

Mike Thompson

From: Mike Thompson [mthompson@dnr.ne.gov]
Sent: Friday, March 24, 2006 4:10 PM
To: Ann Bleed (ableed@dnr.ne.gov); Mike McDonald (gndwater@aol.com); 'Land, Larry'; 'Marc Groff'
Cc: Chuck Spalding (mmacps@aol.com); 'Tom Riley'; Brad Edgerton (ndwrcamb@swnebr.net); 'justin.lavene@ago.ne.gov'; 'david.cookson@ago.ne.gov'
Subject: Attorney-Client Priveleged Communication - Conference Call to Discuss Recent Project Tasks

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Mike, Larry, Marc et al

Please call the number below at 9:30 AM Central Standard Time on Monday, March 27. Be prepared to discuss progress and findings of recent project tasks. We look forward to hearing from you all.

Call number: 605-725-3600

Access Code: 7314426

It is not a toll free call. Our usual conference calling service was booked-up.

Sincerely,

Mike Thompson
Natural Resources Specialist
301 Centennial Mall South
4th Floor State Office Building
Lincoln, NE 68509-4676

(402) 471-1026

mthompson@dnr.ne.gov

www.dnr.ne.gov

Pre-conference notes by MT

3-27-06

MT Observations & Questions

- (1) Do we know who took the observations on each well? ^(81 wells)
- (2) Jennifer's name is misspelled, should be Schellpeper
- (3) USGS land surface elevation used along with depth-to-water
- (4) No wells were excluded from analysis (81 wells)
- (5) Interpolated gw levels used for six wells near "model boundaries"
- (6) Were wells excluded due to lack of data?
If so, how many & where? 3? - pg. 7 of draft
- (7) Typo on Page 5 ... by on behalf of the ...
- (8) Baseflow Done on 24 locations using Sletteny method.
- (9) New DNR e-mail addresses should be pointed-out
- (10) Pg. 7 of draft - 4 of the 57 wells that matched before 2001 did not "match" after 2001. What happened & where are they? - Make sure answer is in report.
see figure 2
- (11) ^{Baseflow trends at} Turkey Creek at Edison & Duffwood Creek at McLeod were not consistent between model & observed as they were prior to 2001.
- (12) Typo in Summary section on page 8 "rom" should read "from"
- (13) Do the conclusions on page 8 translate to "The model is performing as expected?"
- (14) Would changes noted in Appendix A raise any eyebrows if reviewed by rest of original modelling team?
- (15) Does the fact that trends track, but elevation differences make a diff. in the mass flows

Conference Call Notes by MTJ
3-27-03 9:30 AM

page 1

Ann - Two basic questions

① Is model right?

② Based on model - how much CW can be handled?
→ page 3

① Mike M. - model is still working

Ann - do elevation discrepancies make a difference

More water may be discharging to land surface than the model is predicting - that would mean what?

Land - haven't done detailed mound area runoff study, partly due to lack of stream gage data

What about Turkey Creek + Muddy Creek?

Larry - you need to look at the GW "shed" + how it relates to SW drainage

- Madrosten low flows were surprising since 2000

Larry - Cut back

Larry Δ in Water Table from SW pumping

+ No SW pumping



Mike McDonald = ① documenting the model
 ② Look at system + describe what is going on
 We may need to do that before we can
 explain difficult scenario results.

Larry - Conservation Practices - "buried"
 - Maybe we need a fine grid model
 in the River Corridor.

Marc Graft - pumping inputs

Field data to well-by-well comparison is
 difficult.

Power Record Method is sensitive to the total
 number of wells pumping - far apart from
 DNR reg. database

② How can we get a handle of lag effect?

How much is the lag effect on an annual percent
↳ Ann thinks this is not necessary.

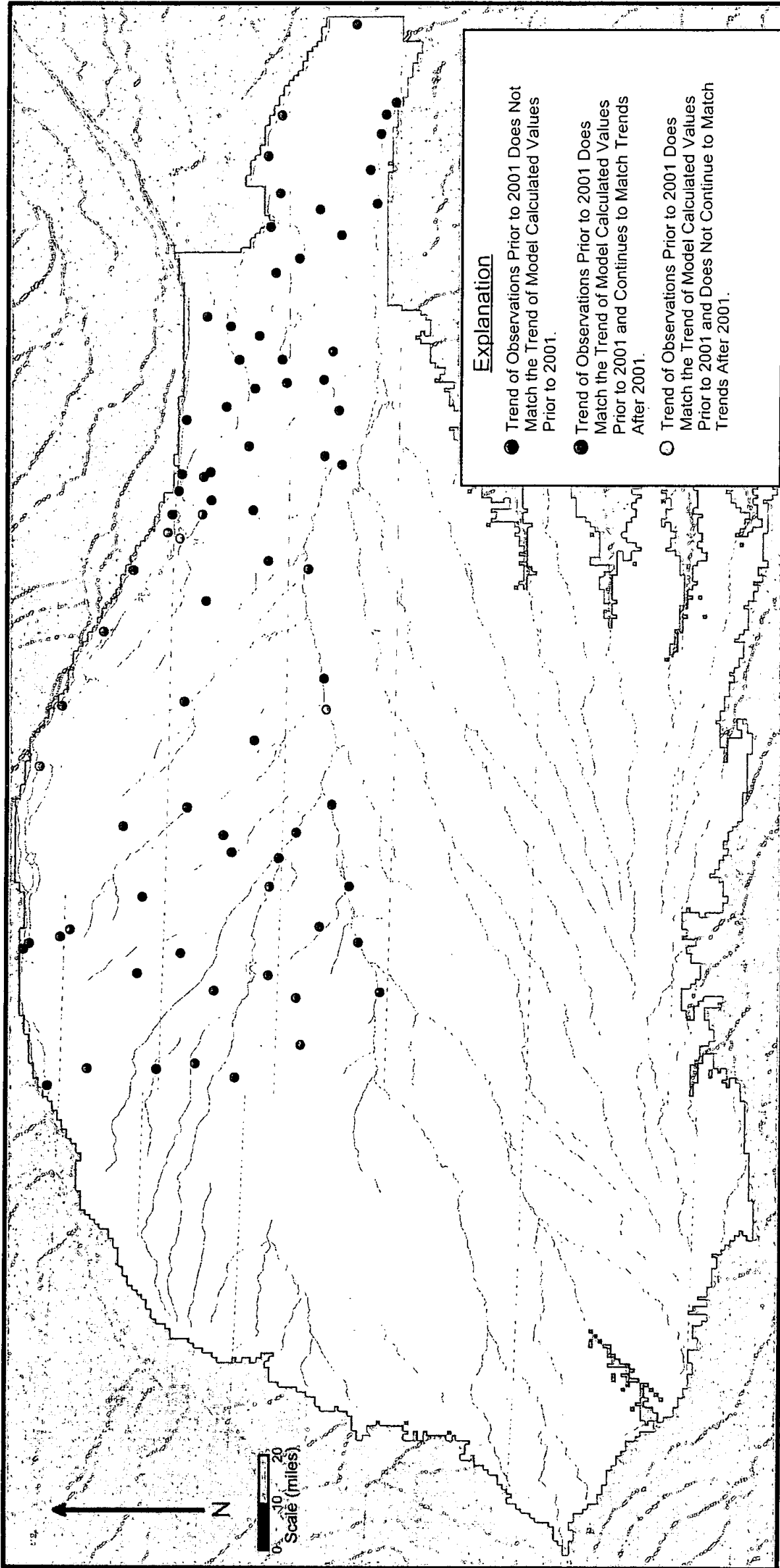
③ Listing + Narrative of Scenarios
Work on Scoping of more scenarios

④ Phreatophytes + Conservation Practices
- How they were handled in the model

⑤ Lag Effect + Lag Effect by NRD
Chuck - take a look with Paul

⑥ Mound Analysis - Scoping for Mike + Chuck
Elwood Reservoir

DRAFT

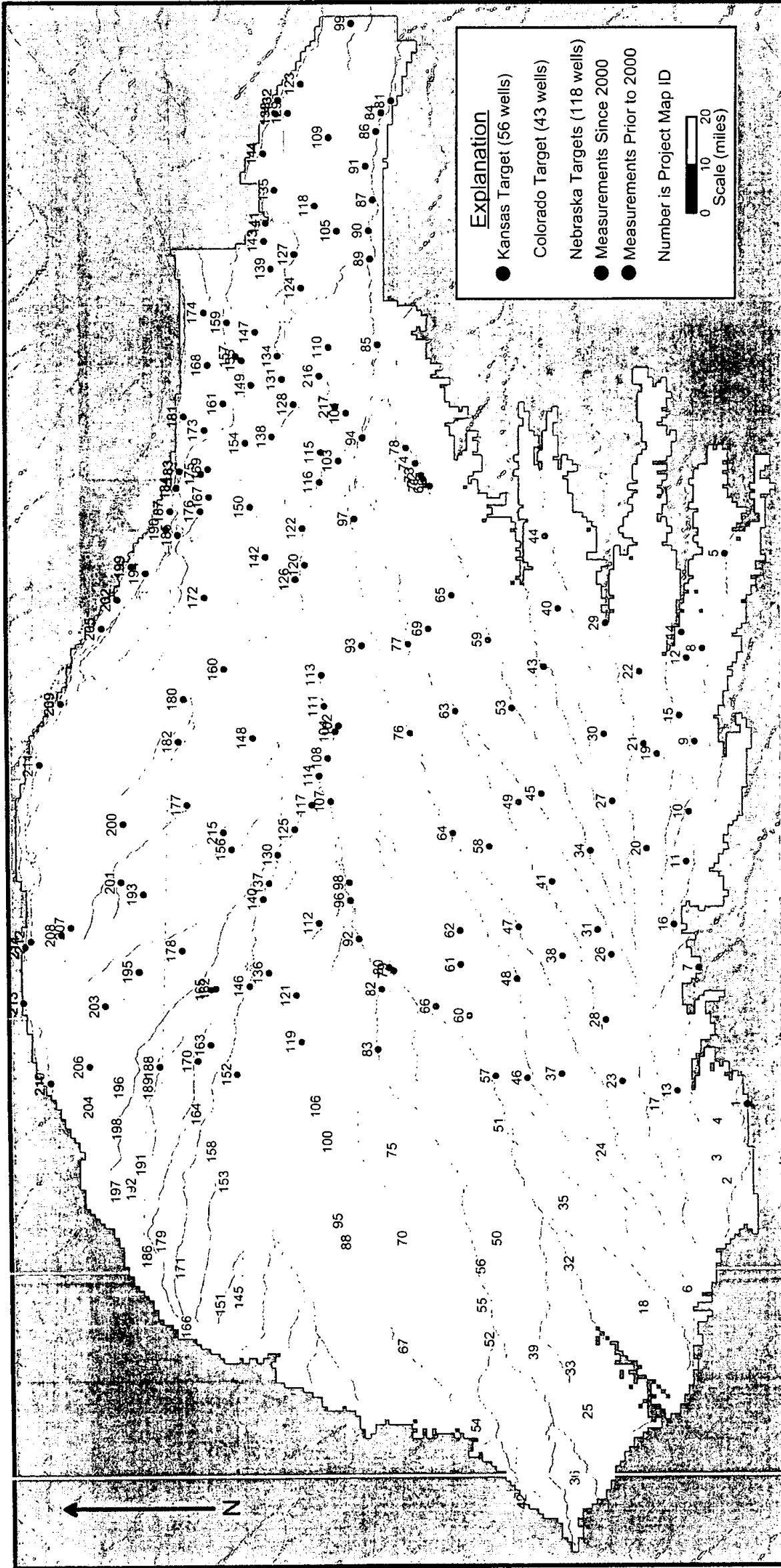


Data Source: Well Location Data from J. Schellpeper 1/16/06
Access Database GWLevels.mdb (Table tblGWsiteData)

Figure 2. Map showing results of evaluation of match of water-level targets.

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Data Source: Well Location Data from J. Schellpeper 1/16/06
Access Database GWLevels.mdb (Table tblGWsiteData)

Figure 1. Location of combined Nebraska and Kansas RRCA model GWSI target wells in the Republican River Basin.



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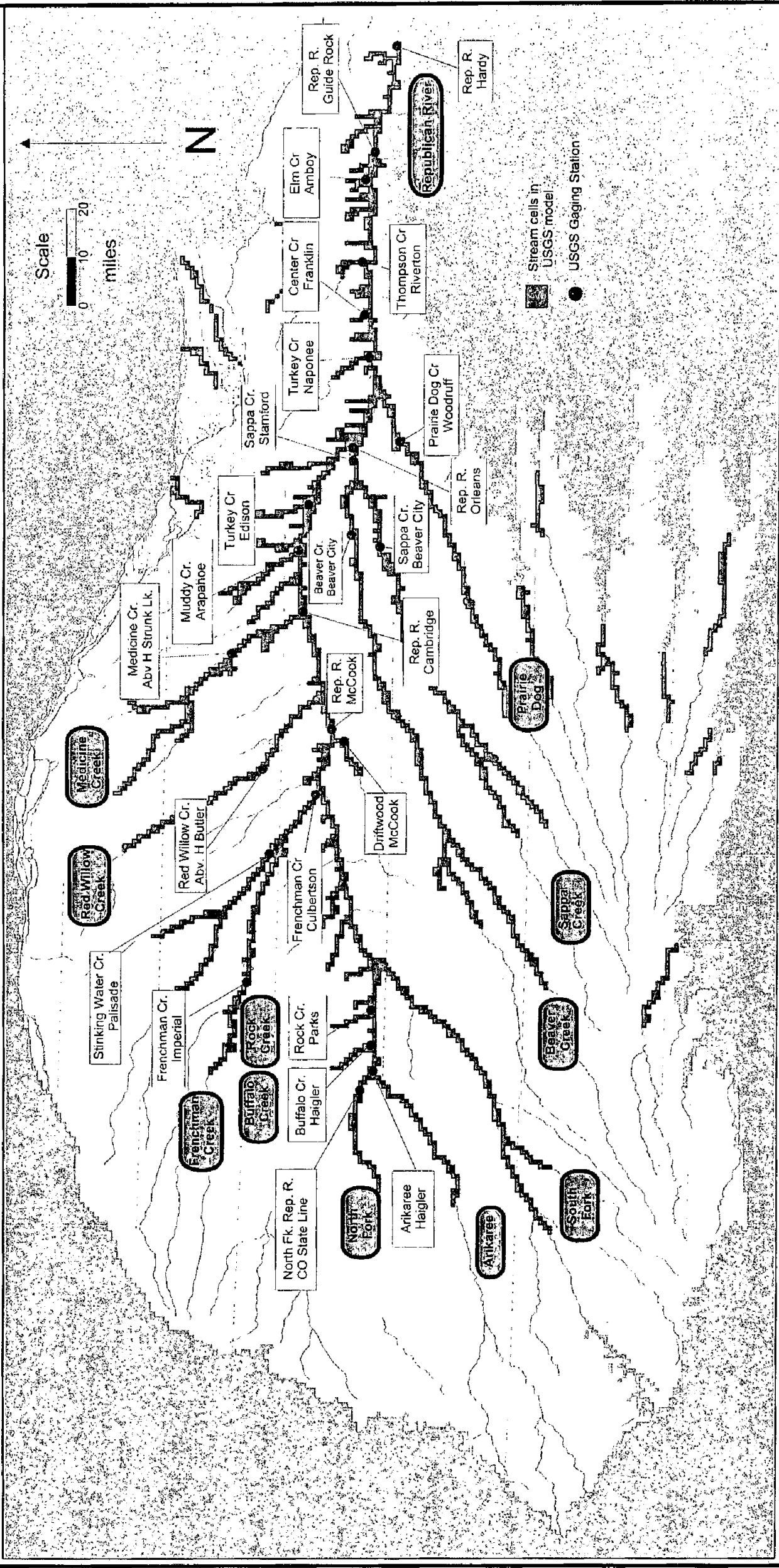


Figure 3. Map showing location of RRCA model baseflow targets with estimates available for the period January 1, 2001 to December 31, 2004.



Table 1. Results of review of ground-water level hydrographs for wells with measurements since December 31, 2000.

Map ID	USGS GWSI Site Number	UTM-X	UTM-Y	Does the Trend of Observations Prior to 2001 Match the Trend of Model Calculated Values Prior to 2001?	Does the Trend of Observations After 2001 Continue to Match the Trend of Model Calculated Values Prior to 2001?
81	400050098083001	1,880,753	14,532,259	No	No
82	400130101374401	904,398	14,546,011	Yes	Yes
84	400240098111301	1,867,973	14,543,267	Yes	Yes
86	400339098153801	1,847,321	14,549,055	Yes	Yes
87	400423098314001	1,772,526	14,552,997	No	Yes
91	400539098234501	1,809,386	14,560,908	No	Yes
92	400551101260301	959,643	14,570,865	Yes	Yes
98	400748101124501	1,021,938	14,581,081	No	Yes
99	400802097502401	1,964,653	14,576,914	No	Yes
103	401041099330901	1,486,087	14,591,362	No	Yes
105	401059098390101	1,738,097	14,592,895	Yes	Yes
217	401120099202501	1,545,362	14,595,008	Yes	Yes
107	401130100533601	1,111,642	14,601,477	No	Yes
110	401233099062701	1,610,402	14,602,229	No	Yes
111	401257100310701	1,216,451	14,608,266	Yes	No
112	401307101222101	976,923	14,615,145	Yes	Yes
113	401329100241701	1,250,237	14,610,949	No	Yes
115	401357099311001	1,495,436	14,611,132	Yes	Yes
216	401414099131101	1,579,095	14,612,503	Yes	Yes
118	401459098325801	1,766,138	14,617,298	No	Yes
119	401559101505601	845,816	14,635,825	Yes	Yes
120	401647099575301	1,371,342	14,629,368	Yes	Yes
121	401703101394801	897,758	14,641,292	Yes	Yes
125	401801101002301	1,080,961	14,641,726	Yes	Yes
127	401850098442601	1,712,743	14,640,451	No	No
130	402107101063001	1,052,981	14,661,203	Yes	Yes
131	402110099140001	1,575,624	14,654,304	Yes	Yes
133	402158098111301	1,866,900	14,660,403	Yes	Yes
134	402202099082201	1,601,160	14,659,387	Yes	Yes
135	402224098290901	1,783,626	14,662,408	No	Yes
136	402236101343101	923,110	14,673,046	Yes	Yes
137	402244101132101	1,021,415	14,671,795	Yes	Yes
139	402313098475201	1,696,730	14,667,013	No	Yes
141	402411098370101	1,747,061	14,673,047	No	No
142	402416099560500	1,380,189	14,674,697	No	No
144	402434098203101	1,823,606	14,675,824	Yes	Yes
147	402612099025401	1,627,497	14,685,369	Yes	Yes
148	402614100373001	1,181,968	14,689,635	Yes	Yes
149	402703099150901	1,569,445	14,689,939	Yes	Yes
150	402711099440801	1,435,785	14,691,876	Yes	Yes
152	402757101591201	809,627	14,709,737	Yes	Yes
154	402802099285801	1,506,136	14,696,550	Yes	Yes
156	402950101052601	1,059,187	14,713,996	Yes	Yes
157	402952099083901	1,600,974	14,707,467	Yes	Yes
159	403125099003701	1,638,012	14,717,097	Yes	Yes
215	403127101012701	1,077,872	14,723,378	Yes	Yes

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161	403210099194201	1,549,187	14,721,440	Yes	Yes
162	403220101384001	905,631	14,733,307	Yes	Yes
167	403449099415201	1,446,662	14,738,121	Yes	Yes
169	403506099350101	1,477,642	14,739,004	Yes	Yes
170	403518101561601	824,716	14,753,900	Yes	Yes
172	403534100054601	1,336,110	14,743,800	No	Yes
174	403546098580301	1,648,729	14,743,506	Yes	Yes
175	403625099361001	1,472,363	14,746,897	Yes	Yes
176	403626099451401	1,431,165	14,748,062	Yes	Yes
177	403817100550401	1,108,344	14,764,196	Yes	Yes
178	403843101295201	947,488	14,770,867	Yes	Yes
180	403913100295401	1,224,817	14,767,601	No	No
181	403922099223301	1,535,023	14,766,007	No	Yes
183	404020099355301	1,475,224	14,770,980	Yes	Yes
184	404046099393601	1,456,897	14,774,577	Yes	Yes
185	404046099504501	1,404,792	14,773,458	Yes	No
187	404209099450201	1,431,021	14,781,888	No	No
188	404221101575501	818,524	14,796,955	No	No
190	404250099493701	1,411,174	14,786,823	Yes	No
193	404601101164001	1,009,675	14,813,523	Yes	Yes
195	404624101352001	924,917	14,819,012	Yes	Yes
199	404850099583001	1,370,025	14,824,644	Yes	Yes
200	404953100595401	1,087,596	14,835,108	Yes	Yes
205	405413100131601	1,302,215	14,857,710	Yes	Yes
206	405506101582301	818,995	14,874,433	Yes	Yes
207	405907101250201	973,255	14,894,082	Yes	Yes
208	410058101264501	965,422	14,904,831	Yes	Yes
209	410138100312401	1,220,133	14,903,573	Yes	Yes
210	410209102024101	800,685	14,917,917	No	No
211	410523100455501	1,153,303	14,927,952	Yes	No
212	410627101283301	958,341	14,939,054	Yes	Yes
214	410745101294801	952,013	14,945,594	Yes	Yes

March ____, 2006

Michael G. McDonald
McDonald Morrissey Associates Inc.
11735 Bowman Green Dr.
Reston, VA 20190

RE: Letter Agreement Pursuant to § 3.D. of Consulting Agreement Dated November 16, 2005

Dear Mr. McDonald:

This letter is sent pursuant to Section 3.D. of our Consulting Agreement dated November 16, 2005. Pursuant to that provision, the parties are to agree in writing on a cap amount for the compensation that may be paid for anticipated consulting work for the fiscal year.

For the current fiscal year ending June 30, 2006, the parties hereby agree that the compensation cap shall be \$134,000.00. This compensation cap is based on the anticipated consulting work to be completed by the end of the current fiscal year, and is in line with current legislative appropriations. This compensation cap may be amended further by written agreement of both parties.

If the Consulting Agreement is renewed for the fiscal year commencing July 1, 2006 through June 30, 2007, a compensation cap will be specified for that fiscal year at the time of renewal.

Please sign your agreement to this letter agreement supplementing our Consulting Agreement on both enclosed originals of this letter. Return one original to me, and retain the other for McDonald Morrissey Associates Inc.

Sincerely,

Ann Bleed
Acting Director

Agreed to this ____ day of _____, 2006.

Michael G. McDonald, Partner
McDonald Morrissey Associates Inc.