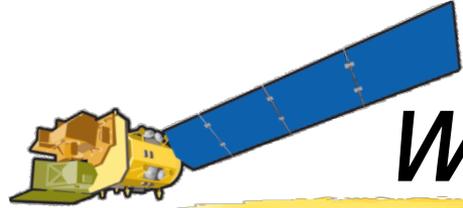


Water – Think USGS

ELT Champion – Bill Werkheiser

Sponsor – Barbara Wainman

19 June 2015



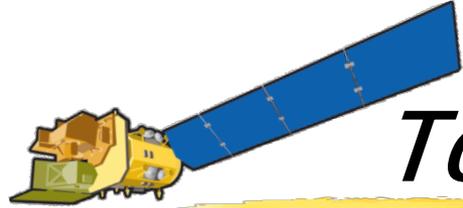
Water – Think USGS Team

The Drips:

- Sarah Bemis, Security Management Branch
- Claudia Faunt, California Water Science Center
- Bruce Gungle, Arizona Water Science Center
- Grant Mah, Earth Resources Observation Science Center
- Shaun Wicklein, Virginia/West Virginia Water Science Center



- Coaches – Stacy Bushée and Mark Sogge

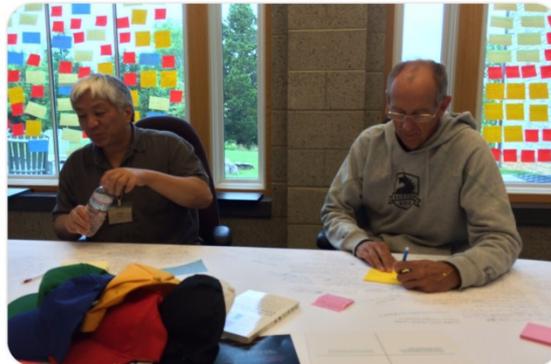


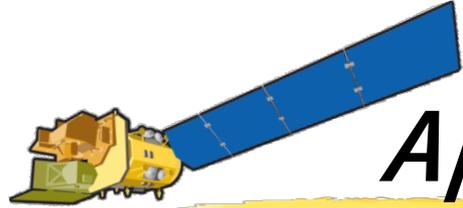
Tools Used



WEEK IN REVIEW

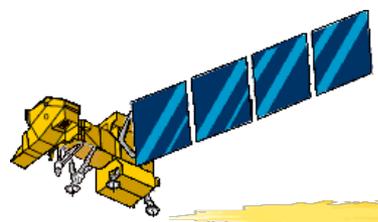
Polarity Map.	6 Thinking Hats
Storytelling.	Forced Connections
Converging Grids.	Brainstorming
Brainwriting.	5 Y's and a How



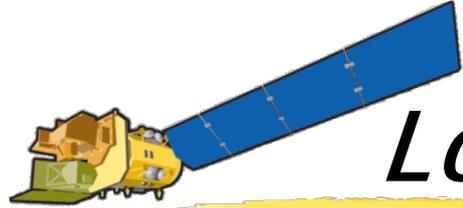


Approach

- USGS Water Visibility with Public and Congress
 - **Why** ---Protect and Increase Funding
 - **How** ---Develop an Integrated Communication Plan and Information Approach



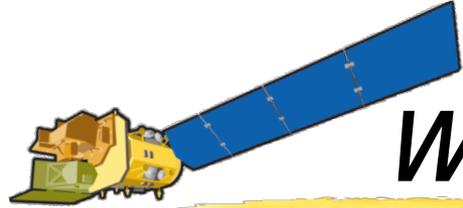
Communication Plan



Logo/Visual ID

- What does current logo say to you ?

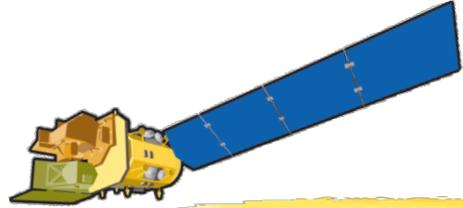


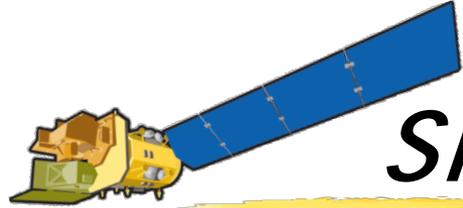


Water-Specific USGS Logo ?

 **USGS** *Water*

The logo consists of a blue square on the left containing three white wavy lines representing water. To the right of this icon, the word "USGS" is written in a bold, blue, sans-serif font, and the word "Water" is written in a blue, italicized, serif font.





Slogan

- USGS, Think Water...



- USGS is Water !



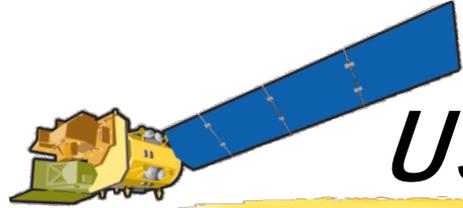

- You Wanna Know About Water ? water.USGS.gov

- Waste-Deep in Water Information



- Recommend a Contest for USGS Staff to Help Select a Slogan



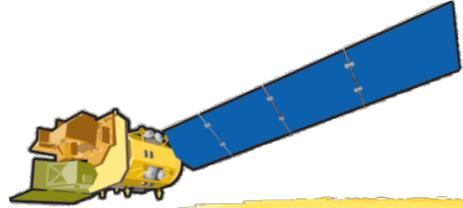


USGS Spokesperson

- Lucy Jones ?



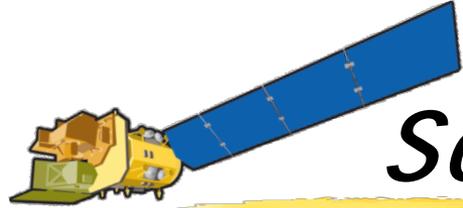
- but she's Geology...



THE COLBERT REPORT



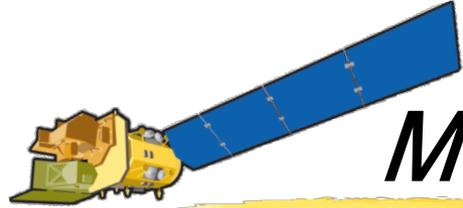
buffering (24 seconds)



Social Media Campaign

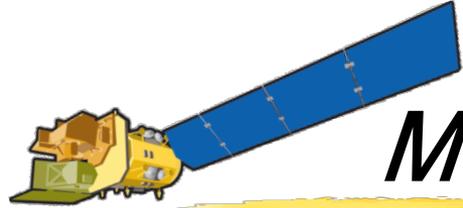
- TV, Radio Ads
- QR Codes on Everything USGS
- Create Excitement Around Hot Topics... Water Wednesday
- YouTube Videos
- Water Radio
- College Marketing Plan via Social Media... Maybe hire a fleet of undergrads to help promote USGS Water on Social Media ?



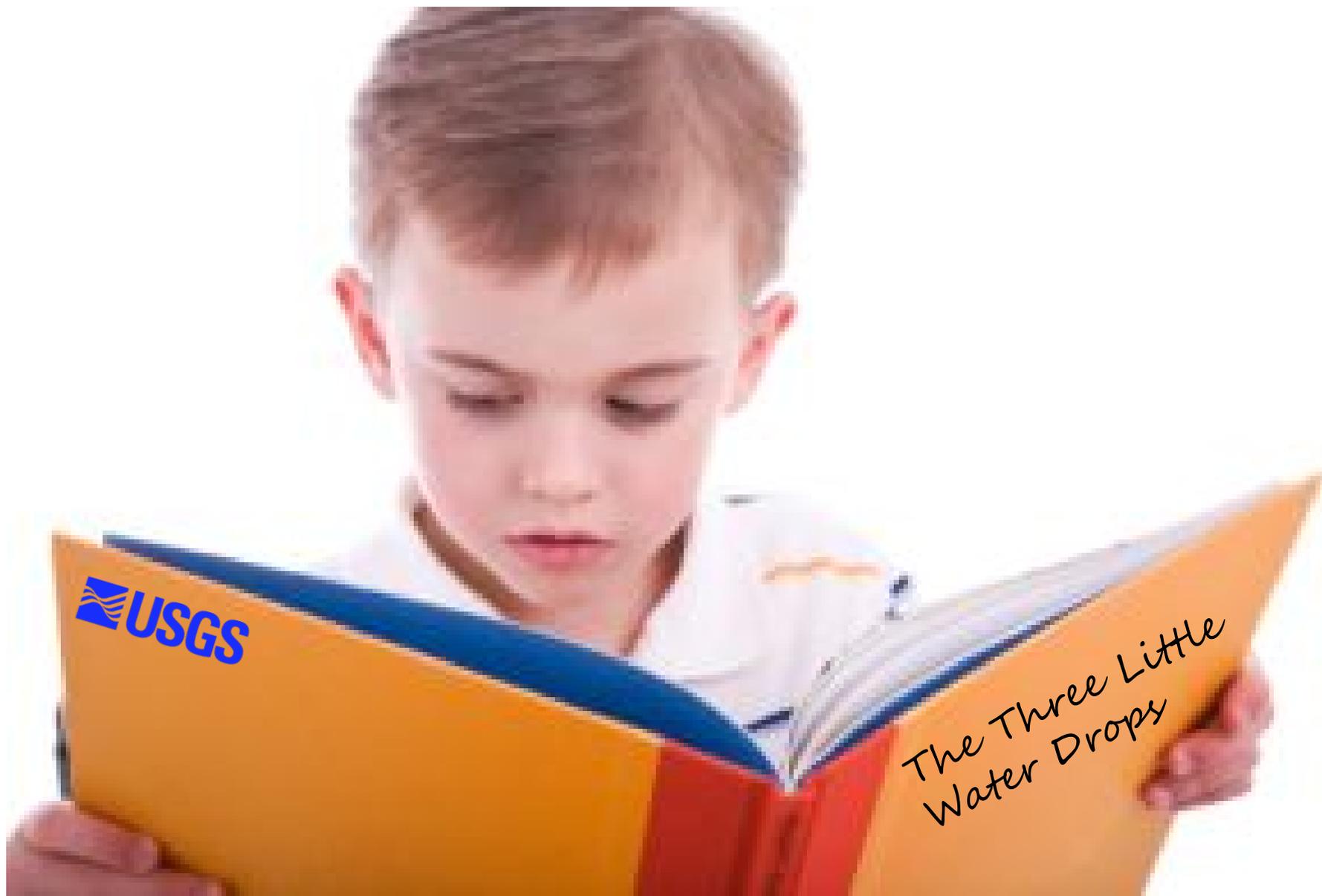


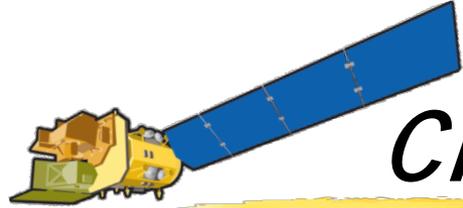
Marketing Methods: Reality TV





Media-Based Outreach

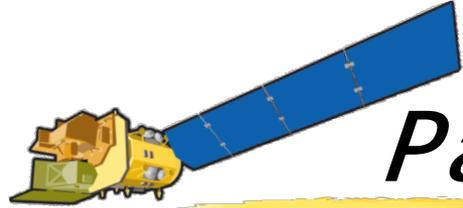




Citizen-Based Outreach...

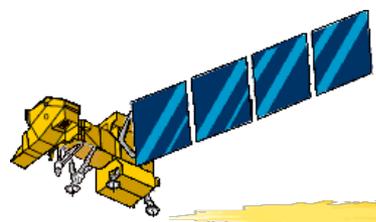


The Water UNDERGROUND



Partnering and K-12 Outreach



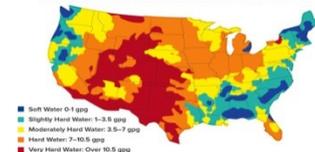


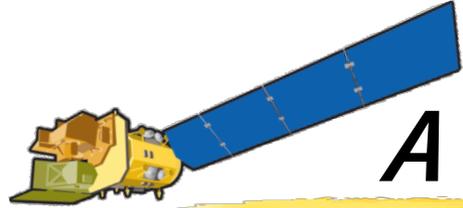
None of this will really work...

*if we don't have easily accessible
and understandable USGS water
information...*



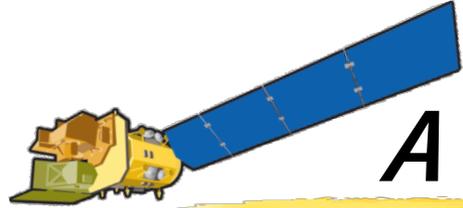
Concentration of Water Hardness in Grains Per Gallon





A Tale of Two Websites...





A Tale of Two Websites

USGS 07329780 Honey Creek below Turner Falls near Davis, OK

Available data for this site: SUMMARY OF ALL AVAILABLE DATA

Stream Site

DESCRIPTION:
 Latitude 34°25'54", Longitude 97°08'49" NAD27
 Murray County, Oklahoma, Hydrologic Unit 11130303
 Drainage area: 16.4 square miles
 Contributing drainage area: 16.4 square miles,
 Datum of gage: 920 feet above NGVD29.

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Current / Historical Observations (availability statement)	2007-10-01	2015-06-18	
Daily Data			
Discharge, cubic feet per second	2004-10-01	2015-06-17	3912
Daily Statistics			
Discharge, cubic feet per second	2004-10-01	2015-04-05	3839
Monthly Statistics			
Discharge, cubic feet per second	2004-10	2015-04	
Annual Statistics			
Discharge, cubic feet per second	2005	2015	
Peak streamflow	2005-08-15	2014-06-23	10
Field measurements	2004-11-02	2015-06-08	91
Water-Year Summary	2006	2014	9

USGS Home Contact USGS Search USGS

California drought, visualized with open data

Scroll down to learn more.

The State of California is experiencing one of the most severe droughts on record, which has implications for citizens of California and beyond. Many State, Federal, and Tribal agencies make routine observations of the water cycle. This website graphically visualizes these data to help understand the effect of drought on rivers, streams, lakes, and reservoirs. Below, learn more about water use and changes in the water cycle due to the current drought in California.

The data presented here are drawn from free and publicly accessible sources. In addition, the analytical, graphical, and software tools used are open-source and available for public re-use.

For more information about drought and science-based decision making in California, visit the USGS California Water Science Center

USGS Current Conditions

Available Parameters: All 3 Available Parameters for this site
 00065 Gage height
 00060 Discharge
 00045 Precipitation

Available Period: 2007-10-01 2015-06-18
 2007-10-01 2015-06-18
 2015-02-18 2015-06-18

Output format: Graph
 Graph w/ stats
 Graph w/o stats
 Graph w/ (up to 3) parms
 Table
 Tab-separated

Days (7): -- of --
 Begin date: 2015-06-11
 End date: 2015-06-18

[Summary of all available data for this site](#)
[Instantaneous-data availability statement](#)

Gage height, feet
 Most recent instantaneous value: 3.27 06-18-2015 20:30 CDT

USGS 07329780 Honey Creek below Turner Falls near Davis, OK

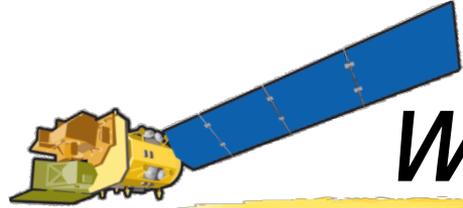
Add up to 2 more sites and replot for "Gage height, feet"

Add site numbers [Note](#)
 Enter up to 2 site numbers separated by a comma. A site number consists of 1 to 10 digits

GO

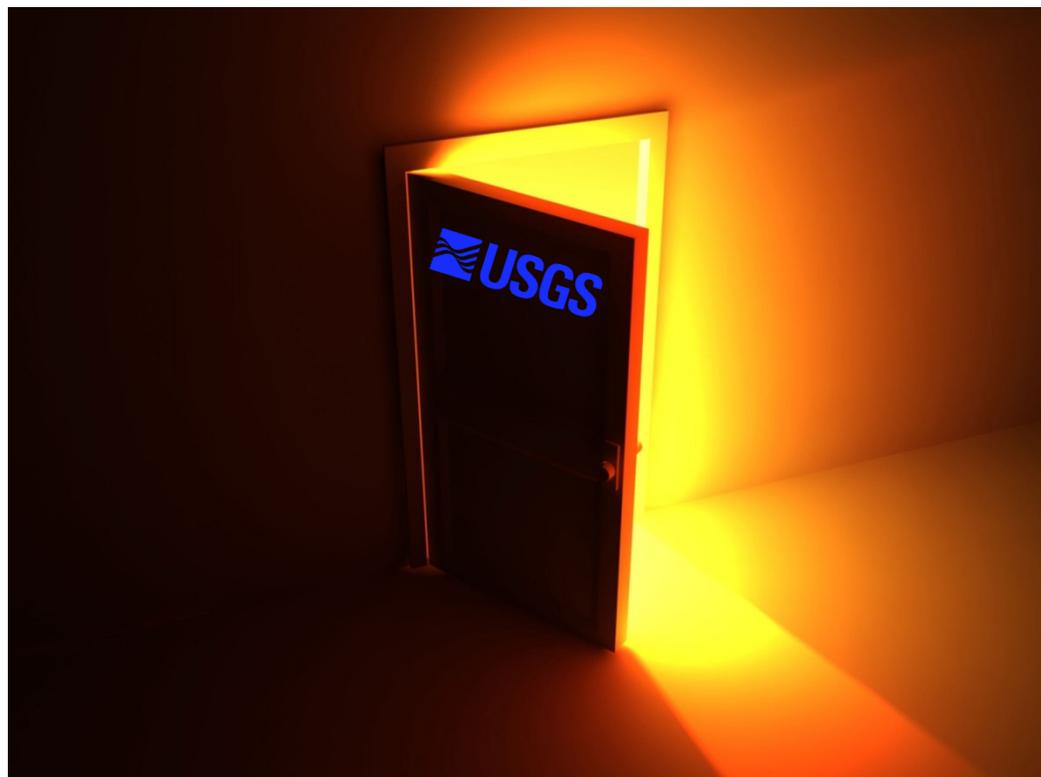
----- Provisional Data Subject to Revision -----

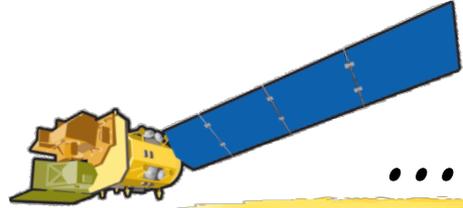
Information dynamically displayed



Web Portal

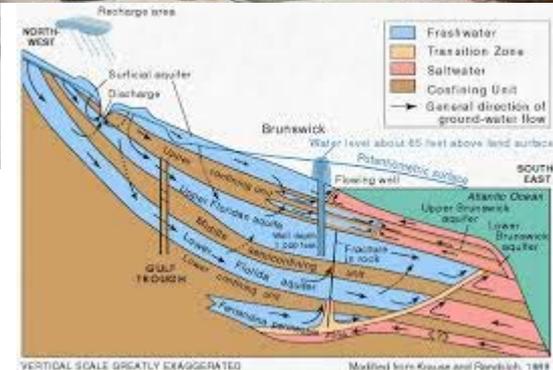
- Aggregates and integrates data from multiple sources and presents it as information



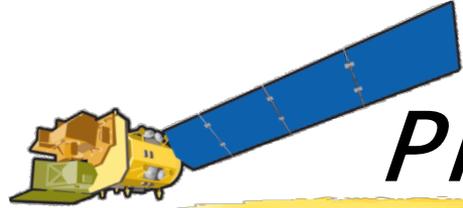


... but this is just the beginning

- Imagine...
- USGS Water App



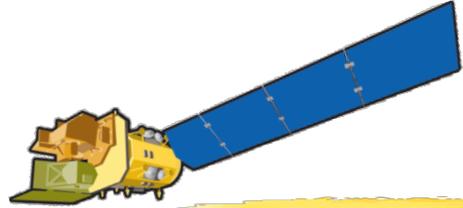
One **STOP** Shop for all your water needs.



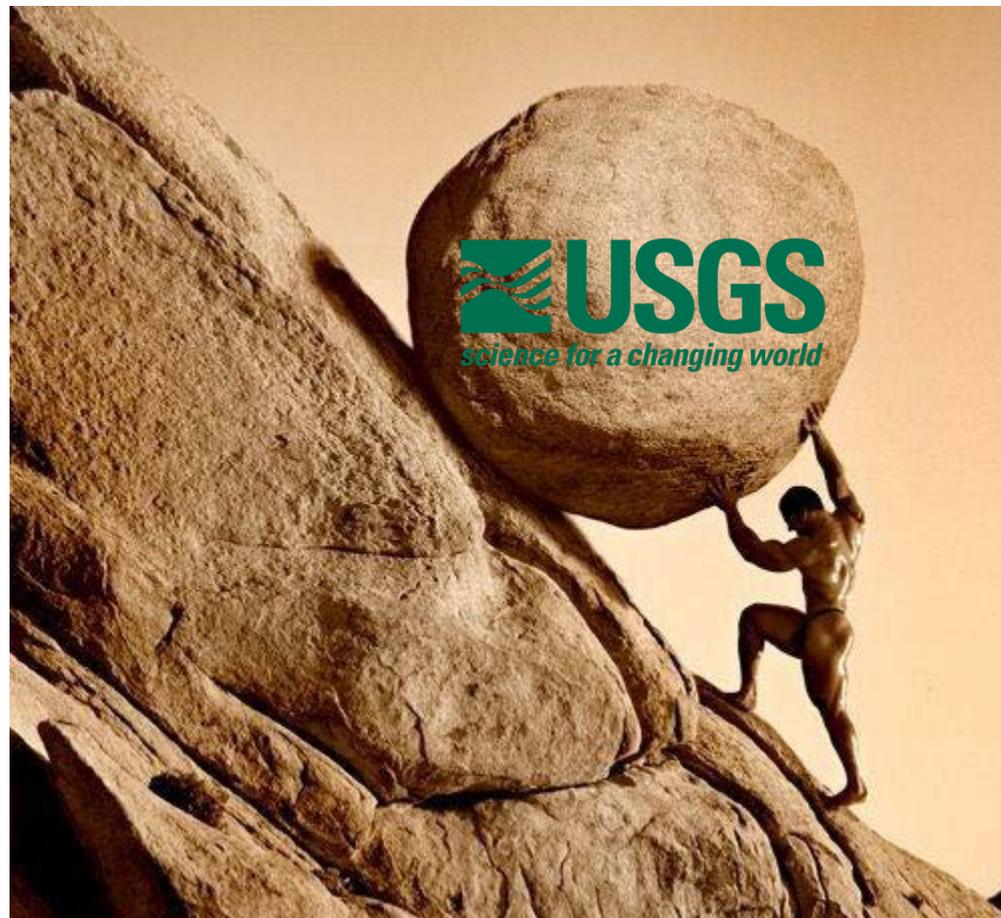
Pilot Project

- Specific Area
- National Map of Limited Types of Information
- What Public Bytes on !!!



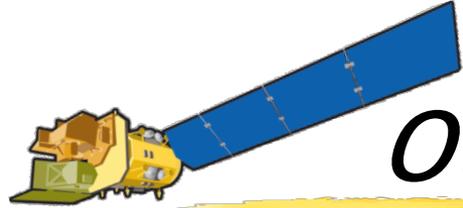


- This will require a Paradigm Shift in USGS Approach to Engaging Public on Water...
 - Coordinate outreach between centers and bureau
 - Information, not data



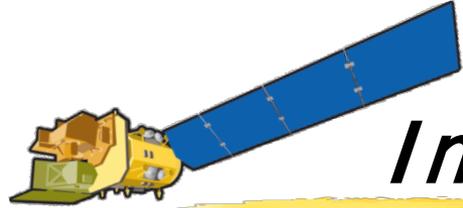


Backup Slides



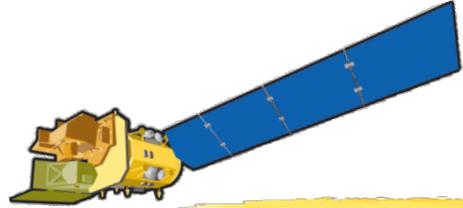
Outreach

- Media Based
 - Poster/Ad Series
 - Internet Open House
 - Children's Book on Water and Hydrological Cycle – Be a Little Droplet
 - Improved News Liaison
- Citizen-Based Outreach
 - Citizen Science – ID Stream Level at Staff Gages, Water Levels in Wells
 - RainLog Citizen-Reported Rainfall
 - Water Quality Test Kits
 - WaterUnderground Website
 - Geo-Caching Water-Finds
- Partnering and Education
 - Engage K-12 Through School Water Programs
 - Water-Based Sister Cities – Similar Climates and Water Issues, Scientific Exchange
- This will require a paradigm shift in USGS Outreach from Centers to a Nation Level...

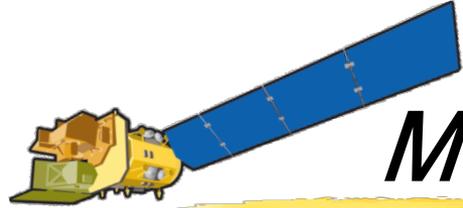


Improved Information Delivery

- USGS provides a wealth of water data and interpretive results, but they are hard for users to access and “get”
- USGS needs to move from just data delivery to integrated delivery of information and interpretive results from both USGS data and partner agencies
- What are new products and services we could/should be providing ?
- How can we present information in a way that is both easily accessible to the public and excite them, while still maintaining validity for science and decision makers ?
- Are there new methods for users to access information like smartphones and apps ?

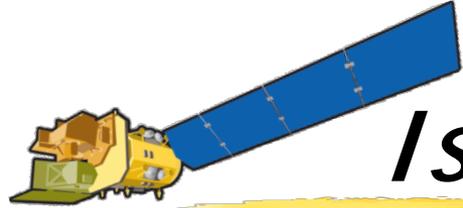


- Modeling Well Driller
- Get Geology
- Get WL
- Don't Be Afraid to Turn to Other People
- What if you had Access to Water Information from All Sources
- One Stop Shop



Marketing Methods

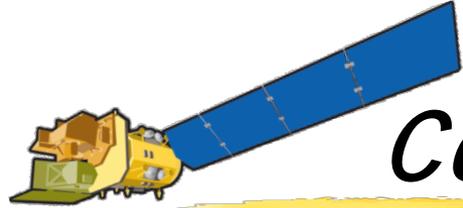
- Wacky Ideas
- Patent Method to Write USGS Logo on Water



Issues Early Warning

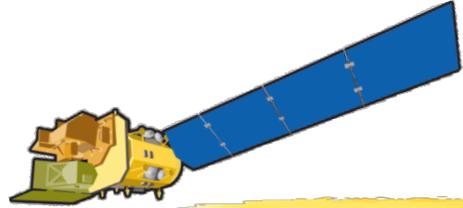
- Another enabling process to address the problem
- Headquarters has limited detailed knowledge of local issues at science centers
- Unable to identify trends affecting multiple regions
- Unable to address emerging issues from a national perspective (“get in front of issues”)

- Propose simple method to collect highlights from centers biweekly or monthly



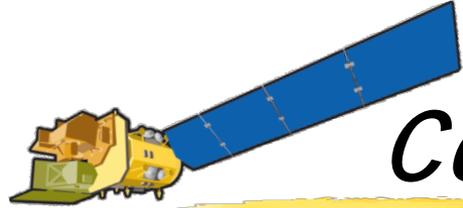
Concerns/Constraints

- Credit other agency sources



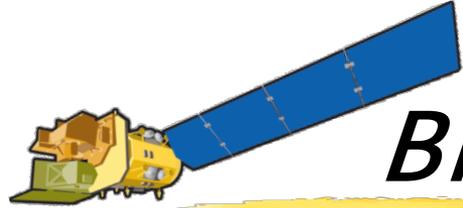
- Problem Discussion
 - What is real issue ?
 - Why is this a problem ?
 - New service area ?
 - What is end result desired (change) for end-user/stakeholder ?
- Discussion with Bill/Barbara

- Water science is too complicated for public to easily understand



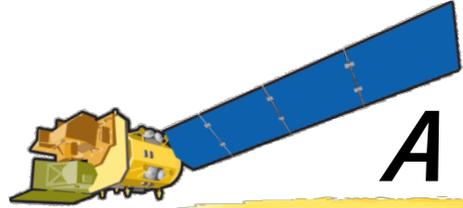
Communication Plan

- USGS not always credited as source of water information used in presentation to public (i.e. – weather maps, etc.)
- Increase public awareness of USGS role in water science and availability of USGS water science products/data/interpretive results
- Develop Communication Approach and Plan
- Builds and Reinforces Improved Information Delivery Work



Broad-Based Approach

- Communication Plan
 - Slogan
 - Logo/Water-Based Visual ID
 - Spokesperson
 - Social Media/#
- Marketing Methods
- Outreach
 - Media-Based
 - Citizen-Based Activities and Engagement
 - Partnering and Education



A Tale of Two Websites

USGS 07329780 Honey Creek below Turner Falls near Davis, OK

Stream Site

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 Murray County, Oklahoma, Hydrologic Unit 11130303
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Water-Year Summary	2006	2014	9

U.S. Drought Monitor
 Drought reduces snowpack and results in decreased reservoir volume.

Here, the effect of drought on 56 of California's more than 700 reservoirs is shown through time.

California reservoirs sorted by elevation

Percent total reservoir volume animated since 2011. Bar widths are proportional to maximum capacity. On the map, circles are proportional to reservoir volume. Data providers: U.S. Drought Monitor, U.S. Bureau of Reclamation, U.S. Army Corps of Engineers, and more; reservoir data accessed from the CA Data Exchange.

Get the Data 17 April 2012

USGS Current Conditions

Available Parameters: All 3 Available Parameters for this site
 00065 Gage height
 00060 Discharge
 00045 Precipitation

Available Period: 2007-10-01 2015-06-18
 2007-10-01 2015-06-18
 2015-02-18 2015-06-18

Output format: Graph
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USGS 07329780 Honey Creek below Turner Falls near Davis, OK

Add up to 2 more sites and replot for "Gage height, feet"

Add site numbers Enter up to 2 site numbers separated by a comma. A site number consists of 1 to 10 digits

GO

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Get the Data 11 March 2014

Information dynamically displayed