1. Draw on a broad range of primary literature to answer your question and substantiate your conclusions/recommendations – As we have discussed, critical analysis involves reading and evaluating information from a range of sources, and then using that information to formulate and substantiate your own conclusions. A few common pitfalls:
   - Making broad sweeping statements without substantiating them with examples and/or citations. Using strong words, such as “must”, “never”, and “very” do not make your points stronger; supporting your points with specific figures and references do.
   - Relying heavily on a single source for the majority of your information. You should cite multiple sources to support your own conclusions, noting when they do or don’t agree.
   - Review articles can be a helpful guide into the literature on a topic but you need to go back to the original references.

2. Make focused conclusions/recommendations
   *Examples of conclusions that are too vague:*
   - More research is needed on vegetative buffer strips.
   - Nonpoint source pollution is a serious environmental problem.
   - The various management strategies have potential to control nonpoint source pollution in the Elkhorn Slough watershed.
   *More focused conclusions:*
   - Grass vegetative buffer strips are not effective at reducing nitrogen inputs into Elkhorn Slough, but more research is needed to determine whether shrub buffer strips might be more effective.
   - Thus far, the largest contribution to reducing erosion in the Elkhorn Slough watershed has been purchasing the most highly erosive land and removing it from agricultural production. Therefore, developing a map ranking lands for their susceptibility to erosion and targeting those sites for land acquisition are high priorities.

3. Improve the organization
   - Use your road map to tell the reader how your paper is laid out.
   - Use subheadings to help with organization
   - Make sure your topic sentences introduce the scope of the paragraph.

4. Use correct citation format – in particular for web pages – See handout on “citing references”. Note that for articles with more than two authors you have to write out all authors names in the reference cited list, not just write et al.
   - Generally first names can be abbreviated in references lists (use initials: Mark Scott Patterson becomes M. S. Patterson).
   - Parenthetical in text citations always have dates attached to them, for example: (Donovan et al., 1999; Haefele et al., 2000). Just listing (Donovan) is insufficient.
   - Only list references that you cite in the text of your paper.

5. Use spell check and proofread your paper!

6. Get more feedback: Please arrange to meet with the grader of your paper if you want further input and/or are unclear on the comments on your paper. Also, you can get additional help from a writing tutor – writing.ucsc.edu – follow the link to “learning support services.”
A few reminders/ for your final draft

The final paper is due March 16 by noon to Karen’s office 461 NS2. If you turn it in before that date, please put it in the lock box outside the ENVS mailroom (ISB 417). The final paper should be ~10 pages double-spaced, plus the drafts with reviewers’ comments and a cover letter explaining in detail how reviewers’ comments were addressed. The final draft of the paper should include the same sections as the draft, as well as a fully developed critical analysis. In other words, based on your research what is the answer to your initial question? What conclusions or recommendations stem from the research presented?

The papers will be graded on the following criteria:
Content & critical analysis (clear thesis statement, engaging and informative introduction, effective use of a range of evidence to substantiate points, arguments are developed and not just restated, focused conclusions/recommendations): 40 pt
Organization (clear topic sentences, logical sequence of materials, smooth transitions): 10 pt
Writing style/formatting: 5 pt
Addressing instructor and student reviewer comments: 15 pt (note that if you do not turn in your drafts you will not receive any credit for this section)
Cover letter: 5 pt
Literature cited – standardized citation format and all relevant information included: 5 pt

Note that we will give more points for the cover letter on your final draft, than we have given for cover letters in the past. Please explain the changes you have made to address the major reviewer comment with some detail. For example, rather than saying “I improved the critical analysis” you might say “On pages 6-8, I have added three additional recommendations, each of which is supported by examples from the literature”. If you have not made major changes recommended by the reviewers, please explain why. Please address the comments both of the instructor and your peers.

Reminders for presentation
1. Work together on an integrated presentation – What is your overall question and what motivates this question? Each person should contribute some part of their research to answering that question, but each person will not have time to present everything so pick and choose. When you put all this information together, which solutions seem most promising?

2. Please arrive 10 min. in advance of class on the day of the presentation. - The best way to get the powerpoint to us is to e-mail it (if it is under 5 megabytes) to Dr. Holl in advance of the presentation. Please use a descriptive file name – (i.e. green roof presentation, not presentation3). Students can also bring their powerpoints on CD, memory stick, or their own computer, but should test their computer connection in advance of their presentation. Regardless, students are required to get their powerpoint presentation to their primary grader to aid in evaluation either via email, memory stick or hard copy.

Upcoming schedule
Feb. 26 – Section – Work on presentations with groups and meet with project adviser.
March 3 – Lecture – Student presentations; grant proposals returned and discussed
March 5 – Section – Student presentations
March 10 – Lecture – Student presentations - Final grant proposal due.
March 12 – Section – Student presentations
March 16 – noon – Final papers due.