Advisory Committee Presentations

February 6, 2020

Overview of Advisory Committee

Stephanie Anagnoson, Director of Water and Natural Resources

Advisory Committee History

- Appointed by the Board of Supervisor/Board of Directors
- Provides input into GSP development/implementation
- Acts as Ambassadors in their Communities
- Previous topics included:

2018

- SGMA Overview from DWR
- Probational Status from SWRCB
- Metering from McCrometer

2019

Glidepaths
Ways of Allocating Water
Highlights of GSPs
Fees and 218 processes

Previous Recommendations

- February 12, 2019 – The Committee recommended that as part of the GSP, native groundwater should be allocated equally across irrigated and unirrigated land within the County GSAs. The vote was 10-1.
- March 7, 2019 - The Committee recommended that as part of the initial modeling efforts, groundwater pumping in the County GSAs decrease over time decreased at approximately 2% a year initially. The vote was 11-0.
- April 12, 2019 - The Committee recommended that credits be given only for activities that introduce new water into the subbasins (new water is water that would not otherwise be part of the subbasins' water supplies). The vote was 8-0.
- April 12, 2019 - The Committee recommended that credits be evaluated by an outside entity to establish the quantity of water to be credited. The vote was 8-0.

Rules for 2020

- Advisory Committee members need to be citizens, of 18 years of age or older, and live or work in Madera County within the appropriate subbasin.
- Members must be able to consider all viewpoints, work towards broad agreement and represent the interests of the stakeholder group that they represent.
- An alternate position exists for each seat. Members should coordinate with alternates so that someone is always present in that seat.
- Alternates should plan to attend all meetings
- If a member misses three meetings, the member is replaced permanently with the alternate.
- The rest of the meetings will be upstairs in the third floor conference room

Advisory Committee Structure – 11 members

Members	Initials	Alternate	Initials
Permanent Ag			
Jim Maxwell (Chowchilla)		Karun Samran	
Devin Aviles (Madera)		James Unti	
Non-Permanent Ag			
Larkin Harman (Chowchilla)		Greg Hooker	
Bryant Elkins (Madera)		Albert Guravage	
Delta-Mendota			
Jared Samarin		Sam Lopes	
Livestock			
Darcy Vlot		Ben Pitman	
At Large			
Clay Haynes		Mike DeLaGuerra	
DAC			
Vickie Ortiz		Self-Help	
Teresa Mendoza		Leadership Council	
Residential			
Clay Daulton		Jay Quick	
Jerry Kazynski		Al Solis	

Meeting Dates and Topics

February 6: Introduction

April 2: Upcoming RFPs, water market, incentive structure, domestic wells

June 4: Update on water market, incentive structure, domestic wells

August 6: Update on water market, incentive structure, domestic wells

October 1: Update on water market, incentive structure, domestic wells, recharge study, rate study

December 3: Applications for next year; Accomplishments for the Year

Brown Act Rules

Mike Linden, Deputy County Counsel

Brown Act as it Relates to Advisory Committee

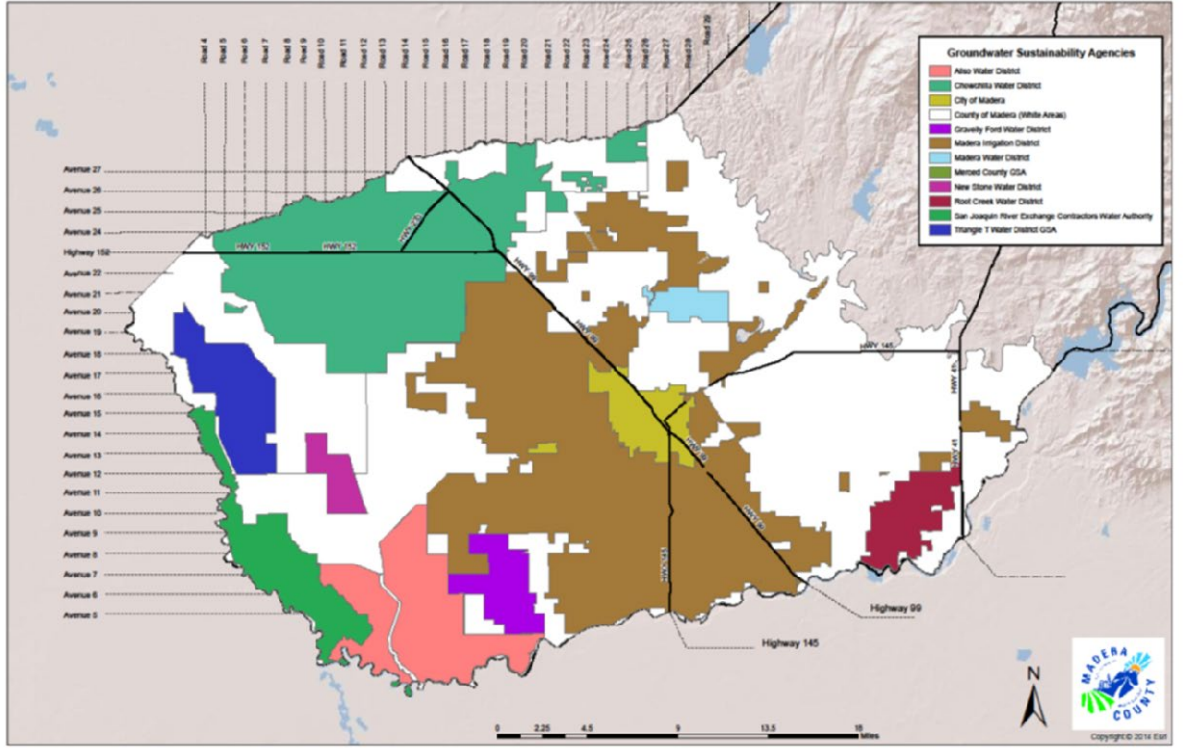
- Regular meetings require 72 hours notice;
- Special meetings can be called with 24 hours notice;
- A quorum is 6 of 11 members;
- Since a majority of a quorum (4 of 6) can pass a motion, no more than 3 committee members can discuss business outside of a public meeting

Subbasins Updates

Greg Young, Engineering Consultant to the County GSAs

Stephanie Anagnoson, Director of Water and Natural Resources

The Challenge



What Everyone Wants

Predictability and Certainty

What Everyone Gets

Less Predictability and Greater Uncertainty

The Way Through

Continuous Dialogue Built Upon

- *Trust*
- *Transparency*
- *Legitimate stakeholder processes that include all beneficial users*

-Gary Peterson, Salinas Valley Basin GSAs

Beneficial Users

Existing beneficial uses

- o Drinking water (private wells, small community, etc.)
- o Irrigation
- o Environment

- Human right to water (AB 685)
- Importance of agriculture to County economy
- GSAs recognize inter-connection of these factors
- GSAs need time to transition and complete projects and actions –which will lower groundwater levels during implementation
- Planned mitigation for impacts can address concerns of lowered groundwater levels during implementation

Subbasin Updates

- Delta Mendota GSP Submittal – in 75 day public review period
- Chowchilla GSP Submittal – in 75 day public review period
- Madera GSP Submittal – being evaluated by DWR for next steps
  - Potential Probationary Status
    - Not eligible for GSA-related grants
    - 90 days of noticing of probationary status hearing
    - 180 days to remedy during which groundwater extraction reporting occurs monthly
    - $300/well and $40/AF fees

- Additional activities
  - CVP Letter Submitted
  - Water Market Meeting planned

Status of Grants

Grant Name	Purpose	Amount
Stressed Basins (DWR)	To identify data gaps and create a conceptual water budget	$500,000
Prop 1 - Madera (DWR)	To write a GSP and install groundwater monitoring wells	$2,500,000
Prop 1 – Chowchilla (DWR)	To write a GSP and install groundwater monitoring wells	$2,500,000
WaterSMART (Bureau)	To develop a water market strategy	$200,000
SALC (Department of Conservation)	To develop an incentive structure to rest and retire land	$200,000
Prop 68 – Madera (DWR)	To inventory domestic wells and install groundwater monitoring wells	$500,000 (pending)
Prop 68 – Chowchilla (DWR)	To inventory domestic wells and install groundwater monitoring wells	$500,000 (pending)

Water Resources Management 2020-2040

Supply Side

- Establish on-farm recharge and accounting system
- Build dedicated recharge basins
- Import additional water
- All projects will have costs, which will need to be allocated to users who benefit (fees)

Demand Side

- Investigate options: incentives, water market, allocations
- Use grant funds to evaluate best option(s)
  - Water Market
  - Incentive Structure

Demand Reduction

- Relevant regulatory sections
  - §354.44(2) If overdraft conditions are identified…the Plan shall describe projects or management actions, including a quantification of demand reduction or other methods, for the mitigation of overdraft.
  - §354.26 (b) The description of undesirable results shall include the following: (3) Potential effects on the beneficial uses and users of groundwater, on land uses and property interests, and other potential effects that may occur or are occurring from undesirable results.

GSP Requirements

- The GSP does not dictate an approach, but recognizes there will be significant demand reduction necessary.
- Ultimately, the Madera County GSAs have the greatest reduction in over the next 20 years than other GSAs in the Madera and Chowchilla subbasins.

Madera Subbasin

- Consumptive use reduction target is 90,000 af/yr by 2040
- Two incremental phases: 2% and 6% (of the target)
- Multiple approaches to achieve the annual reduction targets
  - Single-parcel fallowing
  - Allocations and limits
  - Pumping fees

Year	Annual Rate	% of Target	Annual Reduction
Current	n/a	0%	0
1	+2%/yr Increment ~ 1,800 af	2%	1,800
2		4%	3,600
3		6%	5,400
4		8%	7,200
5		10%	9,000
6	+6%/yr Increment ~ 5,400 af	16%	14,400
7		22%	19,800
8		28%	25,200
9		34%	30,600
10		40%	36,000
11		46%	41,400
12		52%	46,800
13		58%	52,200
14		64%	57,600
15		70%	63,000
16		76%	68,400
17		82%	73,800
18		88%	79,200
19		94%	84,600
20		100%	90,000

Chowchilla Subbasin

- Consumptive use reduction target is 27,550 af/yr by 2040
  - 11,300 af/yr in East area
  - 16,250 af/yr in West area
- Two incremental phases: 2% and 6% (of the target)
- Multiple approaches to achieve the annual reduction targets
  - Single-parcel fallowing
  - Allocations and limits
  - Pumping fees

Year	Annual Rate	% of Target	Annual Reduction		
			Total	East	West
Current	n/a	0%	0	0	0
1	+2%/yr Increment ~550 af	2%	551	226	325
2		4%	1,102	452	650
3		6%	1,653	678	975
4		8%	2,204	904	1,300
5		10%	2,755	1,130	1,625
6	+6%/yr Increment ~1,650 af	16%	4,408	1,808	2,600
7		22%	6,061	2,486	3,575
8		28%	7,714	3,164	4,550
9		34%	9,367	3,842	5,525
10		40%	11,020	4,520	6,500
11		46%	12,673	5,198	7,475
12		52%	14,326	5,876	8,450
13		58%	15,979	6,554	9,425
14		64%	17,632	7,232	10,400
15		70%	19,285	7,910	11,375
16		76%	20,938	8,588	12,350
17		82%	22,591	9,266	13,325
18		88%	24,244	9,944	14,300
19		94%	25,897	10,622	15,275
20		100%	27,550	11,300	16,250

Current Options for Demand Reduction
(These can be combined and modified over time)

- Groundwater extraction charges/fees
- Parcel-based incentives for groundwater use limits (fallowing, easements, etc.)
- Allocation per acre
  - Options: equal for all acres, equal for irrigated acres, varied by crop or by historic use, pooling concepts, etc.
  - Possibly link with a water trading program
- Demand reduction innovations (irrigation variations to affect ET, new crop types, etc.)

Other ideas?

- Contests: highest yield with least water consumption
- Support studies of lower water use crops (production as well as commodity marketing)
- Land use restrictions to limit irrigation
- Well moratorium

Things to consider

- Access to drinking water
- Administrative/regulatory burden for grower
- Administrative burden for County GSA
- Individual economics
- County GSA economics
- County economics
- Flexibility and adaptability of approach to modify to assure GSA reduction targets are met
- Monitoring and reporting (for the State and other GSAs)

Director’s Report

Stephanie Anagnoson, Director of Water and Natural Resources

Christina Beckstead, Executive Director of the Farm Bureau

Farmer Perspectives on Water Management and the Sustainable Groundwater Management Act: Madera County

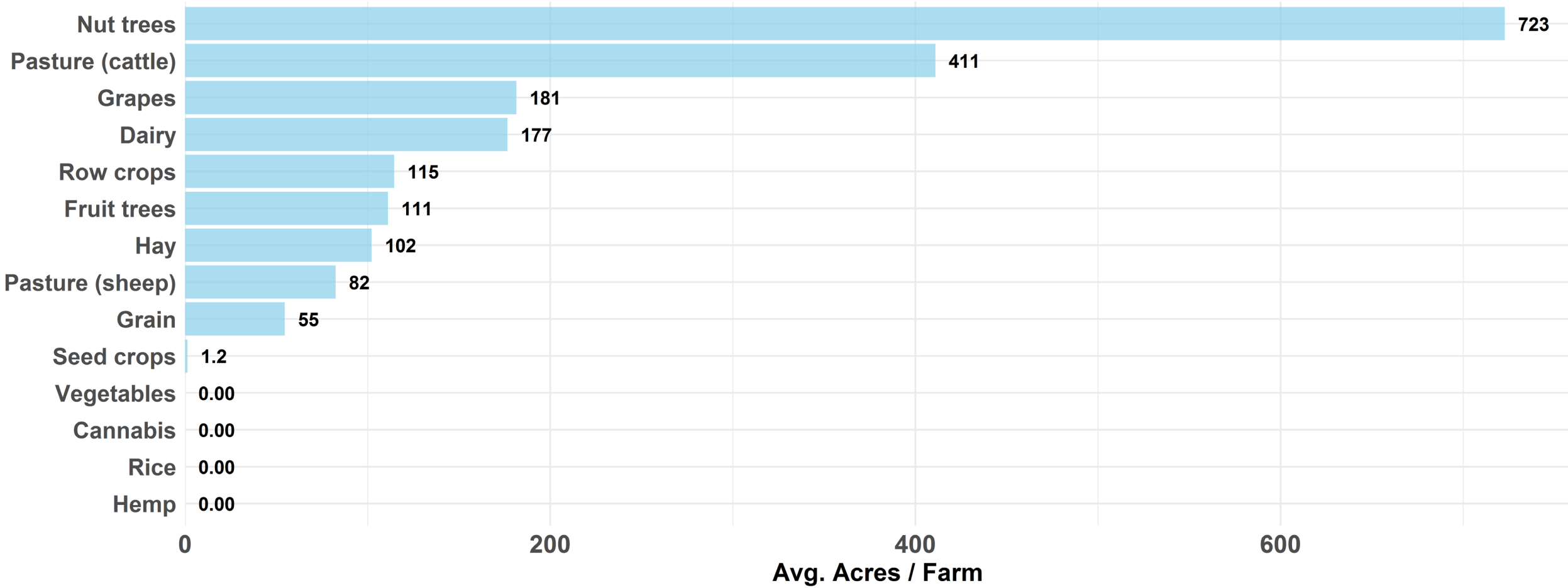
Meredith T. Niles, PhD
University of Vermont

With funding from The Water Foundation

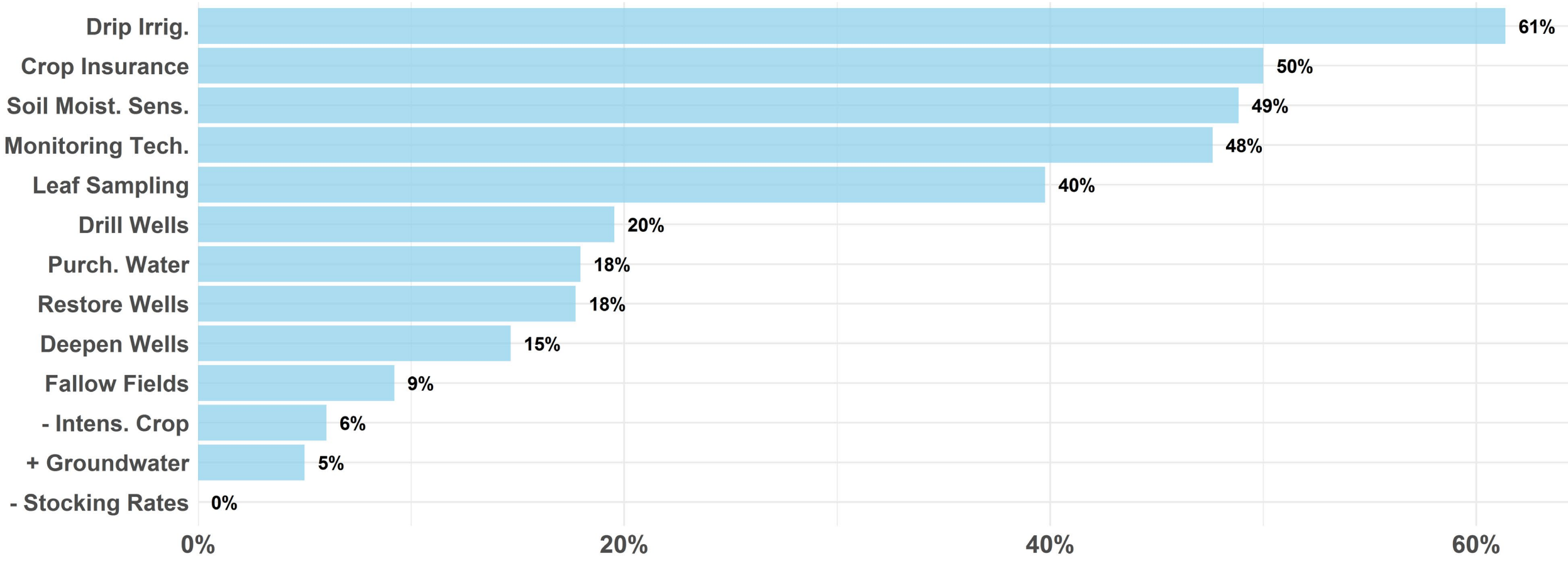
About this slide deck

- This slide deck includes the results of farmer surveys from Madera County
- Surveys were conducted in spring 2019
- A total of 101 farmers responded to the survey (15.5% response rate)

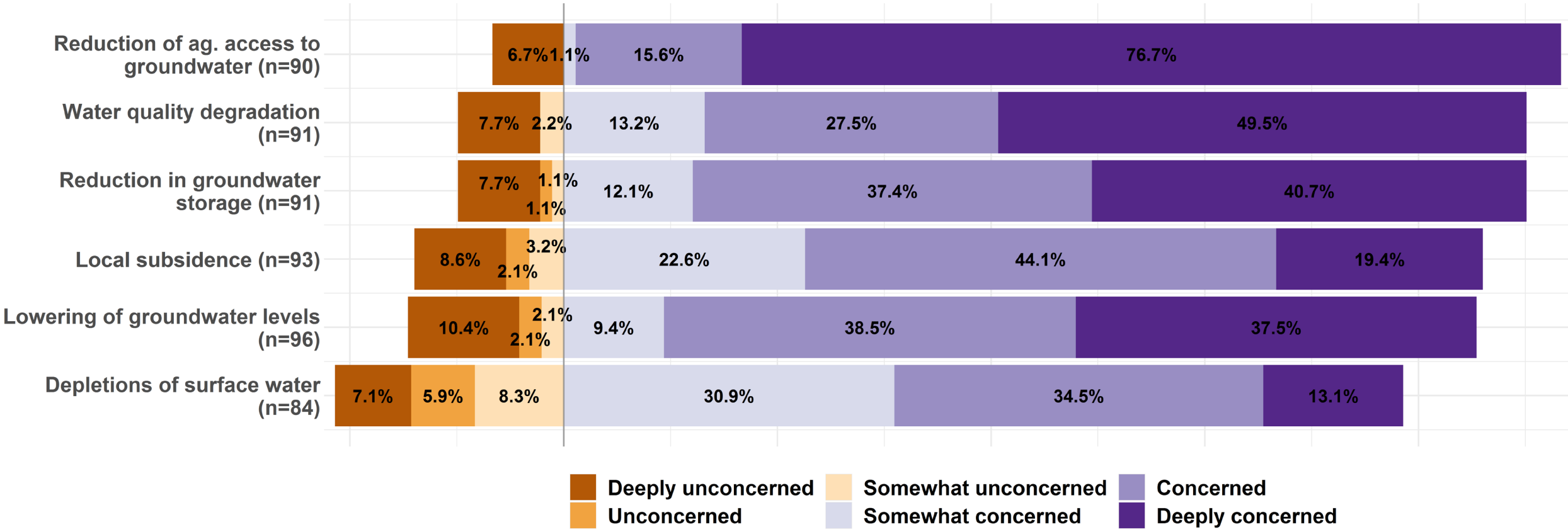
Acreage of crops/land/livestock managed or owned



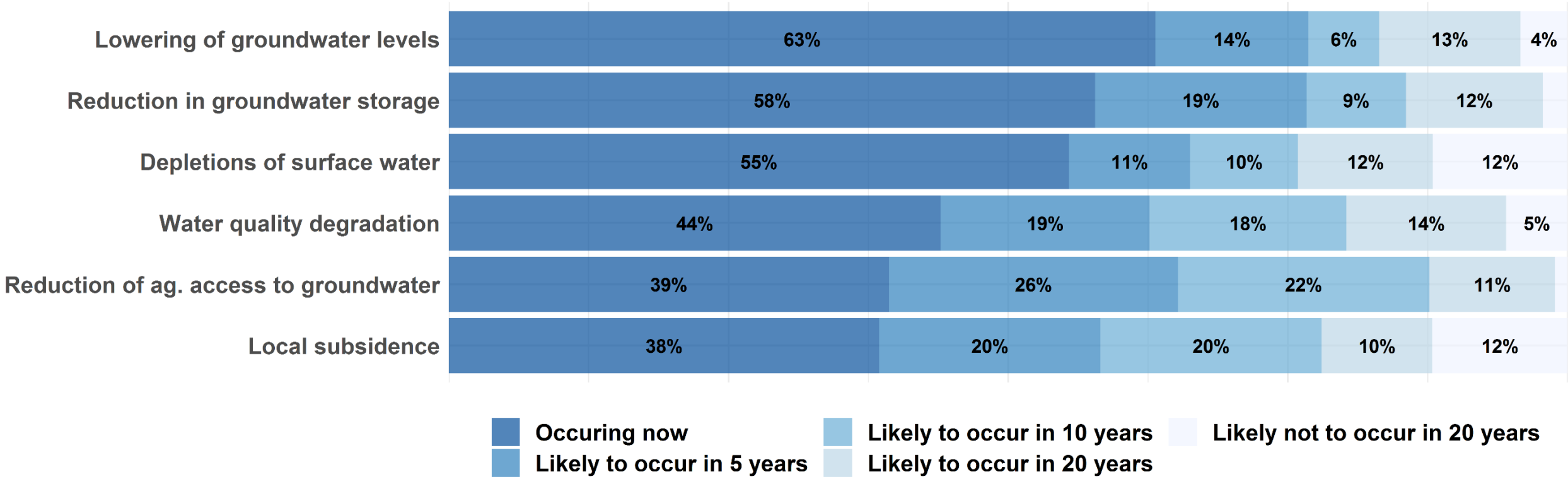
Current use of practices to mitigate water scarcity



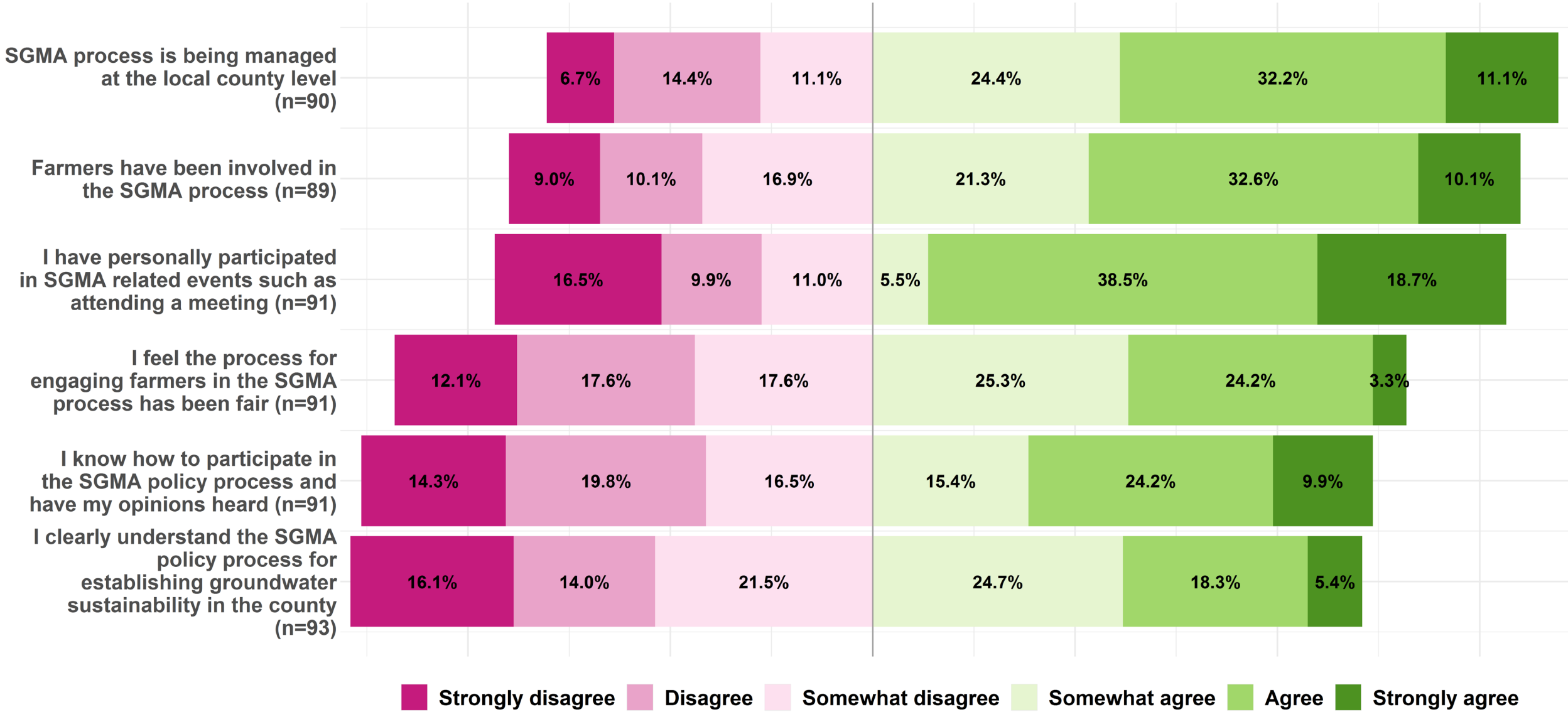
Concern about potential conditions related to groundwater management



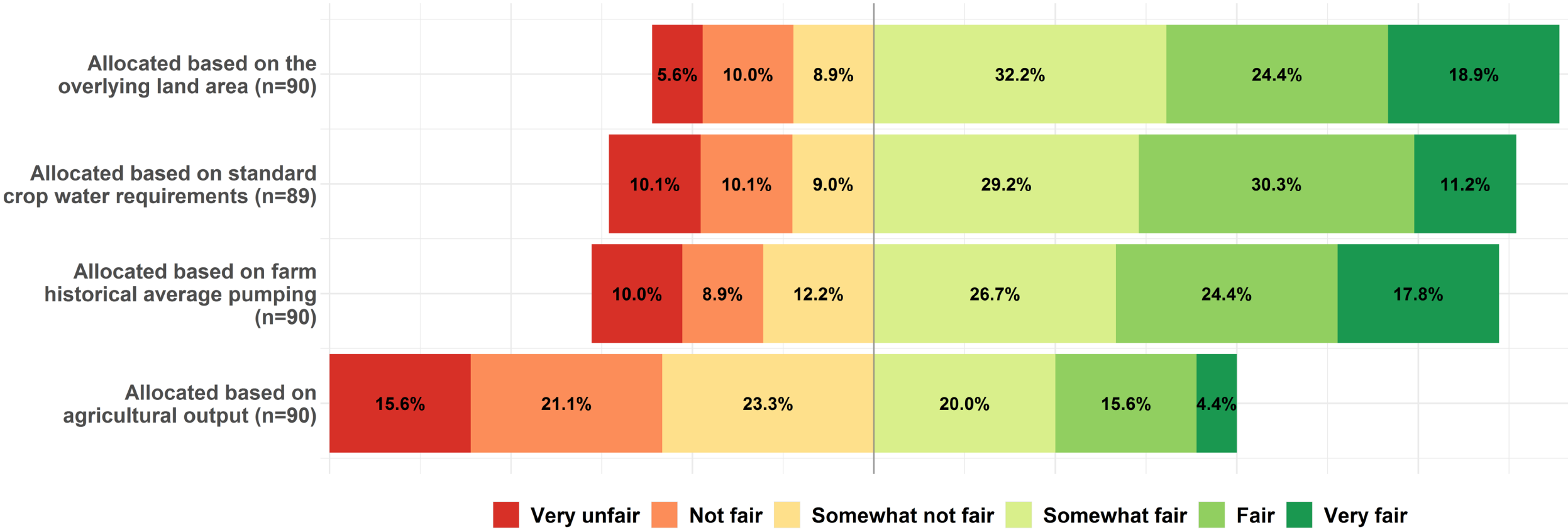
Perceived likelihood that my county will experience these conditions without any interventions



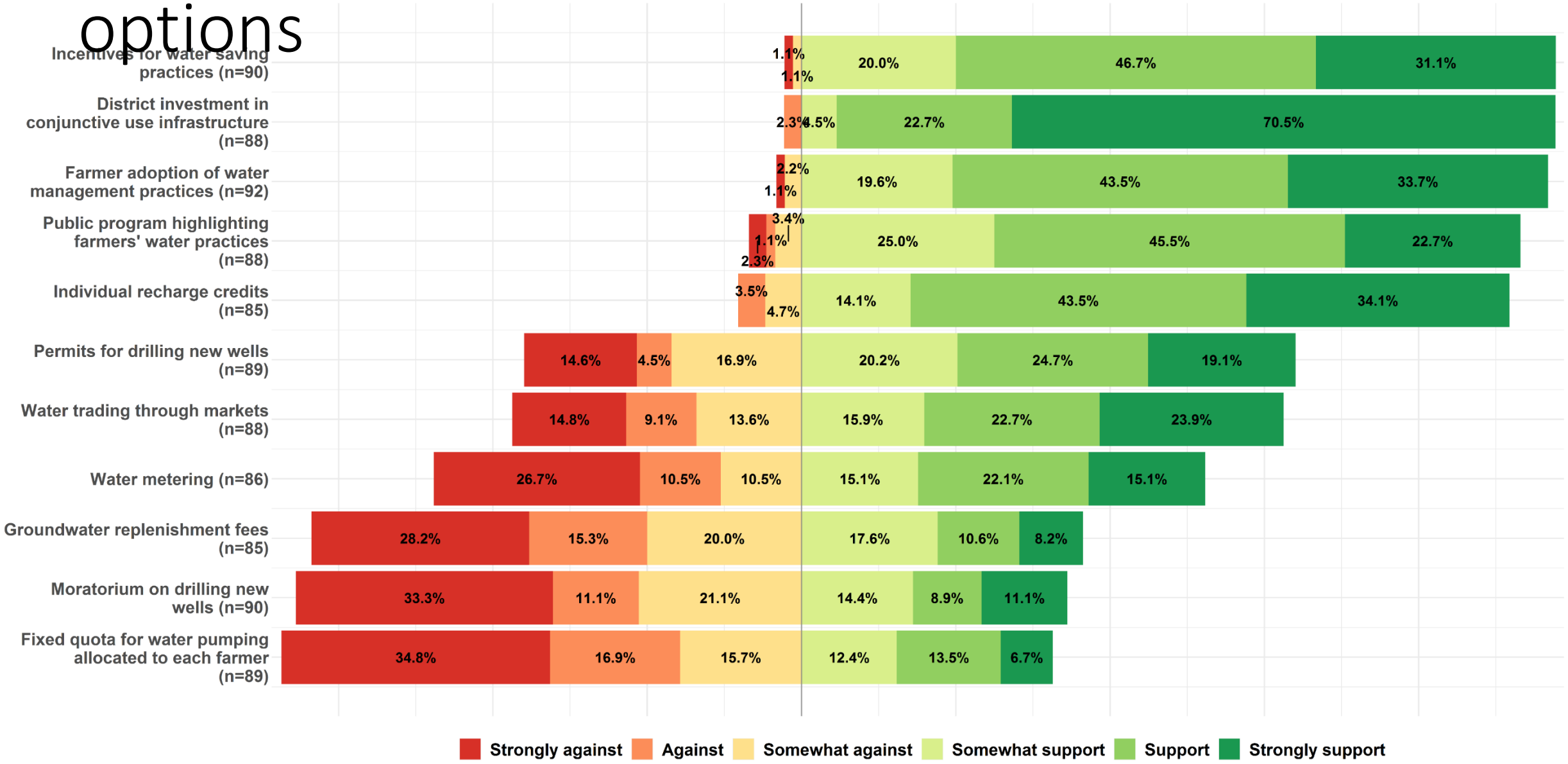
Agreement with statements related to SGMA



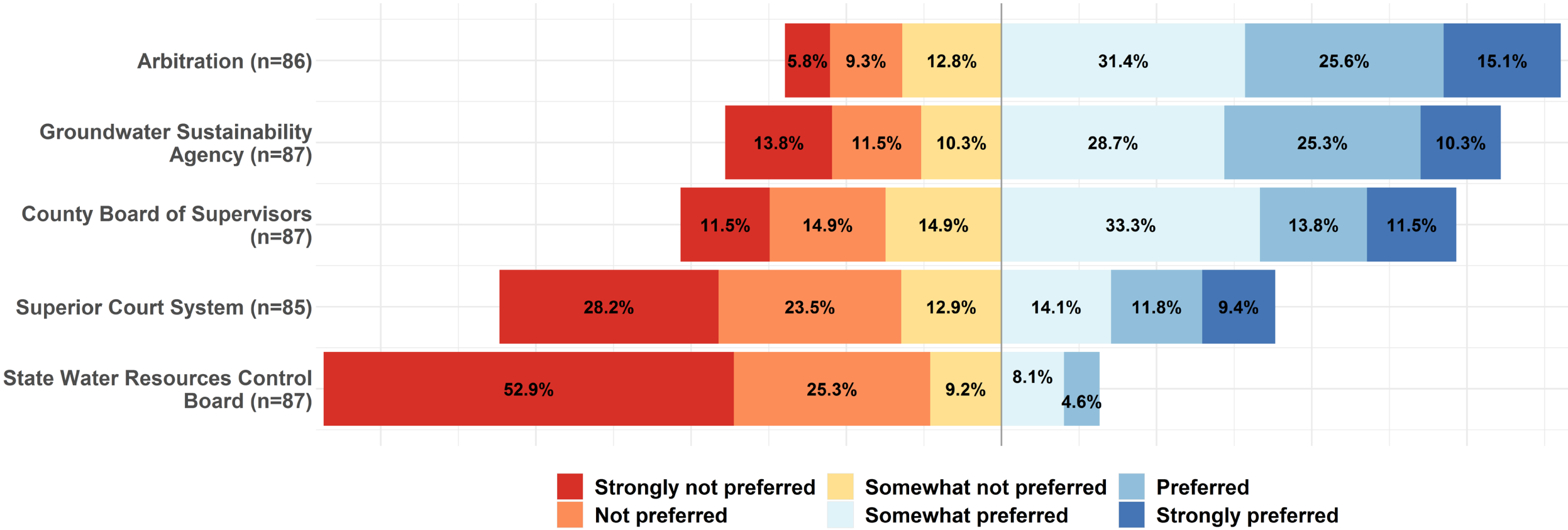
Fairness of possible ways to allocate groundwater use



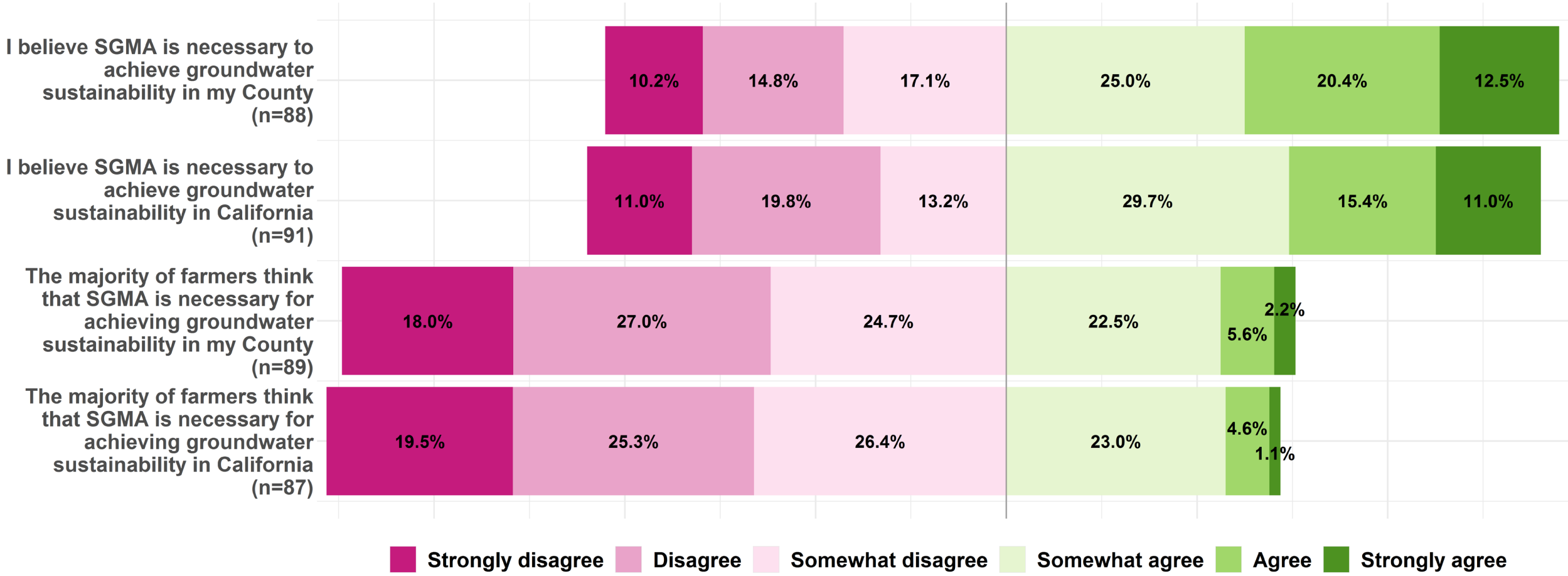
Support for possible water management options



Preferred means of reconciliation, should disputes arise over SGMA implementation



Agreement with statements regarding SGMA implementation



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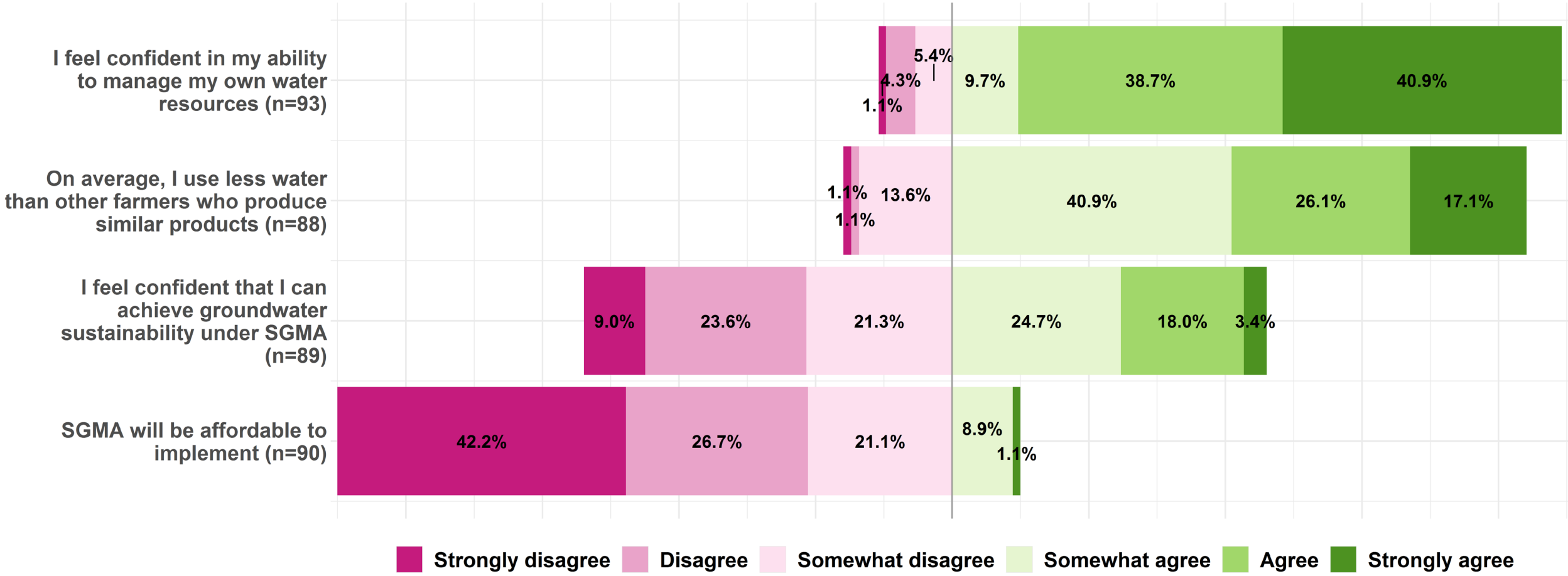
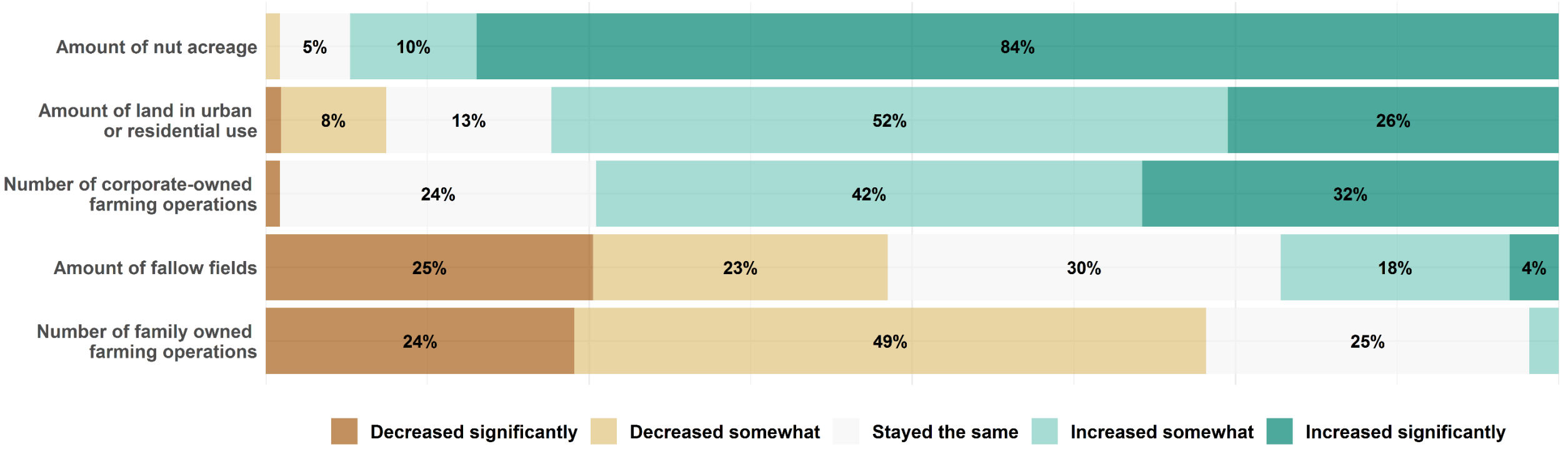
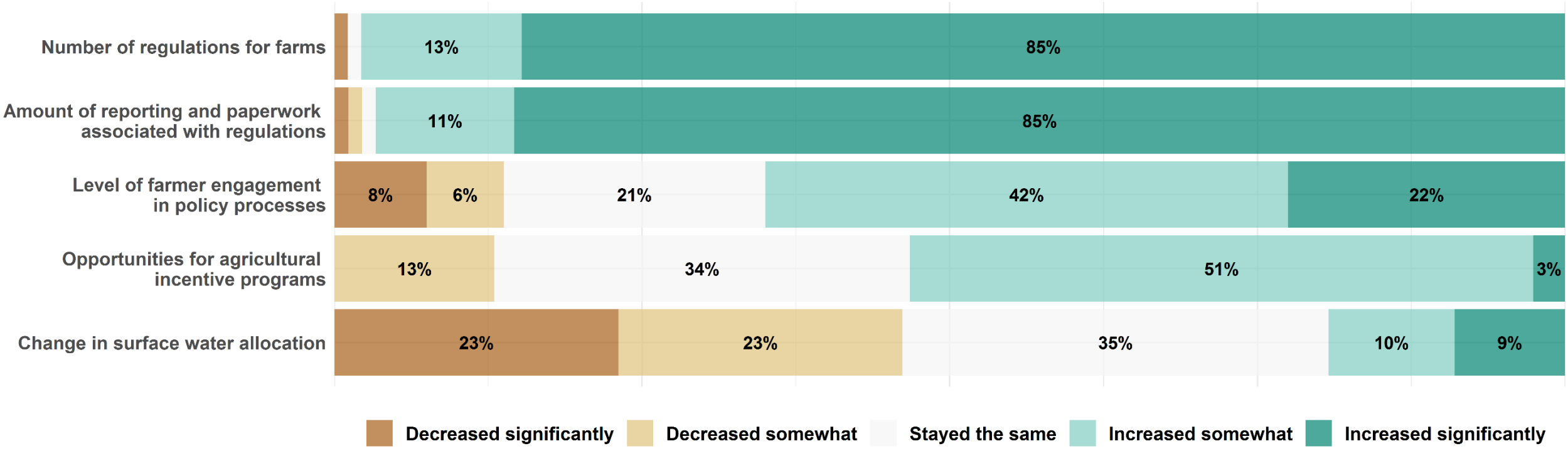
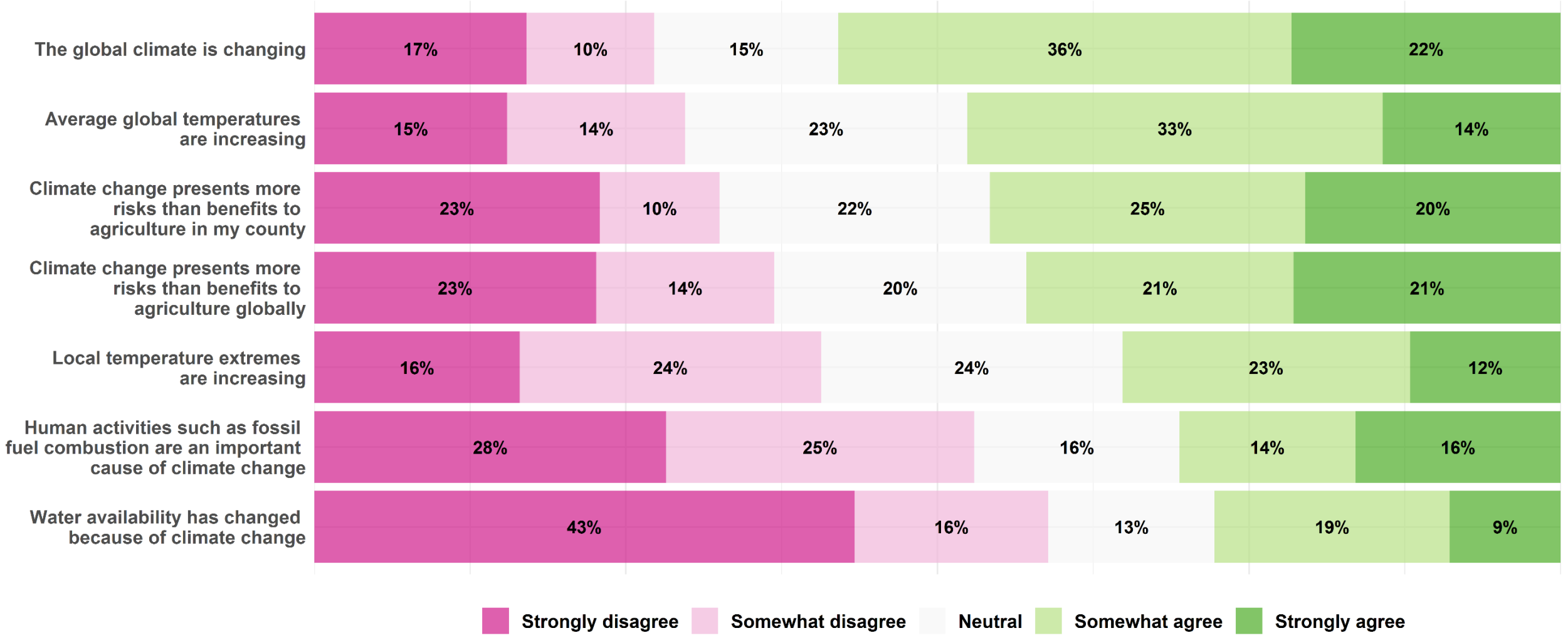


Farmers' average cost, per acre, to comply with SGMA

Observation of LAND USE trends in my county in the past five years



Observation of POLICY trends in my county in the past five years



Agreement with statements related to climate change