

“HUP CALL” (COLO. RIVER MAINSTEM OPERATIONS CALL)

NOVEMBER 2, 2018



What's in a Name?

- **“HUP” – Historic Users Pool**
 - ✓ **66,000 acre-feet pool within Green Mountain Reservoir (Capacity 154,000 acre-feet)**
 - ✓ **HUP created pursuant to 1983 USBR Operating Policy**
 - ✓ **Colorado River administration changed in mid-1990's**

History

- **Settlement of Water Court Case in 1996 required:**
 - ✓ **Annual meeting to finalize an AOP for the HUP (Prior to June 30)**
 - ✓ **Other meetings as requested by the “Managing Entities” to revise HUP Operations**
 - ✓ **The annual meeting was open to the public**
 - ✓ **In-person meeting**

Participants

Original 7 (“Managing Entities”)

- 1) **Grand Valley Water Users Association**
- 2) **Orchard Mesa Irrigation District**
- 3) **Grand Valley Irrigation Company**
- 4) **USBR**
- 5) **CWCB**
- 6) **US Fish & Wildlife Service**
- 7) **DWR**

Morphing of a Meeting

- **Once a year, In-Person, AOP centered, small group**

Morphing of a Meeting

- **Annual In-person, Facilities Operations, Managing Entities + Reservoir Ops**
 - **Once a year, In-Person, HUP AOP centered, small group**

Morphing of a Meeting

- **Annual In-person, 2-3 phone calls July-Oct, Added Call changes**
- **Annual In-person, Facilities Operations, Managing Entities + Reservoir Ops**
 - **Once a year, In-Person, HUP AOP centered, small group**

Morphing of a Meeting

- **Kickoff/Wrap-up, CROS (May-June), Weekly, Major Water Users**
 - **Annual In-person, 2-3 phone calls July-Oct, Added Call changes**
 - **Annual In-person, Facilities Operations, Managing Entities + Reservoir Ops**
 - **Once a year, In-Person, HUP AOP centered, small group**

Morphing of a Meeting

- **What it is today.....**
- **Kickoff, Wrap-up, CROS (May-June), Major Water Users**
- **Annual In-person, 2-3 phone calls July-Oct, Added Call changes**
- **Annual In-person, Facilities Operations, Managing Entities + Reservoir Ops**
 - **Once a year, In-Person, HUP AOP centered, small group**

Currently

- ✓ **2 In-person Meetings (Kickoff/Wrap-Up)**
- ✓ **Weekly Conference Call (March – October)**
- ✓ **Additional Conference Calls when needed**
- ✓ **100 + on notification list**
- ✓ **30 – 50 Individuals on average**
- ✓ **~ 45 minute meeting**

Currently

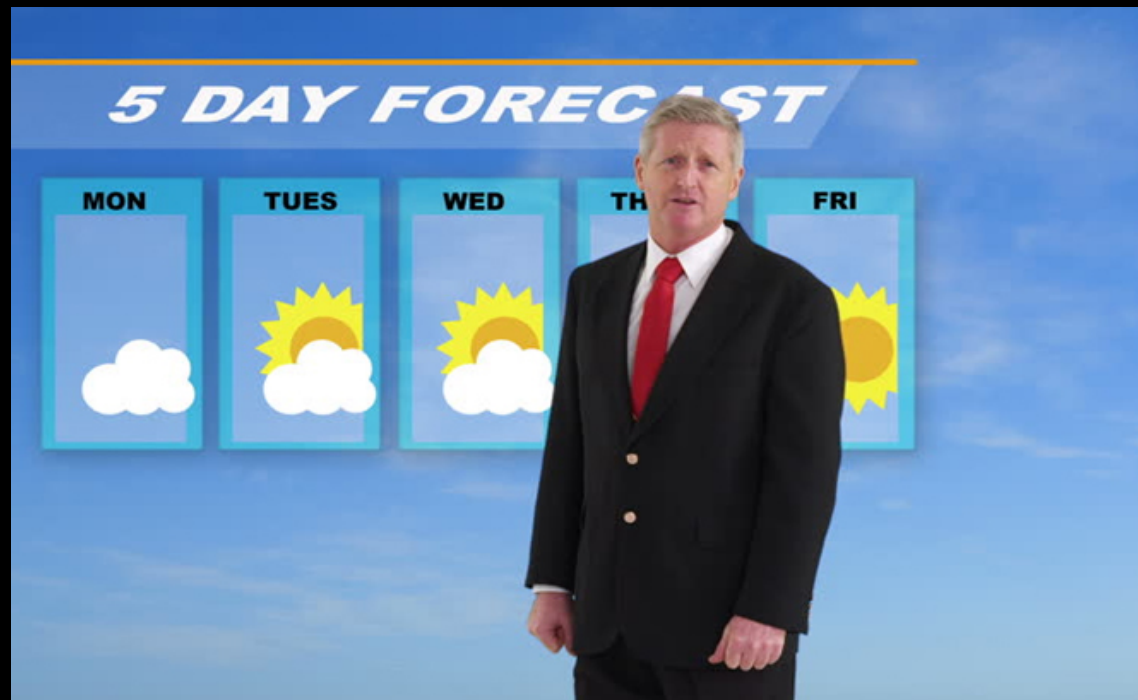
✓ Participants

- 1) **Ag Water Users (Ditch Companies, Water Users Associations)**
- 2) **Municipal Water Users (Cities, Towns, Districts)**
- 3) **Industrial Water Users (Power, Oil & Gas)**
- 4) **Reservoir Operators (Federal, Muni, Augmentation)**
- 5) **Federal Entities (USBR, NWS, NOAA, FWS, WAPA)**
- 6) **Local Government (Counties, Cities, Districts)**
- 7) **State of Colorado (DWR, CWCB, CPW)**
- 8) **Conservation Groups (Watershed, In-stream flow)**
- 9) **Recreational Users (Fishing, Boating)**

Pre-Meeting Information

Meeting Information

- ✓ **Weather Forecast – National Weather Service**



Meeting Information

- ✓ **Weather Forecast – National Weather Service**
- ✓ **River Flow Forecast – Colorado Basin River Forecast Center (NOAA)**

River Basin Forecast Center

□ Forecast Summary:

Rivers responding from 0.25” – 0.75” of precipitation over the last 24 hours. More showers and storms moving through the area today. Temperatures will remain cooler due to clouds and precipitation. For Thursday, an upper level trough will move overhead and should give another round of showers and storms, though coverage and intensity look to be a bit less. Conditions will dry out Thursday night onwards, although isolated orographic showers and thunderstorms are possible during the afternoon hours. Temperatures will continue their gradual climb back closer to seasonal normals during the latter part of the week into early next week. 5-day QPF amounts range from 0.25” to 0.75” and will result in additional river responses today and tomorrow.

River Basin Forecast Center

Forecast Model Colorado River and Tributary Flows (10-day outlook)

	Current (cfs)	Forecast (cfs)	Comments
Fraser - Granby FRGC2	60	40	
Col - Kremmling KRMC2	1450	1440	
Eagle - Gypsum GPSC2	125	105	175 cfs peak tonight
Col - Dotsero EGLC2	1920	1720	
Roaring Fk - Glen GWSC2	450	440	490 cfs peak tonight
Col - blo Glenwd GCOC2	2580	2220	2600 cfs peak later today
Col - Cameo CAMC2	2260	2200	
Plateau Creek PCCC2	30	26	60 cfs peak tonight
Col - Palisade CGYC2	950	615	1000 cfs peak tonight

Meeting Information

- ✓ **Weather Forecast – National Weather Service**
- ✓ **River Flow Forecast – Colorado Basin River Forecast Center (NOAA)**
- ✓ **Data Sheet – Division of Water Resources**

DWR Data Sheet

□ Gage Data/Natural Flow Calc/Calls

Colorado nr Granby (Y-Gage)	82	
Colorado @ WG nr Granby	126	
Colorado @ Hot Sulphur	122	
Colorado nr Kremmling	1140	
Colorado River @ Catamount	1180	
Eagle River below Gypsum	102	
Colorado River nr Dotsero	1450	$\text{Natural Flow} = 1450 - (25+40+15)(0.95) - 108(0.95) - (461+20)(0.95) = 814 \text{ cfs}$
Roaring Fork @ Glenwood		Gage Down
Colorado River blw Glenwood	1980	
Colorado River nr Cameo	1760	$\text{Natural Flow} = 1760 - (25+40+15)(0.90) - (152)(0.925) - (461+20)(0.90) = 1115 \text{ cfs}$
Plateau Creek nr Cameo	22	
Colorado River nr Palisade	360	
River Call Status	Shoshone Sr. 20427.18999 Grand Valley Project 22729.21241	

DWR Data Sheet

Reservoir Data

Reservoirs	Decreed Capacity (acft)	Inflow (cfs)	Remaining or Total Content (acft)	Total Outflow (cfs)	Remarks
Granby Res.	543,758	75	475,322	90	Adams Tunnel = 443 cfs
5,412 E. Slope pool	5,412		1,971	40	15 cfs coming from Williams Fork
Grand County IGA	1,000		385	20	Direct Delivery to GVIC
Williams Fork Res.	93,637	6	84,104	115	Moffatt Tunnel = 42 cfs, 28 from Meadow Cr.
Upper Blue Res.	2,140		1,679		Con-Hoosier Tunnel = 0 cfs
Dillon Res.	252,678	78	221,360	55	Roberts Tunnel = 250 cfs
Green Mtn. Res.	154,645	124	87,478	825	Direct Del. GVIC/GVP = 111/350 = 461 cfs
HUP	66,000		14,581	612	HUP Repl. = 43+108 = 151 cfs
Contract/Silt	20,000		13,046	7	
Silt	5,000		3,089	20	
C-BT	52,000		44,979	75	
Wolford Res.	65,993	15	39,470	45	Contract Release = 4 cfs Wetlands = 0 cfs
West Slope Fish	6,000		1,826	25	
DWB Pool	24,000		24,000	0	
Ruedi Res.	102,369	42	77,750	223	+2 from Rocky Fork = 225 Total
Contracts				17	
5k Firm	5,000		0	0	Boustead Tunnel = 0 cfs
5,412 W. slope pool	5,412		5,412	0	
5k (4/5 Years)	5,000		0	0	
Ute WCD	6,000		2,979	152	
2K Granby insurance	2,000			0	

DWR Data Sheet

Major River Diversions

Entity / Facility	Decreed Capacity	Flow	Remarks:
GVIC	520/119 cfs	640	Fish Passage – Off Fish Screen – Not Operational
Govt. High Line Canal	1 620 cfs	1430	Fish Passage – Off Fish Screen – Operational
Palisade Pipeline		0	
OMID Power Canal	860 cfs	750	
to Irrigation	160 +10 cfs	149	
Returns from Irr. pumping	290 cfs	221	Total Returns = 601 cfs
Returns from Power Plant	400/800 cfs	380	
Amt. Checked	640 cfs	250	
15 MR Target		810	
Mass Balance			Pal + GVIC – OMID Returns – Pal PL + Highline – Plateau vs. Cameo $360 + 640 - 601 - 0 + 1430 - 22 = 1807$ vs. 1760 diff = (2.6%)

Meeting Information

- ✓ **Weather Forecast – National Weather Service**
- ✓ **River Flow Forecast – Colorado Basin River Forecast Center (NOAA)**
- ✓ **Data Sheet – Division of Water Resources**
- ✓ **Other – Reservoir Drawdown Curves, Operational Criteria, etc.**

What's Accomplished?

- ✓ **The Good**
- ✓ **The Challenges**
- ✓ **The Opportunities....**

The Good ...



Communication

- ✓ **Weather**
- ✓ **Gate Changes**
- ✓ **Call Changes**
- ✓ **Maintenance**

The Good ...



Communication



Coordination

- ✓ **Exchanges**
- ✓ **Substitutions**
- ✓ **Trades**
- ✓ **Flow Targets**
- ✓ **Call Reductions**

The Good ...



Communication



Coordination



Cooperation

- ✓ **Managing HUP**
- ✓ **Maintenance Operations**
- ✓ **Flooding**
- ✓ **RIPRAP**
- ✓ **CROS**
- ✓ **Gore Canyon Festival**

The Challenges ...



Communication

- ✓ **We all have our flaws**
- ✓ **Old habits die slow**
- ✓ **Talking Over/Around**

The Challenges ...



Communication



Coordination

- ✓ Dealing with people
- ✓ We're dealing with a Natural Channel
- ✓ Consensus
- ✓ Time

The Opportunities ...



Communication

- ✓ Always room for improvement

The Opportunities ...



Communication



Coordination

- ✓ Limited resource
- ✓ Greater demands

The Opportunities ...



Communication



Coordination



Cooperation

- ✓ **New Programs/Processes**
- ✓ **LBD**
- ✓ **W & S**

“HUP Call”

**From 7 entities discussing part of one reservoir once/year
... 100+ discussing anything and everything related (or not
related) to a river.**

