

HFE Sediment Modeling

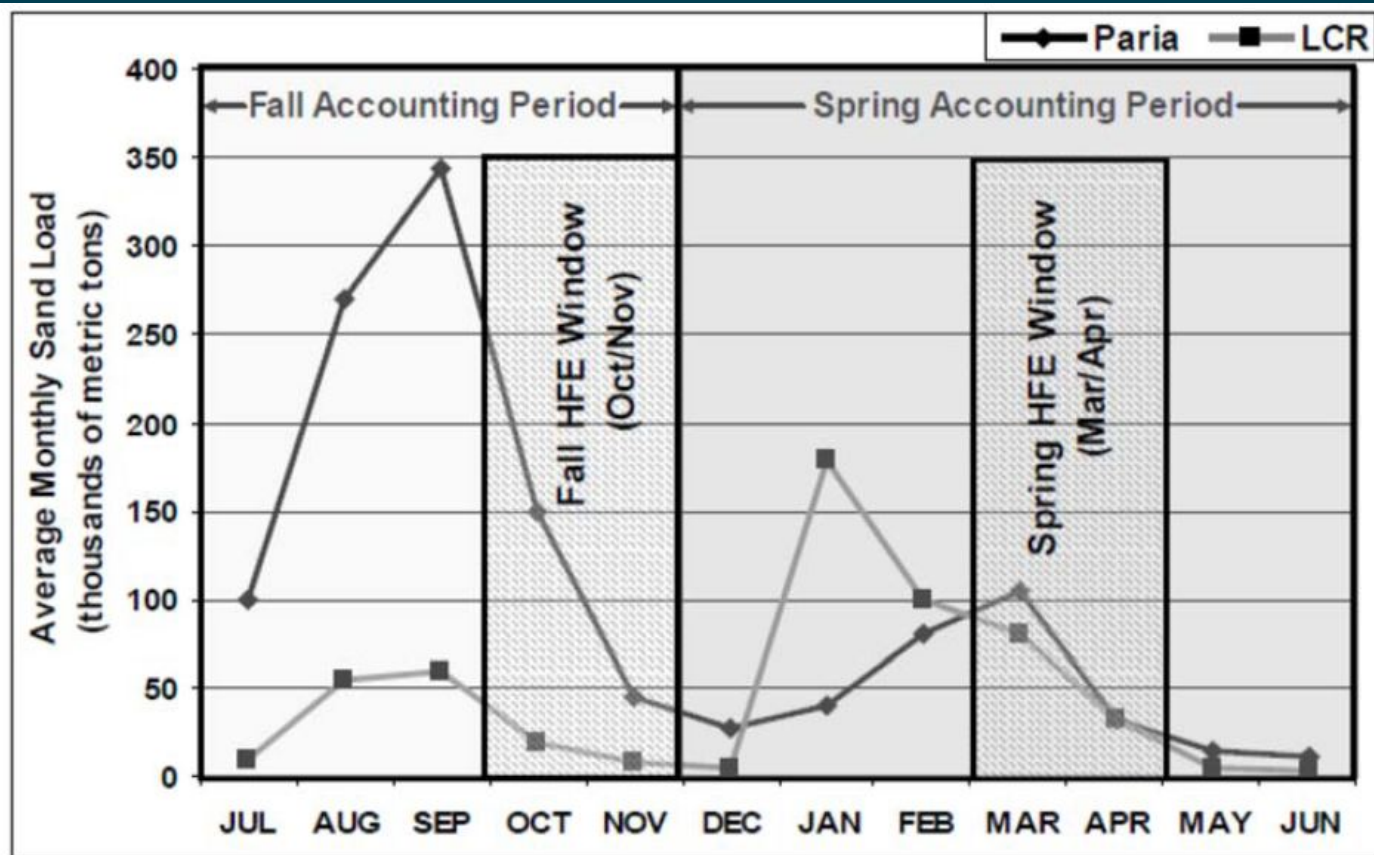


FIGURE 1 Average Monthly Sand Load from the Paria River and Little Colorado River Showing the Fall and Spring HFE Accounting Periods and Implementation Windows



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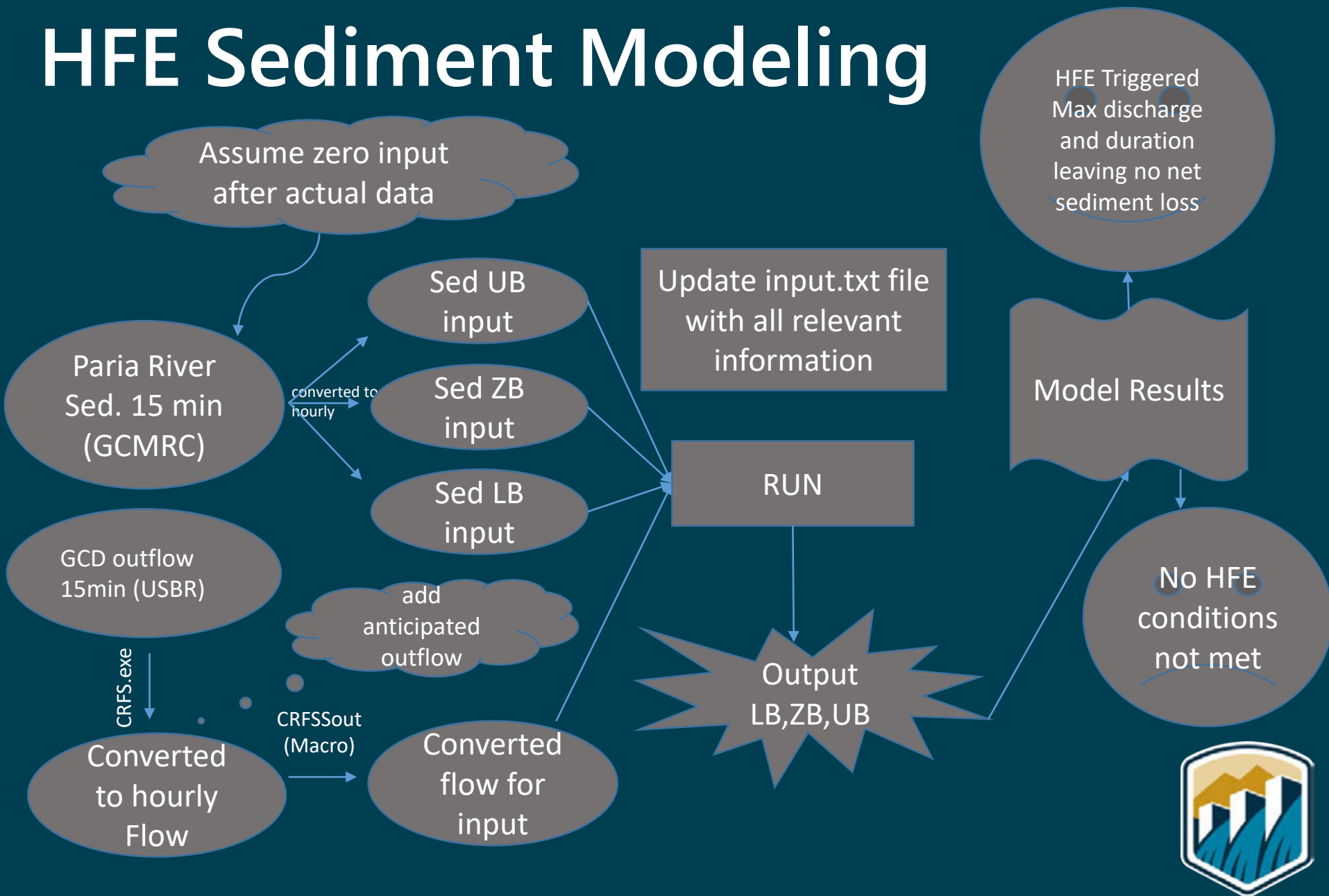
1st step: Determine maximum outflow and the ideal date for initiating an HFE. Max outflow is the facility capacity on the anticipated HFE date, including forecasted maintenance and what units are available. Guidance available in LTEMP_ROD Attachment C.

2nd step: Develop HFE discharge curves for the max possible outflow. usually 9-16 HFE files (csv). Example: 31900_1h, 31900_12hr, 31900_24hr, etc. Duration dictated by sediment load. Max discharge with ramp up and ramp down rates provided in LTEMP_ROD Attachment C.

3rd step: follow flow chart, next slide.



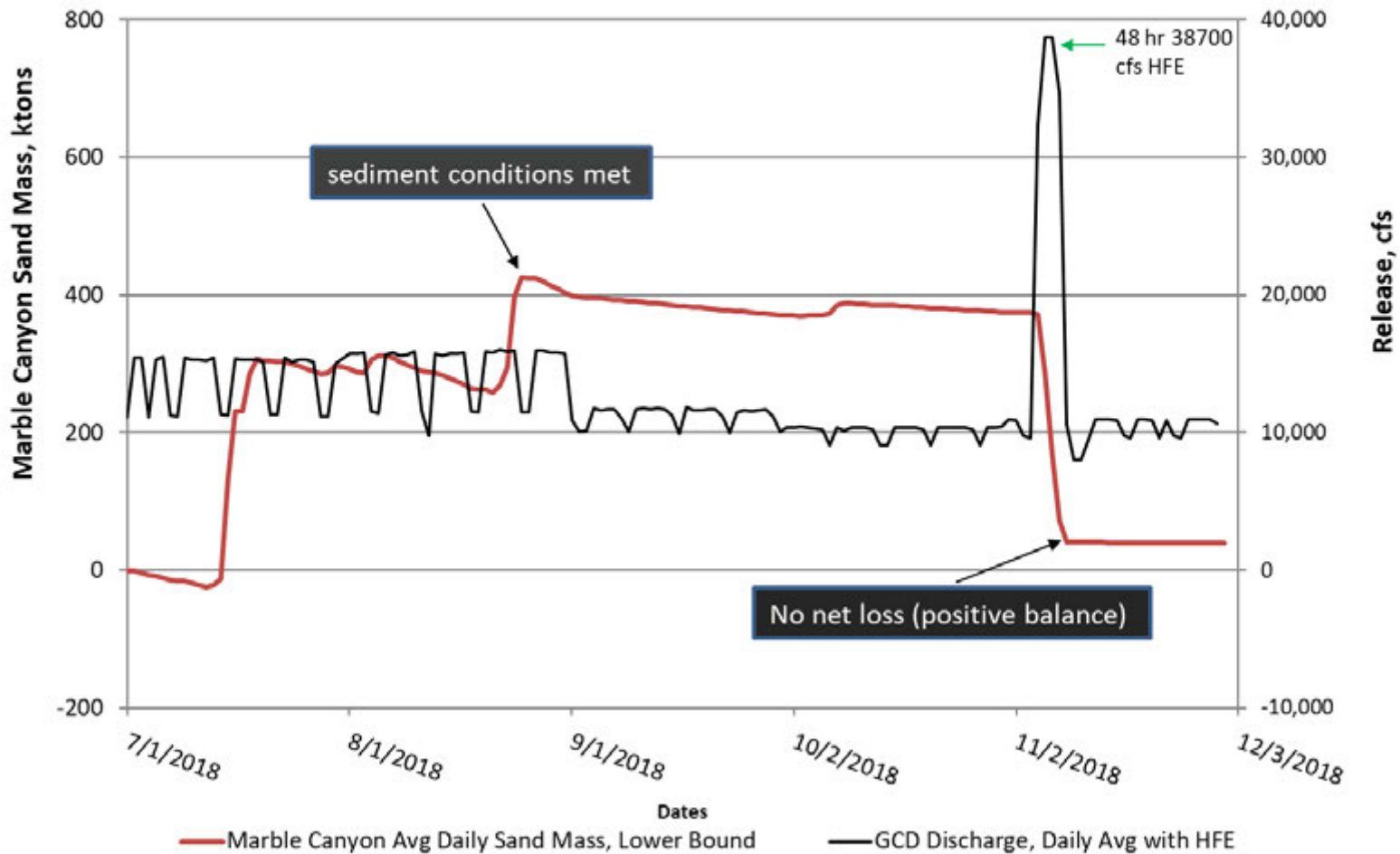
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Actual flow as of 10/04/2018 23:00
Actual Sediment data as of 10/09/2018 4:00
Graph updated 10/09/2018 7:56
GCMRC's most recent Lab Results of Suspended
Sediment as of 8/25/2018

Sand Budget Model Results, Jul 2018-Nov 30 2018 Release and Calculated Sediment Load in Colorado River

The model indicates that there is currently sufficient sediment to support an 48hr 38700cfs HFE. The data from the model will be compared to actual measured sediment for further decisions



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Actual Flow as of 3/26/2020 23:00
Actual Sediment data as of 3/27/2020 04:00
Graph Updated 3/27/2020 13:00
GCMRC's most recent Lab Results of
Suspended Sediment as of 11/21/2019

Sand Budget Model Results, Dec 2019-June 30, 2020 Release and Calculated Sediment Load in Colorado River, Marble Canyon

The model indicates that currently there is not sufficient sediment to support and HFE.



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