

California Groundwater Stakeholders Questionnaire

Groundwater Resilience:

- 1) Considering resilience as the capacity to resist, absorb and recover when confronting disturbances and shocks, what is groundwater's importance to your agency in a resilient water future? *Rate from 0 (not important) to 5 (most important):* _____

- 2) How would you rate the resilience of your groundwater supplies? *Choose between 0 (not resilient) and 5 (quite resilient):* _____

- 3) What level of vulnerability exists for each of the following aspects of the groundwater resources used by your agency? *Please rate between 0 (not significant) and 5 (most significant):*
 - climate _____
 - governance _____
 - economics _____
 - quantity _____
 - quality _____

- 4) What groundwater uses are affected and how much? *Rate from 0 (not affected) to 5 (quite affected):*
 - domestic water supply _____
 - municipal water supply _____
 - agriculture _____
 - industry _____
 - other use (please define) _____

- 5) What steps have you taken or plan to take to address these vulnerabilities? *Give priority from 0 (no priority) to 5 (top priority):*
 - improve infrastructure _____
 - demand management _____
 - wastewater reuse _____
 - improve governance _____
 - other (please define) _____

- 6) More specifically, will you be considering demand management or supply management including new supplies (e.g. stormwater capture, water banking, transfers or trades, among others), or a combination of both?
 - demand management

new supplies
combination

7) What is the significance of key challenges and obstacles you are facing? *Rate from 0 (not significant) to 5 (most significant):*

inadequate legislation _____
staff limitation _____
budget _____
lack of expertise _____
other (please define) _____

8) What are the economic costs and benefits to your agency of the various mechanisms or projects you have planned or constructed to increase groundwater resilience?

estimated cost _____
estimated benefit _____
How do they affect the user? _____

Sustainable Groundwater Management Act (SGMA):

1) What are the challenges to implementing SGMA in your area? *Rank their significance from 0 (not challenging) to 5 (very challenging):*

lack of expertise _____
insufficient budget _____
no cooperation between stakeholders _____
inadequate policy _____
other (please describe) _____

2) Please rank in order of importance, the six undesirable results of SGMA in your area with 0 being least important to 6 being most important:

chronic lowering of groundwater levels _____
reduced groundwater storage _____
water quality degradation _____
subsidence _____
seawater intrusion _____
depletion of interconnected surface water _____

3) Is SGMA affecting your resilience planning? Yes
No

If yes, how?

ensure irrigation needs

secure drinking water supply

reducing floods

other (please describe) _____

4) Did changes or potential changes in management introduced by SGMA have a positive or negative impact on groundwater quantity?

positive

negative

unknown

5) Did changes or potential changes in management introduced by SGMA have a positive or negative impact on groundwater quality?

positive

negative

unknown

6) What management tools do you think will succeed to obtain a better resilience and which are not likely to succeed? *Please mark 1 for "will succeed" and 0 for "not likely to succeed"*

managed aquifer recharge _____

create surface water retention areas _____

increase percolation in urban areas _____

create rainfall _____

building big dams _____

diverting stream flow _____

new technologies _____

remote sensing and satellite observations _____

demand management _____

groundwater pricing _____

clever (precision) irrigation _____

improve hydro-governance _____

involving stakeholders _____

education, training and capacity building _____

other (please specify) _____

7) How do you account for the connectivity surface water-groundwater? *Choose between 0 (treat separately) and 1 (conjunctively):* _____

- 8) Are you in a basin that contains multiple GSA's?
 yes
 no
 If so, how are they working together?

How do you see this playing out and affecting resilience? _____
give a short description:

- 9) If you are directly involved in or affected by SGMA implementation, what are the benefits of its implementation and what next steps would you propose? _____

please describe:

- 10) In general, have you achieved public understanding and acceptance of needed changes and adaptations? Has the new institutional system set by SGMA increased or decreased the public trust in the management of groundwater in your area?

- 11) In conclusion, do you think that SGMA makes your agency/community more resilient or less resilient over time? Please explain your response.

Conflicts Resolution Techniques:

- 1) How do you rate the level of cooperation between groundwater stakeholders in your area? *Rate from 0 (no cooperation) to 5 (complete cooperation):* _____

- 2) In particular, what are the entities with which you interact? *Please check all that apply.*

multiple GSAs

- state agencies
- groundwater users
- surface water users
- advocacy groups
- local/regional regulatory agencies,
- other city/county agencies,
- elected officials,
- entities in adjacent basins
- other (specify) _____

3) What are the key issues driving to conflicts in your area and how do they affect groundwater? *Please rank in order of importance if there is more than one issue:*

- supply
- quality
- SGMA implementation
- other (specify) _____

4) What instruments or tools are you currently using to resolve these conflicts? *Check all that apply.*

- mediators
- public meetings
- public outreach
- other (specify) _____

5) If Water UCI offered a free short training course on conflict resolution techniques and groundwater governance, would you be interested?

- yes
- no

What topics would you like to see included in this course?

Please specify.
