

Documents

From

Department  
Of Interior

To: [redacted]  
Cc: [redacted]  
05/11/1998 12:44 PM Subject: UZ Flow (+climate+infiltration) section for TSPA-VA document  
This email is currently marked "Relevant and Not Privileged"

FYI. Still don't know quite how to handle the air temp glitch. I'm continuing to keep mum about this, but from a scientific integrity standpoint, it is tempting to let the end users know exactly what was provided to them in terms of effectively cooler future climate simulations. Problem is, I don't know how to do this without looking bad. If we can let it all pass without trying to attach DTN numbers to these results (the preferred choice), then I can forget about it and just concentrate on getting results out for the new model. If they (DOE) force us to put DTNs on these things, I would rather the truth come out sooner than later.

Don't need to respond to this, we can talk about it later.

----- Forwarded by [redacted] on 05/11/98 12:24 PM -----  
[redacted] on 05/04/98 03:00:49 PM



To: [redacted]  
Cc: [redacted]  
Subject: [redacted]

X-Sun-Data-Type: text  
X-Sun-Data-Description: text  
X-Sun-Data-Name: text  
X-Sun-Charset: us-ascii  
X-Sun-Content-Lines: 15

To all --

Attached is the first draft of the UZ Flow section (which includes climate and infiltration as well as flow) for the TSPA-VA document. It is in two Word 97 files, one for the text and one for the figures. We are already behind schedule in submitting this section to the VA Electronic Storyboard, so I would appreciate any comments or suggestions you may have by the end of this week (May 9). It is about 15 pages of text, and several figures. You are welcome to comment only on the sections that you are interested in, of course.

If you can't read the Word 97 files, let me know and we can get it to you in some other format.

-----  
X-Sun-Data-Type: default-app  
X-Sun-Data-Description: default  
X-Sun-Data-Name: vauz.doc  
X-Sun-Encoding-Info: uuencode  
X-Sun-Content-Lines: 2222

Sent by: [redacted]

To: [redacted]

cc: [redacted]

Subject: Re: Design Features 23/24 - Period of Effectiveness

10/29/1998 04:41 PM

This email is currently marked "Relevant and Not Privileged"

enjoyed the ranting and raving. We're trying to work with the engineers because that's where the funding's going. Leveling the top of the mountain seemed humorous but it gave me the chance to make some more cool figures. This little task is history now. Wait till they figure out that nothing I've provided them is QA. If they really want the stuff they'll have to pay to do it right.

[redacted]



10/29/98 03:31:59 PM

To: [redacted]

cc: [redacted]

Subject: Re: Design Features 23/24 - Period of Effectiveness

This sure is an interesting viewpoint. The desert pavement forms on areas where the slope is generally less than 1 to 2 percent. You don't generally see pavement on slopes of 10% or more. The other idea that I love is an inereed modifications. As he notes, the natural system is very stable, so why do we have to fool with it. The other idea they are not looking at is caliche. In area where there is well developed caliche, one could expect erosion to that surface but then extremely limited erosion of the well cemented carbonates. These are usually old truncated surfaces that have had new material deposited on them. These show part of the erosion/deposition processes that occur in arid environments. The natural system exists for a reason and it got there without engineers screwing with it. I am starting to rant and rave so I should get back to my other work.

Thanks for sending the information to me. I find these things interesting.

[redacted]

[redacted]

10/29/98 03:21 PM

Sent by: [redacted]

To: [redacted]

cc: [redacted]

Subject: Re: Design Features 23/24 - Period of Effectiveness

FYI: The engineering perspective on this. I meant to send this earlier (if I already did, ignore this... I may have gone senile)

Forwarded by [redacted]

on 10/29/98 02:24 PM

gov on 10/28/98 04:26:21 PM



Jan 31 1998 01:47 PM

To: [redacted]  
cc:  
Subject: Re:

This email is currently marked "Relevant and Not Privileged"

I'm finishing up the infil report (concentrating only on those items [redacted] originally requested me to look at ... I talked this over with [redacted] yesterday). I've been meaning to send you a program that will convert the 6 regional strips you have back to the original \*.inp file format, but I got sidetracked a little with the planning stuff. Let me finish infil and I will get you the code (I'm close to finishing it). I wanted to have these simulations running this week. But I also wanted you and [redacted] to look at what I'm using for effective permeabilities. I'm trying to clean up a worksheet I have so that you and [redacted] can understand it.

As far as [redacted] goes, there are several areas that we can always use help in; programming, GIS, and anyone capable of getting a simulation going, compiling the results, creating maps and graphs of the output, and helping me compile and update the climate database, streamflow records (along with any other calibration data), and the future climate stuff. You and I may be the only ones developing the model code, but even some part-time help from someone with programming skills would be a tremendous boost to keep things going (the small re-formatting program above is a great example), and to have software QA sep in step with model improvements. I don't know who this person would be, and there we have a dilemma. At least we are making an effort to improve our GIS expertise.

As far as the [redacted] stuff and the regional stuff goes: 1. We never seem to be certain about the funding level from [redacted] until the planning is over and done with .... I wanted to have a backup to keep the regional effort going. 2. We are doing the same amount of work on the regional scale whether we get the money for [redacted] or not, so why not try to get the money? All we have to do is a few extra simulations in [redacted]. Its like we'll get paid twice for the same work (and I don't feel bad about this considering how little we're getting paid for the work this year ... in my mind it will all even out in the end). 3. I'm still not convinced that there will not be another round of planning where we have to try to cut 50% of the funding we are asking for now. Then we can just get rid of the [redacted]



Seeze... I spent too much time on this email... gotta go!

Sent by: [redacted] To: [redacted]  
cc: [redacted]

Subject: Re: Jury Summons

10/27/1998 03:08 PM

This email is currently marked "Not Relevant"

Hey yeah. If its not registered than it can't be important. I think [redacted] scared me (something about a \$5,000 fine). So back to my usual strategy. But does this mean that our nation's juries are filled with people who have nothing better to do (or who hate their jobs)? Some college grad sociology - law - statistics major should do a study on this.

[redacted]

10/27/98 02:49 PM

To: [redacted]  
cc: [redacted]  
Subject: Re: Jury Summons

That's odd, I have never gotten one. My kid's must have lost it when they got the mail and since it wasn't registered mail there is no way to know that I actually got it. Even if I did get one and my kid's lost it I have never heard back from them tho. I in fact ever got one so they must not care terribly much if my kids get the mail and lose the summons. I just don't know what to do with my kids someday's when terrible lose of mail occurs. Oh well, I guess if anybody really wanted me they would send me a registered form. You know how the mail is these days. You just can't count on anyone getting the mail to you, especially little kids.

[redacted]

10/27/98 02:44 PM

Sent by: [redacted]  
To: [redacted]  
cc: [redacted]  
Subject: Jury Summons

[redacted]

I've been summoned for Jury duty. I can't do this. My wife tells me this is not something I can just ignore (my usual strategy). The instructions on the summons tell me to show the summons to my employer prior to calling the court. Should I send a fax to you? How does one proceed if one cannot at this time be a juror?

Help!

[redacted]

To: [REDACTED]  
 CC: [REDACTED]  
 Subject: Re: Design Features [REDACTED] - Period of Effectiveness

Thought I would put in my "two bits worth" on this subject. After all, the DF's life expectancy has a lot to do with the engineering design. I would welcome comments.

The design for [REDACTED] calls for armorng the soil blanket with rip-rap. In nature, desert nature that is, the rip-rap is called desert pavement. We can see that the desert pavement effectively protects the soil from wind, rain, snow, sleet, etc, so that the mass transport erosion is confined mainly to the washes. If the rip-rap is applied properly to imitate nature, then why can't we assume a similar protection for our man-made desert pavement? Also, the average erosion rates there are extremely small 0.15 cm/ka average for Yacca Mountain hillslopes. Could expect similar erosion rates with the rip-rap protection? If we look at the ages of the hillslopes at YM, we see it ranges from 170 to 760 ka. I would not suggest that our engineering effort could last this long, but it is certain to last at least 1 ka., and possibly 10 ka's or more (100's of ka's?). I proposed at one time a very conservative approach with 1000 years. Let's face it, the desert topography is very stable and long living so why can't we expect our modifications to last just as long? Comments?

For design [REDACTED], I would think that this would last somewhat shorter than [REDACTED]. Eventually, chemical, and mechanical erosion of the bedrock will creat soil over the exposed bedrock. I am not sure how fast it would form, but it would be very slow. I would think that the 1000 year life would be conservative. Comments?

[REDACTED] .gov> on 10/28/98 03:59:33 PM

To: [REDACTED].gov, [REDACTED].gov  
 cc: [REDACTED].gov  
 Subject: Design Features [REDACTED] - Period of Effectiveness

In the analysis of [REDACTED], we will need to make an assumption regarding how long these surface modifications remain effective.

Can you fellows suggest a reasonable range of time periods that can be assigned to these two features? I propose doing RIP calculations where the infiltration maps are changed depending on the time period of DF effectiveness.

Alternatively, if you can provide a technical basis for assuming these [REDACTED] would be effective for 10,000 yrs, this would work also.

We will need this input from you this week in order to stay on schedule.

Sent by: [redacted] To: [redacted]  
cc: [redacted] Subject: beaten to death

11/21/1998 10:38 PM

This was [redacted] own response to my response to his question (which I tried to be as honest as possible about), without any intentional provocation on my part. In some ways this is getting bizarre; one never knows how far along an old memo will get passed, or even what context it will end up in (for example, [redacted] has no idea that his memo to [redacted] got pasted into this thing, so I'm cc'ing him on this). As I understood from your last memo, there is a point at which we run the risk of beating something to death, and I'm in full agreement on that. Please be assured that I've placed myself in a "wait and see" mode for now.

I'm paranoid enough now that I almost couldn't send this.

----- Forwarded by [redacted] on 11/21/98 06:58 PM -----  
[redacted] gov> on 11/20/98 10:24:17 AM



To: [redacted]  
cc: [redacted]  
[redacted] gov>, [redacted] gov", [redacted] gov>, [redacted]  
Subject: FW: QA'd models

POD,

Can you please check with [redacted] and [redacted] to better understand the level of effort that the USGS will put forth to have infiltration information submitted to the [redacted] this FY? (see e-mail below from [redacted]) Based on the response to the memo that you sent out earlier, I thought that [redacted] had agreed that the most up to date infiltration maps, including the FY96, FY97, and FY98 models, would be submitted (perhaps sequentially) to the [redacted] by the end of this FY (see attached memo). If this is not the case, then [redacted] will have to re-evaluate their intended use of the FY98 infiltration maps in their new [redacted] flow models if the maps may not be qualified in time for [redacted].

[redacted]

----- Original Message -----  
From: [redacted] gov (mailto:[redacted] gov)  
Sent: Thursday, November 19, 1998 8:15 PM  
To: [redacted]  
Cc: [redacted] gov; [redacted] gov  
Subject: RE: QA'd models

[redacted]

The [redacted] model report has been re-submitted for USGS Director's approval.

[redacted] has been the main force behind dealing with the latest round of editorial reviews and pushing the report forward. When Director's approval is granted, I am assuming the FY96 model will be in the [redacted], although we may be required to submit additional supporting information (we are still in the process of finding this out). There is also a chance that the report will not be approved, and will require additional work and/or modifications. Unfortunately, the process of Director's approval is largely beyond our control. Past experience has shown that it is always best to assume additional work and/or modifications will be needed. At any rate we are still hoping for end of December on this, but cannot make any guarantees. If additional OA work is needed, it may become a problem because at present we are not in a good position to do this. I'd say a 50% probability of completion.

the 96 model includes only the current climate base-case net infiltration ap, and a wet and dry year current climate simulation. We still need until April to get the 97 future climate 100-year simulations into the TDMS. Again, no guarantees, especially in light of major uncertainties that continue to exist, and thus I can only give a 50% probability of completion.

Bottom line is, our position for making any FY99 commitments at all is still poor to nonexistent.

[redacted].gov> on 11/19/98 12:26:45 PM

To: [redacted]  
cc:  
Subject: RE: funding woes

What is the status of the FY96 model being submitted to the TDMS? I thought you said that the FY96 infiltration maps could probably be submitted to the [redacted] by December.

-----Original Message-----

From: [redacted].gov [mailto:[redacted].gov]  
Sent: Wednesday, November 18, 1998 4:10 PM  
To: [redacted].gov  
Subject: Re: funding woes

FYI: another example of an apparent disconnect between 1.2.5 and 1.2.3. What is your source in regards to the 1M provided to the USGS? If this is true then the funds seem to be getting funneled in the wrong direction.

----- Forwarded by [redacted] on 11/18/98  
03:06 PM -----

11/18/98 01:19 PM

To: [redacted]  
cc:  
Subject: Re: Discussion with [redacted] (Document link not converted)

As far as I know there is no funded milestone for December. The milestone we tried to get was not a milestone but an attempt to get the FY96 map in the [redacted]. There is no funding. Perhaps DOE should be honest with the [redacted] and tell them they are not funding an infiltration map this year.

To: [redacted]  
cc: [redacted]  
Subject: Re: AP 3.10Q

12/18/1998 02:25 PM

This email is currently marked "Relevant and Not Privileged"

Wow! Thanks for this very thoughtful and philosophically charged wealth of advice. I here exactly what you say. YMP is looking for the fall guys, and we are high on the list. I got a strong feeling at the meeting that high level folks are starting to pay very close attention to who they will come after when things hit the fan. Who got how much funding at what time will all be long forgotten when the lawyers start challenging credibility of results. It was made clear that this will be like the OJ trial, where results are completely thrown out because of minor procedural flaws or personal attacks on credibility. As [redacted] told the lawyer who was there, YMP doesn't stand a snowball's chance in hell of making this work if that is the approach.

As far as the 98 and 99 modeling, I'm starting the write-ups now. Much of this is already being covered in the [redacted] and [redacted] so I can kill 2 birds with the same stone. I much as I think [redacted] may help us out with some things. I am going to be very careful that [redacted] doesn't end up taking credit for our work.

[redacted]  
12/17/98 08:47 PM

To: [redacted]  
cc: [redacted]  
Subject: Re: AP 3.10Q

I agree with your analysis. We only win if we get the final product out. I have to think through this carefully but where i'm headed is this. [redacted] and I will make sure we get the 96 report done (you need to call [redacted] ASAP, just in case she needs input from you on Friday). You, on the other hand, need to start the FY99 report, assuming the FY96 gets approved. You need to lay out the changes you've made to the model, how you've tested or calibrated those changes (stream gage, neutron (I've already started working on a new neutron hole analysis which I had hoped to finish this vacation but won't be done until later I'm sure)), what the results are, and what difference it makes. Do this for the site scale as your basis for the change to the model and as the basis of the report. Then start another report, which uses the first report, to lay out the regional model. Both report will address past and future climates. That's where I'm heading but I'm not there yet. We can discuss this tomorrow.

The bottom line is forget about the money, we need a product or we're screwed and will take the blame. EVERYBODY will say they told us to go ahead without a plan or budget in place (even though [redacted] said no hires). This is now CYA and we had better be good at it. I seem to have let this one slip a little too much in an attempt to cover all our work (and get us the hell out of the long term problem of Yucca Mountain) but now it's clear that we have little to no choice. In all honesty I've never felt well managed or helped by the USGS YMP folks. In fact, as you know, I've often felt abandoned. This time it's no different, or worse, and we have to work together to get out of this one. I'm still overwhelmed trying to protect the rest of the

program from the ravages of what's happening in [redacted] (funding, which we seem to be blamed for because we got funding) and the current [redacted] fiascoes in the [redacted]. That is to say we're not working on our own as we have for the past 12 years, now we're being threatened (and carefully watched) by the people who use to simply ignore us. These are very dangerous time, both funding wise and professionally. Mark my words on this one; it will not be long before our technical credibility will be challenged in an attempt to discredit us and redirect funding!

Oh, by the way, you did a great job in response to [redacted] request. Bravo!!

✓ (keep my last paragraph private or among friends, if you know who they are)

[redacted]



12/17/98 06:57 PM



Sent by: [redacted]

To: [redacted]

cc:

Subject: Re: AP 3.10Q

FYI: The work plan [redacted] has put together as a result of the meeting this week includes model hand-offs ([redacted] documented using [redacted] which will all eventually be QA'd using [redacted] (see attachment below). [redacted] is going to be the [redacted] lead on the [redacted] the FY98 model. We're not sure how smoothly this is going to go but this is the approach. Like you've said all along, YMP has now reached a point where they need to have certain items work no matter what, and the infiltration maps are on that list. If USGS can't find a way to make it work, Sandia will (but for now they are definitely counting on us to do the job). [redacted] totally supports paying for a USGS report on the FY98 model, but they fully realize the problem: we're having with the Director's approval thing.

I've had no response from [redacted] concerning my response to his request for an FY99 work plan using the close-out funds. [redacted] has indicated that I can charge all my time this year to the [redacted] account. There was also good indication this week that [redacted] is willing to support us in FY00 to continue on with model validation and uncertainty work, and to deal with [redacted] addressing the infiltration maps. The [redacted] provided to USGS was in direct response to the telecon and was specifically intended for infiltration modeling work. I can no longer wait for USGS to figure this out; I'm moving ahead according to the PA/Sandia work plan we put together this week.

✓ What I really need now are some warm bodies to review the work I've been doing.

Like [redacted] said, "Live by the sword, die by the sword!"

----- Forwarded by [redacted] on 12/17/98 06:15 PM -----



12/17/98 05:01 PM



Sent by: [redacted]

To: [redacted]

cc:

Subject: Re: AP 3.10Q

Thanks much! Yes, I very much need to take a close look at this. I was just about to request this when I saw your note.

03/15/1999 12:18 PM

To: [redacted] Tucson, AZ [redacted] gov>  
cc: [redacted]  
Subject: Re: Tiger Team Hell

This email is currently marked "Relevant and Not Privileged"

[redacted] and I have been trying to figure out what's really coming at us with the tiger team effort. So far we've learned that they don't have a solid plan of action yet. I've formulated a "potential impact list" that is prioritized according to what work gets impacted 1st; 1. FY99 support to [redacted] (includes all the workshop stuff), 2. regional recharge report, 3. site-scale infiltration modeling report. Some of the work the tiger team effort calls for was scheduled under 22001 QA anyway, but we started hearing rumors of things like re-doing all the QA work for the neutron logging data, which will stop us dead in the water.

Now I'm going to give you the inside scoop: I'm going to continue the regional modeling, even if it means ignoring direct orders from YMP management. I'm also going to be working on reports, even if it means ignoring direct orders from YMP management. [redacted] and I have a pretty clear vision of the type of work that needs to be done to stay alive for the long-haul, and it very definitely involves getting product out there for the users and the public to see. The Death Valley regional modeling work fits that bill. Screwing around with tiger teams does not. In the end, it's going to be the reports that move everything else forward. Tiger team efforts will just be vaporized.

So, the work may be slowed, but I will not let it stop. At this point, I am still working to the plan that we've all spent a significant amount of time on to make things happen for FY99. That's the insider scoop. The position we will take for the [redacted] planners may be much different. So delete this memo after you've read it.

[redacted] gov> on 03/15/99 10:29:26 AM

[redacted] gov> on 03/15/99 10:29:26 AM

Please respond to: [redacted] Tucson, AZ \* [redacted] gov>

To: [redacted]  
cc: [redacted]

Subject: Tiger Team Hell

I understand you're going to be sucked into the [redacted] for [redacted] site infiltration. Any idea how that will impact timing for your regional recharge model product for the year's end. Or are you just working every weekend and waking moment like all the rest of us?

MAR-11-2005 03:24PM

03/26/1999 10:59 AM

To: [redacted]  
cc: [redacted]  
Subject: Status of LADS phase 1 calc. report - USGS

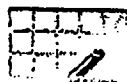
Between you and me, I put my 6k effort in months ago. My work gets charged to [redacted] and [redacted]. This is where we invested our time and energy in promoting, planning, and actually doing the work. I'll admit that I have not devoted a full-time effort towards [redacted]. I've been working on the daily climate data-base, the new future climate simulations, the regional modeling, and the backlog of reports. Yes the [redacted] work is now behind schedule but so is everything else because I'm the only one doing this work and I'll be damned if I drop everything else and work on nothing but [redacted]. I'd be very happy to just hand the work over to someone else at this point. It seems I do not have this option, thus all I can say is that the work will get done, but not by sacrificing everything else that's going on. I do not need to be developing hoop jumping skills. The skills I am interested in developing are ones that will benefit the [redacted] district and our careers.

I'm not directing this at you. This is just to let you know where I stand at this point in time.

I guess this is another one of those memos that need to be destroyed.

[redacted]

Forwarded by [redacted] 03/26/99 10:39 AM



03/26/99 09:56 AM

To: [redacted]  
cc: [redacted]

Subject: Status of LADS phase 1 calc. report - USGS

[redacted]

On Feb. 19 I requested the following steps from USGS staff, to complete the calculation report for [redacted] (formerly designated [redacted] and [redacted]):

1. Train [redacted] and a checker to [redacted]. Train [redacted] to [redacted]. Also, train [redacted] for classification of software as "software routines."
2. Assign a [redacted], and prepare a [redacted] with input/output files (i.e. implement [redacted]). Typically this means that all input/output files, and code listings, are put on a CD-ROM. The originating organization should be [redacted], to avoid complications from USGS policies.
3. Designate all software used in this calculation as "software routines." This means the software does not have to be qualified. The calc. report should include source code listings, description of routines and how they fit together, exact specification of compiler and CPU (with S/N's), and a test case that exercises all the routines.
4. Revise [redacted] calc. report with [redacted], and software routine documentation. Note that the report should state whether all input data are "Q." If not, then the calculation results should be clearly indicated as [redacted].

5. Printout first draft ( ). Originator signs calc. cover sheet. All pages will have the number, including the correct Rev. number. Page numbering will comply with .
6. Perform internal review of report. This can be informal, or as a review implementing . Make revisions as required (a revised copy will have the next draft number, i.e. ).
7. Printout checking draft (increment draft number using , etc.). All pages will be marked "Checking Draft" in addition to the number, etc.
8. Perform checking function, coordinating with the checking group ( ). A technically qualified checker (as determined by the Responsible Manager), who has received the checking indoctrination training and knows how to use the checklists, needs to be identified from within .
9. Revise document, backcheck per QAP 3-15, and get Originator and Checker signoffs on calc. cover page. Get Lead Engineer's signoff ( ).
10. Submit final document with cover sheet, all drafts, markups, and review paperwork, to your representative from Engineering Document Control. Request that they close out any on the original Design Input Request, and prepare and submit the Record Package to .

I requested that steps 1-4 be completed by March 15th, and all steps by 4/15. Steps 1-4 are not complete, so this activity is behind schedule.

Please help expedite this effort.

( )

11-20 5 03:24PM

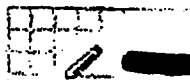
04/22/1999 04:05 PM

To: [redacted]  
cc: [redacted]  
Subject: Re: QA

This email is currently marked "Relevant and Not Privileged"

Not a bad idea. I am now considering it. Ideally, one would assume that the more information you provide QA, the better the QA. In reality, it seems that the opposite is true. At any rate, its a damn shame to be wasting time with this sort of thing.

[redacted]



04/22/99 03:43 PM

To: [redacted]  
cc: [redacted]

Subject: Re: QA

What if you just download the raw files from [redacted] and say you used those? Do they need to know any more than that? You don't really need to do an analysis just say this is the data I used. Maybe that would work.

[redacted]

[redacted]

04/22/99 03:27 PM

To: [redacted]  
cc: [redacted]

Subject: QA

The QA bullshit grows deeper. I may need to say that I did everything by hand for the data package I am submitting that [redacted] and [redacted] reviewed. The program I wrote is not in the system and QA will be all over like files on &%#\$. All references to [redacted] are being deleted.

Here's my question: When we go to start QA'ing the site-scale modeling work, will I get taken to the cleaners because I am not referencing either a tech procedure or a scientific notebook? In other words, would it be cost-effective to create a SN for the site-scale work and back-date the whole thing??

Can't wait to be far-far away from here!

[redacted]

MAR-11-2005 03:24PM

[Redacted]

To: [Redacted]

04/22/05 06:52 PM

cc:

Subject: status of new climate net-infiltration modeling

This email is currently marked "Relevant and Not Privileged"

I thought I'd give you a "heads up" on the progress of work I've been doing with the results you've provided. Model simulations have been in progress but about 3 weeks ago I found a small error in the model input that was generated using the EarthInfo data. The error was minor but would have created a QA nightmare so this was fixed and the simulations are being re-done (I'll send you a summary of the results when I get to this point).

I am about to submit a "developed datapackage" milestone consisting of the climate input files (7 files for the 7 sites you identified) that are being used by the net-infiltration model. The input files are basically re-formatted EarthInfo export files with a minor amount of parameter estimation occurring to fill small gaps in the record (even for the high ranking sites, there are gaps all over the place).

Here's the weird news: to get this milestone through QA, I must state that I have arbitrarily selected the analog sites. At first, I was going to include your email as supporting information in the data package, and discuss the work we did using the worksheets consisting of candidate sites, but since there is no DTN for your results the message I am getting from CA is that I can't use or refer to those results. In other words, I was trying to give you credit for your part in all this, as well as provide all info possible for the traceability of the analog climates, but this seems to create problems rather than solving them.

So for the record, the seven analog sites have been arbitrarily (randomly) selected. Hopefully these sites will by coincidence match the sites you have identified.

[Redacted] P.S. please destroy this memo

MAR-11-2005 03:24PM

To: [REDACTED]  
cc: [REDACTED]  
Subject: QA

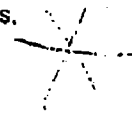
This email is currently marked "Relevant and Not Privileged"

✓ The QA bullshit grows deeper. I may need to say that I did everything by hand for the data package I am submitting that [REDACTED] and [REDACTED] reviewed. The program I wrote is not in the system and QA will be all over it like flies on &%#\$. All references to [REDACTED] are being deleted.

✓ Here's my question: When we go to start QA'ing the site-scale modeling work, will I get taken to the cleaners because I am not referencing either a tech procedure or a scientific notebook? In other words, would it be cost-effective to create a SN for the site-scale work and back-date the whole thing??

✓ Can't wait to be far-far away from here!

[REDACTED]

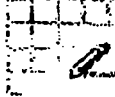


MAR-11-2005 03:25PM

P 029/032

What is your fax number so we can copy you on it .

[Redacted]



03/06/2000 08:12 AM

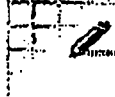
To:

[Redacted]

Subject: Re: USGS AMRs

I think we're on board - you or [Redacted] will initiate a 3.14 request?

[Redacted]



03/06/2000 08:11 AM

To:

cc:

[Redacted]

Subject: Re: USGS AMRs

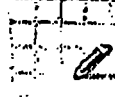
Please note that these are two separate issues:

[Redacted] - is an output data transmittal needed for a number of AMRs. This is needed in the TDMS regardless of the status of the AMR [Redacted]. We are burning CDs and sending you copies of what you sent us for this transmittal and the other [Redacted] data received. Please note that [Redacted] in Las Vegas (the [Redacted] coordinator) also has copies of these data. We will also send you these by email, though I am concerned that the files are large and may be difficult to transmit (We will send the files later this morning in separate emails).

As part of the AMR [Redacted] If the AMR will not be complete by the time the [Redacted] is issued, then the AMR itself (a DRAFT version) must be submitted as an [Redacted] transmittal. Otherwise the [Redacted] can not be finalized. This is a recent approach to deal with the possibility of an AMR not being complete before the due date of the [Redacted].

I hope this clarifies these two separate issues.

[Redacted]



03/06/2000 05:34 AM

cc:

[Redacted]

Subject: Re: USGS AMRs

I am not sure what you mean by "This is a different [Redacted] Transmittal." Is this not [Redacted]

08/05/1999 04:24 PM

FROM: [REDACTED]

P 023/332

To: [REDACTED]  
08/05/1999 04:51 PM  
CC: [REDACTED]  
Subject: RE: SN-0116

This email is currently marked "Relevant and Not Privileged"

Still planning to meet the Aug 31 deadline with 1st draft into tech review, so I'll be charging full-time to this month (and probably next)..... I think [REDACTED] (is it [REDACTED]???) is running a surplus right now, but [REDACTED] may also be charging to this. [REDACTED] and [REDACTED] are helping me with the 1st draft as we speak. I've been bogged down with the Yucca Mt. site-scale [REDACTED] stuff which includes all the software QA. [REDACTED] has put a high priority on the deliverables for both the site and regional work so I'm burning the candle at both ends. The good news is that I'll be a lot more productive in [REDACTED]. The bad news is that my productivity has been real bad the past month or two with all this moving and house buying crap. Life has been crazy ever since the gathering at the [REDACTED]. But it feels real good to be working out of the [REDACTED] Office in the middle of [REDACTED].

Hopefully the proposals for the [REDACTED] work (the stuff we sent [REDACTED]) will go thru and then we'll be doing some serious leveraging of resources for FY00. I also need to get serious about getting together with [REDACTED] for the [REDACTED] stuff.....

got to go

[REDACTED]

[REDACTED] on 08/05/99 03:53:14 PM

[REDACTED] on 08/05/99 03:53:14 PM

To: [REDACTED]  
cc: [REDACTED]  
Subject: RE: [REDACTED]

Re: On QA, how's your recharge report (due Aug 31, 1999) coming. By the way, [REDACTED] County may want to fund the transient recharge work!!!! Perfect for all you [REDACTED] district types.

> -----Original Message-----  
> From: [REDACTED]  
> Sent: Thursday, August 05, 1999 3:51 PM  
> To: [REDACTED]  
> Cc: [REDACTED] Hydrologist, [REDACTED]  
> Subject: SN-0116

> FYI

> [REDACTED] and I have responded to the recent issues concerning [REDACTED]. We believe [REDACTED] have fixed all of the problems identified so that a stop work order should be [REDACTED]

MAR-11-2005 03:25PM

P. 024/032

11/05/1999 08:44 PM

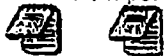
To: [redacted]  
cc: [redacted]

Subject: Thanks for the tool refs

This email is currently marked "Relevant and Not Privileged"

These references are pretty cool. Thanks for leaving them, it looks like usable stuff. Why can't I do this? What's my problem?

Well, maybe its that I'm just now getting the stupid data package off to the correct person. I re-sent it to [redacted], who responded from a laptop in [redacted] that I should just re-send it to [redacted] which I just did. Pretty soon the QA experts will want to know where the [redacted] and [redacted] precip files came from.



Here they are: [redacted] Don't look at the last 4 lines. Those lines are a mystery that I believe somehow relate to the work [redacted] was doing in entering the 1994 data. These lines are not used by [redacted] (we stop at 9/30/84). I've deleted the lines from the "official" QA version of the files (which do not have readers). In the end I keep track of 2 sets of files, the ones that will keep QA happy and the ones that were actually used.



These files are the output from the [redacted] database that [redacted] and I had put together, which I still have but haven't looked at since 1996. So either the [redacted] data package has to look a lot like those files or I'm going to have start talking about the [redacted] database when the QA questions start. My guess is that we do not want to deal with the [redacted] database.

\* Here it is almost 2000, and I am still struggling with work done in 1995 and 1996.



P.S. Let's make QA read those references too. Better yet, let's set aside a day for watershed training.

03:25PM

P. 025/032

01/06/2000 04:01 PM

To: [redacted]  
Subject: Re: AMR [redacted]

This email is currently marked "Relevant and Not Privileged"

[redacted] called. Yes, this is really happening. [redacted] and [redacted] will help but it seems I am stuck going to [redacted] on the [redacted] ([redacted] and [redacted] will also go for moral support). Responses to the [redacted] comments are due on the [redacted]

There is of course, no scientific notebook for this work. All work is in the form of electronic files. I can show auditors input, output, and program files, but it is not clear to me how to show documentation of work in progress. They may be expecting to see something that at least looks like a scientific notebook documenting work in progress. I can start making something up but then the [redacted] projects will need to go on hold.

If I continue placing [redacted] tasks as 1st priority for January, I will be ill prepared for the audit, and will likely get hammered. That's fine by me. I am far more concerned about the [redacted] projects than I am about the [redacted]. But [redacted] will be rather unhappy, and I will need help trying to figure out a good excuse why 100% of my time did not go into the audit without revealing the [redacted] projects.

I am open for suggestions.

[redacted]

[redacted]

01/06/2000 11:21 AM

To: [redacted]  
cc: [redacted]

Subject: [redacted]

Forwarded by [redacted] on 01/06/2000 11:21 AM

[redacted]

01/06/2000 10:25 AM

To: [redacted]  
cc: [redacted]

Subject: [redacted]

FYI.

Forwarded by [redacted] on 01/06/2000 10:25 AM

[redacted]

01/05/2000 09:52 AM

To: [redacted]

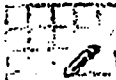
MAR-11-2005 09:25PM

P 026/092

cc:

[Redacted]

Forwarded by [Redacted] on 01/05/2000 09:57 AM



01/05/2000 08:56 AM

To:

cc:

[Redacted]

Subject: AMR [Redacted]

The audit team has selected [Redacted], "Infiltration Model," which is being developed by USGS, as the [Redacted] with [Redacted] to be evaluated replacing the AMR Analysis of Geochemistry Data. We need a copy of the latest revision immediately. When is the earliest you can get me a copy?

We will schedule the interviews with the originator of this [Redacted] for Wednesday, [Redacted]. Please make arrangements for the appropriate USGS personnel to be at [Redacted] on that day. For records, they will need as a minimum their Scientific Notebooks and the check/review documents. If different colors were used for the check/review comments, we will need to see colored copies or the originals for this and all the [Redacted]. We will notify you of additional records will need to see for the [Redacted] that will need to be available. We will try to keep the number of documents that USGS will need to bring to a minimum.

MAR-11-2005 03:25PM

P. 027/032

[Redacted]

To: [Redacted]  
Cc: [Redacted]

02/17/2000 04:14 PM

Subject: finally the dam coordinates

This email is currently marked "Relevant and Not Privileged"

I finally took the time to process your request. This required the use of [Redacted] to look at the corners of the [Redacted], then a coordinate transformation using [Redacted]. Here are the results:



[Redacted] my picks using [Redacted]



[Redacted] results obtained from [Redacted]

Please do not tell anyone how this was done because then we will need to get this whole thing through software QA!

[Redacted]

MAR-11-2005 03:25PM

P. 028/032

To: [redacted]  
cc: [redacted]  
03/06/2000 10:54 AM Subject: Re: USGS [redacted]

This email is currently marked "Relevant and Not Privileged"

What a circus (see emails below)....  
I re-wrote [redacted] to use the following [redacted] grid files as input:

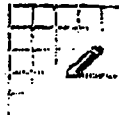
- [redacted]: the composite [redacted] created by [redacted]
- [redacted]: latitude (decimal degrees) for each grid cell calculated by [redacted]
- [redacted]: longitude ..... calculated by [redacted]
- [redacted]: slope calculated by [redacted]
- [redacted]: aspect calculated by [redacted]
- [redacted]: the soil type map, rasterized by [redacted]
- [redacted]: the depth class map, rasterized by [redacted]
- [redacted]: the rock type map ([redacted] & [redacted] and [redacted] & [redacted] only), rasterized by [redacted]
- [redacted]: the topographic ID (I must assume that this was produced in [redacted] by [redacted] using the [redacted]. Because it is only a place holder and not actually used by the model it doesn't matter but the parameter has been carried through the pre-processing and is in all the [redacted] files used as input for [redacted].

So once the [redacted], the geology, the soil type, and the soil depth class maps make it into the [redacted], [redacted] will provide a link to [redacted], which is the file I started with in 1996. The link between the source data in the [redacted] and the [redacted] grid files above are all standard [redacted] operations (except for maybe the [redacted] ID stuff) so this should get us to full traceability.

I checked the blocking ridge calculations using [redacted] and they do not match what is in [redacted]. The skyline map produced by the new version of [redacted] looks reasonable. I have not yet incorporated [redacted] latest fixes to [redacted] for the improved version. I am just trying to re-produce the blocking ridge values provided to me in [redacted] back in 1996, and I have not yet been able to do this. Again, the original calculation was not done by me and at this point I have no direct trace of the the blocking ridge values in [redacted] to the actual calculation. I do have a copy of [redacted] provided to me by [redacted] and I am now using this to check the [redacted] calculations. [redacted], do you have the original [redacted] program that was used to create the values in [redacted]? Also, could you send me a copy of the improved version so that we can start with the better numbers for the regional modeling?

I can fudge the attachment for [redacted] for now but eventually someone may want to run [redacted] to see what numbers come out and at that point there will be problems, although it is my belief for now that an impact analysis would reveal that the differences are not critical to the end result.

Forwarded by [redacted] on 03/06/2000 10:19 AM



03/06/2000 09:33 AM

To: [redacted]  
cc: [redacted]

Subject: Re: USGS [redacted]

Yes - will fedex it and fax it to [redacted]

MAR-11-2005 03:28PM

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

03/07/2000 08:09 PM

cc:

Subject: developed daily precip record

This email is currently marked "Relevant and Not Privileged"



Mod3-ppt.dat believe it or not, this file is now 3.5 years old, but it is what was used. This developed record stops on day 274, 1995. The only real good thing about this file is we seem to be very close to getting it into the TDMS (the data was developed in a [REDACTED] turned to [REDACTED] worksheet that may now be required to go through qualification as a software routine, so things have yet again stalled). Someday I hope to have the time to update this to include an improved pre-1987 interpolation and all the new data after 1995, which includes some interesting events..... back to QA.

P.S. Hope this email doesn't trigger a [REDACTED] input request. I'll probably get fired.

03/09/2000 07:39 PM

To: [REDACTED]  
cc: [REDACTED]  
Subject: vegcov01

This email is currently marked "Relevant and Not Privileged"

[REDACTED] has a user option which when set to 0 the vegtypes in the file [REDACTED] (created by the damn routine [REDACTED]) are ignored and a veg-cover term of 30 is just assumed. The real stupid thing is that this value is never used because the veg cover stuff (root-zone parameters) all get defined in the control file. The veg-type and veg-cover columns are just dummy place holders that are not even used by [REDACTED] (remember all those great ideas about correlating something, anything, to vegetation....). But because vegcov01 is where the bedrock ks is adjusted I have to drag the routine into the AMR. Damn it!

The main stupid thing is that as a 1st step I ran [REDACTED] with the user option set 2 to create [REDACTED] from [REDACTED], the output from [REDACTED]. This setting causes a veg cover estimate to be made based on vegtyp01, which are the vegtypes defined for the regional model (data from [REDACTED] and [REDACTED]). I was desperately trying to bring vegetation into the picture (still wasn't getting what I needed from the bugs and bunny crowd) but it didn't match up as well as I had hoped, I ran out of time, and it fizzled.

Now here is the majorly stupid part. To create [REDACTED], which is used as input to [REDACTED], I re-ran [REDACTED] using [REDACTED] as input and set the option to 0. So the regional vegtypes made it into all the watershed files that were used in the AMR. Now I can't just re-write the routine to leave out vegtyp01 because the output will never match what ended up becoming the watershed files. Had I re-run [REDACTED] using [REDACTED], I could now re-write the code in 5 minutes, get rid of [REDACTED] all together, and all would be cool.

So I would like to keep [REDACTED] as is, tell the story just as it happened, and then explain that we don't have to trace [REDACTED] because it was not used (we cannot bring [REDACTED] into the picture because then we have to deal with the input file which is the geospatial input file for the [REDACTED] region!). In fact we can just not even talk about the vegtype and vegcover stuff and just say those are dummy place holders that are never used so they don't need to be traced.

On second thought...do whatever you want. At this point I cannot re-produce the blocking ridge numbers using [REDACTED] and I have yet to re-visit the elevation stuff [REDACTED] was finding and who knows what will happen if we tried to run [REDACTED] on any of the source data going into the [REDACTED]. There is a bug in the top layer of the cascading bucket model, the soil ks conversion is off by a factor of 10, and even if I can re-produce the blocking ridges they're still wrong. Then there are those strange non-integer values that I saw for the 1st time in the Day and others input file during my testing of [REDACTED]. What is rock-type 1.33??? Oh yeah, the [REDACTED] data .... Jesus! I'm going nuts again! I'm going home now!

MAR-11-2005 03:26PM

[Redacted]

To:  
cc:

[Redacted]

03/30/2000 03:48 PM

Subject: Installations

This email is currently marked "Relevant and Not Privileged"

The programs, of course, are all already installed otherwise the AMR would not exist. I don't have a clue when these programs were installed. So I've made up the dates and names (see red edits below). This is as good as its going to get. If they need more proof I will be happy to make up more stuff, as long as its not a video recording of the software being installed.

----- Forwarded by [Redacted] on 03/30/2000 03:39 PM -----

[Redacted]

03/29/2000 03:13 PM

to:  
cc:  
bcc:

[Redacted]

Subject: Installations

I'm trying to follow-up on this request, but I need your help. Please respond back to me, asap, with the appropriate answers to the questions [Redacted] is seeking.....thanks.

----- Forwarded by [Redacted] on 03/29/2000 03:08 PM -----

[Redacted]  
03/29/2000 01:52 PM

to:  
cc:

[Redacted]

Subject: Installations

Good Afternoon [Redacted]

I am following up on our conversation today about the installations I have pending.

The installations are for [Redacted] under section 501 of [Redacted].

[Redacted] (1/1/1998)  
[Redacted] (1/1/1998)  
[Redacted] (1/1/1995)

# three code are for [Redacted] and [Redacted]. The first two codes are for [Redacted], [Redacted] s for [Redacted]

The information I need have these codes already been installed to initiate the [Redacted] process, or do they still need to be installed? If they have been installed I need to know the name of the individual that installed the codes and the date. I will also need you permission to make the entries onto the User Request forms to bring them up to date.

[REDACTED]  
03/07/2000 08:09 PM

To: [REDACTED]  
CC:

Subject: developed daily precip record

This email is currently marked "Relevant and Not Privileged"



Mo-3-ppt.dat believe it or not, this file is now 3.5 years old, but it is what was used. This developed record stores on day 274, 1995. The only real good thing about this file is we seem to be very close to getting it into the [REDACTED] (the data was developed in a [REDACTED] turned to [REDACTED] worksheet that may now be required to go through qualification as a software routine, so things have yet again stalled). Someday I hope to have the time to update this to include an improved pre-1987 interpolation and all the new data after 1995, which includes some interesting events..... back to QA.

P.S. Hope this email doesn't trigger a [REDACTED] input request. I'll probably get fired.