



Sediment Monitoring Update

7/17/14

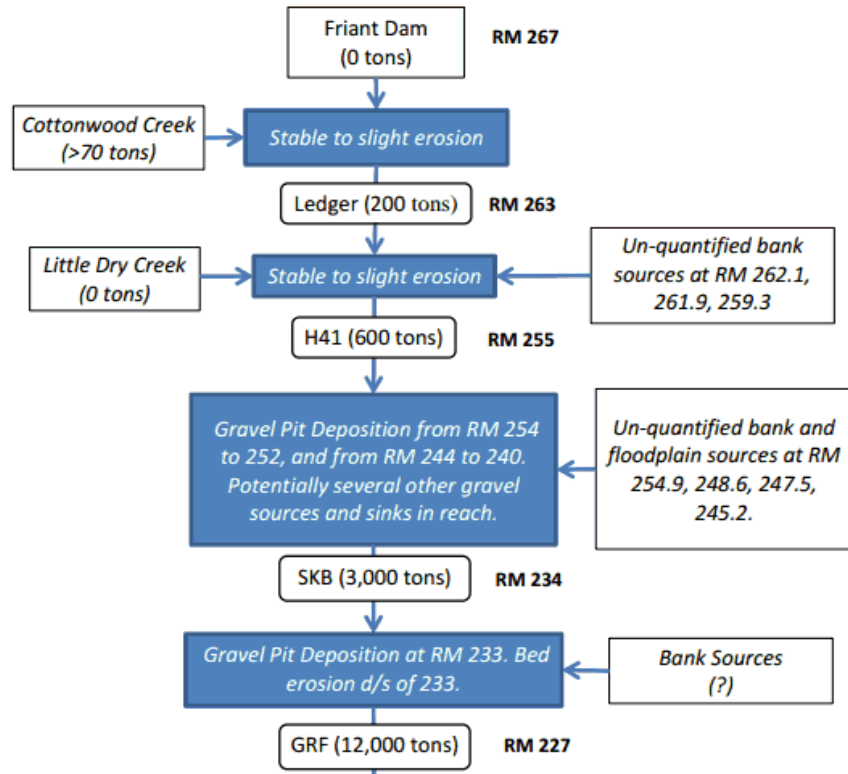


Outline

- Sediment Budget
- 2014 monitoring
- Monitoring strategy

Sediment Budget

- Summarize sediment transport data
- Conceptual sediment transport framework
- Identify data gaps





WY2010-12 Observations

- WY2011 had substantially higher transport in all size classes compared to WY2010 & WY2012
- Nearly all gravel transport was <32mm
- Gravel transport was episodic
- Gravel transport in pools unlikely below 8,000 cfs
- Cottonwood and Little Dry may contribute sand, but gravel pits interrupt transport
- Significant sand erosion between Gravelly Ford and Skaggs Bridge, transported into Reach 2A



2014 Sediment Monitoring

- No monitoring due to no Restoration Flows
- Remote sensing:
 - Topographic LiDAR
 - Bathymetric LiDAR
 - Aerial imagery



Monitoring Strategy

- **Baseline: transects for suspended, bedload, bed material.**
 - Continue to inform sediment budget
 - Mobilize only during flood flows
 - Prioritize Reach 2A-2B



Monitoring Strategy (continued)

- Tributary sand sources
 - Keep waiting for tributary storm flows
 - Some automated equipment
- Invest in continuous measurement in gravel reaches
- Update remote sensing periodically



Questions
