary provided by Allan Wylie has been incorporated. This changes the *.cel file and the irrigated lands files. Conceptually other files could have been affected but none of the others had features in the areas of change. It appears that the only change has been the removal of one model cell, Row 37 Column 13.

2) The fixed-point data set has had all out-of-bounds points removed.

3) E101027A included separate irrigated lands maps for 1980, 1992, 2000 and 2006. E101014A restores 1986 irrigated lands (with the problem above the canyon rim repaired) and adds a new data set for 2002 irrigated lands, prepared by IDWR. These changes are reflected in the *.iar and *.red files.

P110209A has Trib4 (BevCam) divided into trib4 (Beaver) and trib24 (Camas), and trib16 (HenryF) divi into trib16 (HenryF) and trib23 (RtlPine). P110209A also has two additional sections added to the e *.mdl file used by mkmod6 as follows:

The first informs the mkmod of the types of points in the *.fpt file, it looks like:

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www.idwr.idaho.gov - /Browse/WaterInfo/ESPAM/model_files/Versio /Current_Data/E110228A/

[To Parent Directo

Thursday, Octob
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Wednesday, Novemb
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Tuesday, Februa
Monday, Ju
Wednesday, Februa
Thursday, M
Monday, Februa
Thursday, Novemb
Tuesday, Mar
Monday, Octob
Wednesday, Novemb
Friday, Februa

TextPad - C:\Documents and Settings\ADMIN\Local Settings\Temp\E1102...

File Edit Search View Tools Macros Configure Window Help

Find incrementally

Document Selector

E110228A.iar

E110228A.iar

```
STRESS PERIOD 1
1
5302
8 107 2
IEGW503 IESW005
74400 741
8 108 2
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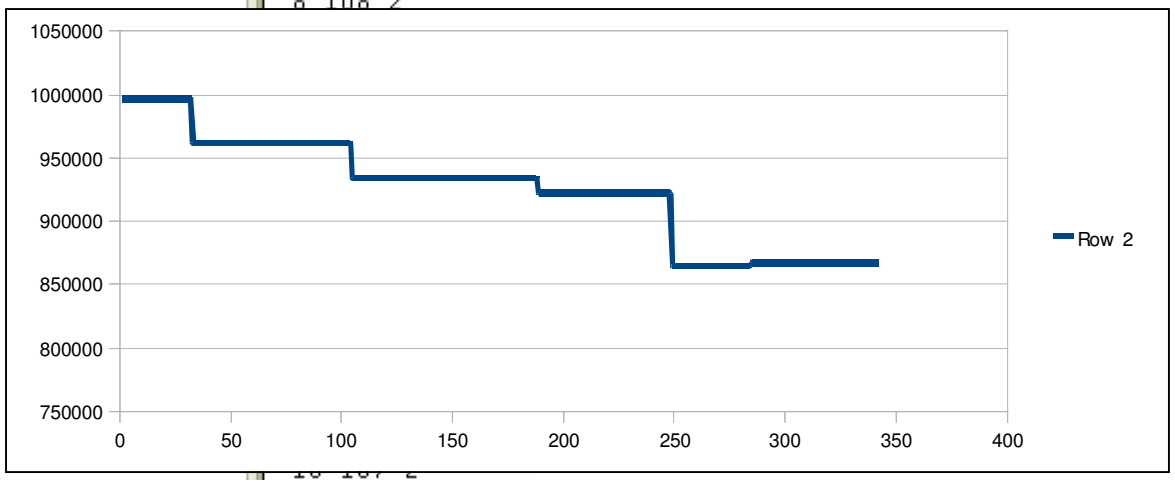


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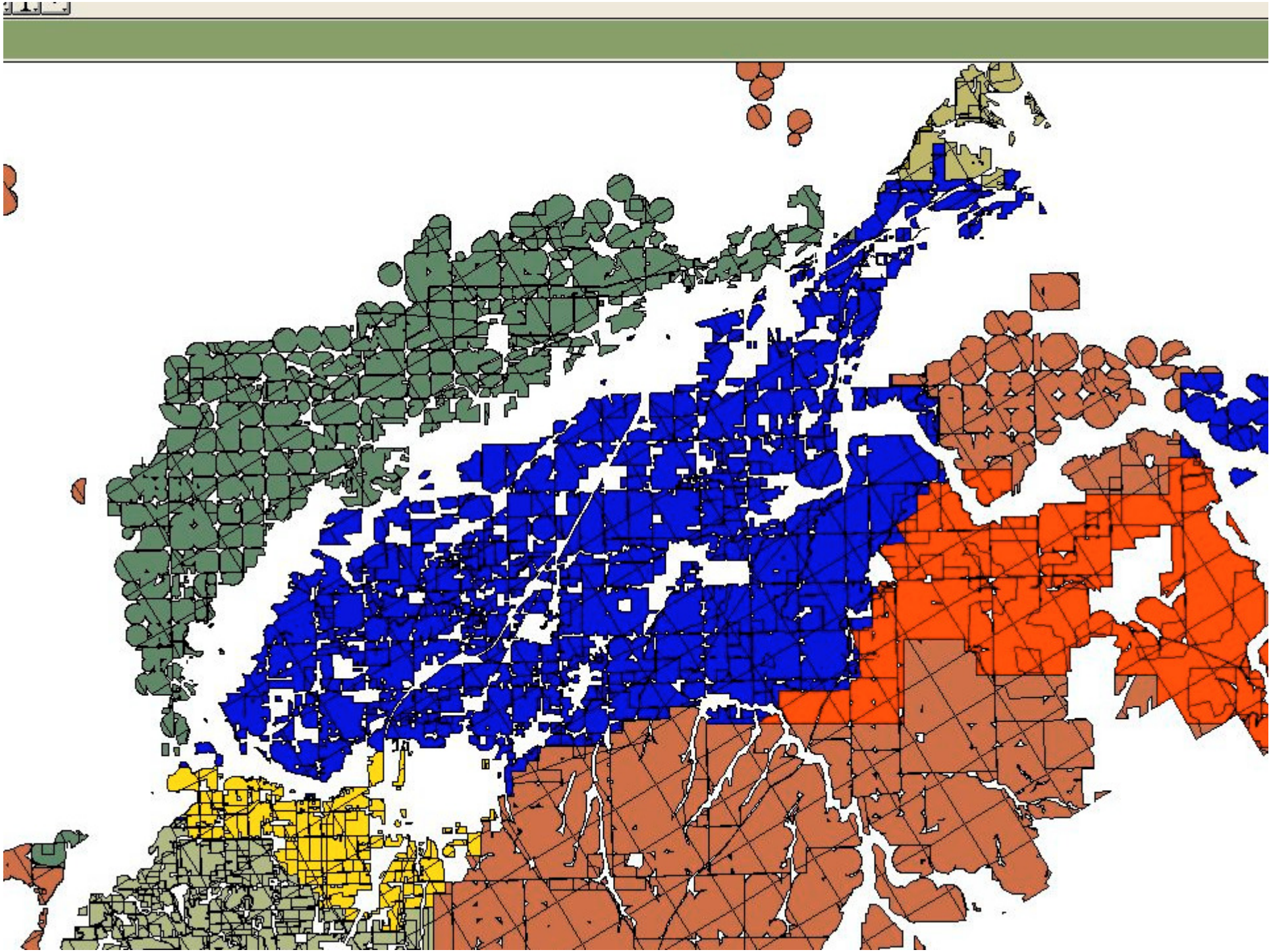
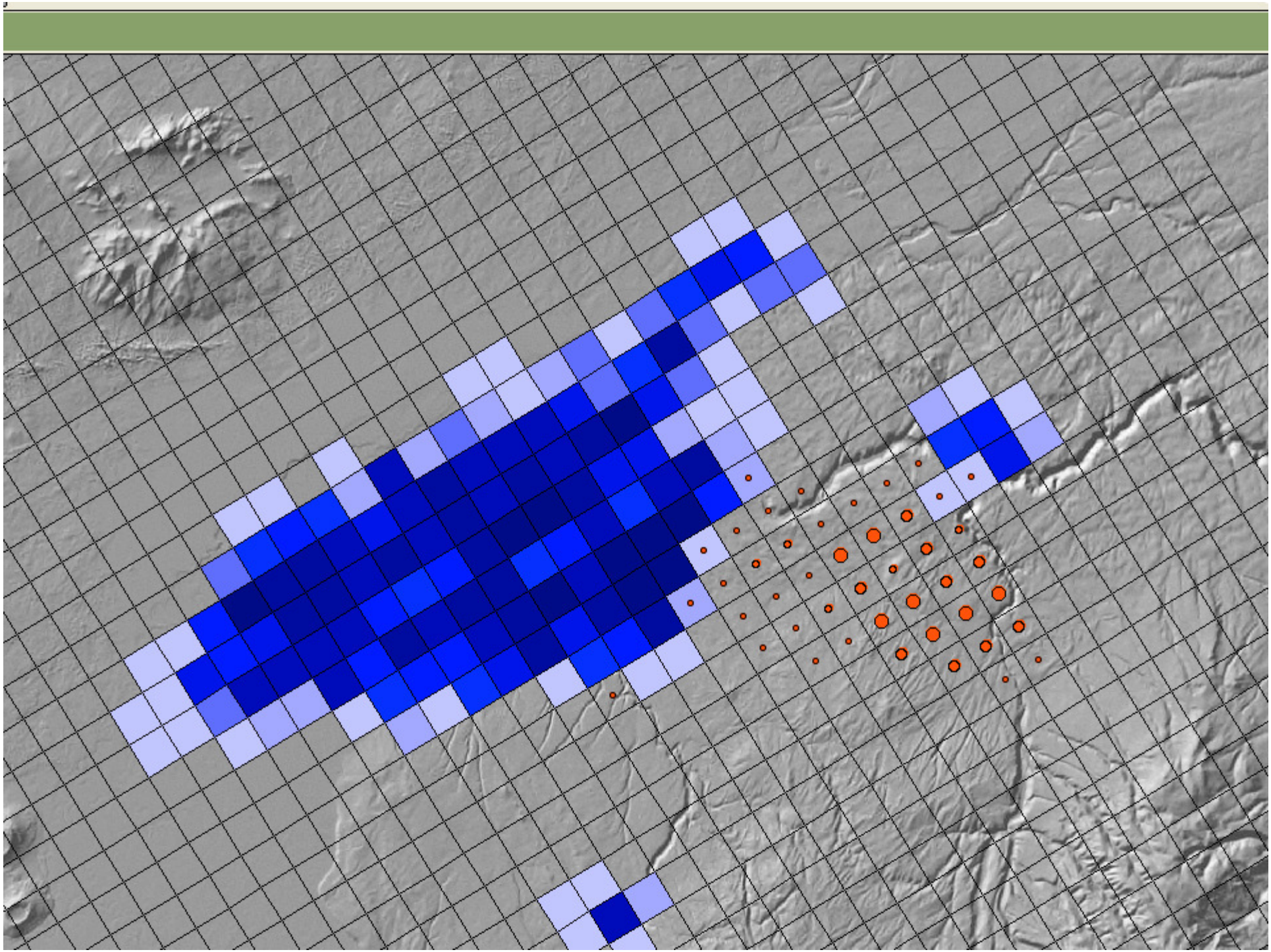
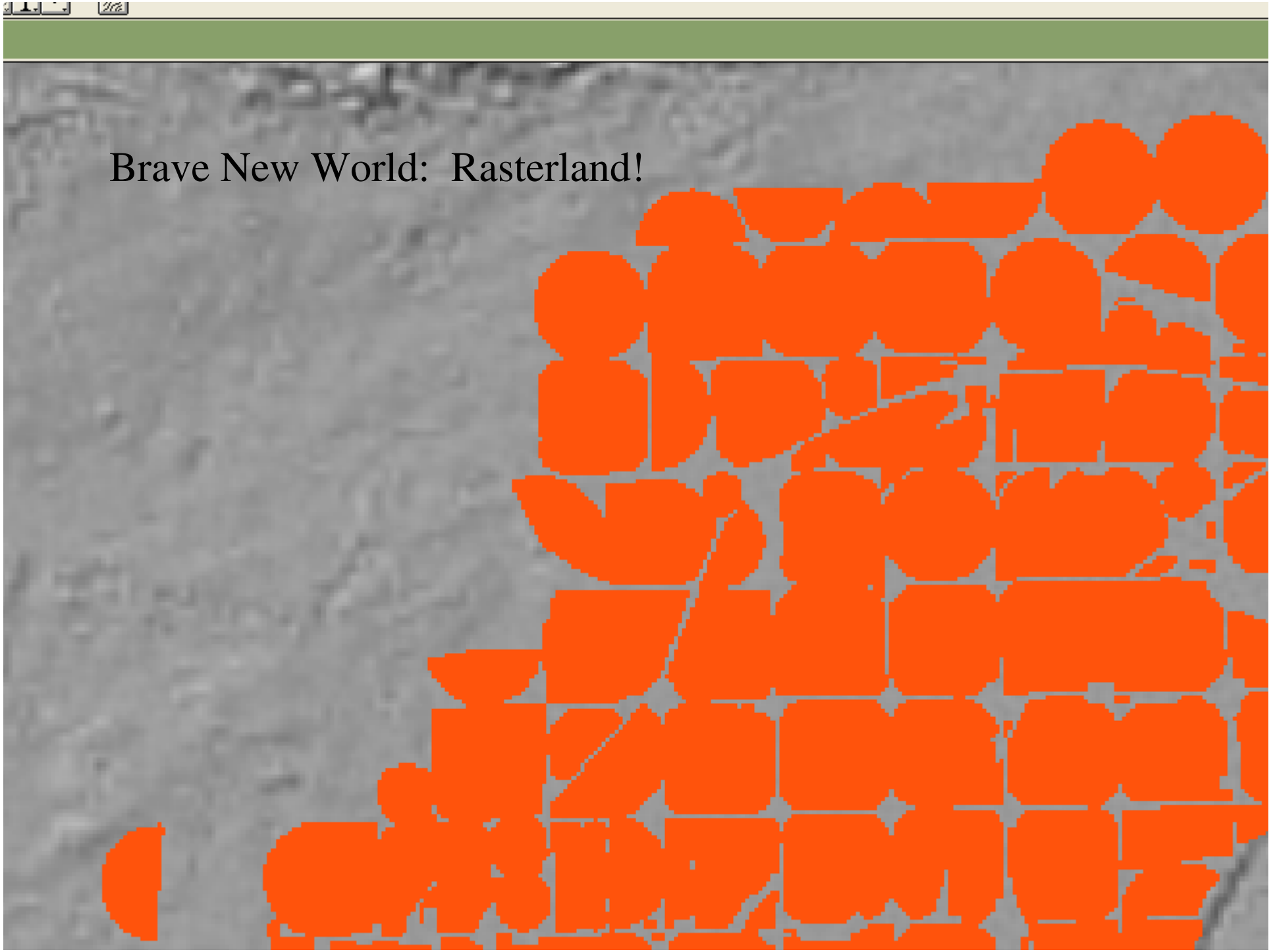
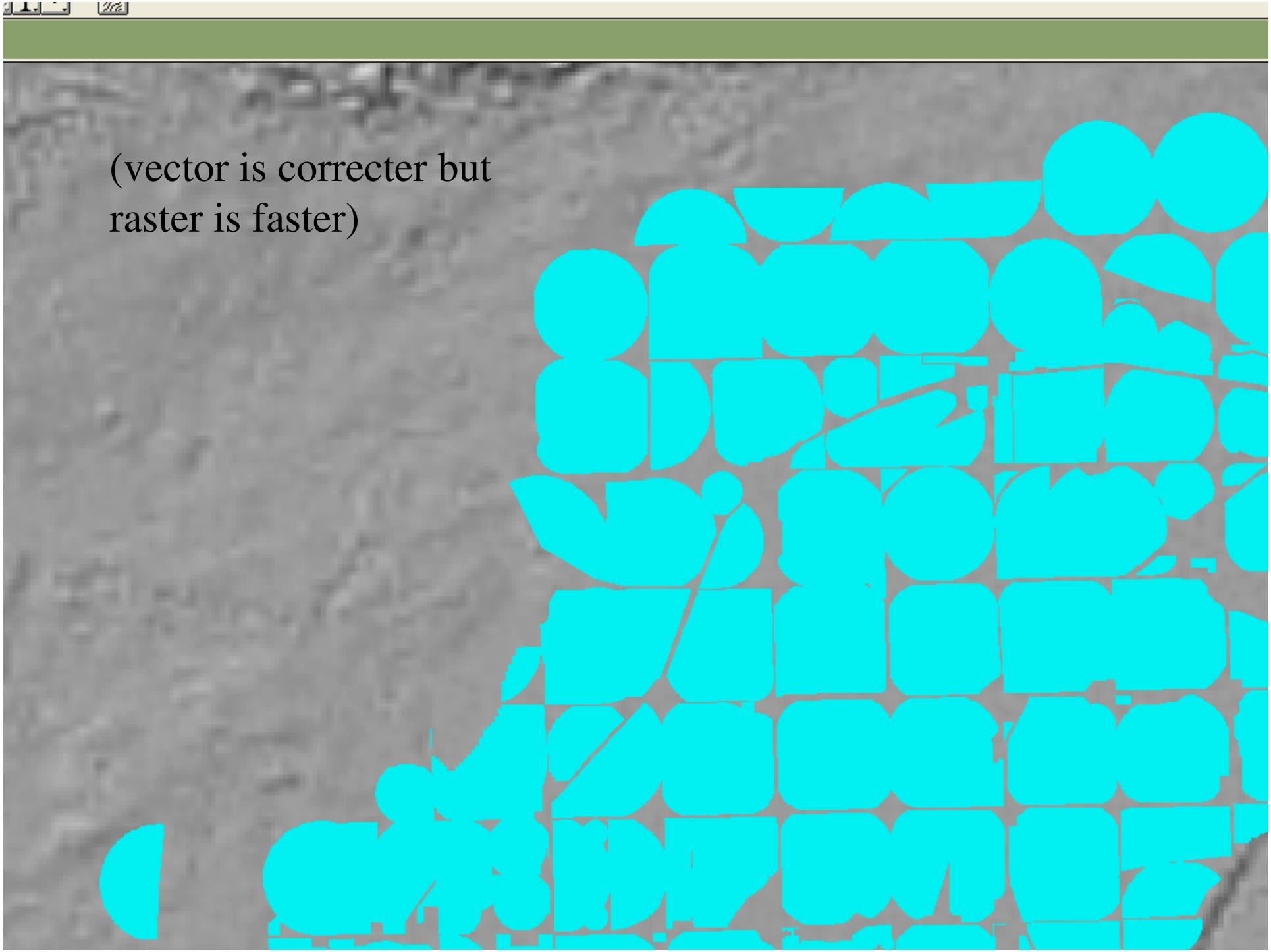
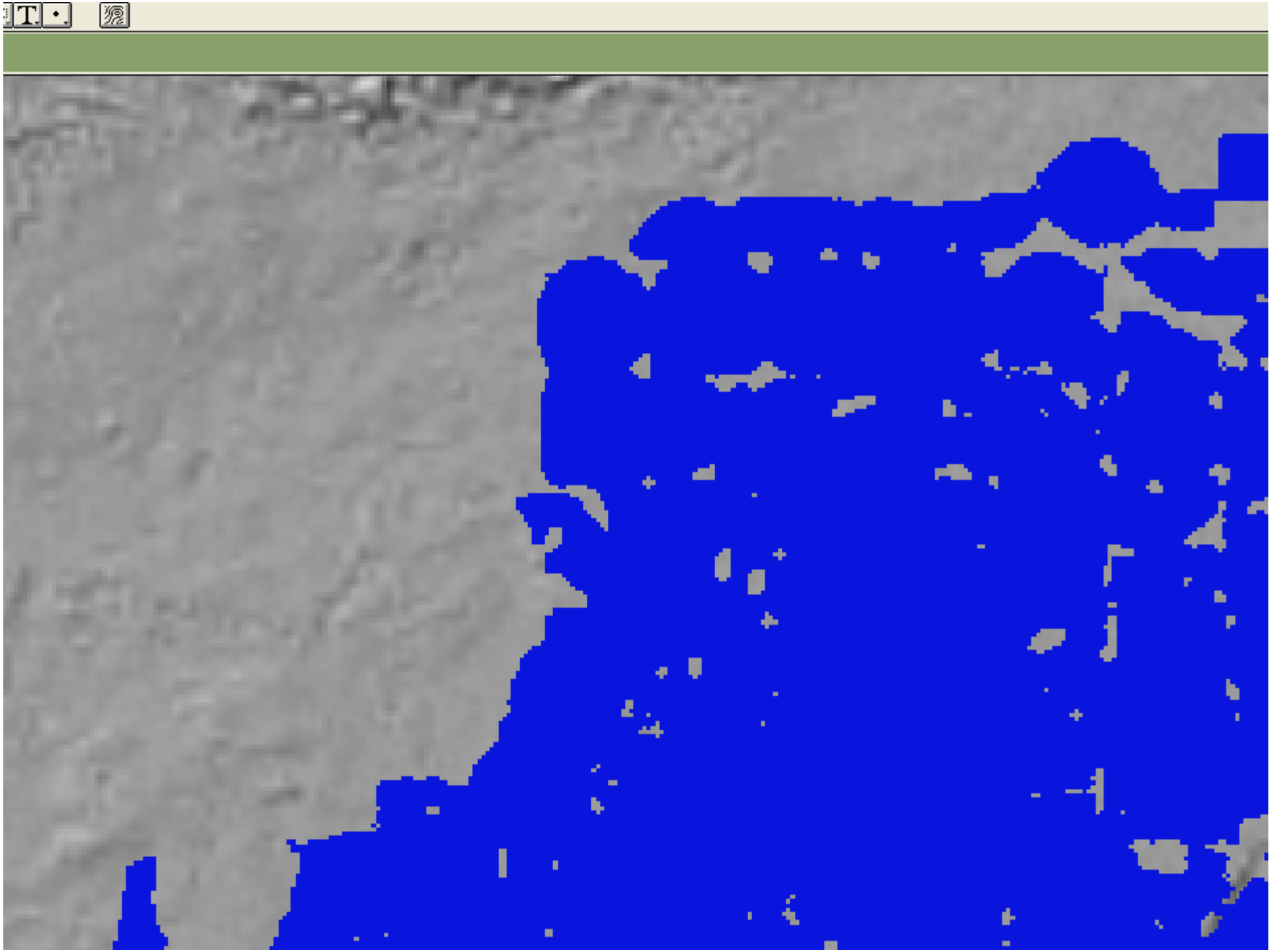
Expl... Doc... Clip ...

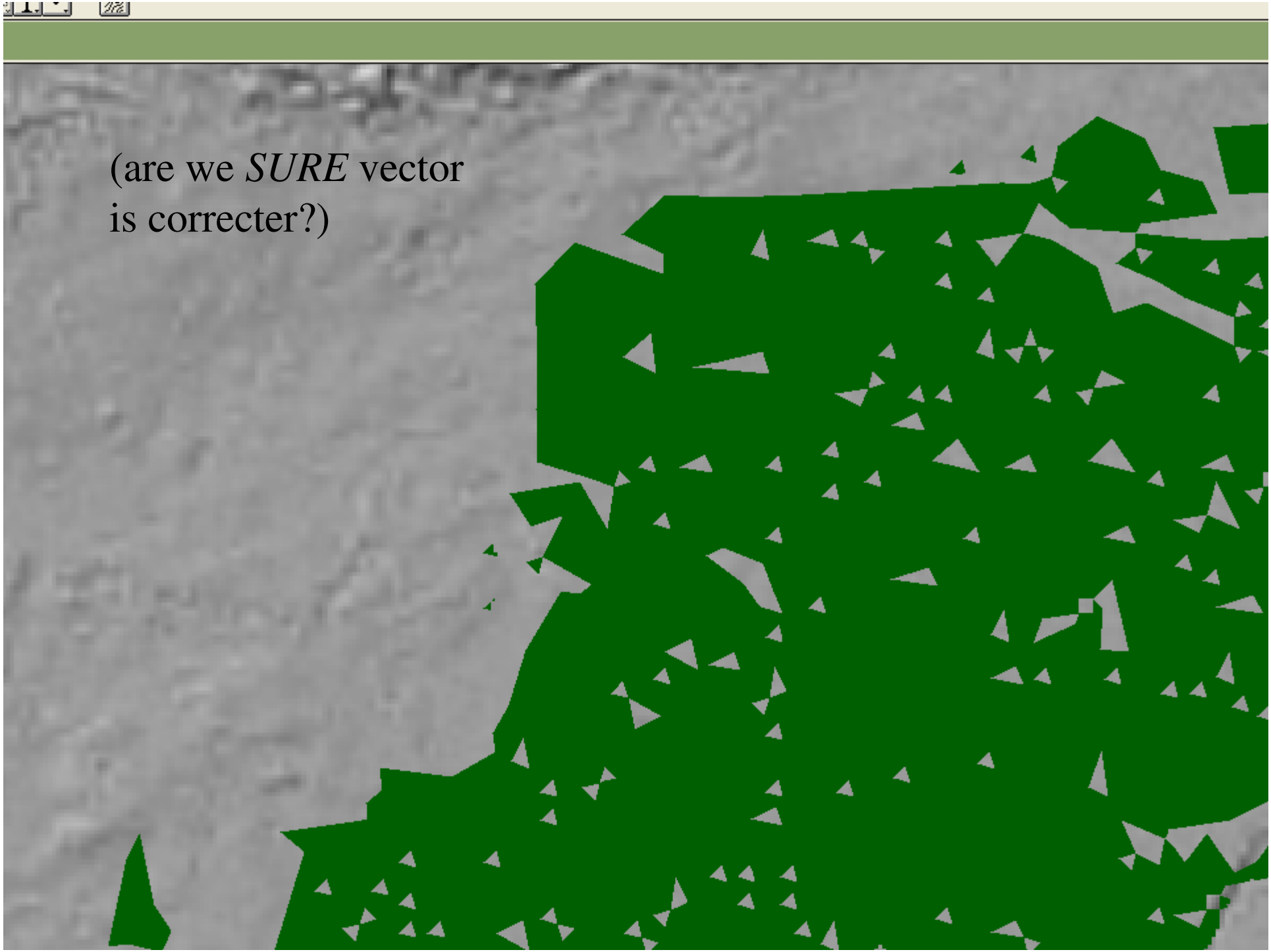





Brave New World: Rasterland!


(vector is correcter but
raster is faster)




(are we *SURE* vector
is correcter?)

Deficit & CIR, etc.

- Economic theory
- ET Adjustment Factors
- Last ESHMC meeting
- What we did
- Last week

Economic theory:

- Irrigated acres will adjust to fit typical supplies

ET adjustment factors should correct for any chronic condition

- short water supplies
- local departures from traditional assumptions
  - crop mix
  - crop varieties
  - management intensity
  - irrigation methods
  - weather conditions
  - soil conditions

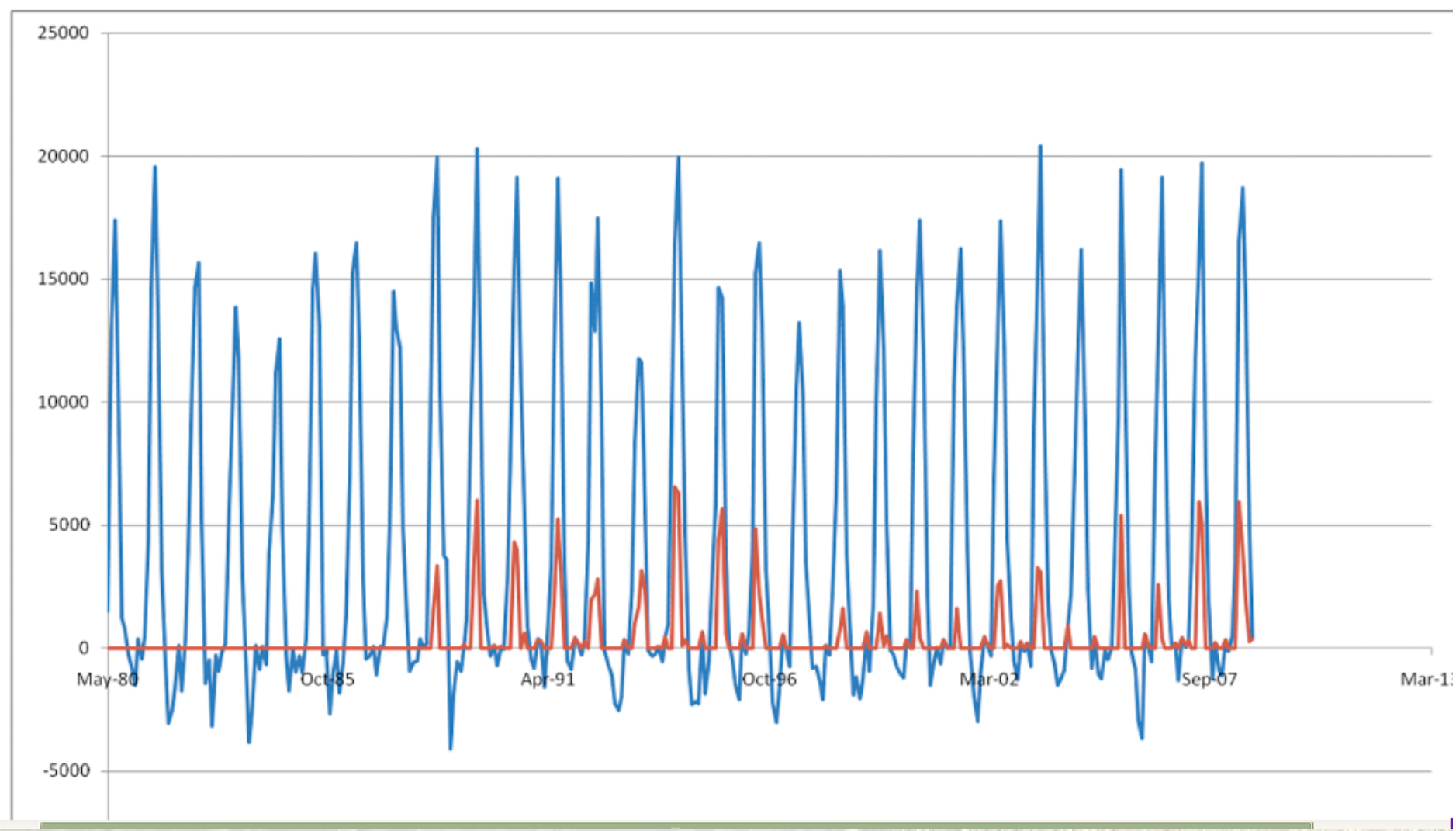
Last ESHMC meeting

- Minidoka
- Monteview
- Mud Lake

Last ESHMC meeting

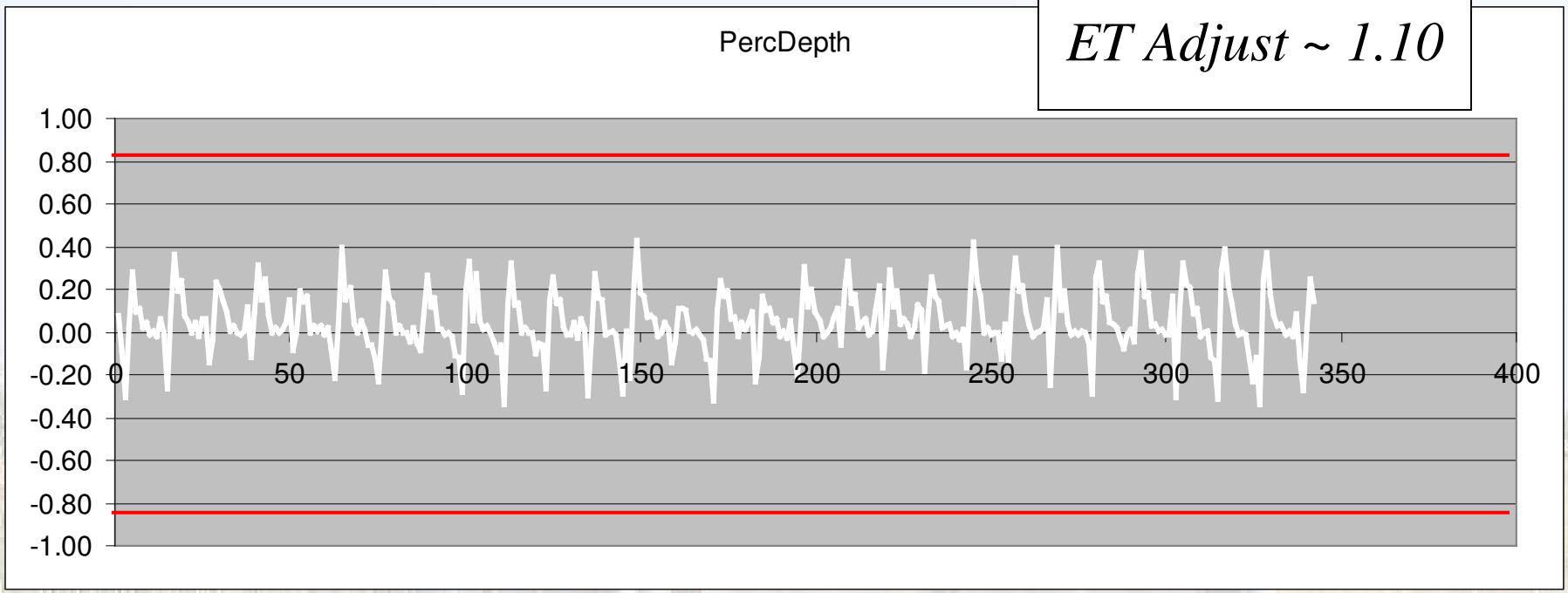
- Minidoka - Canal seepage adjusted to match Sullivan data
- Monteview - Fixed blunder in offsite pumping volumes
- Mud Lake - Not Happy Yet

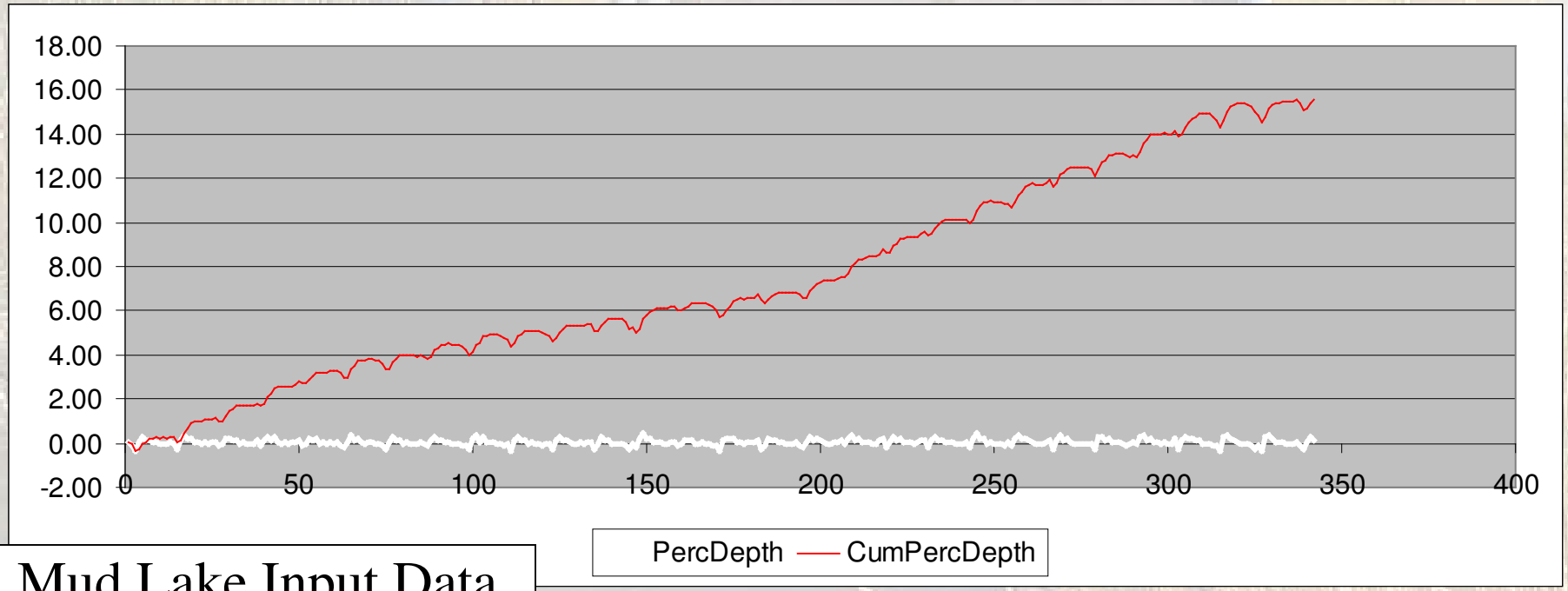
ET adjust 0.82



(Mud Lake from MKMOD)

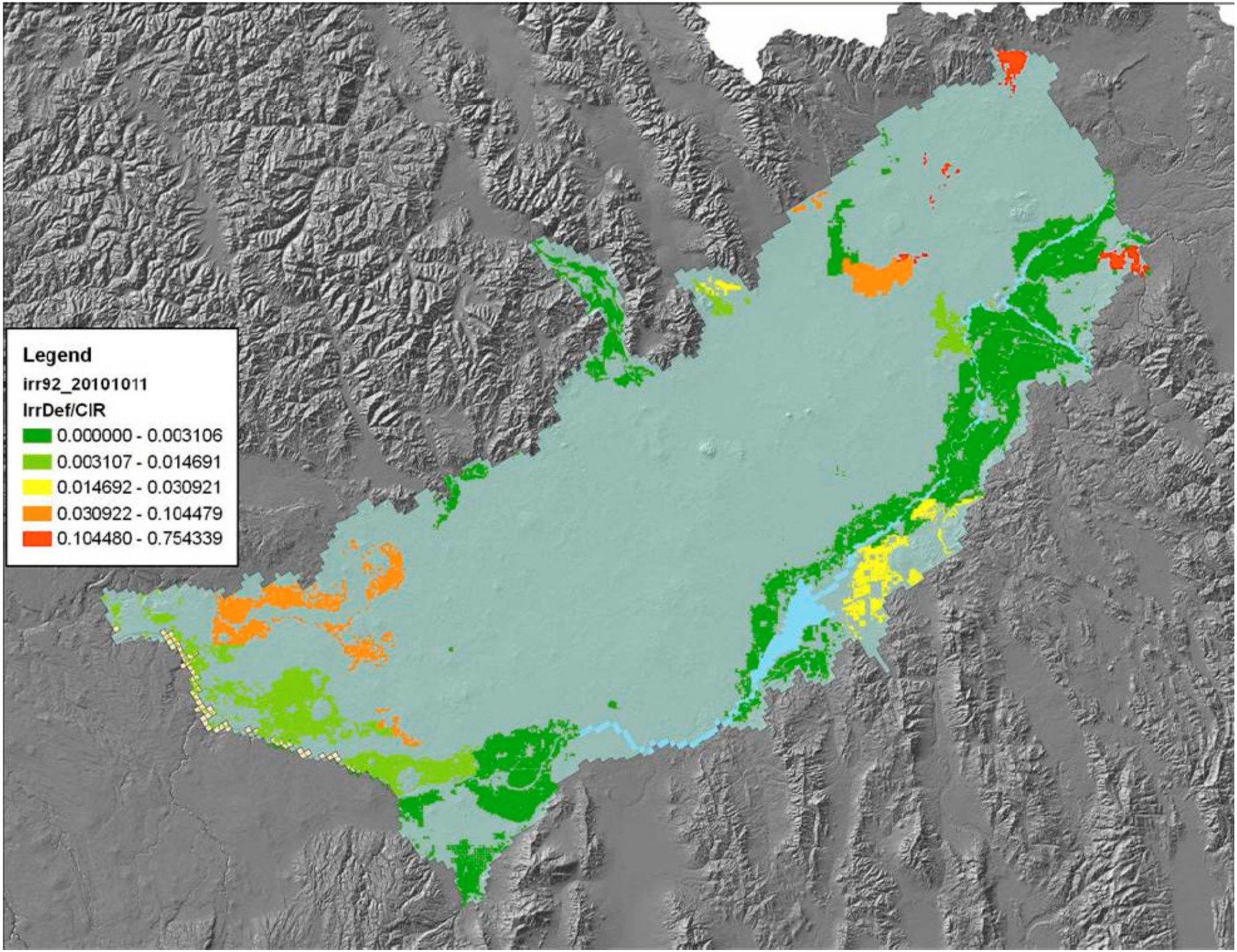
ET Adjust ~ 1.10





Mud Lake Input Data

Last week


Legend
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IrrDef/CIR
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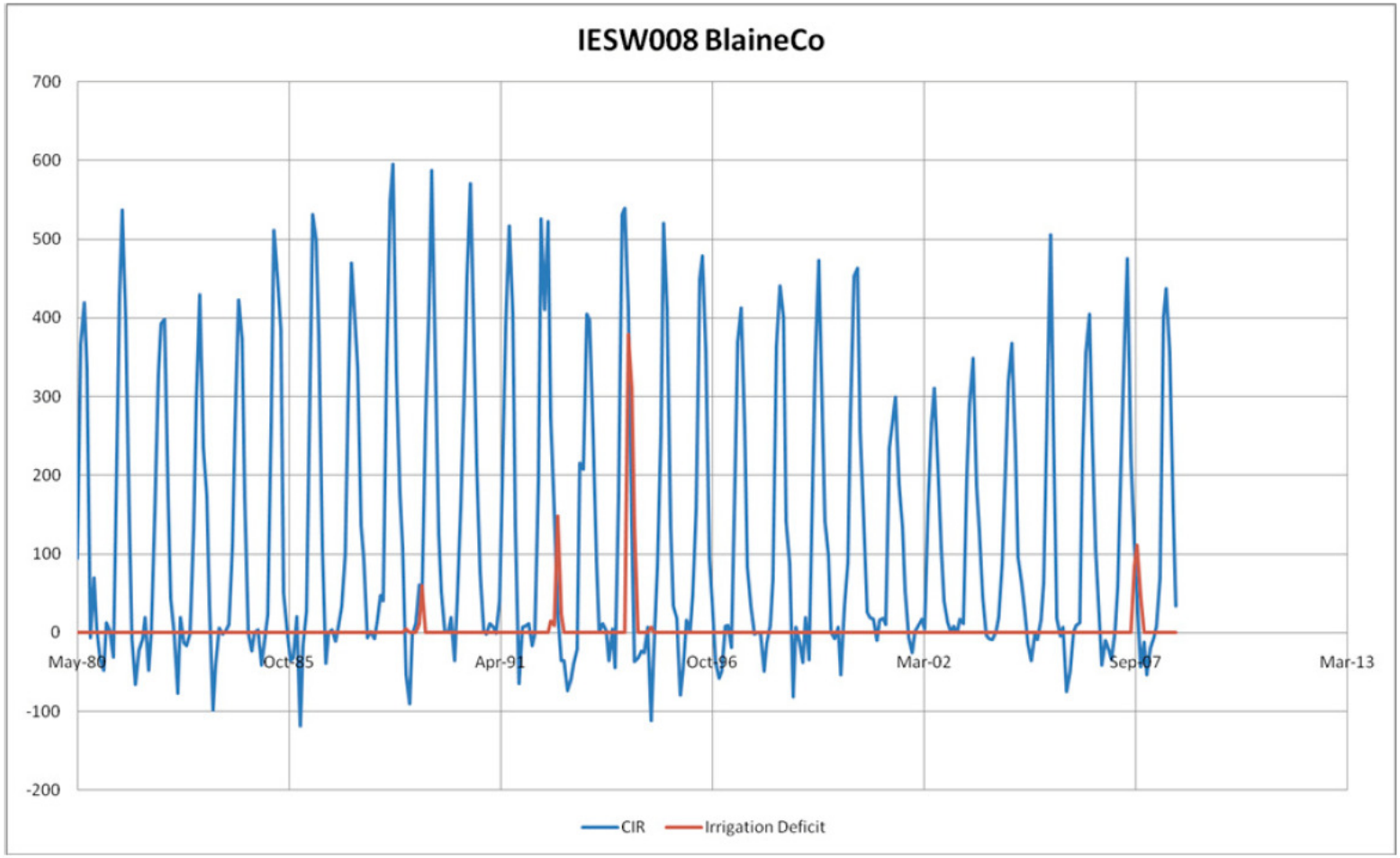
0.014692 - 0.030921
0.030922 - 0.104479
0.104480 - 0.754339


IESW008 BlaineCo
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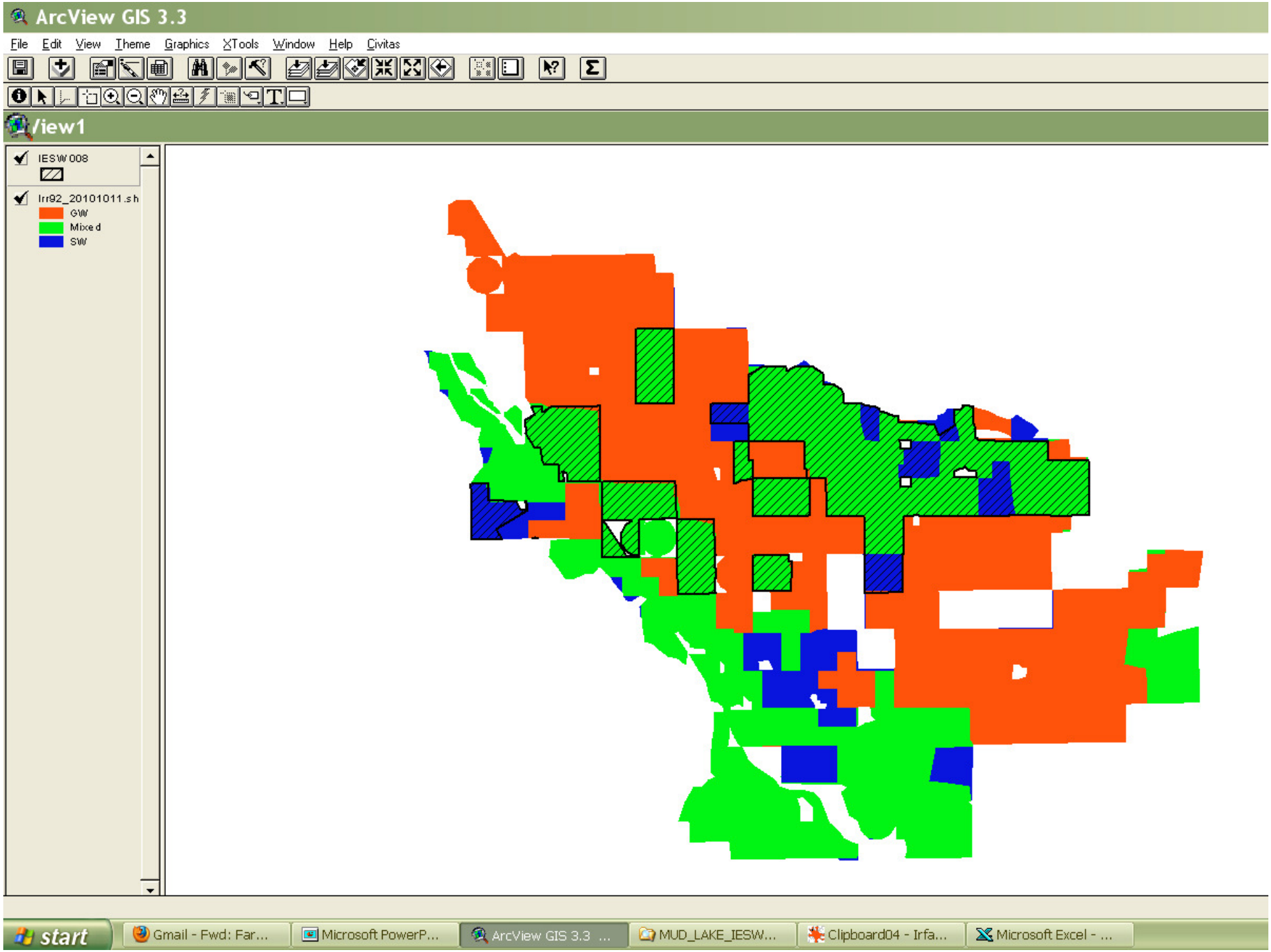
Apr-91
Oct-96
Mar-02
Sep-07
Mar-13
CIR
Irrigation Deficit


ArcView GIS 3.3
File Edit View Theme Graphics XTools Window Help Civitas
View1
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Irr92_20101011.sh
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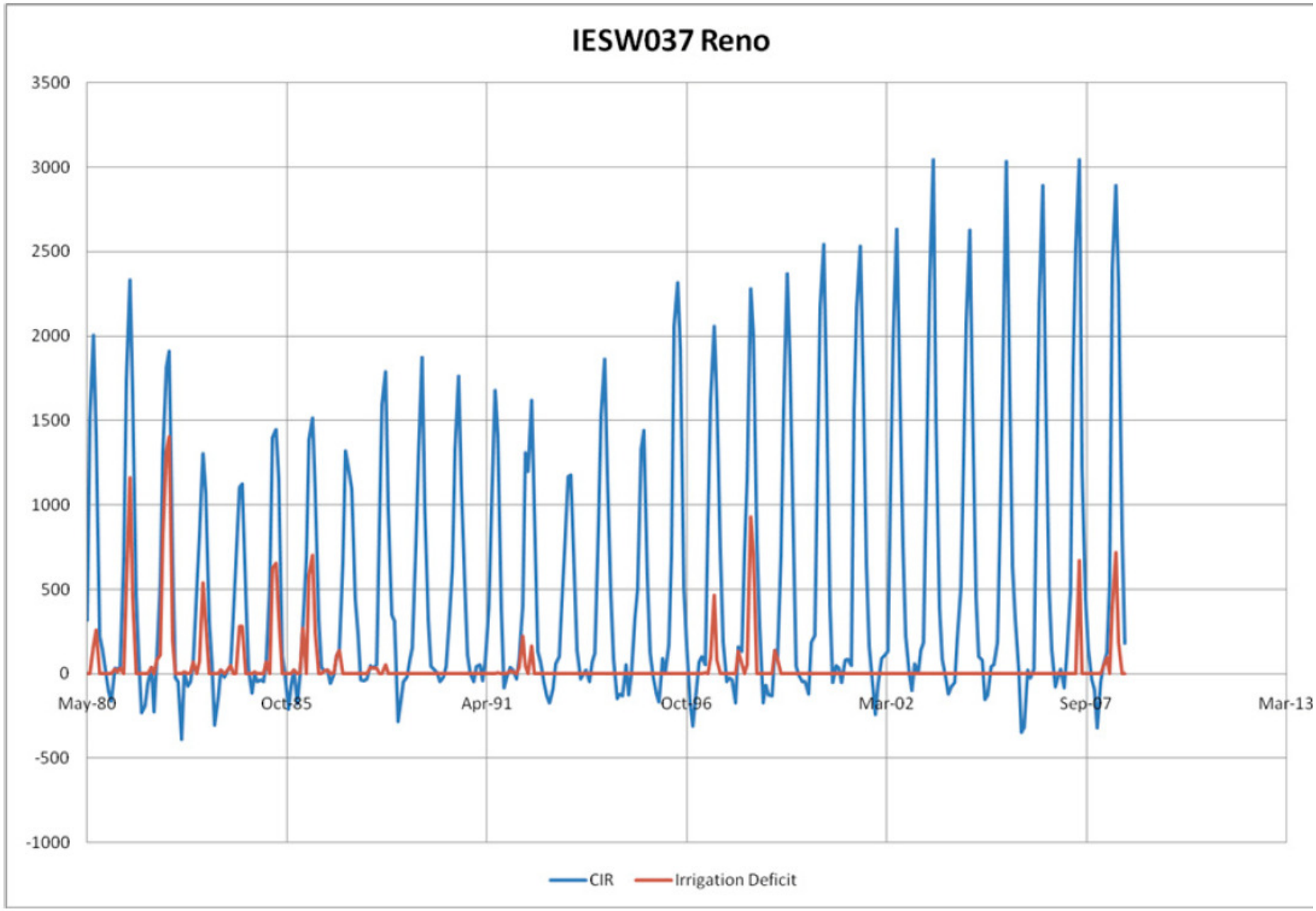
Microsoft PowerP...
ArcView GIS 3.3 ...
MUD_LAKE_IESW...
Clipboard04 - Irfa...
Microsoft Excel - ...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3000
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1000
500
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-1000
May-80
Oct-85
Apr-91
Oct-96
Mar-02
Sep-07
Mar-13
CIR
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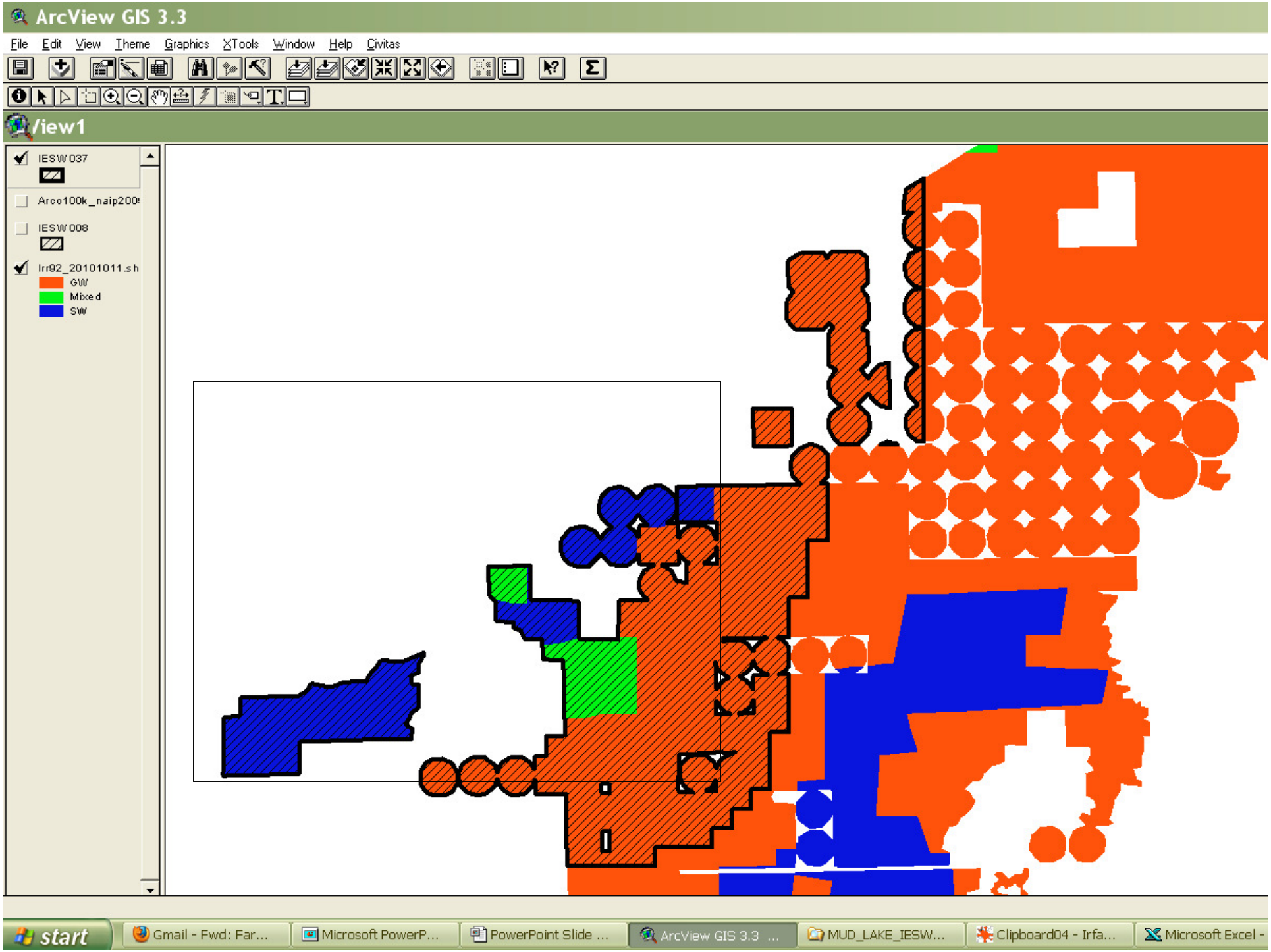
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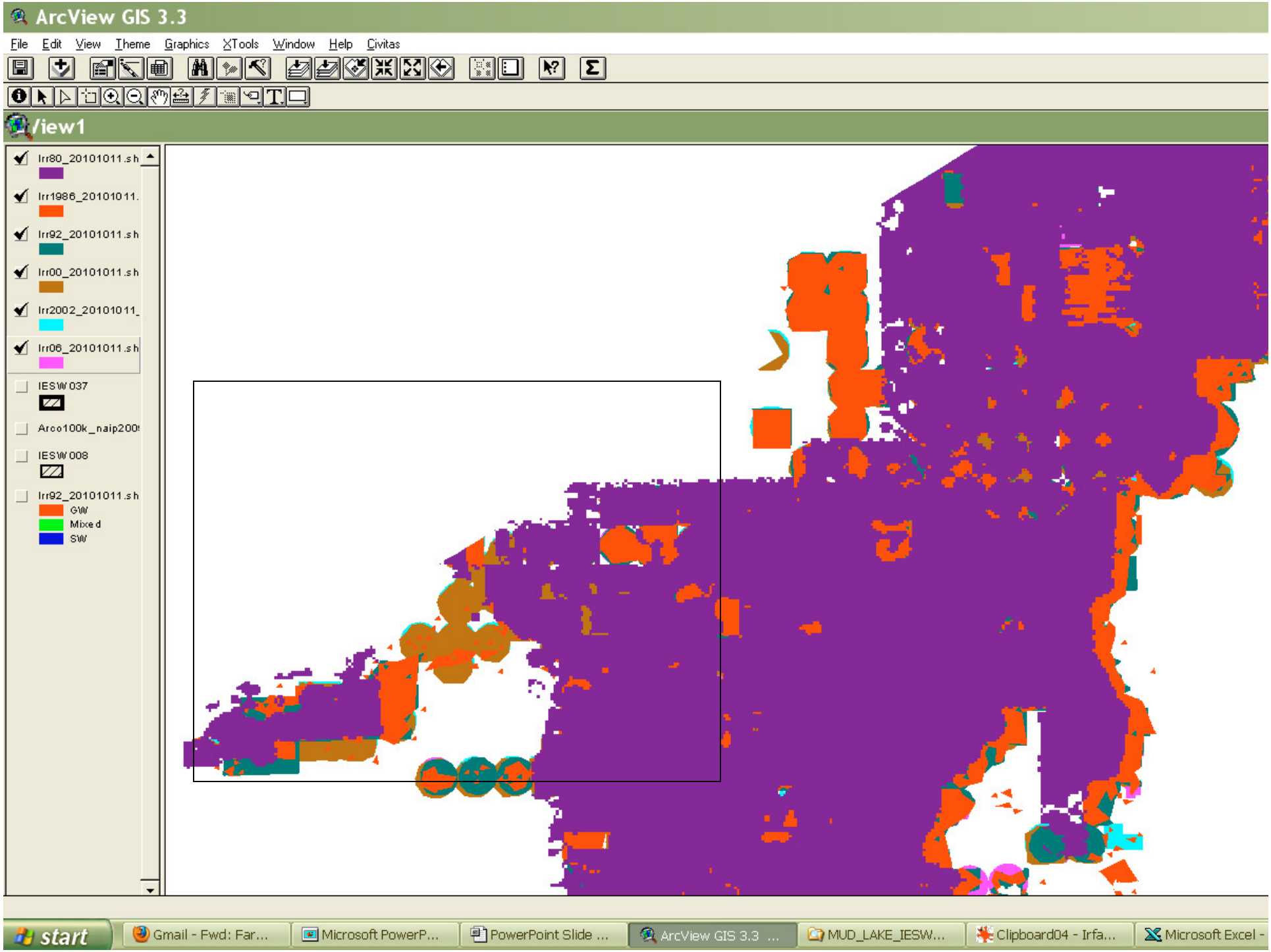
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