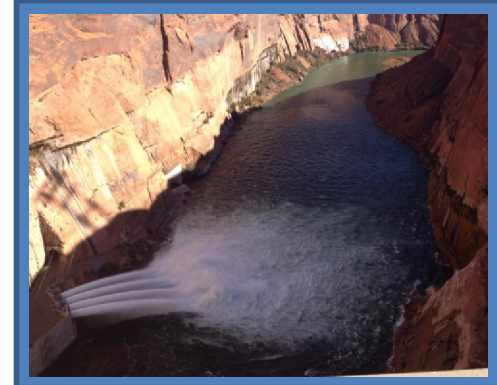


Talking Points 2013 HFE



GENERAL:

- HFE 2012 and HFE 2013 marks the first time the releases have been done in back-to-back years since the USBR began conducting high-flow releases in 1996.
- 2ND HFE in the Ten Year Protocol (Will continue through 2020)
- Goal to replenish downstream sandbars and beaches in the Grand Canyon
- Original HFE announcement was changed because of maintenance issues with a power unit. (Only 6 of 8 avail)
- Bypass tubes opened on Monday, and will close Saturday morning



SEDIMENT:

- USGS/GCMRC estimates 1.5 metric tons are in the main stem and that's three times more than last year
- The sediment amount is equivalent to filling a football field-sized hole that is 690 feet deep or about 70 Stories tall (Anne Castle)
- When complete, there will still be more sediment in the system at the end of the 2013 HFE than there was at the beginning of the 2012 HFE. [Could be foreshadow for 2014]
- HFE's are triggered by decisions associated with sediment inputs into the system. (Paria River)
- -- Water being released in HFE is enough to fill an Olympic -sized swimming pool every 2 minutes. [AZNews Reporting]

WATER:

- Lake Powell's lake level will have dropped by 2.8 feet at the end of HFE
- Water deliveries from Lake Powell to Lake Mead downstream will not effect the total volume.
- Water will be made up with corrections in March and May monthly deliveries

HYDROPOWER:

- Revenues, associated with power that won't be generated, will be reduced. That loss cannot be calculated for several months, but HFE 2012 cost \$1.2 million in lost power.

STATS:

- Release Amount: ~**34,100** cfs
- 2012 release: 42,000 cfs
- Total HFE duration is 5 days, 3 hrs
- Time on peak (96 hrs)

- **Units available: 6** (instead of 7)
- **Powerplant capacity = ~19,100 cfs** (instead of 22,200 cfs)
- **November volume = 670 kaf**
- **Previous HFE's:** 96, 04, 08, 12
- Bypass volume = (130 kaf)

