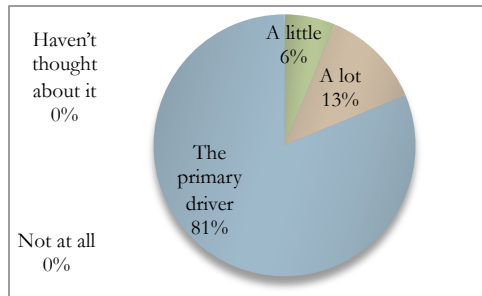


Appendix: Digital Response Questions

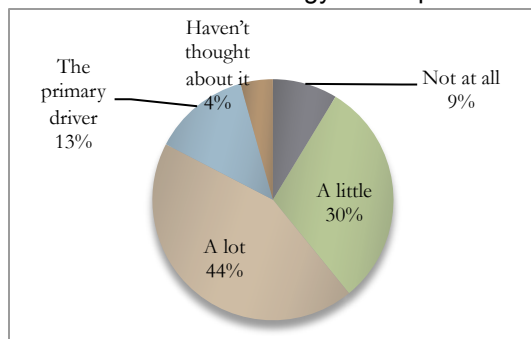
The appendix is divided into five sections: A) critical factors in decision making, B) priority concerns for the region, C) timescales of value to stakeholders, D) possible scenarios to explore and policies and responses and E) future concerns.

A: Critical factors in decision-making

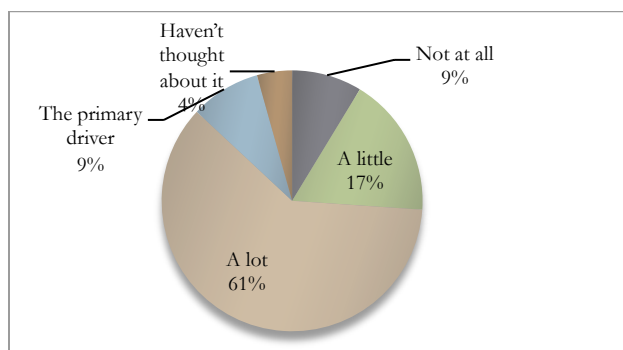
1. To what extent do concerns about water availability influence your decision-making? This may include direct or indirect decisions about land management, educational programs or regulatory policies, or research and technology development.



2. To what extent do concerns about carbon influence your decision-making? This may include direct or indirect decisions about land management, educational programs or regulatory policies, or research and technology development.

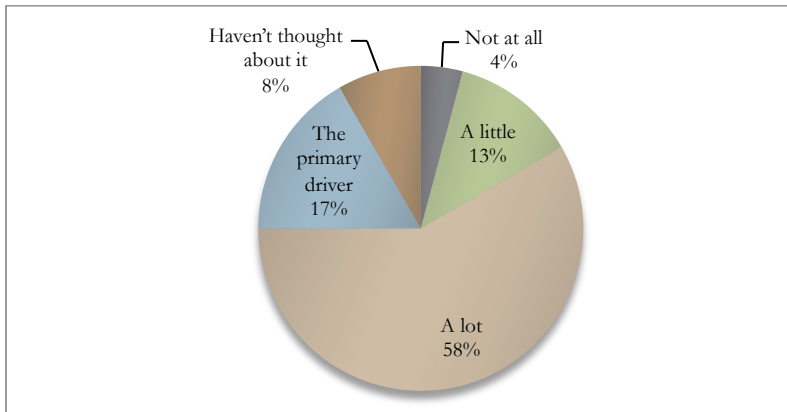


3. To what extent do concerns about nitrogen influence your decision-making? This may include direct or indirect decisions about land management, educational programs or regulatory policies, or research and technology development.

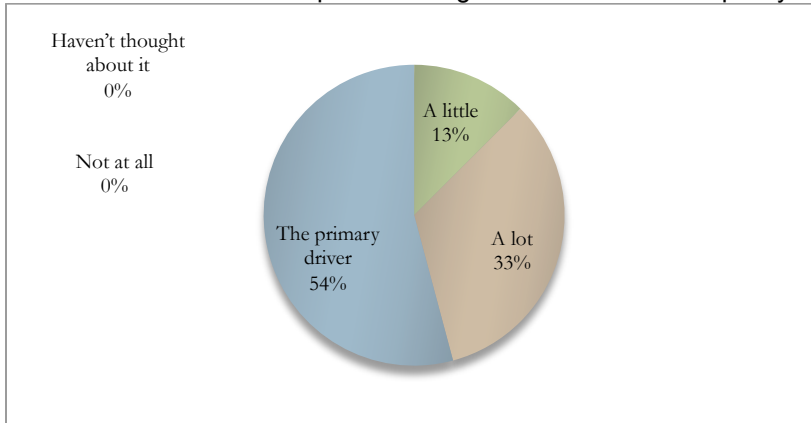


B: Priority concerns for the region

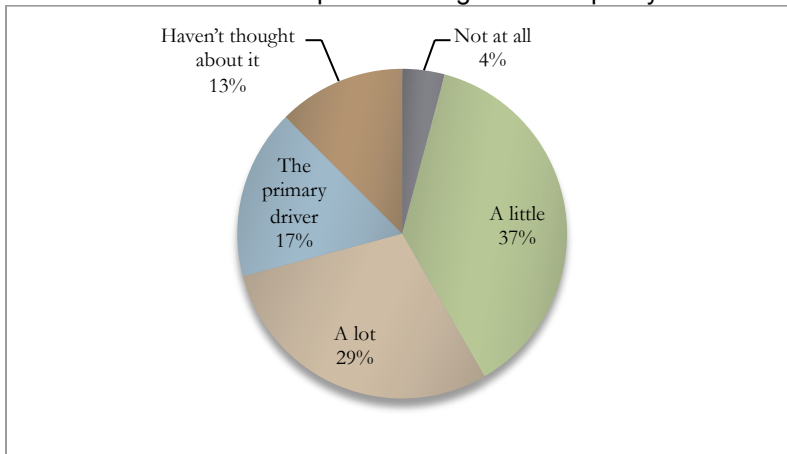
1. To what extent is the contribution of nitrogen to atmospheric greenhouse gas concentrations a matter of concern?



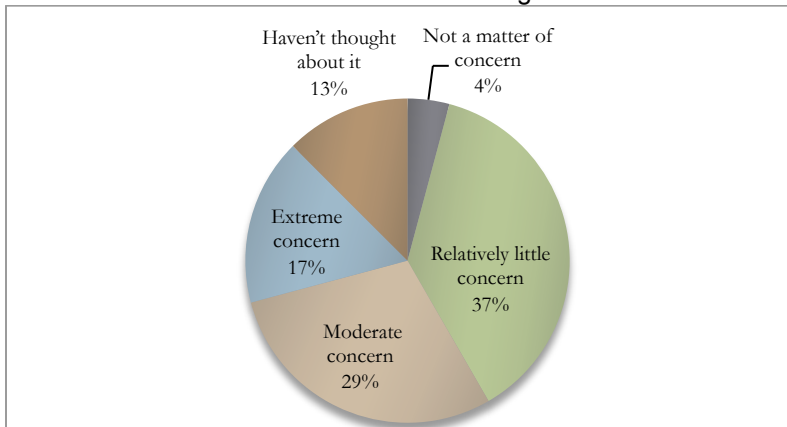
2. To what extent is the impact of nitrogen on surface water quality a current concern?



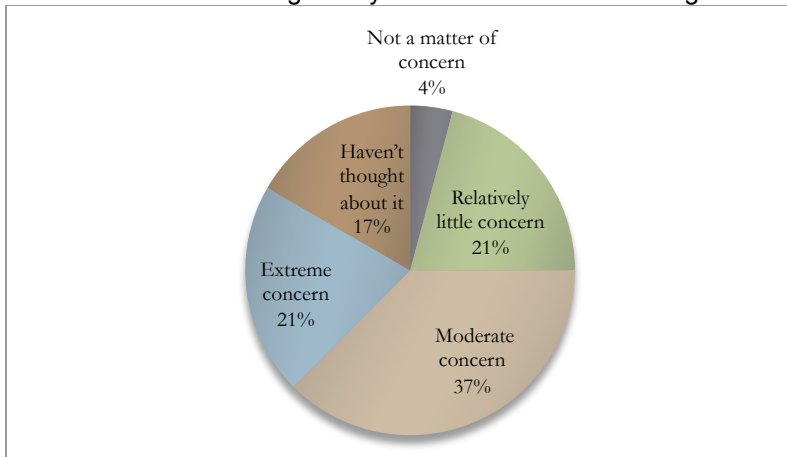
3. To what extent is the impact of nitrogen on air quality a current concern?



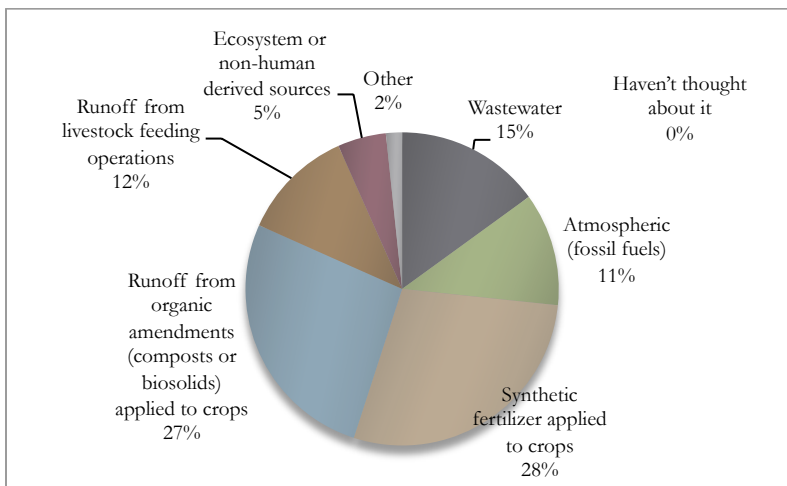
4. To what extent is the current cost of nitrogen fertilizer a matter of concern?



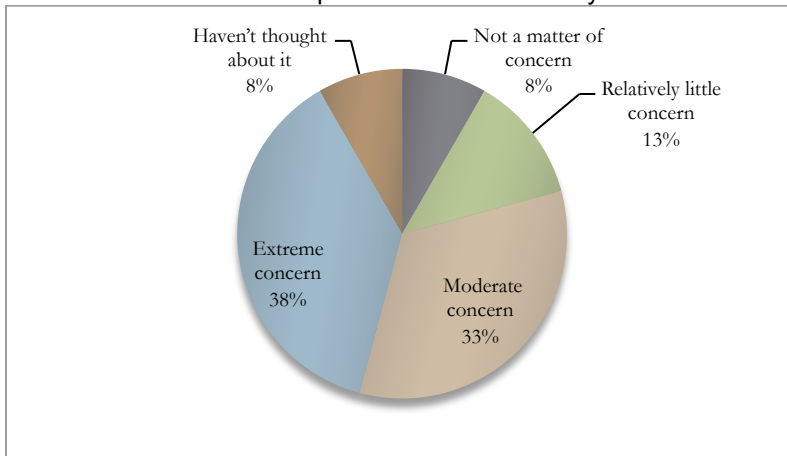
5. To what extent are regulatory measures related to nitrogen a matter of concern?



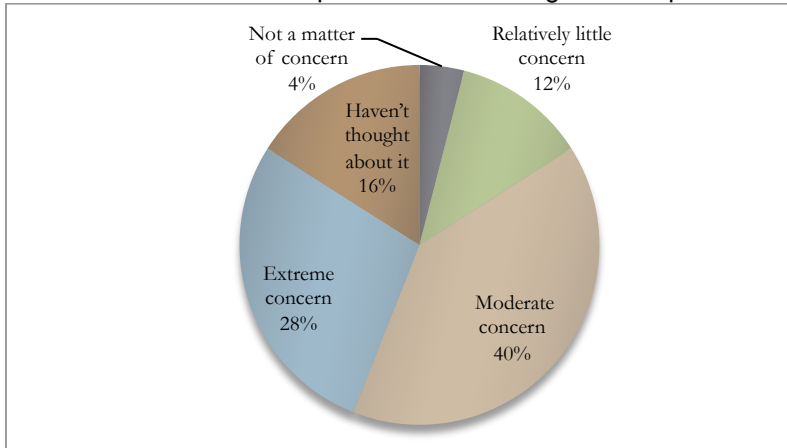
6. Select the top three sources of nitrogen pollution of greatest concern:



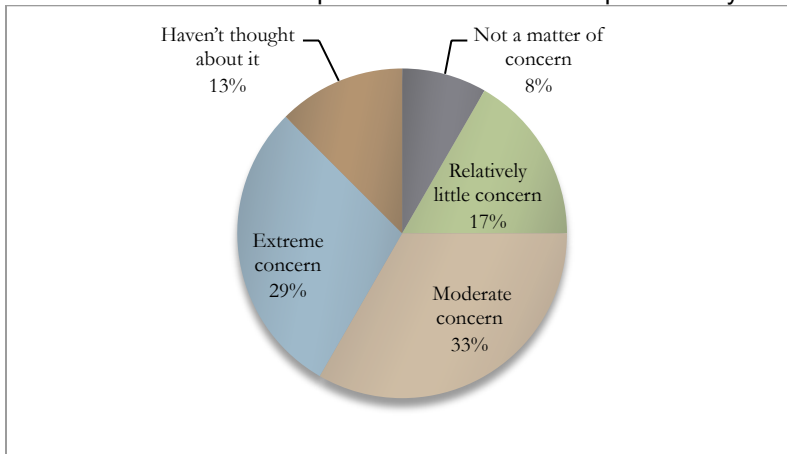
7. To what extent is the impact of carbon on ecosystem sustainability a current concern?



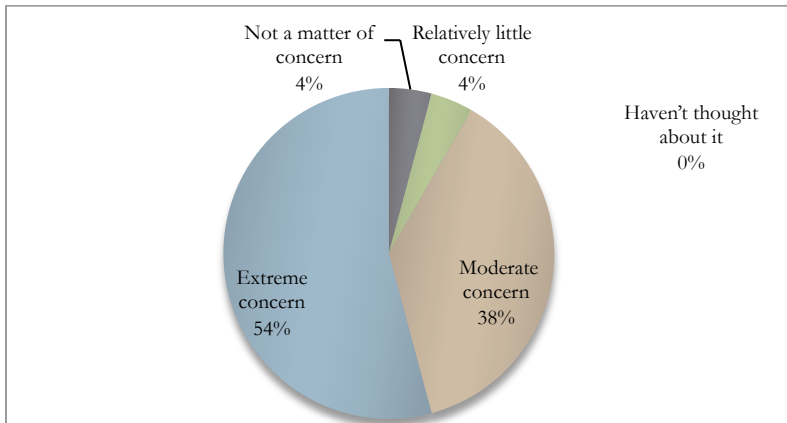
8. To what extent is the impact of carbon on agricultural productivity a current concern?



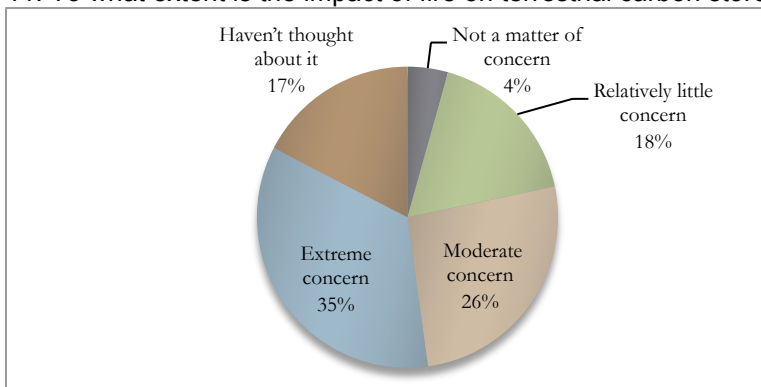
9. To what extent is the impact of carbon on forest productivity a current concern?



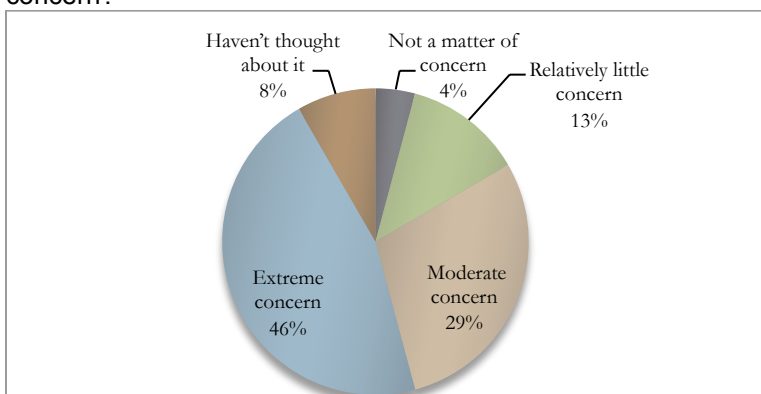
10. To what extent is the effect of carbon emissions on climate a current concern?



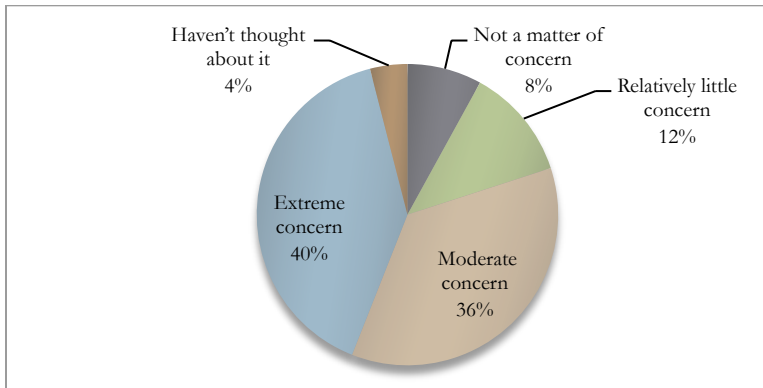
11. To what extent is the impact of fire on terrestrial carbon stores a current concern?



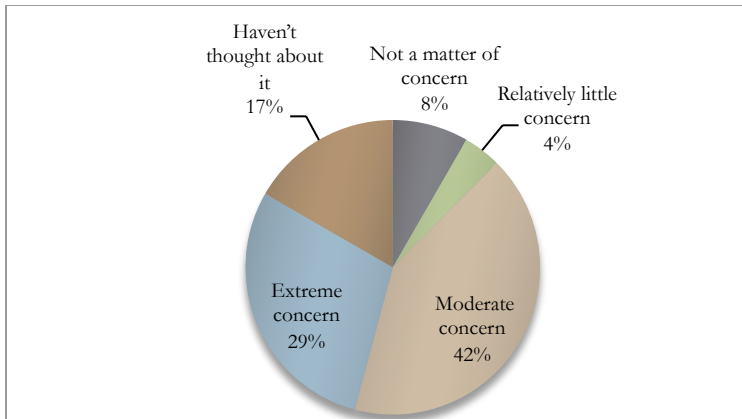
12. To what extent is the impact of rising temperatures on terrestrial carbon stores a current concern?



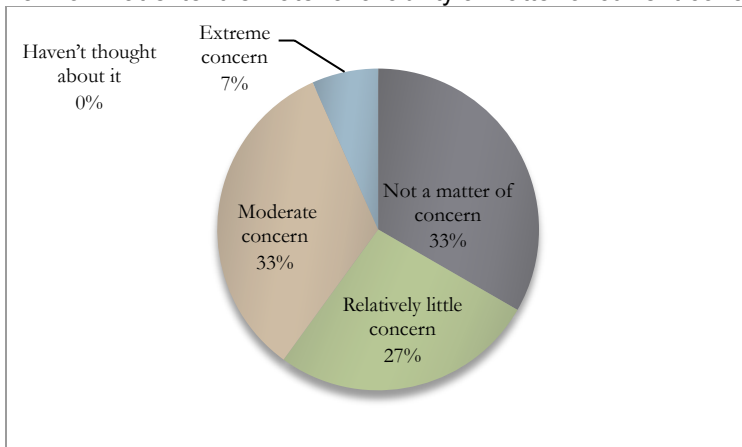
13. To what extent is the impact of land management practices on carbon stores a current concern?



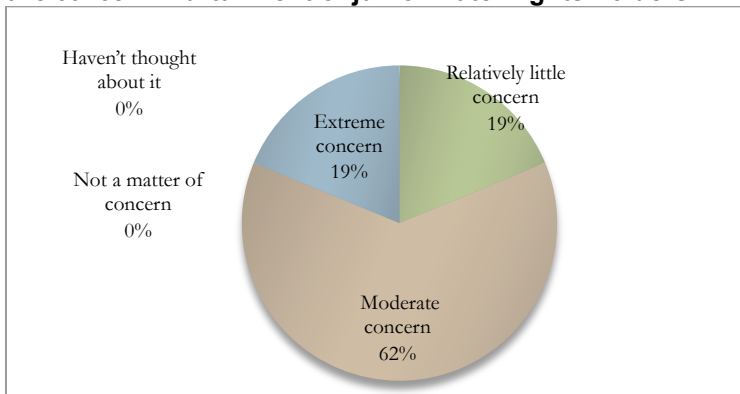
14. To what extent are the impacts of pests and plant diseases on carbon stores a current concern?



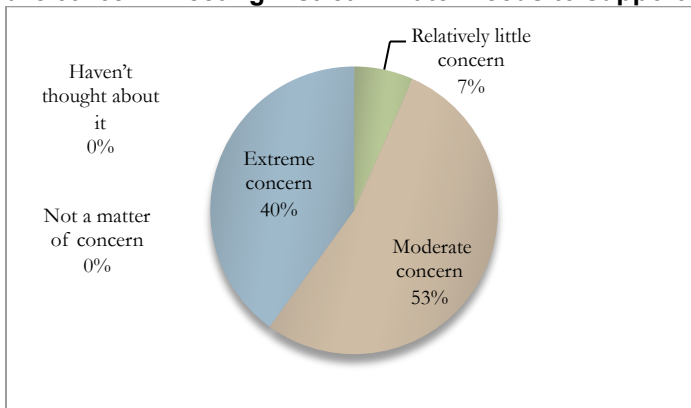
15. To what extent is water availability a matter of current concern?



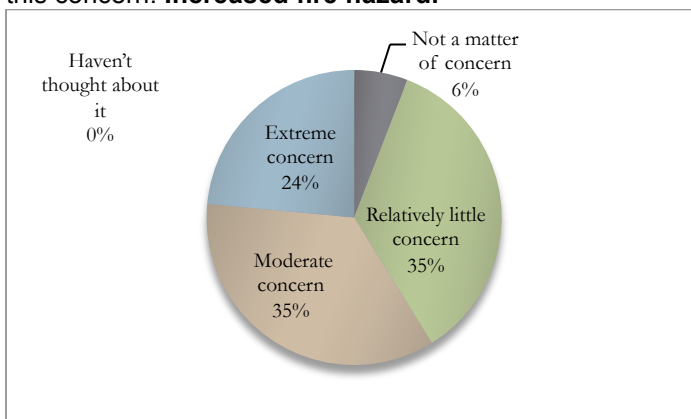
16. In the event of a temporary (one year) 10% reduction in summer water availability, please rate this concern: **Curtailment of junior water rights holders.**



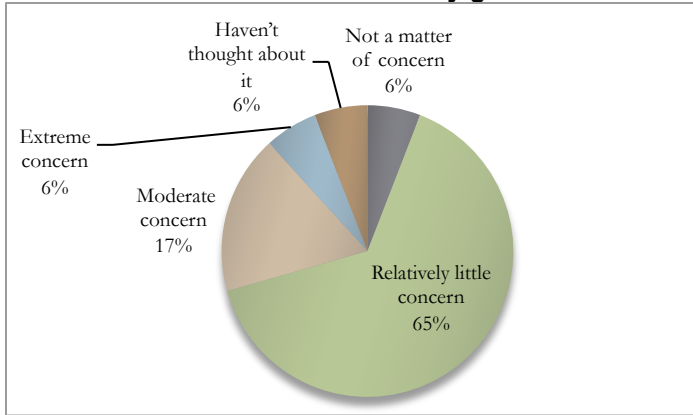
17. In the event of a temporary (one year) 10% reduction in summer water availability, please rate this concern: **Meeting instream water needs to support fish populations.**



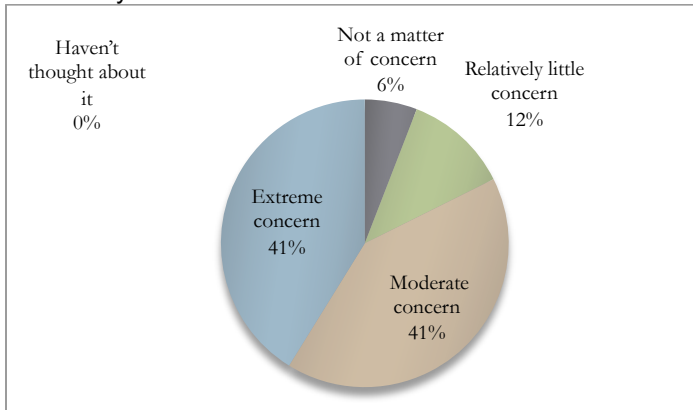
18. In the event of a temporary (one year) 10% reduction in summer soil moisture, please rate this concern: **Increased fire hazard.**



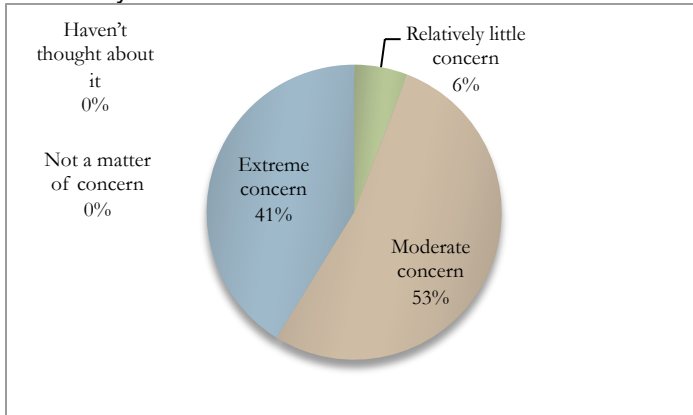
19. In the event of a temporary (one year) 10% reduction in summer water availability, please rate this concern: **Reduced electricity generation.**



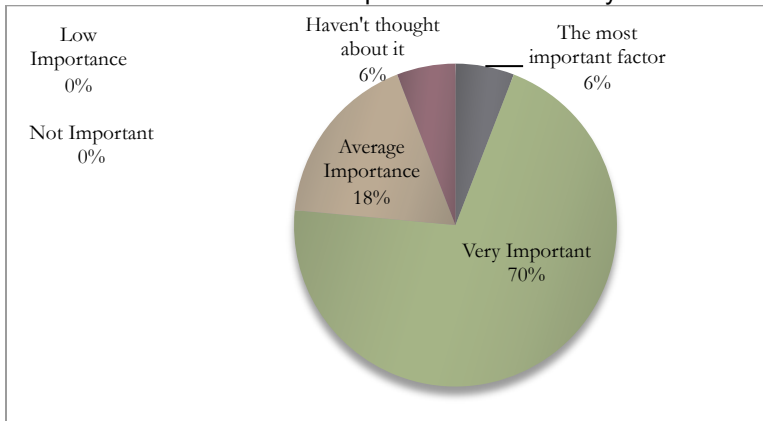
20. To what extent is increased out of stream water demand a current concern for water availability?



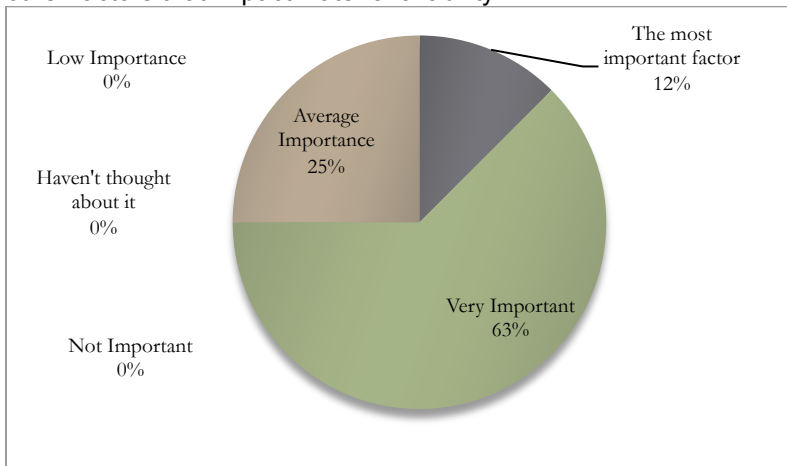
21. To what extent are changes in land management practices a current concern for water availability?



22. How significant is the impact of increasing irrigation efficiency on current water availability relative to other factors that impact water availability?

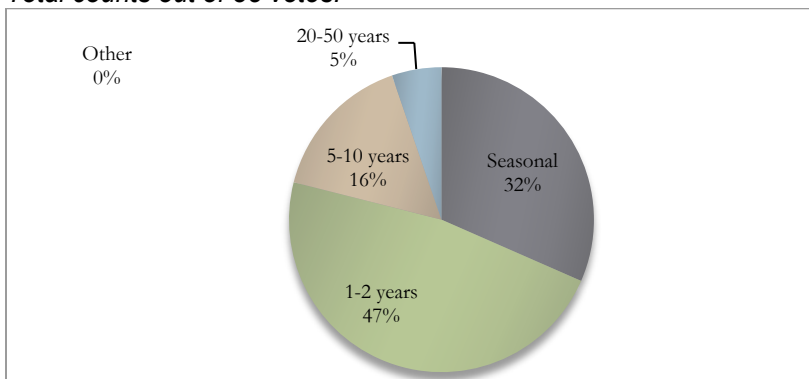


23. How important are the impacts of regulatory policies on current water availability, relative to other factors that impact water availability?

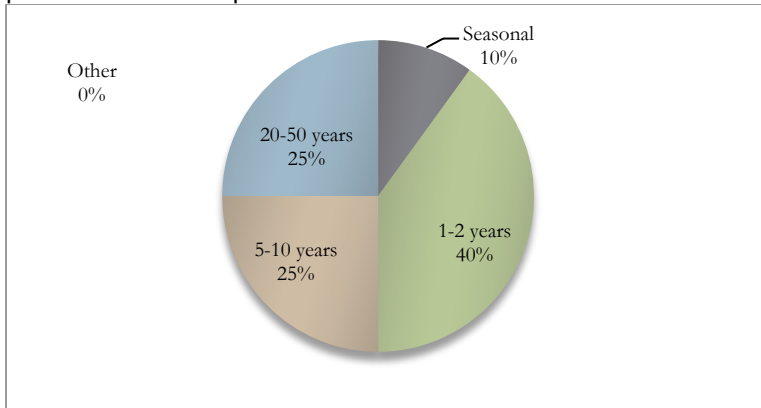


C: Timescales of value to stakeholders

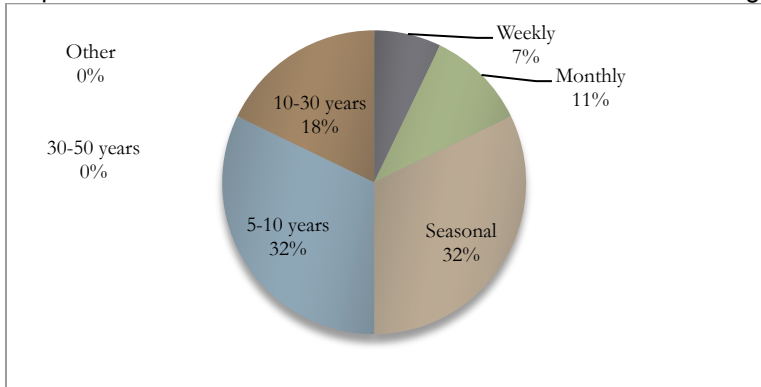
1. Projected information about the environmental effects of different nitrogen management practices would help me most if it were available for the following timescales: (Select up to two).
Total counts out of 38 votes.



2. Projected information about the environmental effects of different carbon management practices would help me most if such information were available for the following timescale:

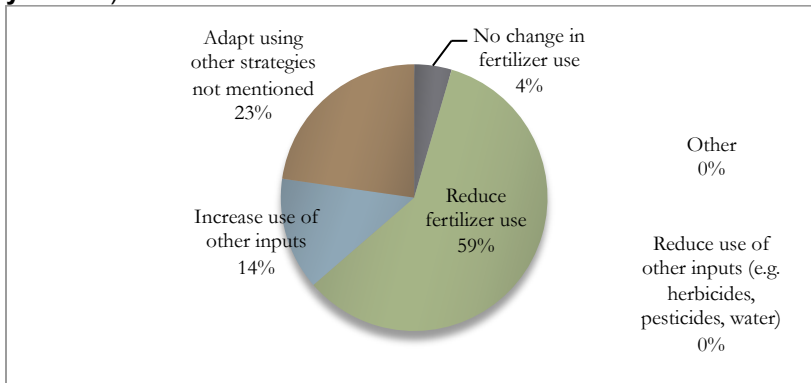


3. Information about the environmental effects of different water management practices would help me most if such information were available on the following timescale:

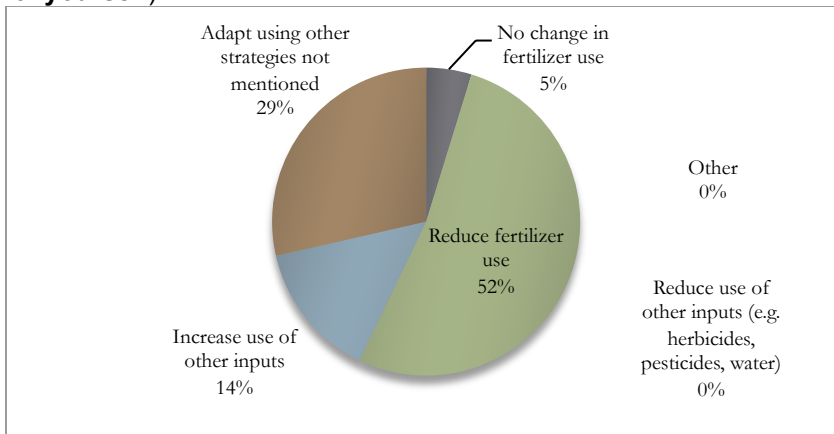


D: Possible Scenarios to Explore/ Policies and Responses

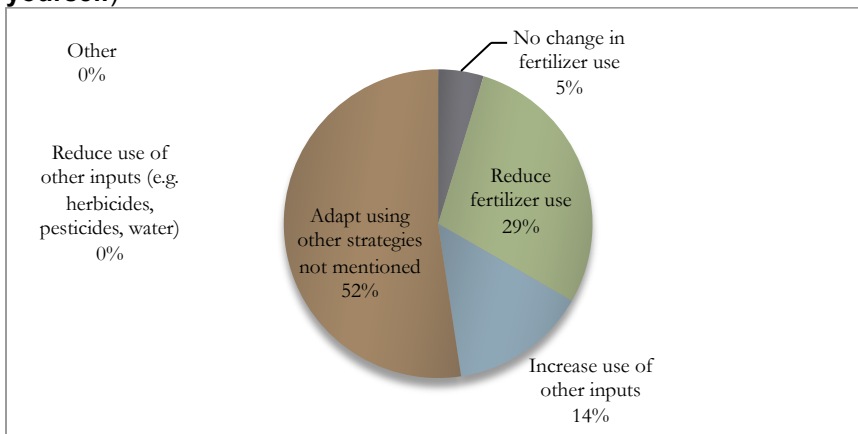
1. How do you think most land managers would respond to a 50% increase in fertilizer price if that increase were expected to be temporary (1 year)? (If you manage fertilizer, please answer for **yourself**)



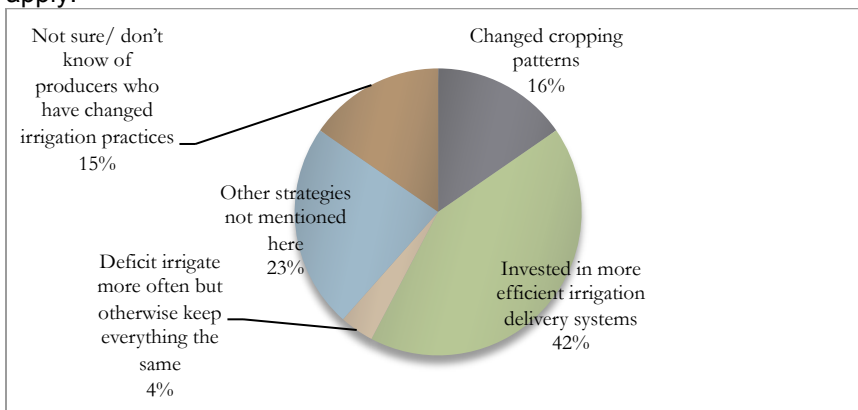
2. How do you think most land managers would respond to a 200% increase in fertilizer price if that increase were expected to be temporary (1 year)? (If you manage fertilizer, please answer for **yourself**)



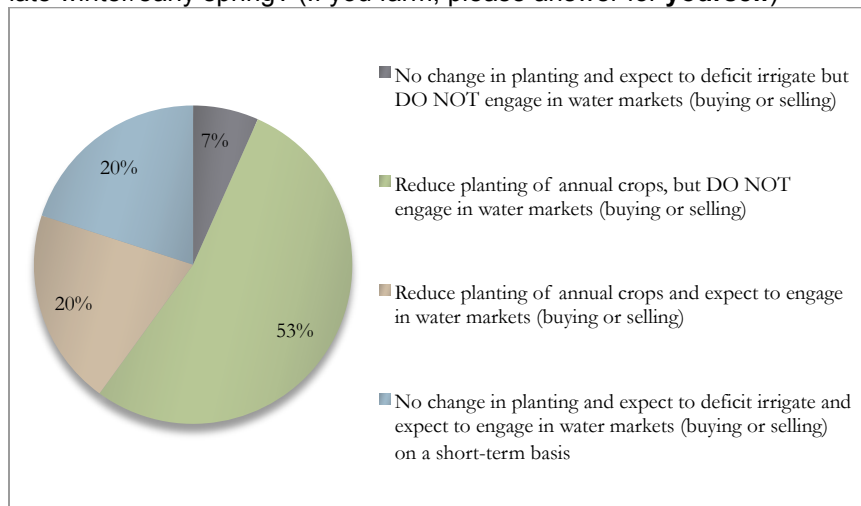
3. How do you think most land managers would respond to a 200% increase in fertilizer price if that increase were expected to be permanent? (If you manage fertilizer, please answer for **yourself**)



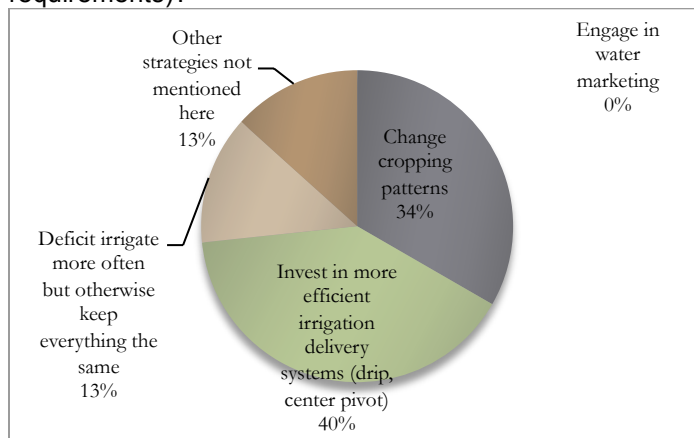
4. Are you aware of producers that have changed their irrigation practices in the last 5 years? If so, how have they changed? (If you irrigate, please answer for **yourself**) Please select all that apply:



5. How do you think most annual crop producers who irrigate respond when snowpack is low in late winter/early spring? (If you farm, please answer for **yourself**)

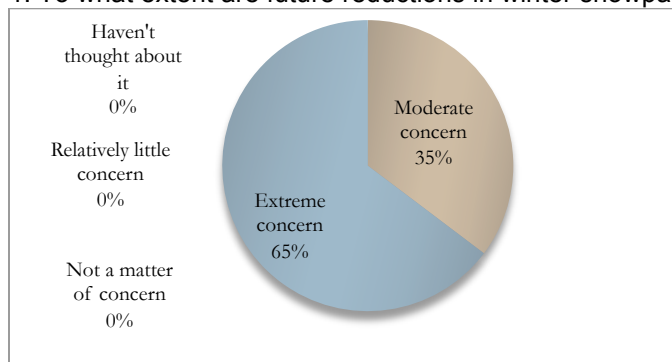


6. How do you think most farmers who irrigate would respond to a permanent increase in the frequency of water curtailments (not allowed to divert their full right due to in-stream flow requirements)?

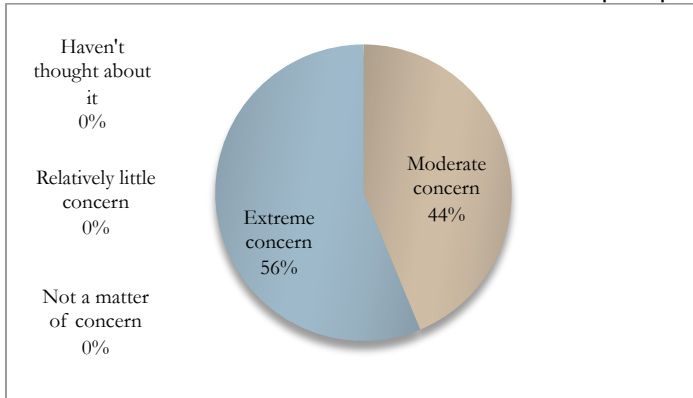


E: Future Concerns

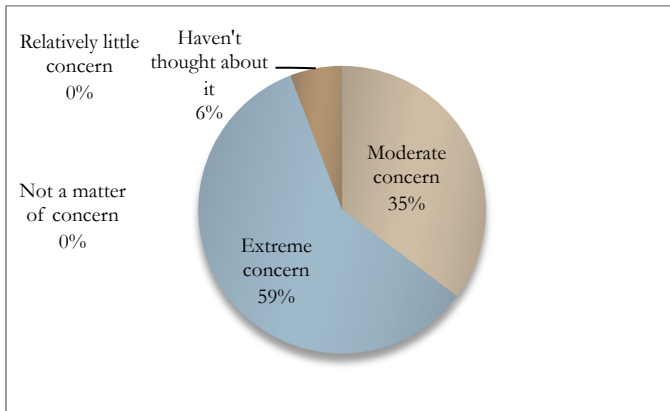
1. To what extent are future reductions in winter snowpack an issue of concern?



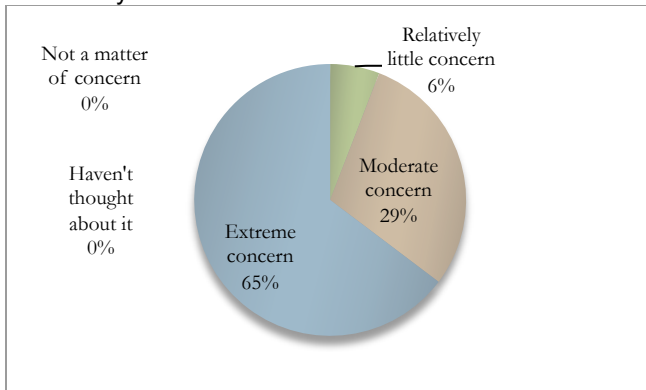
2. To what extent are future reductions in summer precipitation an issue of concern?



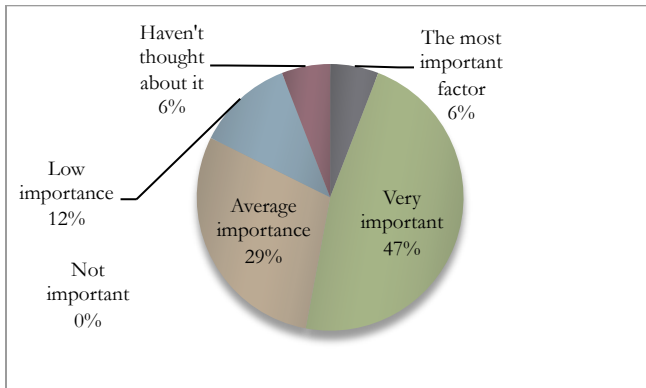
3. To what extent are future increases in water demand a concern?



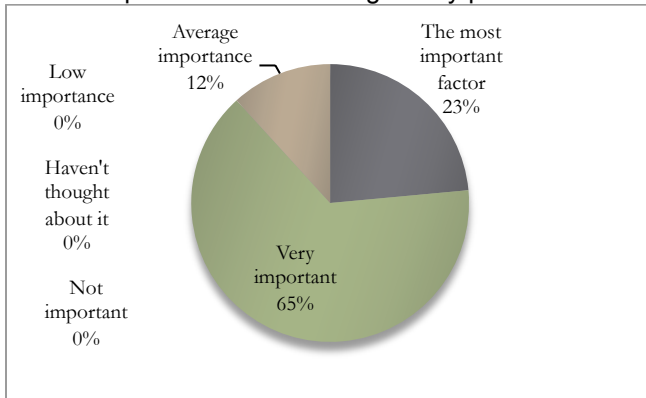
4. To what extent are future changes in land management practices an issue of concern for water availability?



5. How important will **future** changes in irrigation efficiency be for water availability relative to other factors?



6. How important will **future** regulatory policies be for water availability relative to other factors?



7. How concerned are you about **future** changes in the cost of water?

