

## **What, When, Where, and What Now: Changing Climate Email Alerts**

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The USDA Southeast Regional Climate Hub (SERCH) delivers technical support, tools, and strategies to help working land managers cope with the challenges of our changing and variable climate. One of these tools is an email alert service called SERCH LIGHTS. The alert is triggered by changes or variations in climate conditions and is delivered to subscribers when those changes are identified in their location(s) of interest. Several climate datasets and forecast products exist, but agriculture and forestry professionals do not always have the time, resources, or specific technical knowledge to consult, integrate, and synthesize this information. SERCH has identified two ways to make that climate information accessible at the right time and place for management decision relevancy. First, by providing spatial and temporal criteria for alert messages, and second, by aggregating multiple datasets to create additional insights into climate impacts on working lands. For example, during a drought a monthly forecast of drought development or intensification (i.e., NOAA Monthly Drought Outlook) can be combined with estimates of current rainfall deficits (e.g., Standardized Precipitation Index), real-time precipitation forecasts (e.g., NOAA Daily Precipitation Totals), and short-term precipitation outlooks (e.g., NOAA 6–10 Day Precipitation Outlooks) to gauge whether drought conditions may require mitigation actions such as irrigation. The alert audience is USDA field staff, university, and extension communities with local-scale expert knowledge that can connect the information to foresters, farmers, ranchers, and other land managers across the region. The alert includes links to decision support tools and other resources for responding to impacts. An ongoing dialog with the alert audience is part of the Hub's support strategy. By exchanging feedback about the alert's utility, identifying important research questions, and revisiting potential topics for future development, Hub staff strive to ensure that SERCH LIGHTS meets the changing climate information needs of southeastern working land managers.

### Audience Questions:

- Would you subscribe to any of these SERCH LIGHTS email alerts? If yes, which ones? If no, why not? (Audience will be asked to browse current alert topics, subscribe using laptops, tablets, or smartphones, and provide feedback on subscription options and alert topics.)
- Are there additional climate conditions that would be helpful to include in a future alert?
- What are some existing tools, datasets, or resources that you or your stakeholders rely on for making climate-related management decisions?