The authors tried to evaluate the interaction between waterloding and elevated CO2 on Australian riparian tree seedlings, and the information is very valuable because there are very limited attempts are there. The manuscript is well written, but author needs to discuss about the deficiency of replications because the experiment was conducted under no environmental controlled glasshouse at only one time, this means other background environments can affect the interaction. At least, authors need to show the data of weather environments as figure, temp, radiation, humidity, and please discuss about this point.

* Get humidity and temperature from Masood, get solar irradiance from BOM, do means and SD or something.
* Basically, the most important variable influencing the experimental results is growth – therefore total available light and to a more variable extent temperature are likely to exacerbate the results of the experiment. Since the expt was done in winter and total available light wasn’t that much, it’s possible that the effect size may have been greater.

The question is what if you repeat this next year, do you believe same results will come out? The treatment started after 90d fro 24d, if you change this timing and this period, how do you think?

* Talk about length of waterlogging period and fx on plants

You may review the literature compared to your results in terms of weather and also the treatment method.   
  
Minor,   
axis of several figures are too thin not uniform, fug2 and fig3.

My only concern with the study is that the experiment was conducted on juvenile individuals in a greenhouse with very small chambers. Plants in riparian zones, especially perennial and woody plants, are acclimated to field conditions. The authors did use similar soils found in the field, which is plausible. Furthermore, woody plants in the field have acclimated rooting systems that surround microbial communities, nutrients, and, more importantly, the plant community as a whole. As a result, the physiological responses of woody plants in the field will not be the same as those from in this study. So I am not too convinced that the results found in this study reflect the actual values in a riparian zone. In addition, flooding in a riparian zone has seasonal/intra-annual variations. These events occur during a specific stage of the plant’s life cycle, suggesting that more focus is needed on the physiological responses during different periods.   
  
While this problem applies to all indoor experiments, I’d like the authors to address this issue in the discussion, nevertheless, by stating the applicable conditions for their results.

* Paragraph lamenting limitations of glasshouse expts. But glasshouse expts allow us to make manipulations that would not be feasible in the field so we can get at mechanisms.
* Cycles of flooding are def important for adults, but this study was on seedlings which are most likely to experience only a single major flooding event.

Comments to the Author   
The manuscript reports the responses of three riparian tree seedlings to interactive effects of elevated CO2 and waterlogging. The seedlings were planted on pots in a glasshouse environment that CO2 and temperature can be controlled. The experimental design is clear. The manuscript is well written. Here are my major comments:   
1. I don’t quite understand the significance and importance to understand the interactive effect of eCO2 and waterlogging. Why do authors focus on these two drivers/stresses? The mechanistic connection between these two is not clear. A small number of publications do not justify the importance. From the FACE experiments (outdoor CO2 experiments), we know that the CO2 effect on plants is not well understood, mostly related to photosynthesis, respiration, temperature, carbon allocation, and nutrient supplies. The connection to waterlogging is secondary. So, the FACE results and knowledge gaps should be well described in this manuscript.

FACE and GH experiments are complementary. FACE is best at studying ecosystem processes and community-level functioning, but the ability to construct manipulative experiments, and especially to make destructive measurements. GH experiments focused more on individual plants in pots are able to provide data which would not be feasible to obtain using FACE (either bc it is too destructive, manipulations can’t be made, or there isn’t a FACE setup in the system of interest).   
  
2. I have a major concern on the short duration of the experiment, last 90 + 24 +23 days. Within the treatment period, one may see the effect on photosynthesis, but not much on root biomass and stem density. The other effect may be involved such as the difference of the individual plant, species variation, etc.

Actually na. 5 months is plenty for seedling experiments, and there are lots of examples where fx on root biomass and stem properties (or some kind of tissue density) have been found in seedlings of this age.  
  
3. The temperature varied 16-28 degree C. How did temperature affect the treatment effect? 

All the GH’s were at ~ same temperature.

4. As with all indoor experiments, how do experiment results explain the real, national condition? This is the reason why people designed outdoor CO2 experiments and rainfall experiments to reflect more realistic environmental drivers.