

## **Water Resources Planning Committee**

Minutes from **Feb. 9, 3:00-4:15pm**

Look for your **name** in **underlined bold letters**, which indicates a request for information or action. The **everyone** tag applies, as you would expect, to everyone.

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**Next Meeting**: Friday, Feb. 23, 2:30-3:30pm, location TBA

### **Attendees:**

Mike Mayfield, Garbielle Katz, Jeff Colby, Mike Windelspecht, Bill Anderson, Carol Babyak, George Santucci, Kristan Cockerill, Jana Carp, Chris Thaxton, Stan Aeschleman (charged the committee)

### **Absent:**

Wendy Patoprtsy, Patrick Beville

Everyone: Do you know of other that should join our group immediately and permanently (Jana, you mentioned Botany?) If so, **everyone**, please send me list of names.

**General comments.** Thanks to everyone for coming today! I think Jana said it best when she mentioned that this is a “great day!” Most of us have been looking forward to a formalized congregation of faculty to discuss Kraut Creek and Water Resources. I believe that we have an opportunity to put App State “on the map” as a leader in Water Resources if we chose to see this through. Just to let you know, I fully intend to put forth the effort necessary for this team to succeed but it all depends on each one of us to commit a little extra work in the next few months. This document is kind of large at the moment but I think that as we get through the start-up phase of this committee and define our goals and limits, that our benefit-to-time cost ratio will rise significantly (and this file will shrink in size considerably). Please take the time to read through it and send along comments to be added for the next meeting. Thanks again!

### **Decisions reached:**

1. We will be named the **Water Resources Planning Committee**, not the Kraut Creek Planning Committee. We intend this body to be much broader in scope than just Kraut Creek. One possible perspective is to sell ourselves as a modular academic research team that can be adjoined with any group seeking funds and in need of our services. For example, George mentioned the Deerfield church opportunity for data collection – Bill A. and Chris T. intend to participate. In such scenarios, if funding opportunities were available, we should consider a full spectrum data collection (chem., sediment, ground water, surface water, bio, mapping, modeling, etc.). Does the Ginn Corp. effort come to mind?
2. We intend this body to eventually represent the Center for Water Resources within the developing “EcoInstitute”.

3. In the near term, we intend to deliver to the Provost (Stan Aeschleman) a list of prioritized recommendations related to Kraut Creek focused on
  - a. Preventing future “harm”
  - b. Interventions to improve existing designs/systems
 which include:
  - c. Cost feasibility
  - d. Time and effort required
  - e. Integration into the EcoInstitute
 Delivery date TBD (June 1, 2007?). See ‘*Deliverables*’ below for details.
4. We intend to act as an “oversight” committee that will make recommendations on ongoing design and construction plans affecting Kraut Creek – we will need access to all future designs from design and construction to be effective (**Patrick B.**, can you offer ideas? Will this be well received? What would be the procedure to formalize?).
5. We will allocate a server (**Jeff C.**, did you offer a system? If so, we’ll need sftp and ssh access to port data files, or an ftp server site or the like) to act as an information repository to provide the Committee and others:
  - a. Maps of the stream including topographical surveys, fly-by photos, land use, and outfall pipe sources. These maps should be provided soon to aid in our discussions...(**Jeff C.** and/or **Gabrielle K.** and/or **Mike M.**, can you get these? Mike M. mentioned that a former student – Chris – may be able to provide some recent files). When can we have this up (A date is needed).
  - b. Data from past work including bio (**Mike W.** to provide?) and other data (**Bill A.**, **Chris T.**, **Carol B.** to provide.)
6. We intend to act as an intermediary between ASU and Boone – to integrate the remediation efforts throughout the entire Kraut Creek reach.

**Topics Discussed (in no particular order):**

1. We should have a presence in the undergraduate research symposium (Jana).
2. The New River Symposium is at Radford (May 31-June 2) if anyone is interested (George).
3. Mike W. mentioned that he would be happy to shift some of his research focus onto KC. This would round out our data sets and strengthen our pitch to the admin and any grants that we wish to put out. **Mike W.**, we should talk about a timeline and a plan of action for the Summer.
4. This series of minutes will act as a documentation of this effort (the initiation of the WRPC and its activities).
5. Seek outsiders to come and talk to us about remediation experiences (**Mike M.**, you mentioned a former student – Amanda Todd? - may be able to share some experiences with engineering firms, can you follow up?) Also mentioned was Buck Engineering (sp?) and Charlotte’s Little Sugar Creek (?) and of course Rock Branch at NCSU. **Everyone**, Should we get more info on these stories (e.g. invite people in?)

6. We should be wary that “Water Resources” implies many things, including waste water treatment, which may be another good source of funding but also may represent a very large amount of work above and beyond our current focus.
7. Garbielle mentioned that “restoration” is still a research topic – there is not an agreed upon method of remediation, especially for urban, high-gradient streams. Mike M.’s idea that we should pick an “easy win” scenario for our first recommendation seems to be a good idea in light of Gabrielle’s comment. But I think we should couch any remediation efforts that we recommend, large and small, in terms of being research and instructional efforts first and foremost, not a guaranteed solution.

### **Deliverables:**

1. Recommendations to Stan will include the following positive effects if the WRPC is empowered as an oversight committee for Kraut Creek design and planning:
  - a. Convenient and low-cost research and collaboration opportunities.
    - i. **Chris T.** will build a list of researchers who would benefit.
  - b. Convenient and low-cost teaching and outreach facility
    - i. We need a list of teachers that use the stream and would profit from having structured access points to the stream (e.g. Anderson (GLY), Windelspecht (BIO), Thaxton (PHY), ...) **Jana C.**, can you provide an updated list of the faculty using KC to teach?
    - ii. We need to structure a pitch that would give Ken Peacock and idea of what kind of outreach we’re talking about (workshops, summits, conferences, K-12). **Everyone**, how have we used KC as a medium for this already (we need a list).
    - iii. We should focus on K-12 since this is a top priority of Erskine Bowles.
  - c. More fund opportunities will become available that stress remediation or BMP implementation
    - i. We need a list of funding agencies that stress remediation with an approximation of the potential funding that could come our way. **Kristen C.**, can you provide? We should also stress that Design and Construction could participate in grant writing and funding (**Patrick B.**, do you guys already benefit from grant funding? If so, what percentage of your budget is externally funded through academic grants? This would help us to sell the potential funding – and the integration of this committee into the D&C process for KC - as another source of income to D&C.).
  - d. A “shining” example (for publicity) of effective cross-disciplinary work and of the practice of environmental / sustainable efforts on campus and in the region.

We will also list the ramifications (negative impacts) if the recommendations are not followed. Notably, stream remediation must consider the hydrological behaviors of the **full** reach – if design and construction selects a subset of our recommendations and not the fully integrated approach, this may hamper the effectiveness of sub-section designs or at least force changes to these sub-section designs in anticipation of the hydro effects of an unremediated section. For

example, if we recommend a wetland area at Varsity Gym but the Raley lot plans are not designed properly as an effluent to this wetland, the wetland may get blown away.