

Grower Views on Nitrogen Management Survey Summary

Survey region: San Joaquin County and Delta Water Quality Coalition (SJDWQC)

Jessica Rudnick*, Stephanie Tatge, Sat Darshan Khalsa, Mark Lubell, Patrick Brown

Project Summary:

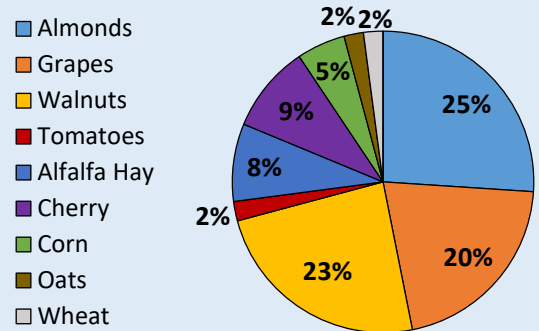
- UC Davis sent our Grower Views on Nitrogen Management Survey to SJDWQC growers to ask about their views on nitrogen management and better understand how the Coalition can provide support to growers in adopting nutrient management practices and complying with the Irrigated Lands Regulatory Program.
- The survey was sent to ~2,300 SJDWQC growers between June and August 2018. We received 312 responses (15% response rate) and determined the sample was representative of the whole Coalition in terms of crop type and operation size.
- The project objectives include: (a) providing feedback to SJDWQC outreach and extension programs on needs to continue assisting growers with adoption of nitrogen management practices; (b) providing feedback to the Coalition and Regional Water Board on what growers think about the Irrigated Lands Regulatory Program.

Key findings on practice adoption:

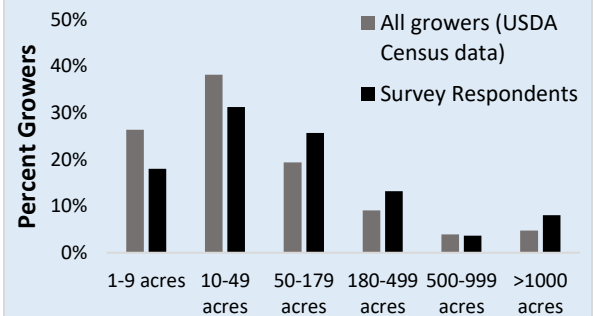
- Agronomic benefits of nitrogen management practices (improvements to crop yield and quality, soil fertility & return on investment) are some of the most important factors considered in adoption decisions.
- Uncertainty of practice impact on the farming operation, cost, and regulations are the most frequent barriers preventing adoption of nitrogen management practices.

Survey sample characteristics

Crops grown by survey respondents

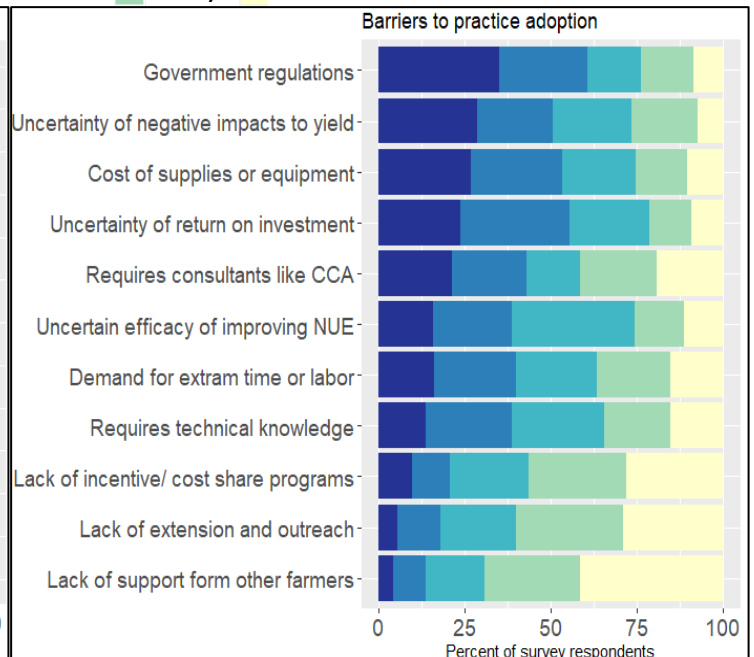
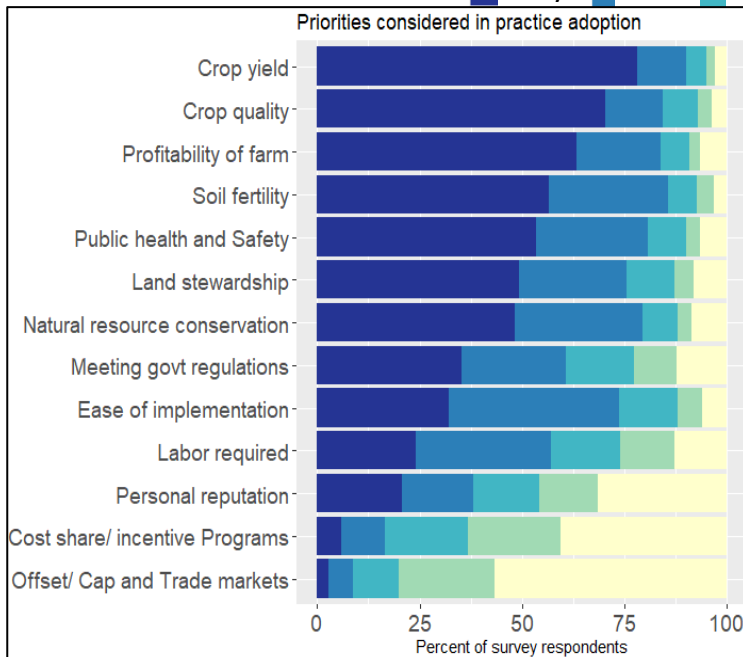


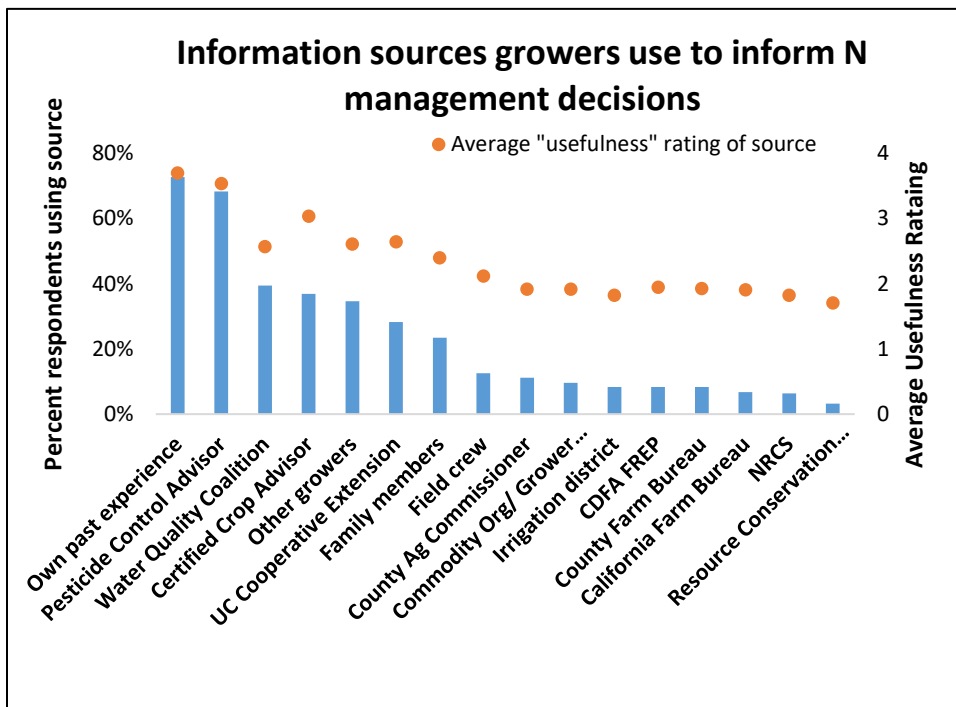
Distribution of farms by size



Survey asked growers how often the following priorities or barriers affected their decisions to adopt N management practices

Always Often Sometimes Rarely Never



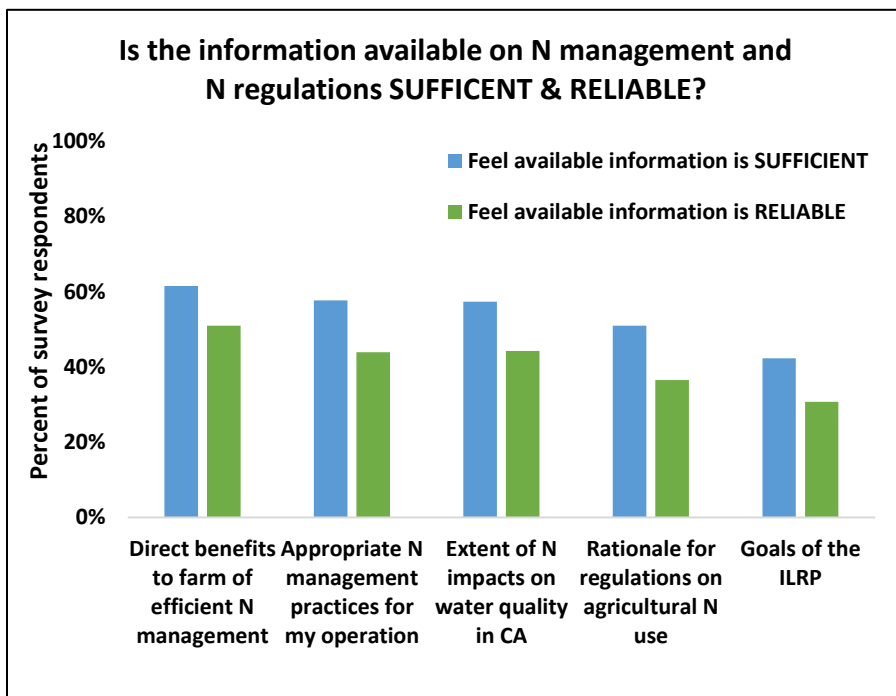


Key findings on nitrogen information landscape:

- Growers seek information from many sources to base their nitrogen management decisions, but most important sources are PCAs (cited by 68% growers) and their own past experiences (73%).
- The Water Quality Coalition is the next most important information source, cited by 39% of growers.
- Average ratings of the usefulness of different information sources correlate very closely with how commonly the information source is referenced.

Is there good enough information on N management and N regulations?

- On N management, the majority of growers (>50%) feel there is *sufficient* and *reliable* information on the on-farm benefits of efficient N management and which practices are most appropriate for their land.
- On N regulations, most growers feel there is *sufficient* information available on the rationale (>51%), but not the goals (42%) of the regulations, and on both issues there is less trust that this is *reliable* information.



Takeaways for Outreach:

- PCAs are a highly valued information source and may be crucial partners to disseminating information about nitrogen management & regulations.
- Emphasizing on-farm benefits of improved nitrogen management is key to motivating practice adoption.
- Improved communication on the goals and expectations of the Irrigated Lands Regulatory Program is still needed.

Next steps: Further analysis of the survey will determine how factors influencing adoption vary across different crop types and farming operations. UC Davis will continue collaborating to understand how to improve outreach and extension of nitrogen management practices and regulations.