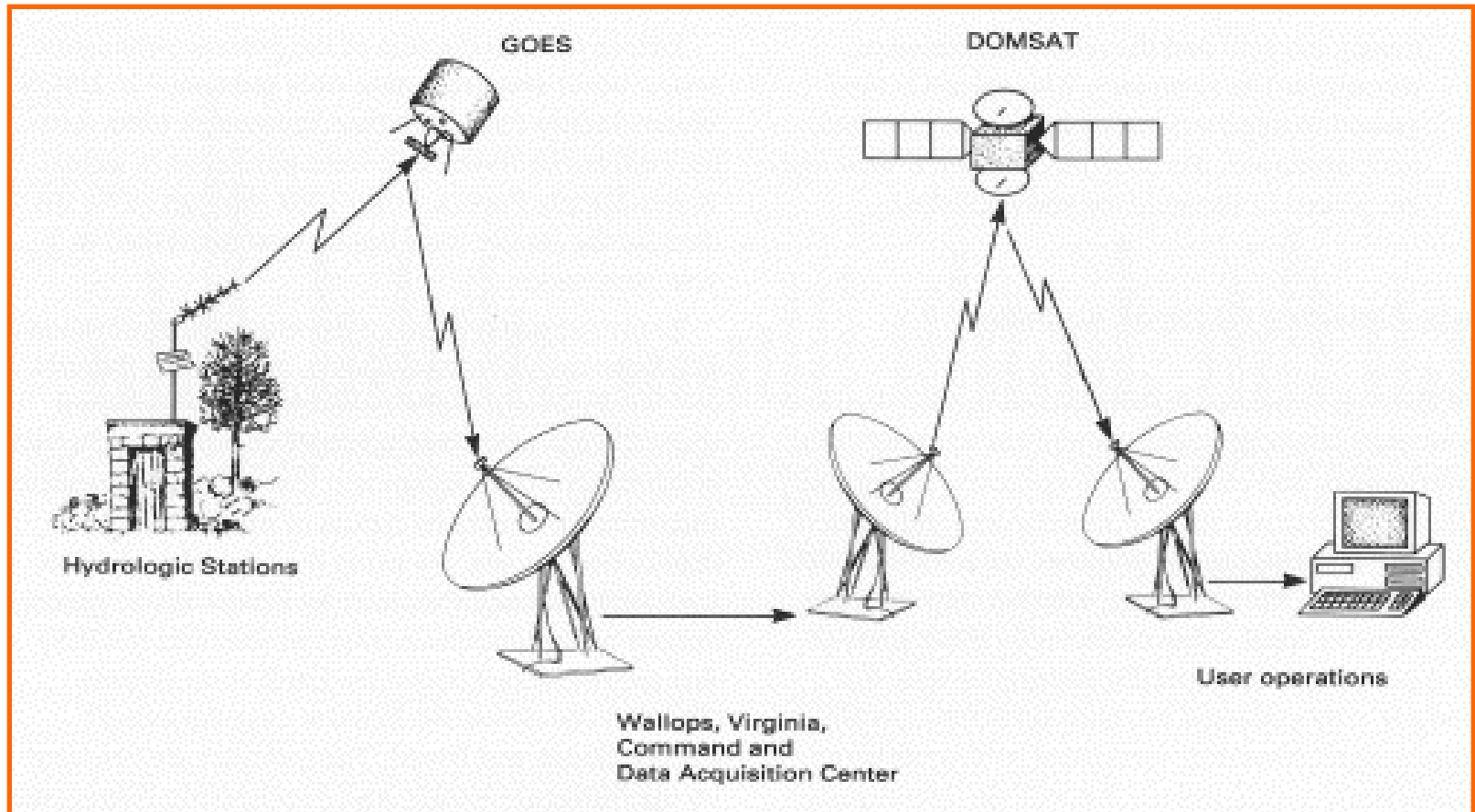


# POST-FIRE USGS FLOOD WARNING SYSTEM



# Satellite Telemetry

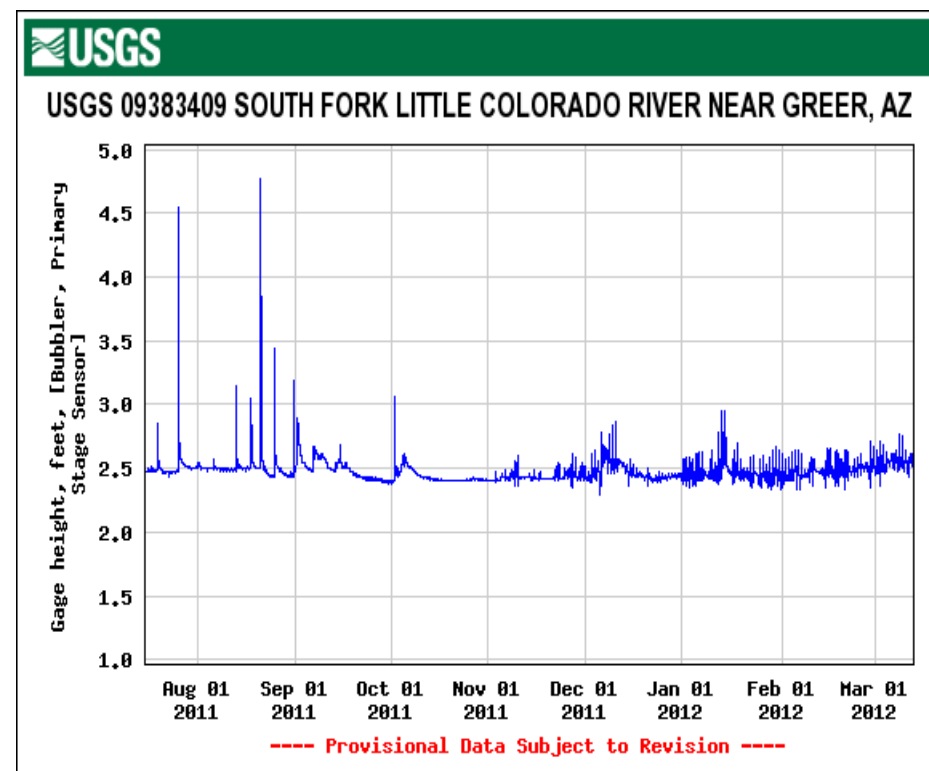
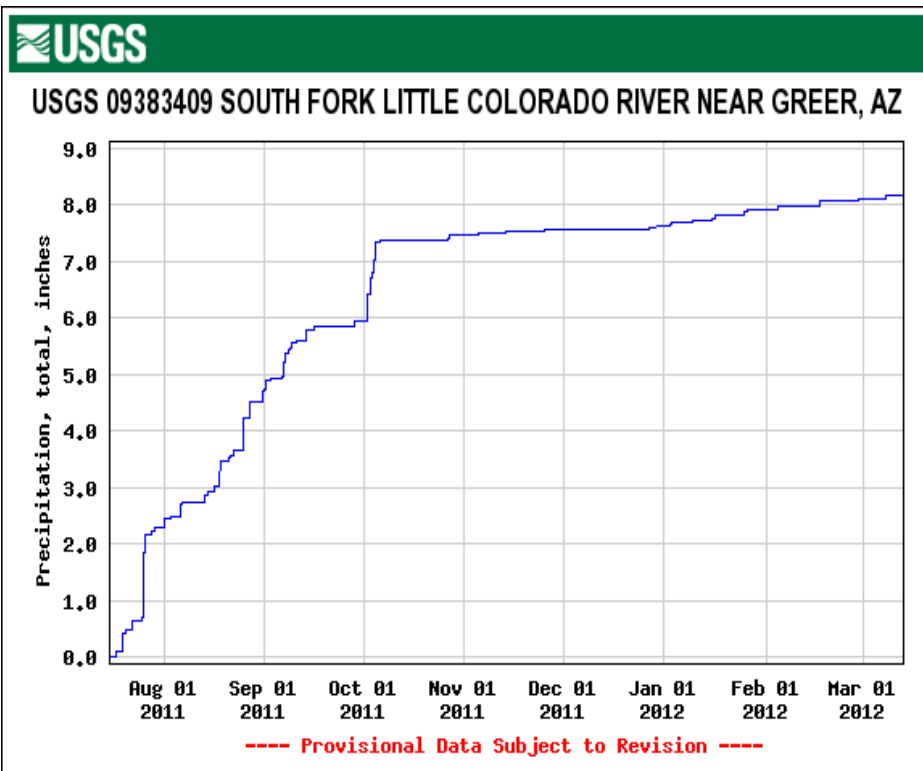
2



# Data are delivered automatically to:

3

- ❑ **USGS NWISWEB** where it is made available to the general public, and transferred to the **Arizona Flood Warning System (AFWS)**
- ❑ **National Weather Service (NWS)** and routed to **NWS River Forecast Center** offices



# WaterAlert

4

- ❑ **Gages can be monitored by the general public through the USGS WaterAlert website, <http://waterWaterAlertrdata.usgs.gov>**
- ❑ **Subscribe free of charge to the WaterAlert notification system and set your own thresholds**
- ❑ **Allows individuals to be notified via e-mail or cell phone text message when an alert occurs.**

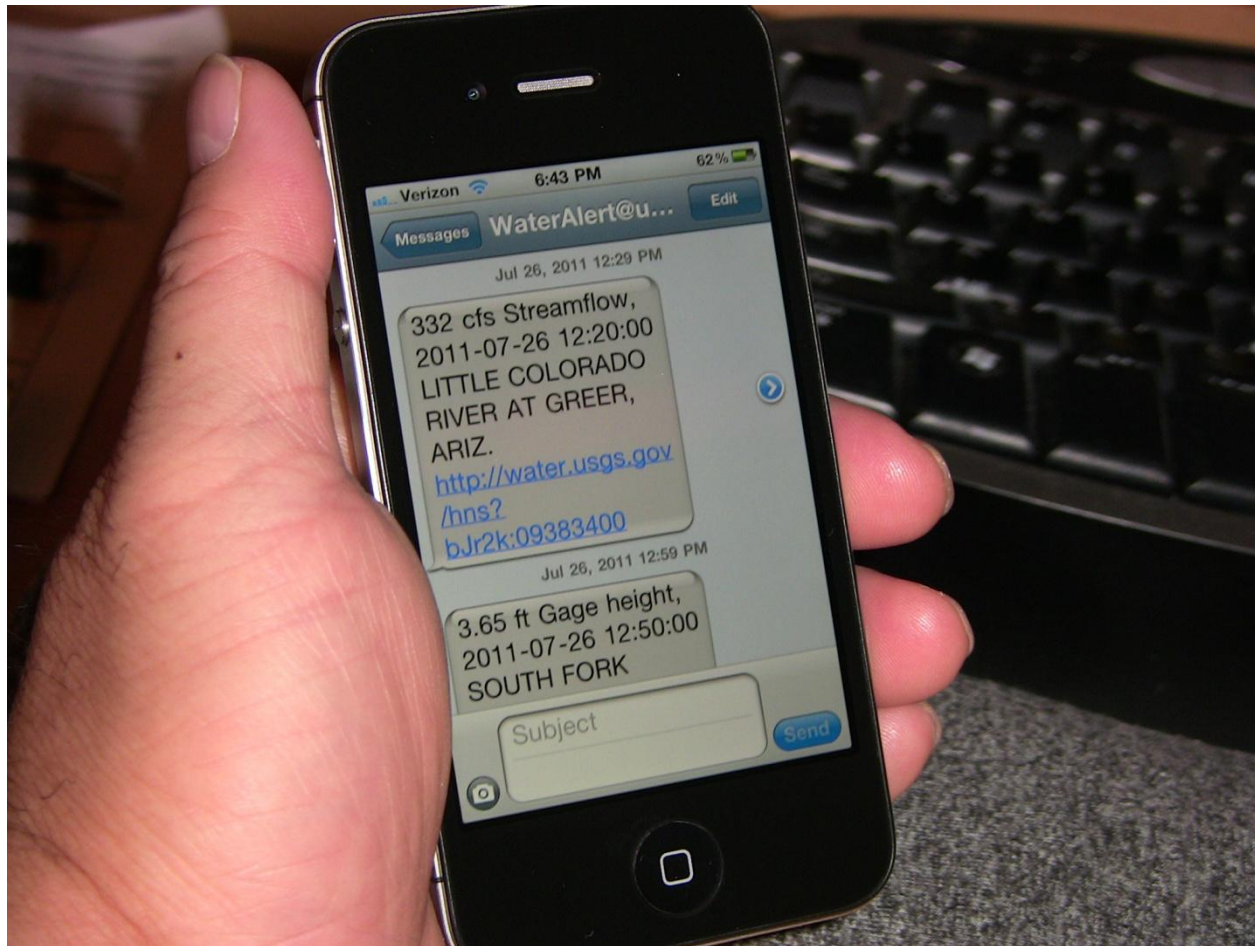
## **Quotes from Apache County manager County Manager, Delwin Wengert.**

“This is an exciting advancement in technology. It provides our residents access to the same information as our emergency responders. Residents can also personalize the system so that the drainage areas they are most concerned about are reported, and the trigger values such as amount of rainfall and river height can be customized.”

“We think this is an important means of empowering our residents to plan for the inevitable flooding that will occur in the aftermath of Wallow. It’s not just the current monsoon season where vigilance is called for, but the spring runoff and the whole cycle that will repeat itself over the next few years as the forest heals. With scientists telling us that a typical 1 to 2 year rainfall could result in 50- to 100-year runoff, it’s important that residents have and use this technology as another tool to protect themselves.”

# WaterAlert text to your Phone

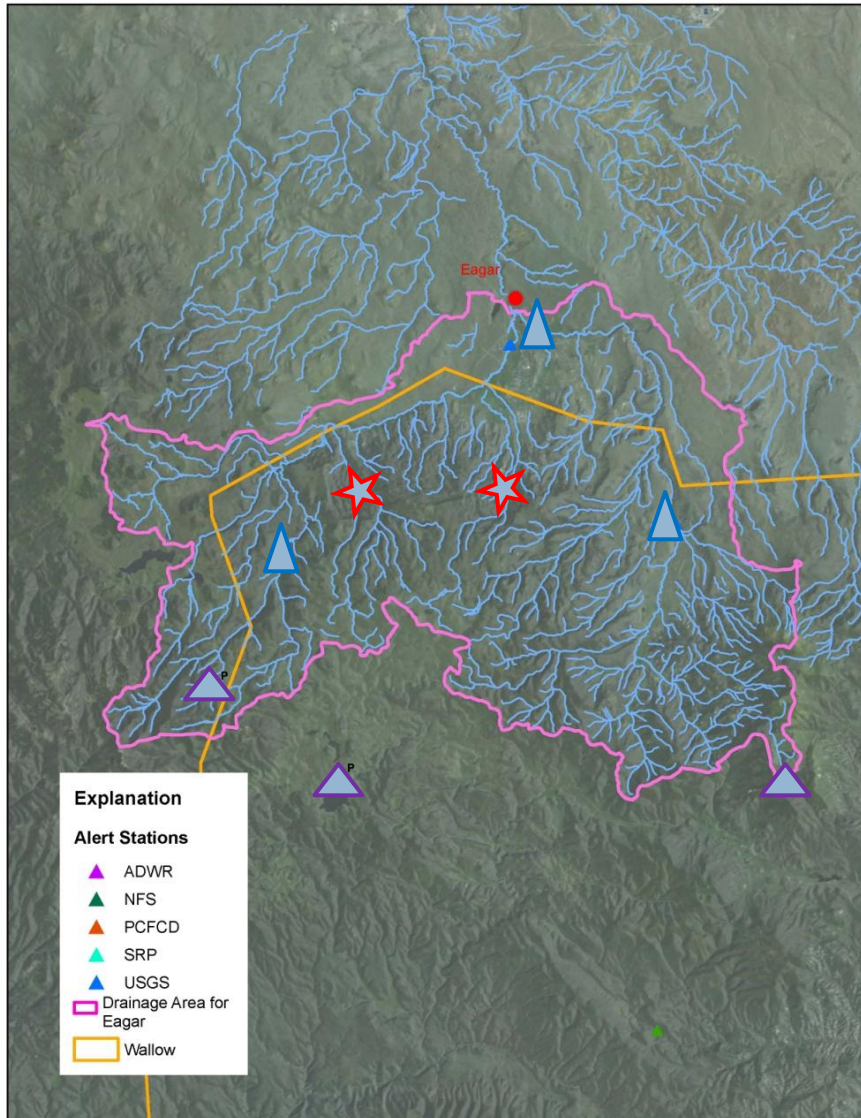
5





# Eagar Area

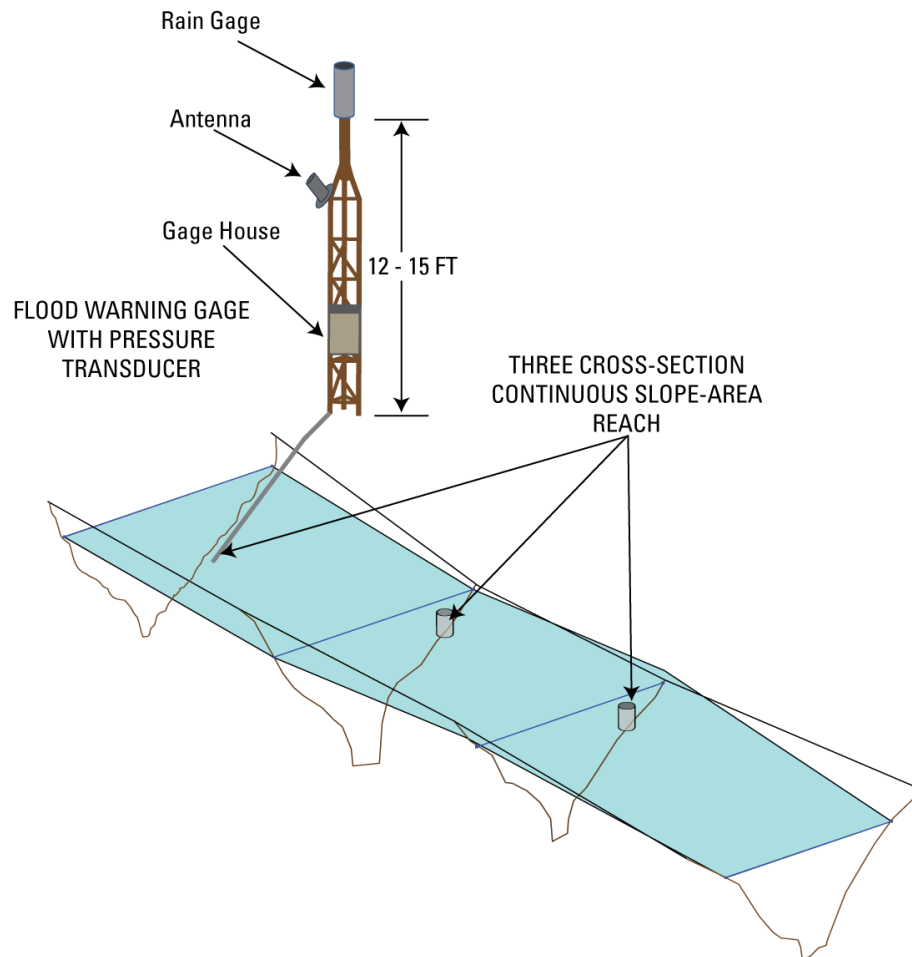
6



- ★ New flood warning gage  
(satellite telemetered)
- ▲ New rain gage at existing gage  
(satellite telemetered)
- ▲ New rain gage  
(radio telemetered)

# Water Canyon Flood Warning Gage

7





# Water Canyon Flood Warning Gage Cont.

8



- ❑ Stream gages installed in burned areas need a variety of sensors to handle the extreme conditions of runoff from burned areas. Non-contact sensors, such as radar, can be used in concert with redundant sensors to ensure survivability of the gage.
- ❑ The monitoring sites can be used both for hazard warning and for scientific data collection.
- ❑ Rapid deployment of the gages is essential for the protection of threatened communities and also for the collection of data from the first storm event.



# Gage Construction

9























