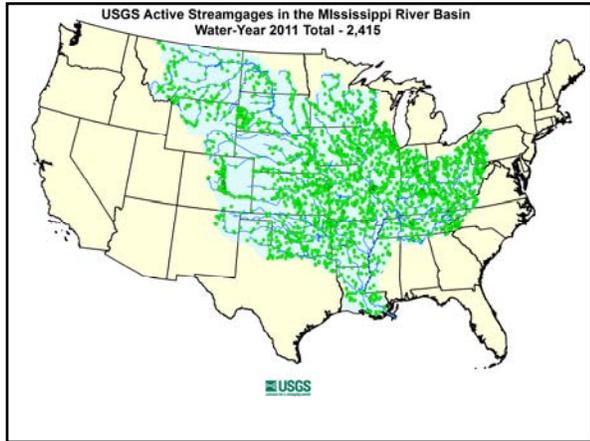
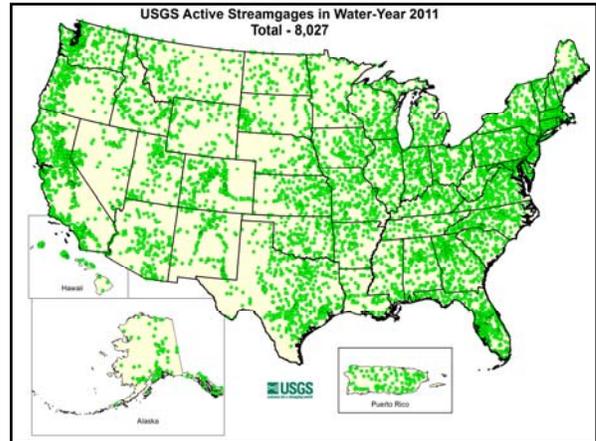


Current Status and Challenges For USGS Streamgages

Interagency Flood/Drought Preparedness Workshop
January 23, 2013
Robert Holmes, PhD, P.E., D.WRE
U.S. Geological Survey

3.2.13.4

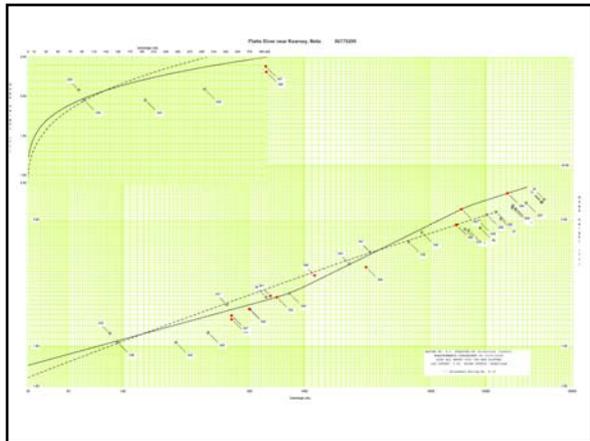


Current Status of USGS Streamgage and Ongoing Readiness Actions

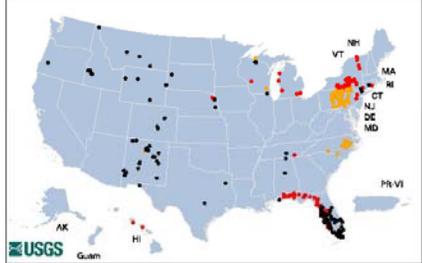
- Increase to stocks to Rapid Deployment Gages and autonomous continuous stage sensors



- 24x7 operation with measurements to verify/extend ratings as needed



Threatened and Endangered Streamgages



<http://streamstatsags.cr.usgs.gov/ThreatenedGages/ThreatenedGages.html>

Slide 5

RRH1 From Steve Robinson:

We only have ratings back to 1983 in the database. All the ratings were similar in shape so I drew in an upper and lower boundary instead of plotting each rating individually. I also included measurements before the Garrison dam was completed (1953), at the request of the North Dakota State Water Commission.

Robert Holmes, 7/17/2012

USGS Flood/Drought Situational Awareness Products of Note

- WaterWatch
- WaterAlert
- WaterNow
- Flood Inundation Mapping



WaterWatch

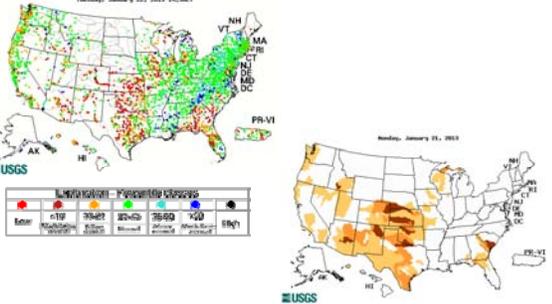
waterwatch.usgs.gov




WaterWatch

http://waterwatch.usgs.gov/

Tuesday, January 22, 2013 14:38:01



Explanation - Percentile classes

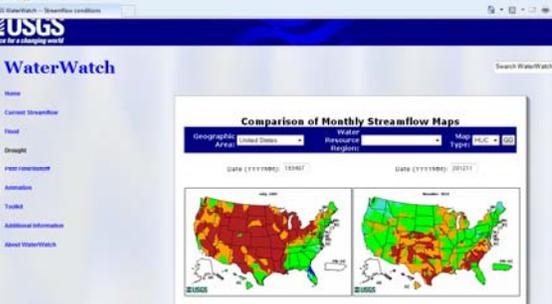
High	75-100	50-75	25-50	10-25	0-10	Low
Very High	High	Normal	Low	Very Low	Extremely Low	Low

Explanation - Percentile classes

Low	0-2	3-9	10-17	18-25	26-33	34-41	42-49	50-57	58-65	66-73	74-81	82-89	90-97	98-100
Very Low	Low	Normal	High	Very High	Extremely High	Very High	High	Normal	Low	Very Low	Extremely Low	Very Low	Low	Very Low



WaterWatch



Explanation - Percentile classes

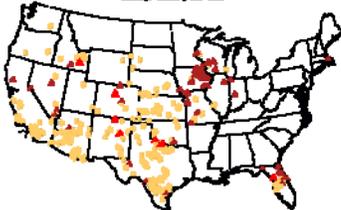
High	75-100	50-75	25-50	10-25	0-10	Low
Very High	High	Normal	Low	Very Low	Extremely Low	Low



WaterWatch

Record Low Flow

Monday, January 21, 2013



Explanation

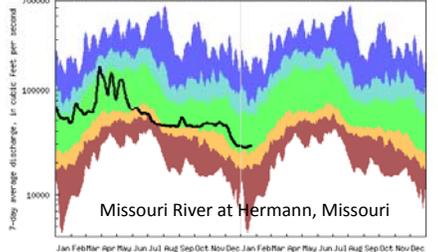
- ▲ Record low flow with more than 30 years data
- ▲ Record low flow with less than 30 years data
- Zero flow sites



WaterWatch

Site-Specific Streamflow Duration Hydrograph

Duration hydrograph of 7-day average streamflow for USGS 06934500 (Drainage Area: 522500 square miles, Length of Record: 84 years)



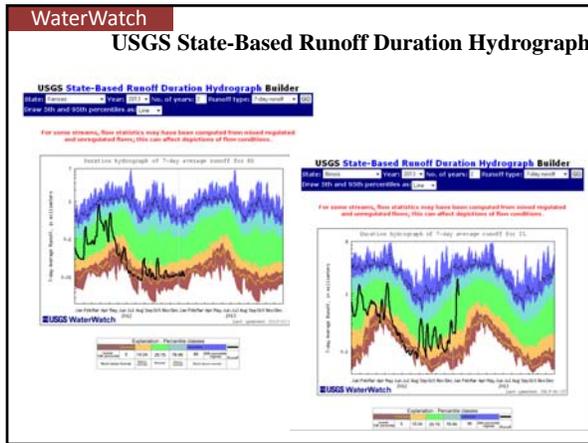
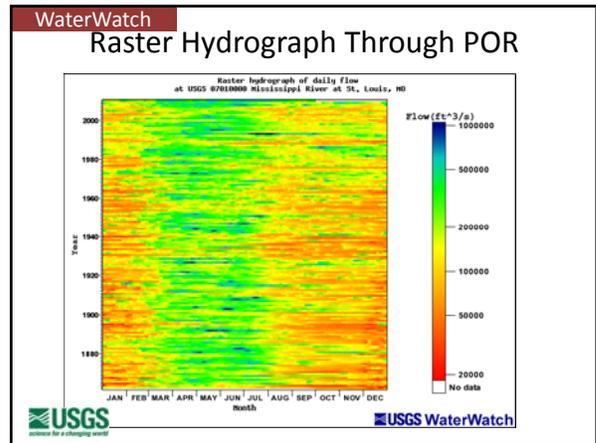
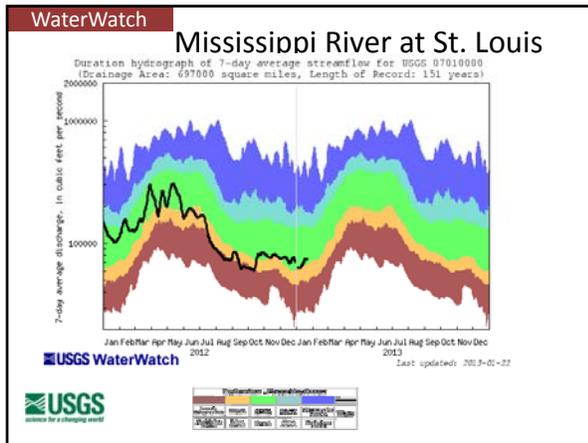
Missouri River at Hermann, Missouri

USGS WaterWatch

http://waterwatch.usgs.gov/

Select toolkit and then duration hydrograph





WaterAlert

<http://water.usgs.gov/wateralert>

WaterNow

USGS WaterNow

Email to: waternow@usgs.gov

Subject line: 02341505

02341505 20:30EST CHATTAHOOCHEE RIVER AT US 280, NEAR COLUMBUS, GA
 Discharge, cubic feet per second = 4560
 Gage height, feet = 3.97

For Realtime Data at this station:
http://waterdata.usgs.gov/nwis/uv/?site_no=02341505

Water data when you want it!

Flood Inundation Mapping

FIM Philosophy

Approach
 Collaboration with Other Agencies

An aerial view of inundated areas directly linked to USGS streamgage and NWS forecast information

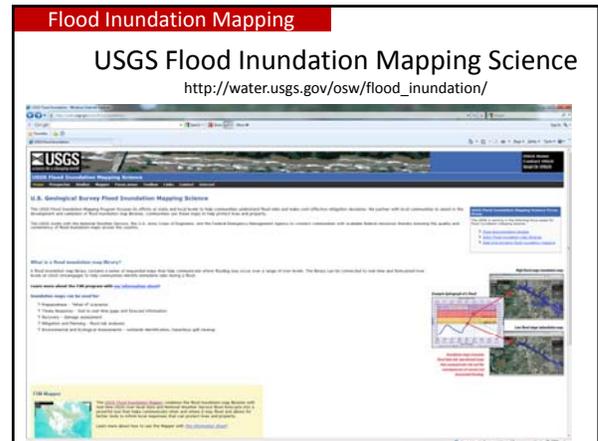
Static map library of 1 to 2 foot intervals starting at NWS flood stage and going up to (and beyond) historic flood levels

Related to Minor, Moderate, and Major flood NWS classifications

Like a streamgage at your door!

Example

<http://il.water.usgs.gov/ifhp/saline/#>



Contact Information For Questions

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