Manuscript Title: The Potential Release of Phosphorus in Floodplains

Authors: Maria S. Rossetti, Nicole K. Ownby, Erin Scott, and Brian E. Haggard

Response to Reviewer Comments:

Introduction

1. Page 82, 2nd paragraph, line 4: Changed Flynn, 2005 to Flynn, 2009.

Methods

- 2. Page 83, 1st paragraph, line 8: Identified that SRP was measured using the ascorbic acid method (APHA 2012).
- 3. Page 83, 1st paragraph, line 10: Included the filter size that was used.
- 4. Page 83, 2nd paragraph, line 4: Included citation for the method used.
- 5. Page 83, 2nd paragraph, line 10: Chose to use "content" because data is reported as mass P per mass soil, in which "content" is often used. "Concentration" is often used to report mass P per volume water.

Results and Discussion

- 6. Page 84, 1st paragraph, line 3: Modified wording to identify the flux regressions begin described.
- 7. Page 84, 1st paragraph, line 10: Removed "The slopes from the individual regressions" as it belongs in the methods.
- 8. Page 84 1st paragraph, line 20: Changed units to μg m⁻² hr⁻¹.
- 9. Page 84, 2nd paragraph, line 2: Included information that these are the two highest soil P contents.
- 10. Page 84, 2nd paragraph, line 5: Modified sentence for clarity regarding the difference in regression techniques to better fit the data.
- 11. Page 85, 2nd paragraph, line 12: Changed "maximum" to "plateau".
- 12. Page 85, 2nd paragraph, line 15: Changed units to μg m⁻² hr⁻¹.
- 13. Page 85, 3rd paragraph, line 3: Added information about differences between studies and what may have influenced differences in results.
- 14. Page 85, 3rd paragraph, line 10: Removed sentence and included discussion of the relationship between soil test P content and flux rates further down in Results and Discussion section.
- 15. Page 85, 3rd paragraph, line 13: Changed "P" to lower case, "p".
- 16. Page 85, 3rd paragraph, line 20: Included a conclusion regarding the timing of SRP flux in the last paragraph.

References

17. Double checked sources – formatting and relevance.

Figures and Tables

- 18. Added black boxes representing more precise site locations.
- 19. Added footnote to refer reader to Figure 1 for site description; included p value in footnote for LSD and defined meaning of letters.
- 20. Modified y-axis on figures 2 and 3. Included n.