



State of Idaho

DEPARTMENT OF WATER RESOURCES

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DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

March 24, 2006

TIMOTHY P DEEG
C/O KENT W FOSTER ESQ
HOLDEN KIDWELL HAHN & CRAPO PLLC
PO BOX 50130
IDAHO FALLS ID 83405

WILLIAM ISAAK
3082 ISAAK PLACE
AMERICAN FALLS ID 83211

WARM CREEK IRRIGATION CO.
3298 S ISAAK LP
AMERICAN FALLS ID 83211

Re: Protested Applications in the name of Timothy P. Deeg, referred to as Transfer
No. 71132, and Amendment of Permits Nos. 41-7076 and 41-7081,

Dear Interested Parties:

Enclosed is a memorandum dated March 15, 2006, prepared by Dan Nelson. This memorandum reports Mr. Nelson's findings after examining the information supplied by Mr. Brockway after the recently held hearing for the above-referenced matter. This letter and its enclosure will allow the parties in this protested matter 14-days from the date of this letter to contact Mr. Nelson and interact with him about his findings. If Nelson's re-evaluation and/or discussion with Dan Nelson do not resolve the discrepancies in the place of use across the parties must submit their comments to Gary Spackman, within 21-days from the date of this letter.

Sincerely,



Gary Spackman

Enclosure

cc: C.E. Brockway, Brockway Engineering(w/enc1.)
Allen Merritt, IDWR Southern Region (w/enc1.)
Dan Nelson, IDWR Western Region

SUPPORT DATA

IN FILE # 41-7030

SCANNED

MEMORANDUM

RECEIVED
MAR 16 2006
DEPARTMENT OF
WATER RESOURCES

TO: GARY SPACKMAN

FROM: DANIEL A. NELSON

DATE: 3/15/06

SUBJECT: RE-CALULATION OF ACRES WATER RIGHTS 41-7076 & 41-7081

During a protest hearing on water rights 41-7076 and 41-7081 on 12/14/2005, I was asked to re-visit the acre determination I made on the field exam recommendation for these water rights. Brockway Engineering had secured a 1994 and 1997 aerial photo of the owner's farm, and had created shape files for the farm in ArcView. I agreed to re-visit the acres I recommended in 1997, since ArcView was not available to field examiners at that time.

I used Brockway's aerial photos and created my own shapes to ensure that information was accurate. I will discuss the comparisons I found for each right separately.

41-7076:

In my review of the acres for water right 41-7076, I agree that some of the acres were not accounted for in my original exam. My original exam didn't take into account the end gun use on the pivot when calculating the acres. I based my original acre calculations on the acres I planimetered and those that were listed on the FSA aerial photo at the time of the exam. The new ArcView technology has allowed us to do a better job of calculating acres, so I was not surprised that Brockway found a difference in the acres using the latest technology. The difficulty was that we needed to find a 1997 aerial photo that was taken at the time proof of beneficial use was filed. Brockway supplied this aerial photo.

Please see Attachment A for the ArcView shapes that I created using the 1997 aerial photo. My new shape file revealed that there were 239 acres actually irrigated instead of the 227.5 originally recommended. Brockway found 240.5 acres, but the difference between Brockway and my calculations were generally due to rounding, and line placement. Please see attachment C for a comparison of the acres.

I RECOMMEND THAT FIELD EXAM RECOMMENDATION BE CORRECTED TO SHOW THE ADJUSTED ACRES IN ATTACHMENT C. THE DIVERSION RATE AND VOLUME WERE NOT BASED ON THE ACRE AMOUNT, SO THOSE AMOUNTS SHOULD NOT BE CHANGED FROM MY ORIGINAL RECOMMENDATION.

41-7081:

In my review of the acres for water right 41-7081, I agree that some of the acres were not accounted for in my original exam. My original exam didn't take into account the end gun use and the swing arm use on the West Pivot when calculating the acres. I based my original acre calculations on the acres I planimetered and those that were listed on the FSA aerial photo at the time of the exam. The new ArcView technology has allowed us to do a better job of calculating acres, so I was not surprised that Brockway found a difference in the acres using the latest technology. The difficulty was that we needed to find a 1994 aerial photo that was taken at the time proof of beneficial use was filed. Brockway supplied this aerial photo.

Please see Attachment B for the ArcView shapes that I created using the 1994 aerial photo. My new shape file revealed that there were 347.3 acres actually irrigated instead of the 338 originally recommended. Brockway found 358.5 acres, but the difference between Brockway and my calculations were generally due to rounding, and line placement except for the lands in the SE and NE of Section 1. The permit also limits the total acres allowed to 348 acres, so my new calculations will give Mr. Deeg very close to the maximum amount allowable under 41-7081.

Brockway did not take into account overlapping water rights when creating his shape files, so there are a couple of discrepancies. There is approximately 9.4 acre in the SE S6 that are covered under water right 41-7071. Mr. Brockway included these acres in his total acre calculations when they were covered by another right.

Water right 41-7030 was transferred to NE ¼ S1 in 1994, and even though the transfer took place after the proof of beneficial use was filed for this permit, the aerial photo does suggest that the pivot was installed at the time the aerial photo was taken. If the pivot was in place at the time of the aerial photo, it is difficult to determine which acres should be allocated to 41-7030 and 41-7081. However, by filing the transfer on water right 41-7030 for 36 acres in SWNE and 36 acres in the SENE of S1 it does suggest that the acres from 41-7030 were needed to bring the total acres licensed up to the total acres irrigated in 1994 for these two 40-acre tracts.

Therefore, I took the total acres irrigated in SWNE and SENE of S1 per the 1994 aerial photo, and subtracted the 36 acres allocated for each 40 acre tract by water right 41-7030 to determine the acres that should be allocated to water right permit 41-7081. 41-7081 is limited by the permitted amount of 348 acres, so using this method allowed me to cover as many acres as possible using all of Mr. Deeg's water rights. If we didn't give full credit for the 36 acres from each of these 40-acre tracts to water right 41-7030, then we would need to adjust acres in other irrigated tracts that appear to be irrigated under 41-7081 in order to stay within the 348 acre limitation of the water right permit 41-7081. Therefore, I am comfortable with the adjusted acres shown in attachment B, because it allows coverage of all the actual irrigated acres in 1994 when water rights 41-7030, 41-7071, and 41-7081 are combined. Please see attachment D for a comparison of the acres.

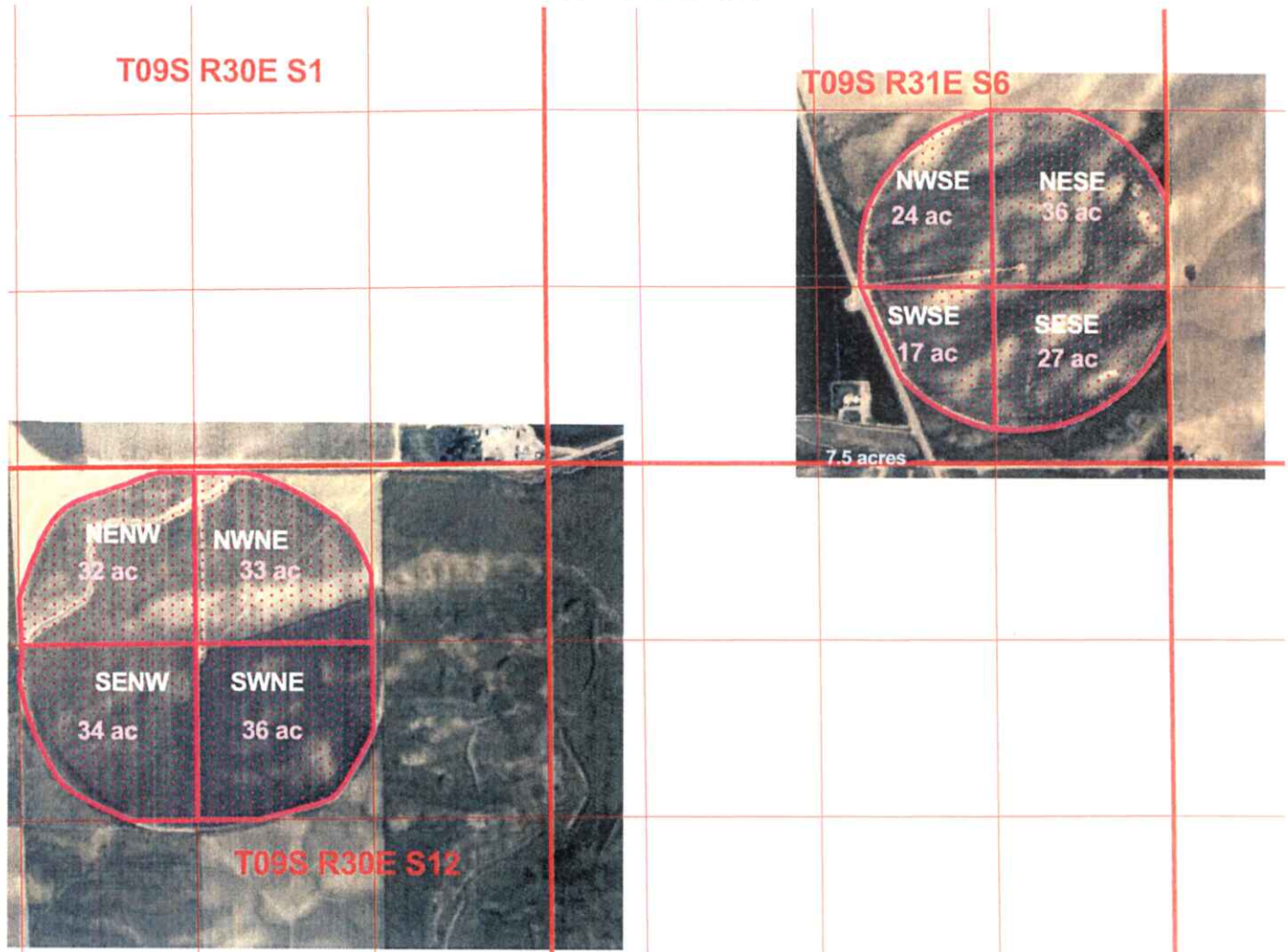
I RECOMMEND THAT FIELD EXAM RECOMMENDATION BE CORRECTED TO SHOW THE ADJUSTED ACRES IN ATTACHMENT D. THE DIVERSION RATE WAS BASED ON A SYSTEM CAPACITY, SO IT SHOULD NOT CHANGE. THE VOLUME WAS BASED ON THE ACRE AMOUNT, SO THE VOLUME SHOULD BE CHANGED TO 1389.2 AFA.

REVIEW OF ACRES - ATTACHMENT A

FIELD EXAM 41-7076

BY DAN NELSON

2/8/2006

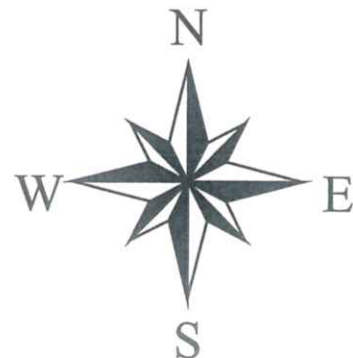


0.4 0 0.4 0.8 Miles

- SECTION LINES
- 1/4 1/4 LINES
- RE-CALCULATED ACRES

Please Note:

This is a map of the re-calculated acres associated with permit 41-7076. My original field exam was done without the benefit of using ArcView, so this method of acre determination is more accurate. This is a 1997 aerial photo supplied by Brockway Engineering. The 1997 photo shows that an end gun was used in the corners of pivots, which skewed my earlier calculations slightly for each 40 acre tract. The total acres for this permit should be 239 acres or 11.5 acres more than what was originally recommended in my field exam. The diversion rate and volume recommended were based on the capacity of the pivot, and not the acres, so those recommendations should remain.

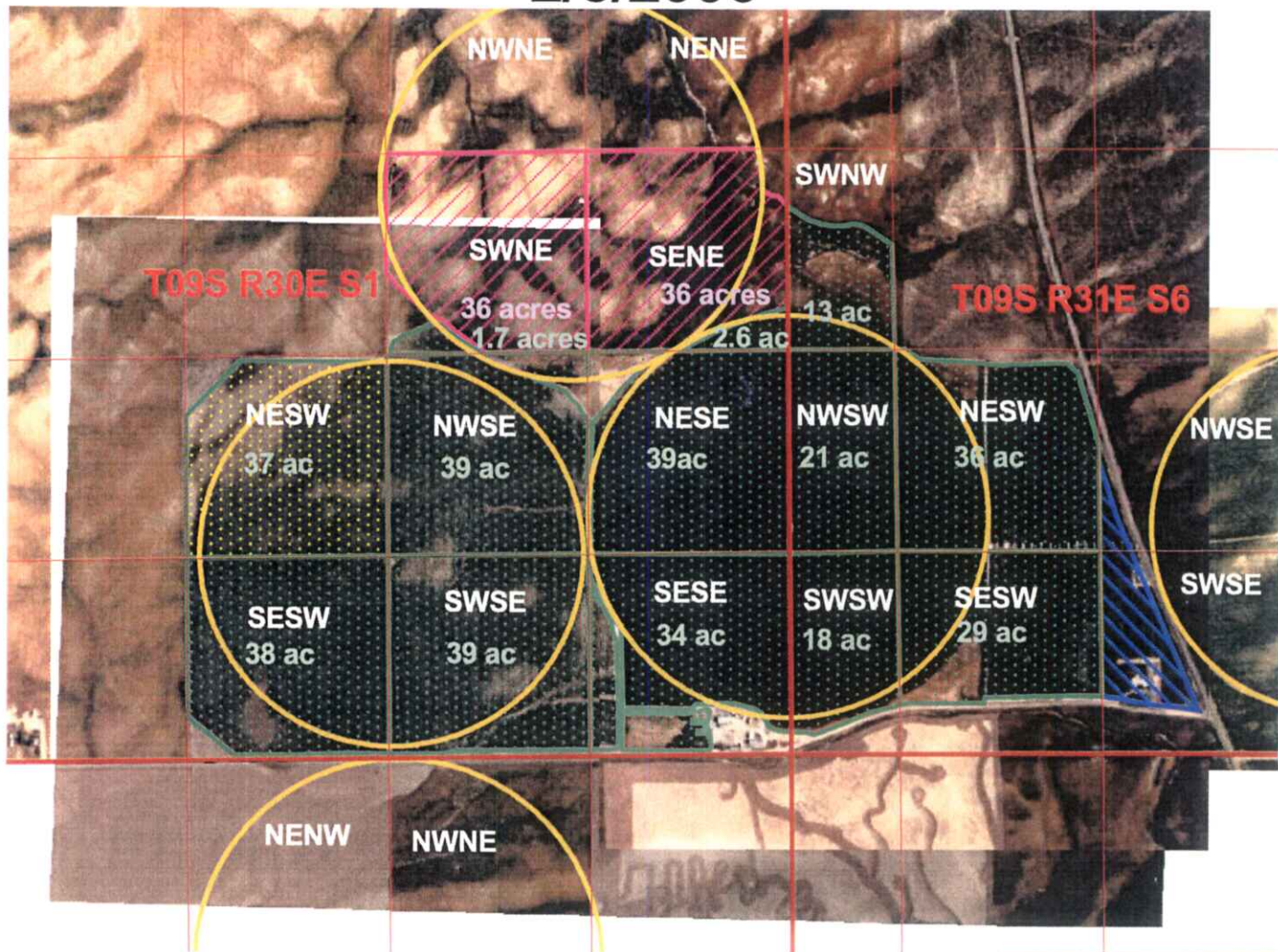


REVIEW OF ACRES - ATTACHMENT B

FIELD EXAM 41-7081

BY DAN NELSON

2/8/2006



0.4 0 0.4 0.8 Miles

- SECTION LINES
- 1/4 LINES
- PIVOT LOCATIONS
- RECALCULATED PLACE OF USE 41-7081
- ESTIMATED PLACE OF USE 41-7030
- ESTIMATED PLACE OF USE 41-7071

PLEASE NOTE:

The above maps show the re-calculated place of use for water right 41-7081. The aerial photo is a 1994 aerial photo supplied by Brockway Engineering. Brockway Engineering determined that some acres hadn't been accounted for in the original field exam. This is true in some cases, but Brockway Engineering neglected to take into account the other rights on the property. Brockway included lands irrigated by 41-7071 in the NWSE and SWSE of Section 6. They also included lands irrigated in the SENE S1 under water right 41-7030. Water right 41-7071 existed before this permit and 41-7030 was transferred to this property at approximately the same time, so the acres for both these rights needed to be removed before acres could be allocated to this permit. I have increased the total number of acres by approximately 9.4 cres. These acres are mainly found in the NESW and SESW of S1. The remaining 40 acre tracts were increased mainly due to new rounding protocol.



**ADJUSTED ACRES FOR WATER RIGHT 41-7076
FOR FIELD EXAM BY DAN NELSON
ACRE COMPARISON TABLE 41-7076 --> ATTACHMENT C**

BROCKWAY ENGINEERING CALCULATED ACRES

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
9S	30E	12		32.9	35.8		32.3			33.8									134.8
9S	31E	6													36.3	25.2	17.1	27.1	105.7
TOTAL																			240.5

ADJUSTED ACRES

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
9S	30E	12		33	36		32			34									135
9S	31E	6													36	24	17	27	104
TOTAL																			239

ORIGINAL FIELD EXAM ACRES

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
9S	30E	12		30	33		30			33									126
9S	31E	6													35.5	23	16	27	101.5
TOTAL																			227.5

I RECOMMEND THAT THE ADJUSTED ACRES TABLE BE USED IN THE LICENSING OF PERMIT 41-7076

**ADJUSTED ACRES FOR WATER RIGHT 41-7081 ==> ATTCHMENT D
FOR FIELD EXAM BY DAN NELSON**

BROCKWAY ENGINEERING CALCULATED ACRES

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
9S	30E	1			1.6	9.4					37.1			38.3	36.7	36.8	38.6	33.5	232
9S	31E	6							13.3		36.1	21.2	17.6	28.9		1.9	7.5		126.5
TOTAL																			358.5

ADJUSTED ACRES

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
9S	30E	1			1.7	2.6					37			38	39	39	39	34	230.3
9S	31E	6							13		36	21	18	29					117
TOTAL																			347.3

ORIGINAL FIELD EXAM ACRES

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
9S	30E	1				4					33			33	40	39	38.5	35	222.5
9S	31E	6							14.5		35	21.5	16	28.5					115.5
TOTAL																			338

I RECOMMEND THAT THE ADJUSTED ACRES TABLE BE USED IN THE LICENSING OF PERMIT 41-7081