

USGS Update



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USGS Colorado Water Science
Center

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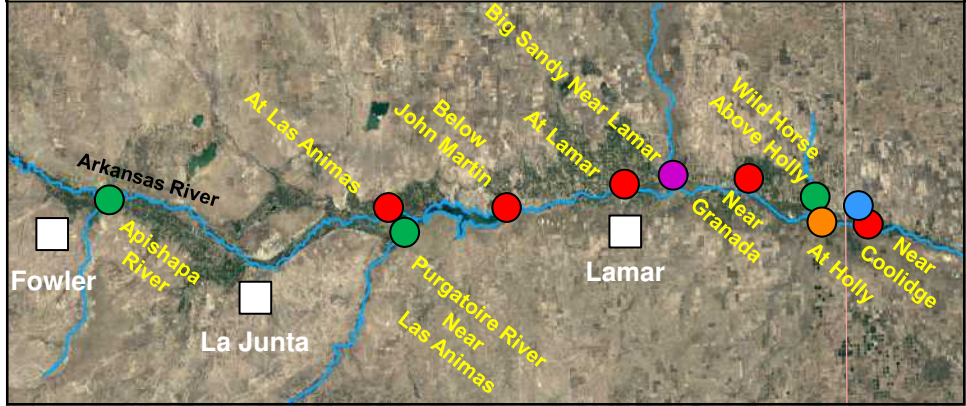
2022 USGS Update

- **2022 Flow Conditions**
 - Pueblo, CO to Coolidge, KS
- **Big Sandy Creek near Lamar, CO Streamgage**
 - Potentially Discontinue
- **Arkansas River at Holly, CO Streamgage**
 - Potentially Reestablish
- **Arkansas River at Las Animas, CO Streamgage**
 - Site Update

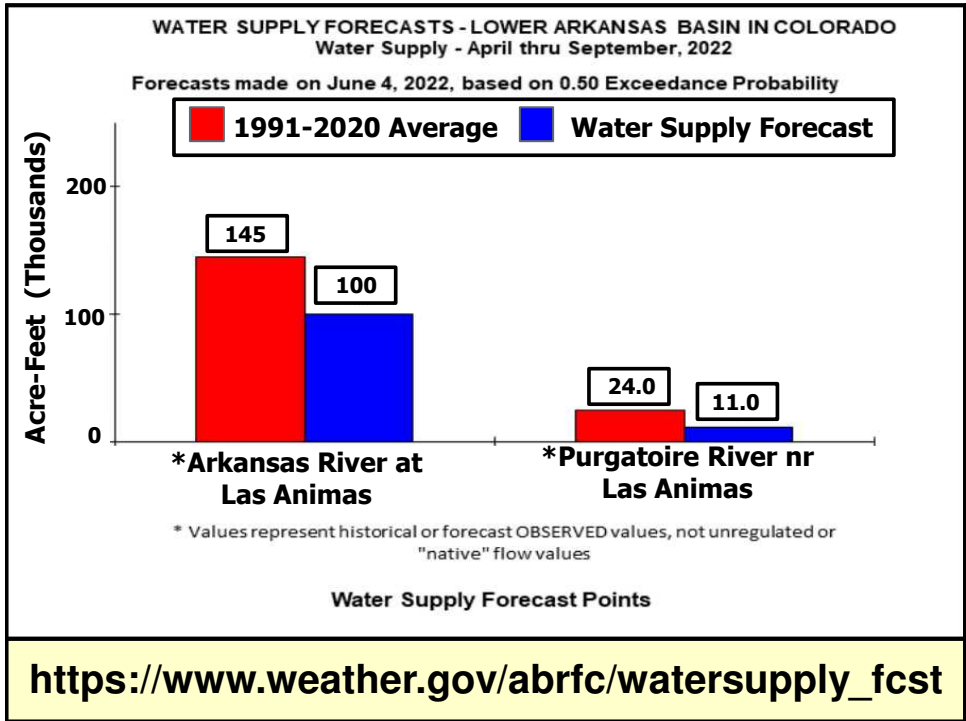
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USGS/ARCA Cooperative Streamgauge Program

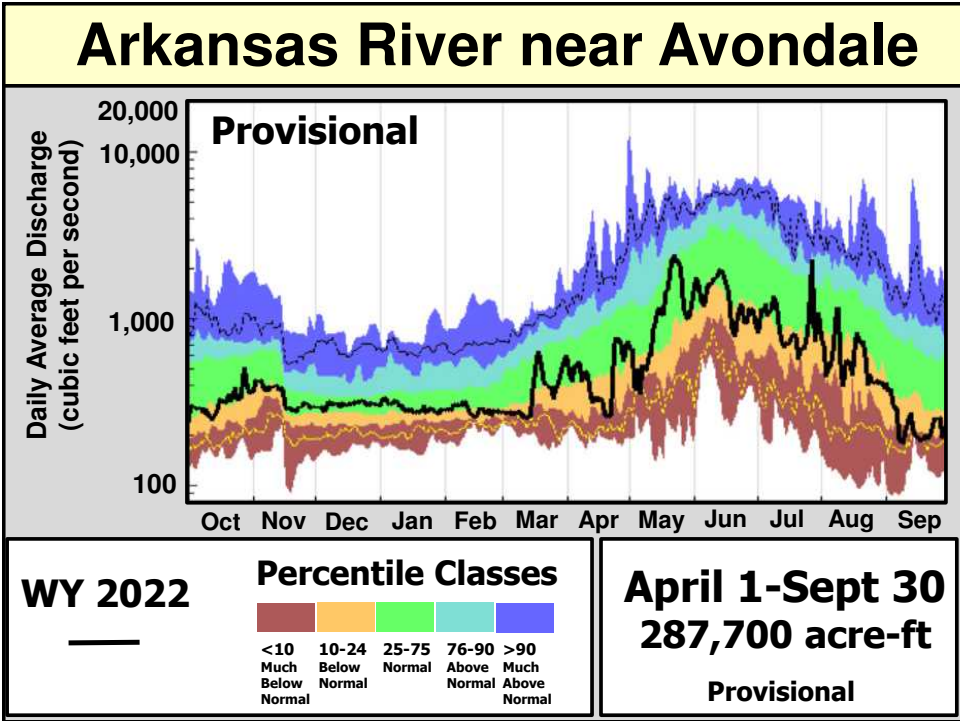
- Mainstem Arkansas Sites (5)
- Tributary Sites (3)
- Frontier Ditch
- Potential Discontinued Site:
Big Sandy nr Lamar
- Potential Reestablished Site:
Arkansas River at Holly



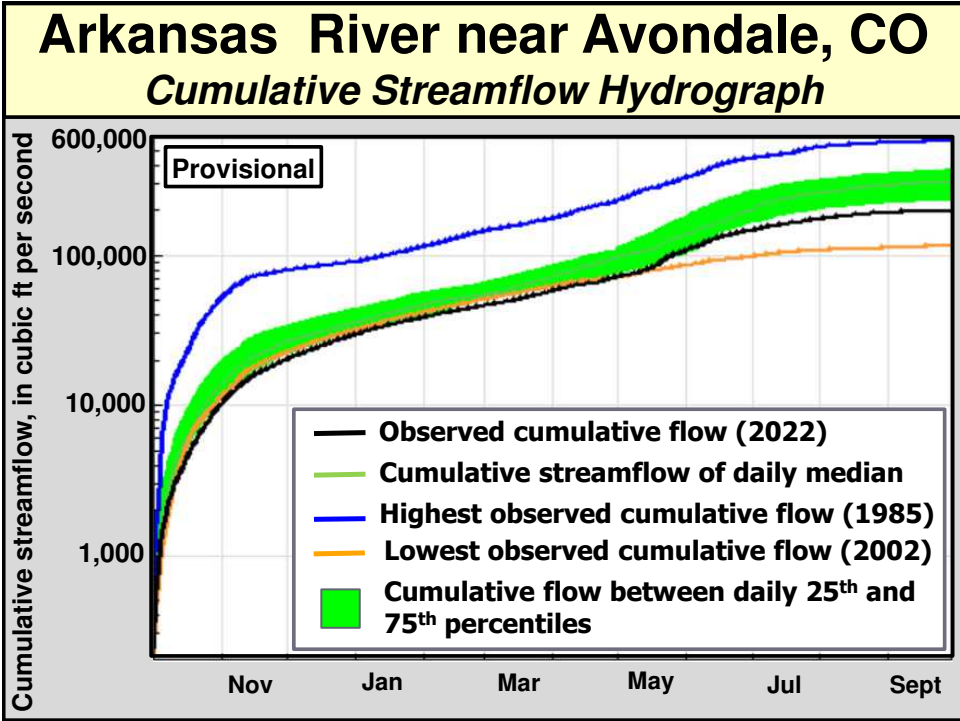
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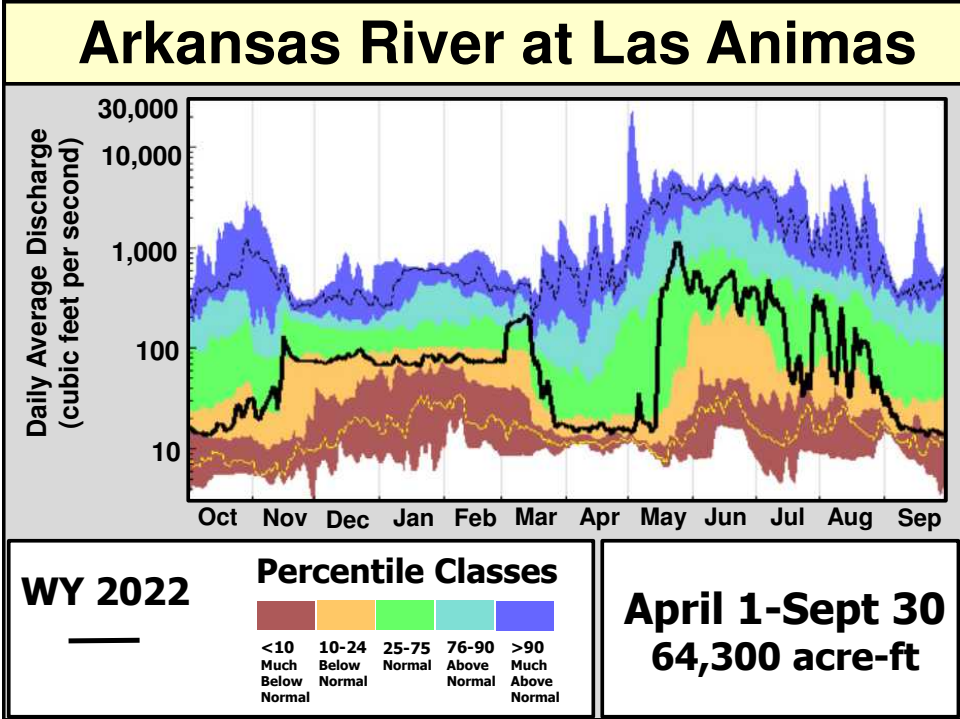
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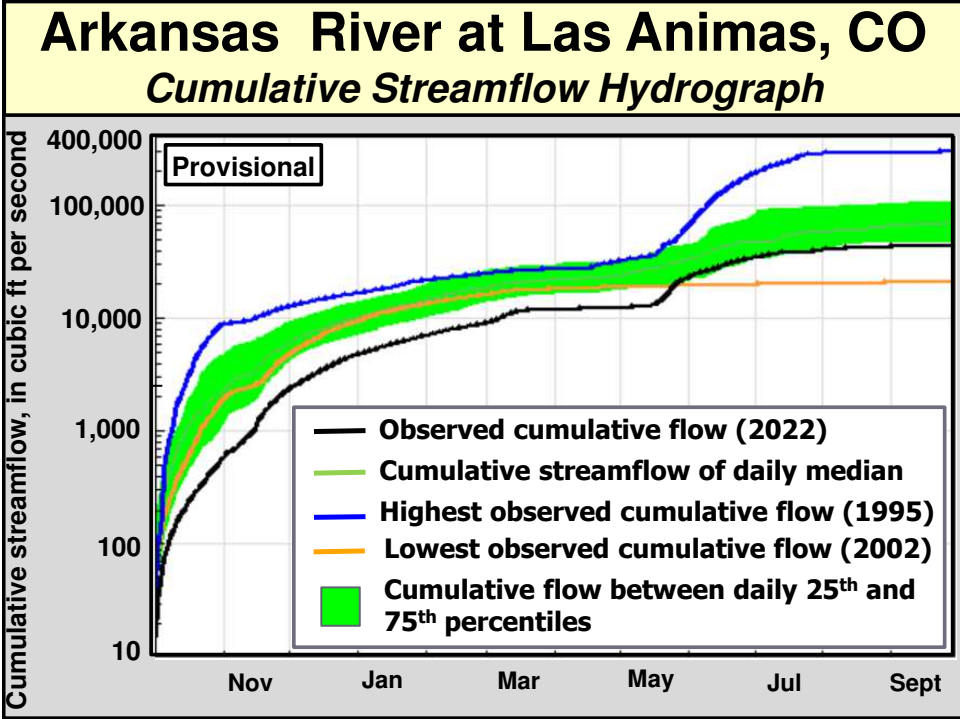
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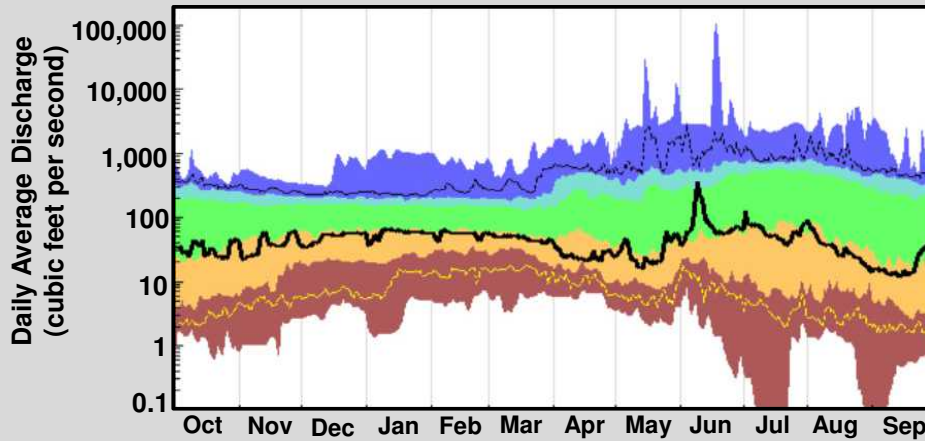


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Arkansas River nr Coolidge, KS



WY 2022

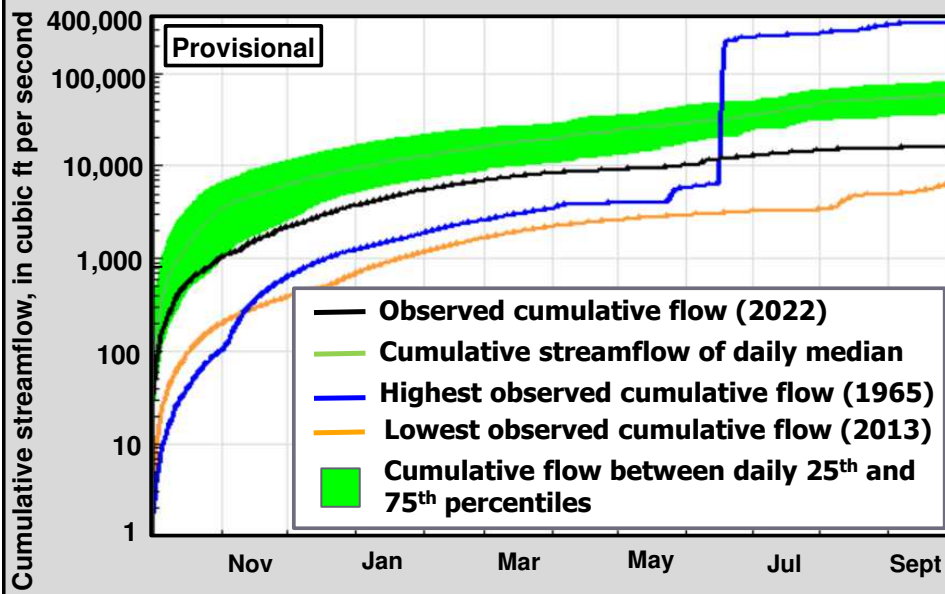
Percentile Classes

<10	10-24	25-75	76-90	>90
Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal

April 1-Sept 30
16,100 acre-ft

Arkansas River nr Coolidge, KS

Cumulative Streamflow Hydrograph



How Streamflow is Monitored

Gage Height or Stage

Measure the height of the water surface above an established altitude

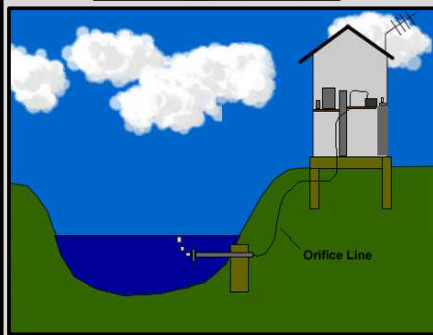


Survey stage reference elevations near a streamgage location

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How Streamflow is Monitored

Non-submersible Pressure Transducers



Non-contact Radar Sensors



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How Streamflow is Monitored



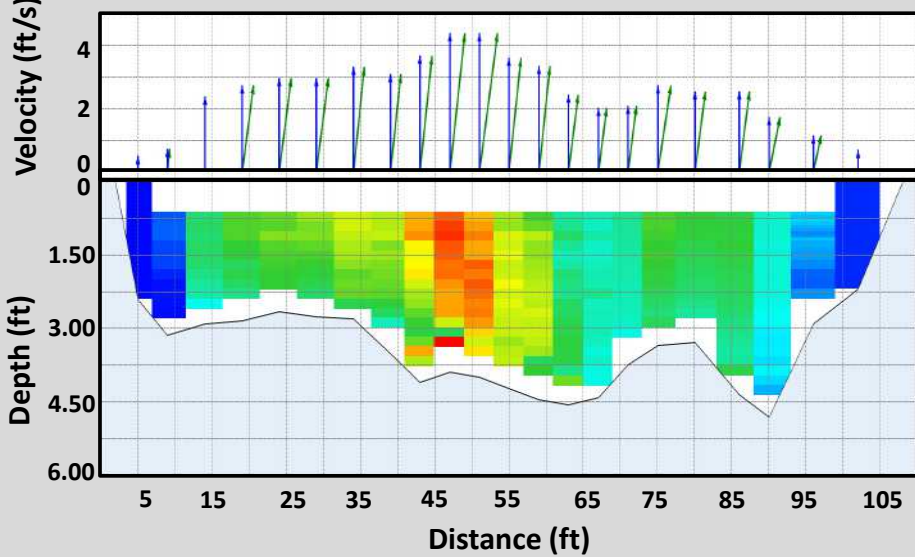
$$\text{Discharge} = \text{Velocity} \times \text{Area}$$



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How Streamflow is Monitored

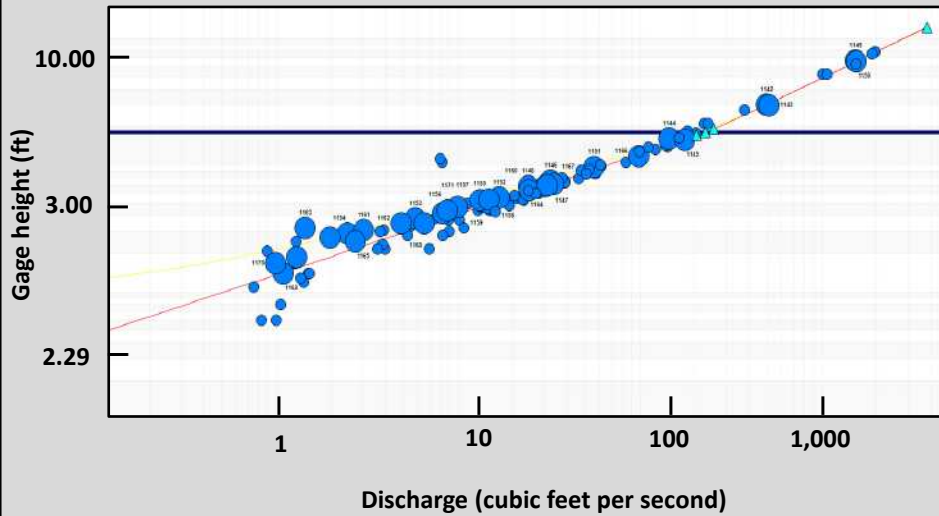
$$\text{Discharge} = \text{Velocity} \times \text{Area}$$



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How Streamflow is Monitored

Purgatoire River near Las Animas, CO



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Big Sandy Creek near Lamar, CO

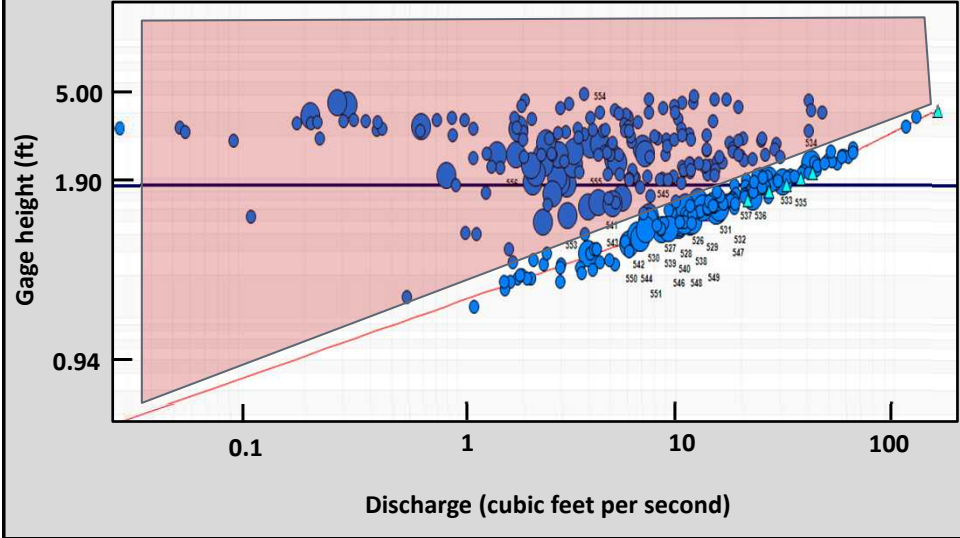


May 20, 2022

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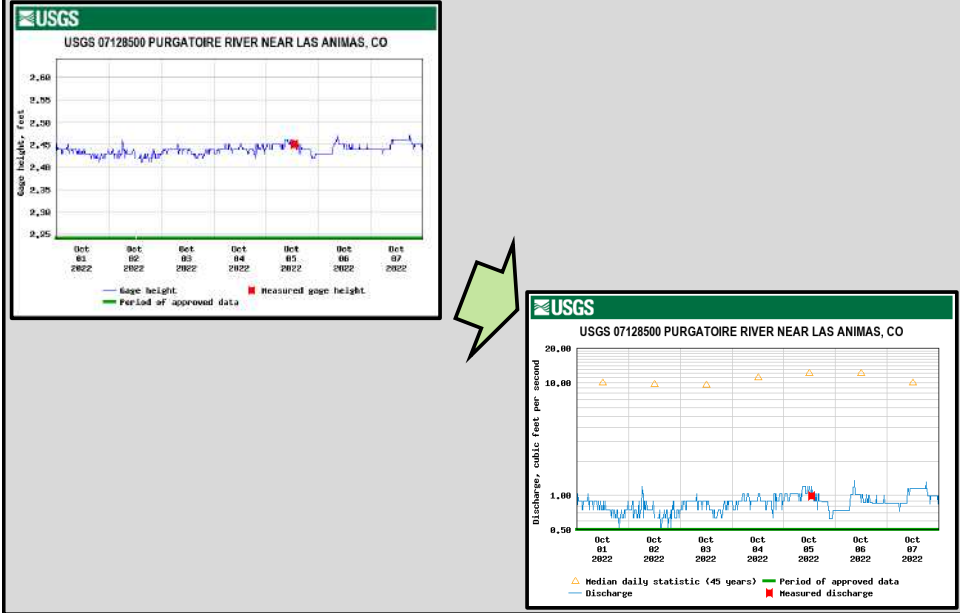
How Streamflow is Monitored

Big Sandy Creek near Lamar, CO



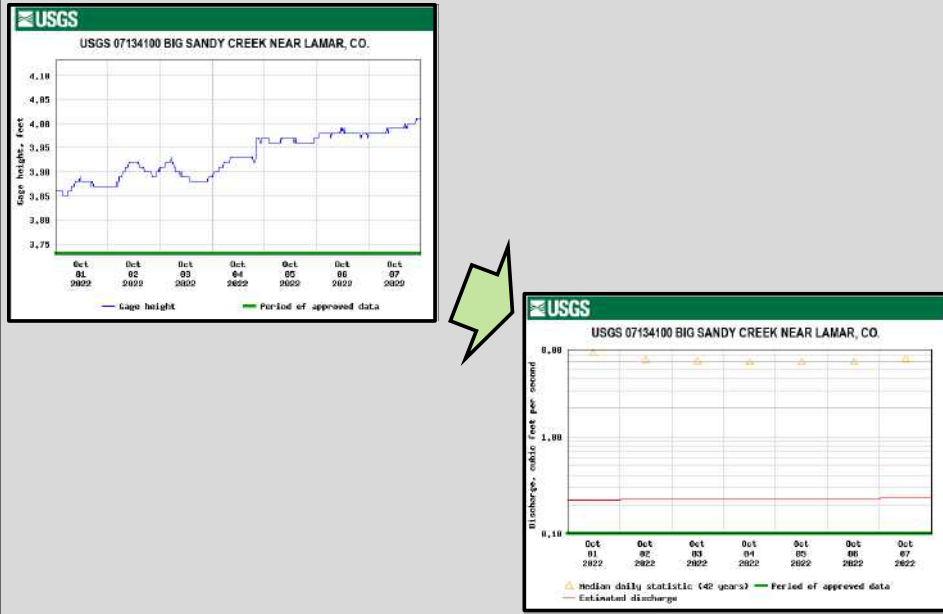
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How Streamflow is Monitored



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How Streamflow is Monitored



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Arkansas River at Holly



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Arkansas River nr Las Animas

High Flow Site Conditions



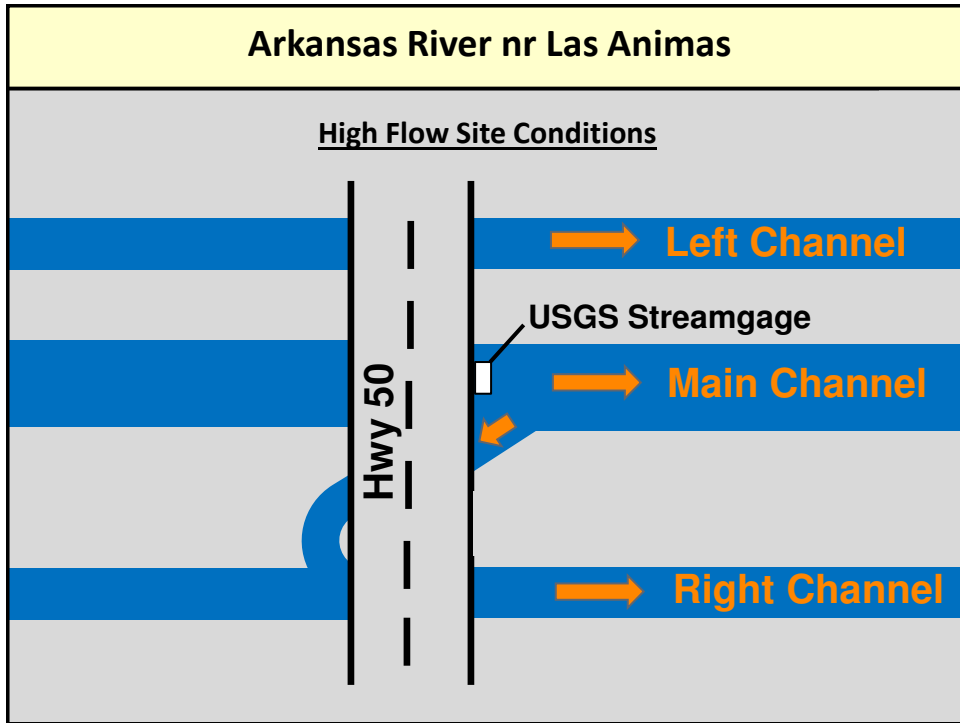
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Arkansas River nr Las Animas

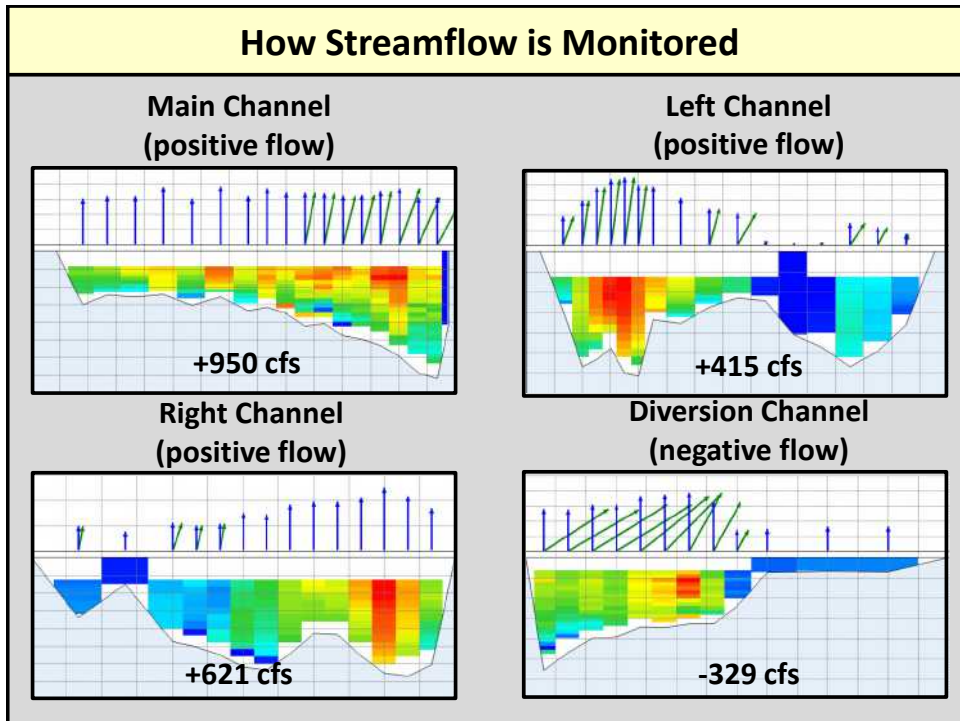
High Flow Site Conditions



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