

How to Make Decisions When You Don't Have All the Facts: the Interface of Science and Public Policy

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Decision Making Without the Facts

- Ag Policy Makers - Policy, research, funding
- Beekeepers - Pollination events
- Scientists - Experimental Design
- Regulators - Risk Assessment
- Ag Chem Producers - New Products
- Ag Producers - Daily Actions
- Public - Daily Actions

Current Bee Crisis

- 6 years of 30% losses in honey bee colonies
- Estimated 5.6 M colonies worth \$1.2 Billion
- Third most important animal component of US food system is in trouble
- Some National Policy Level Responses
 - but Too Little Too Late
- Limited Pollinators Put Sustaining Our Food Supply at Risk

A Lesson in Wisdom from the Hive (Seeley, 1995)

- Social physiology of honey bee colonies
- Swarming Behavior- familiar to bee keepers
- Group Decision - making that appears to be
all inclusive and totally objective in its
democratic nature
- Produces a life - sustaining solution for the community

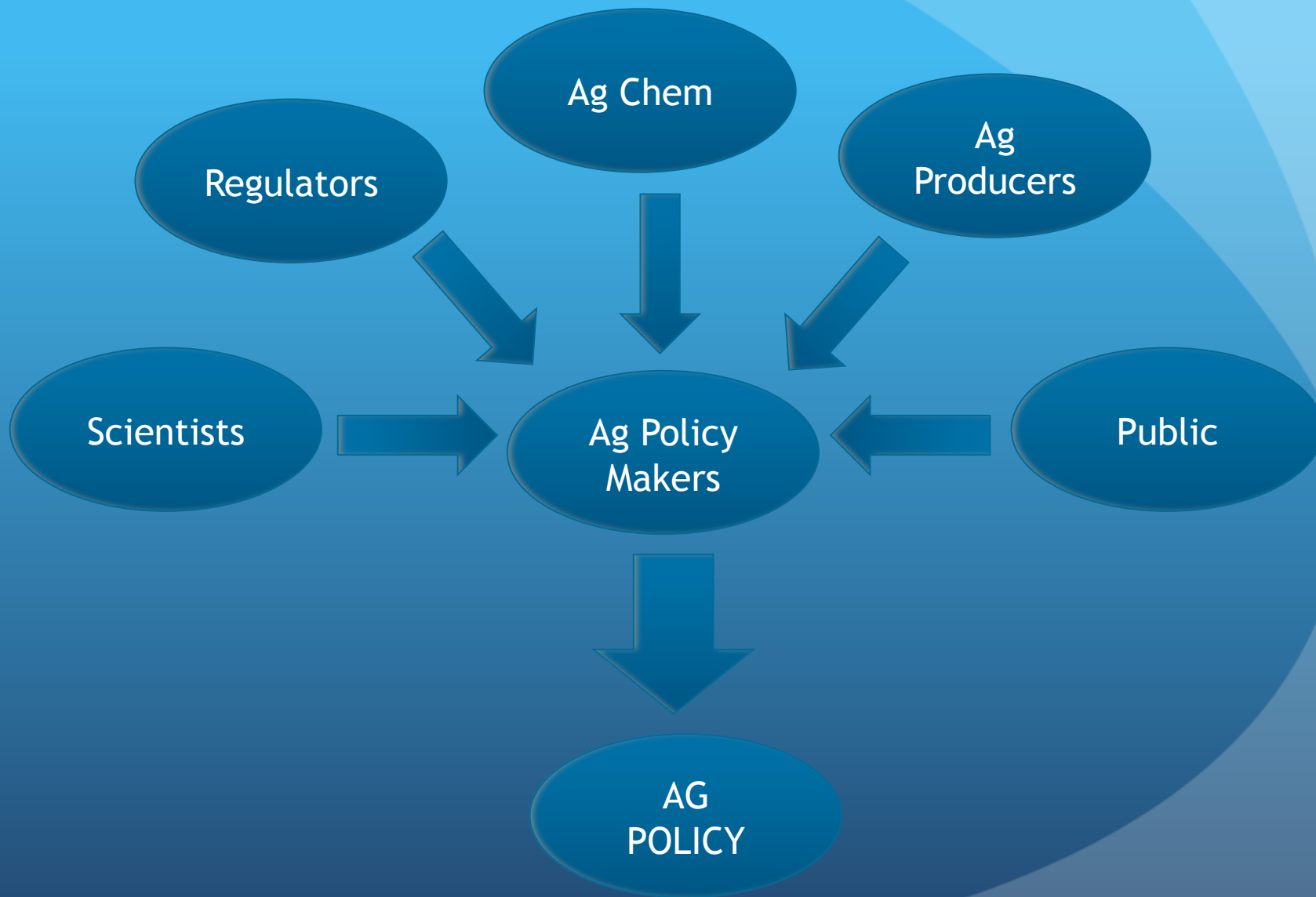
Characteristics of Swarm Decision-Making

- Swarm located in a place that is not sustainable
- Multiple scout bees return with individually specific messages
- All incoming messages treated equally, while “intensity” and “persistence” of messenger are important contributors
- Takes time for the “right decision” to be selected and acted upon- 90% accuracy
- Whole group participates in final action
- Process known as Bee Swarming

Current Pollinator Crisis

- Beekeepers and their pollination services at threshold of no longer supporting a sustainable food system
- We are the Community that needs to find a new place
- Multiple messengers, but not all are treated equally and there are no consensus decisions
- Innovative Solutions and New Public Policies are Critically Needed
- “Brainswarming”- a possible solution (Maryann)

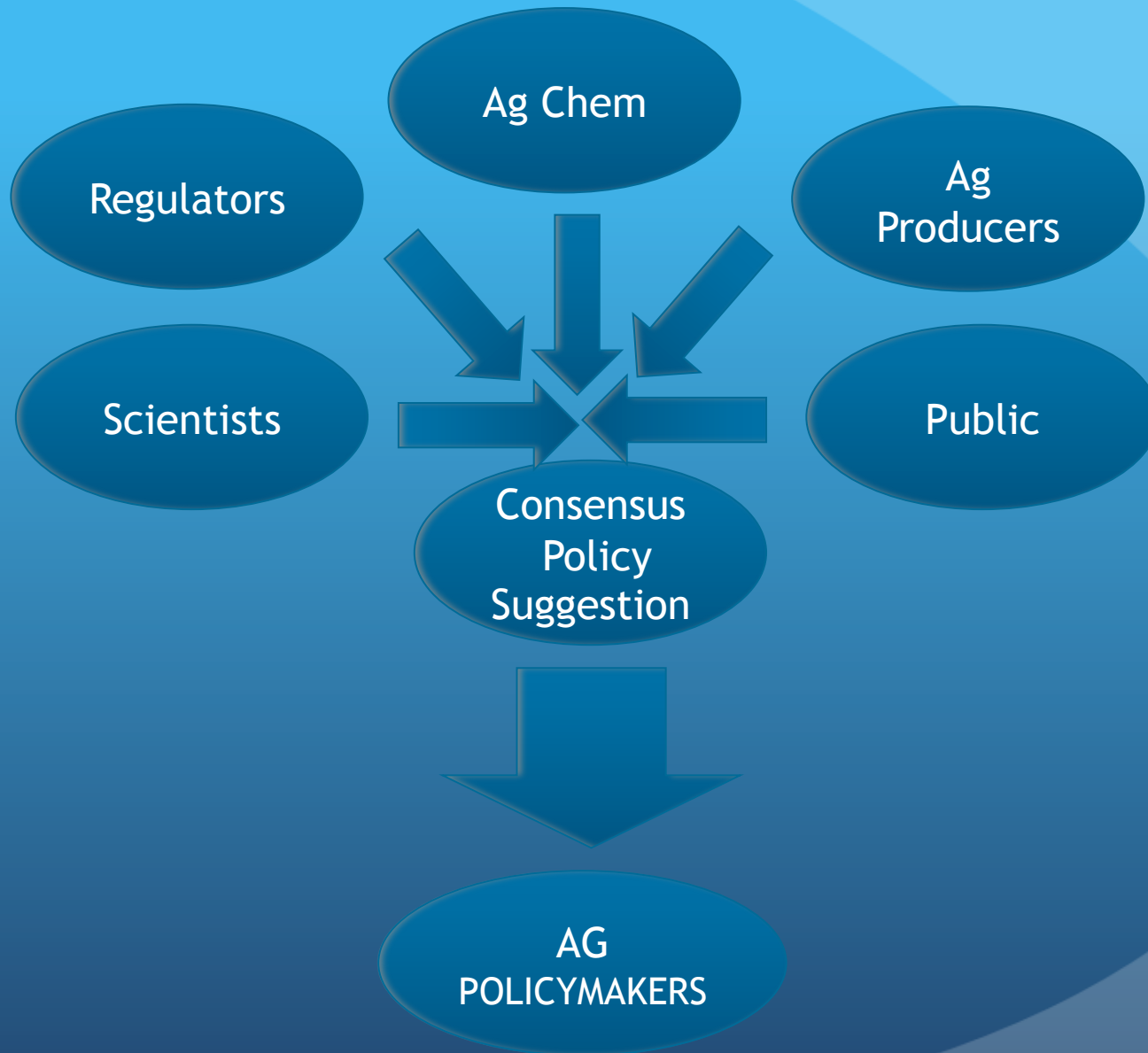
Current Stakeholder Involvement in Ag Policy



“Brainswarming” A New Process for Increasing Stakeholder Effectiveness

- “Brainstorming” techniques - counter learned limitations on individual free idea generation
- “Brainswarming” - counters perceived limitations on reception of messages from various sources by recipient
- If adopted, can lead to equality of wisdom + knowledge from all sources
- Open minds and open dialogue can harness the collective wisdom of the group and produce novel solutions with WOW Factor

New Model of Stakeholder Inputs to Ag Policy



‘If the bee disappears off the surface of the globe,
then man would only have 4 years of life left”

Quote ??

Three Things about “Brainswarming” the Bee Crisis with Absolute Certainty

- No concept of the ideal solutions needed, but absolute faith that brain swarming can help dedicated people find them
- Some of the best qualified people in the world to achieve this are in this room today
- We are ready, willing, and able to engage in this process

ARE YOU WILLING TO JOIN US ??