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[Address information deleted for privacy]

December 15, 2003

Email Transmittal

Central Platte Natural Resources District
Board of Directors
215 N. Kaufman Ave.
Grand Island, NE 68803

Subject: COHYST - specific requests

Dear Board Members:

The purpose of this letter is to request specific responses from your board on the below items regarding COHYST.

1. Transcript of the October 23, 2003 Water Resources Committee meeting.

As you recall, I participated in your October 23, 2003 Water Resources Committee meeting on COHYST. At that time, it was indicated by the Chair that the meeting was being recorded, and a written transcript would be generated for use in later considerations on the items discussed. Since nearly two months have elapsed since that meeting, I trust the stated transcript has been generated by now and that you are preparing to constructively address the issues resulting from that meeting.

Please provide me with a copy of the resulting transcript just as soon as possible. I would prefer to receive this in electronic form. If the file size of this transcript exceeds 1 Mbyte in size, please send it to me on CD at the above mailing address. If that file is smaller than 1 Mbyte, you may transmit it to me at the above email address.

I would appreciate being advised by email not later than December 22, 2003, when and by what means I can expect to receive this transcript.

2. Status of your progress on implementing my COHYST recommendations.

By this letter, I am specifically requesting that CPNRD implement those recommendations I made to you on October 23, 2003 in a timely manner. Time is of the essence.

During my presentation, I described my conclusions as to the status and direction of the COHYST project. I also made specific recommendations to CPNRD as to those actions which my professional experience leads me to conclude are necessary in order to effectively address the issues in the interests of landowners and irrigators potentially affected by COHYST. I am attaching a copy of those conclusions and recommendations for your reference. If you wish to revisit my entire presentation, it is available for that purpose on the Internet at: <http://www.platterivertruth.org/Briefing-23Oct03-all.PDF>

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As you recall, as part of my recommendations I offered to provide suggestions on some companies that might be considered to assume the needed role of an outside independent firm to serve as the overall manager of the COHYST project. Time is passing quickly, and it clearly is important to act right away to start this process of engaging such a firm.

Please advise me of the status of your plans to implement these needed changes to COHYST. Clearly these changes are needed in the best interests of landowners and irrigators who are likely to be affected by the future implementation of COHYST both in your management actions in the CPNRD area of jurisdiction, and by other NRDs as well. Because of the aggressive COHYST completion dates, and the importance of implementing my recommendations to facilitate a successful outcome of the COHYST project, it is clear that time is of the essence for your actions in this matter.

Please advise me in writing of your plans and progress on implementation of these changes I recommended and am requesting be timely implemented. I would appreciate receiving your written response not later than January 8, 2004.

Very truly yours,

Ronald D. Klein

Cc: file

w/attachment(6 pg)

What should be known after 5 years of work?

- Need for project and exactly how it will be used should be clearly defined
 - Should form the basis for all work from the start
- What it will do/how it will do it/how it will be proven to work should all be clearly known and in process
- **Especially important is a defined, proven and clearly demonstrated way to verify the model matches physical field tests**
 - **And, technically sound means to resolve differences when it doesn't**
- When interested/affected parties ask questions, answers should be readily available and openly answered and discussed
 - Those answers should be consistent from individual to individual and organization to organization
- **COHYST does NOT seem to be this way**

What seems to be the case with COHYST?

- Need for and exactly how it will be used IS NOT clearly defined
 - Should form the basis for all work This seems to be an **academic exercise**, not a practical project
- Emphasis seems to be mostly database collection from existing sources with effort primarily based on computer computation from those databases.
 - Seems to be very limited in practical field testing to confirm GW/SW interaction predictions
- What testing has been done or planned is at spacing extremely far apart
- While reasons seem to exist for the wide spacing, the arguments for not being closer seem to be consistent with an **ACADEMIC EXERCISE** and **not a practical project**
 - It is all predicated on the “Regional Model” concept.
- Where is the proof that the “Regional Model” is adequate?
 - I would expect a complete analysis to show how this meets the intended use requirements. The lack of a clear definition of exactly what this will be used for, and how, makes this an even more questionable approach.

What seems to be the case with COHYST?(Cont'd)

- Many inconsistencies in statements by COHYST committee members
- It appears that there is no data to truly prove - or perhaps even indicate - river depletion from wells is real
- Yet, COHYST team is talking about using it to control wells?!!
 - Why?
- Doesn't available data directly dispute the depletion claim?
- Lack of specific strategy for use of COHYST by the NRD BOD is a major problem
 - This needs to be thought through completely
 - No sign it has been
- Expecting a farmer to prove the model wrong is unfair & unreasonable
 - See June 26 meeting

Conclusions

- COHYST is being run as an **ACADEMIC EXERCISE/RESEARCH** project
 - It is nowhere close to being practically useable for groundwater management - or anything else
 - Unless you want flawed decisions based on an unproven model.
- COHYST is at the “early technology development phase”
 - There are at least 2 or 3 more phases to execute before it will be useable
 - Technology proof - by good field testing & correction of the model to actually reflect variations in aquifer hydrological characteristics
 - Refinement to smaller spacings of model field tests
 - Deployment - a thoroughly thought out plan to address the application of this model to individual wells and additional field tests throughout the COHYST area to be certain the model matches physical
- COHYST needs to be managed with the realization it effects the **LIVEHOODS** of people and is not just a research tool.
 - That does not appear to be the case.

Recommendations

- There should be a truly independent outside entity contracted to do a full and independent audit of this project from start to finish. They should be empowered to make the necessary changes to both the management and technical approach to this project so that it might become “real”.
 - The first question to be answered should be: Where is the provable evidence that there IS river flow depletion caused by groundwater pumping?
 - I have some suggestions of firms that might be appropriate choices that I can make available at the appropriate time and to the appropriate people
- There must be real emphasis on defining exactly what this model will be expected to do, how it will be used, and how conflicts between model predictions and field results will be resolved.
- There **MUST** be a **REAL** field test program developed and executed.
- The model **MUST** be made to match field test results in a way that reflects the variations in aquifer characteristics in much smaller regions than currently defined.

Recommendations(Cont'd)

- The Regional concept should be abandoned and replaced with a requirement to prove the model to the individual well.
- The NRD Board needs to take direct control of COHYST by engaging an independent outside firm as the overall manager.
 - Comparable to the “prime” or “general” contractor approach to complex projects
 - That firm should specifically NOT be part of the “hydrological community”
 - That firm should have a demonstrated record of independent thinking and practical deployment of systems that work and effect people’s lives.
 - NOT a research firm
- There MUST be a change in the conduct of the management and staff of the program so that potentially effected parties can get accurate, consistent, and timely information about how this might affect their futures.
 - No more evasion/inconsistency/incorrect information from COHYST participants - or board members for that matter.