

2019 Gravel Augmentation Recommendations

- Developed by Physical Workgroup
- Reviewed by IDT

Gravel Augmentation Objectives (TRFES and ROD)

“Annual Coarse Sediment Introduction” –

- Maintain a coarse sediment balance

- Support geomorphic processes into the future

- Rejuvenate/Create Habitat into the future

Basis of Recommendations

1: How Much - Target Gravel Transport Capacity:

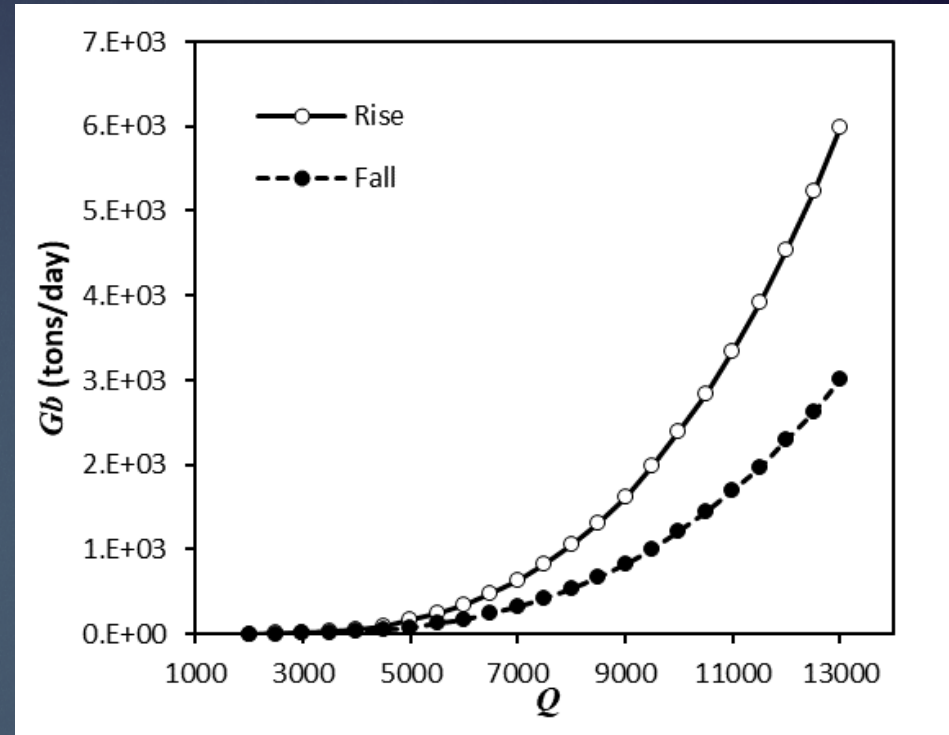
- Total gravel transport capacity that would be expected given the release hydrograph under *natural* gravel supply conditions

2: Where - Site Capacity:

- The available capacity at augmentation sites
- Geomorphic & habitat benefits

Capacity Estimate

- Based on Observed Transport Rates at Douglas City
- Location with Natural Supply from Indian Creek and Weaver Creek

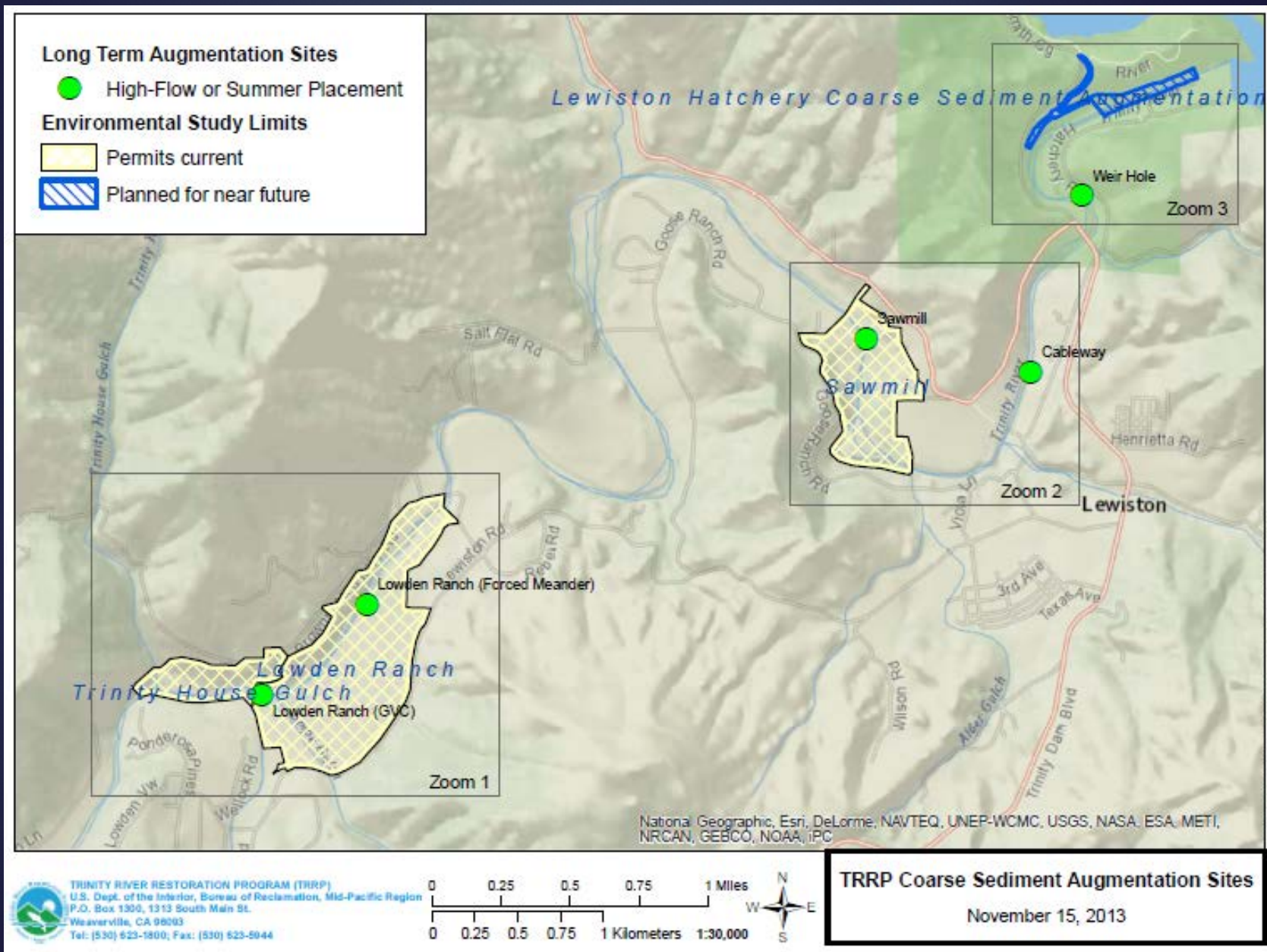


Capacity Estimate – How Much?

Table 2: Estimated gravel load transported upstream from Indian Creek by each of the 6 potential 2019 hydrographs analyzed.

	Normal OffCHInundations	Wet OffCHInundations	Normal ROD	Wet ROD
Hourly	2,185 yd ³	3,000 yd ³		
Daily Average	2,500 yd ³	3,500 yd ³	1,750 yd ³	5,150 yd ³

Permitted Locations



Augmentation Recommendations for OffCHInundation Hydrographs (in Cubic Yards):

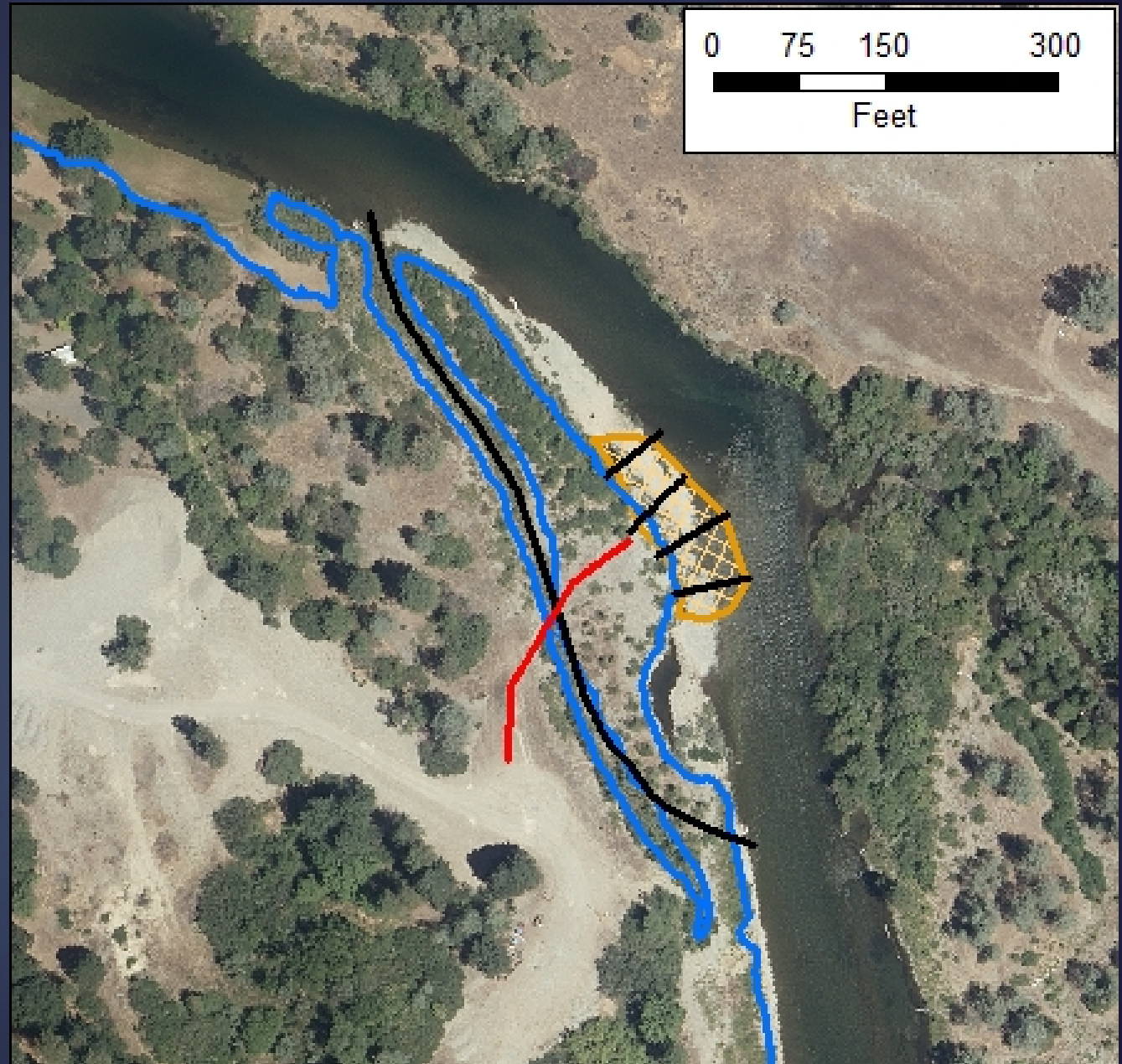
WY Type:	Normal		Wet	
Site:	Sawmill	Lowden	Sawmill	Lowden
Date and Time				
Sun., April 14*	1000	400	600	600
Sat., April 27, 9:00			1000	800
Mon., April 29, 9:00	500	600		
Fri., May 17, 9:00			500	
Site Total:	1500	1000	2100	1400
WY2019 Total:	2500		3500	

Diversion Pool (Weir Hole):

- No 2019 Augmentation



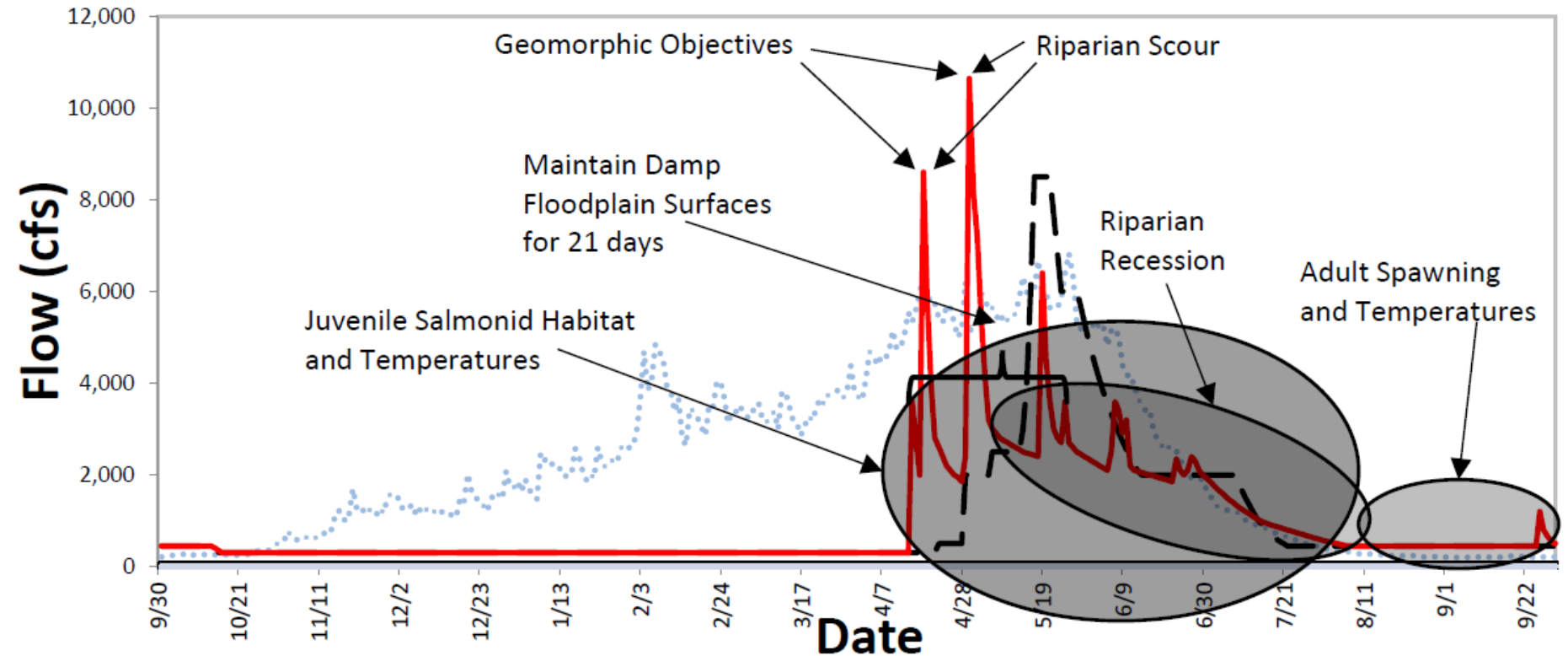
Sawmill



Lowden Ranch



Schedule



Logistics



Questions

WY Type:	Normal		Wet	
Site:	Sawmill	Lowden	Sawmill	Lowden
Date and Time				
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