



Flow Management Science

and FY20 Surplus Funding Priorities

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19 June 2019

Previous motions

- **December 2018:** [TMC unanimously passed] a motion for the TMC to accept and allow the IDT to identify data gaps and solicit proposals to answer outstanding flow management questions. Such proposals would be solicited, reviewed, and shelved to be ready for implementation upon availability of funding.
- **April 2019:** [Regarding FY20 funds, TMC passed a motion that] Any savings received from not funding TRH tasks or other funds that become available be redistributed following prioritization assessment by IDT and recommended to TMC of
 - Additional effectiveness monitoring
 - Watershed restoration with the goal of up to \$500K
 - Funding for SAB
 - And we move \$100,000 from geophysical support services monitoring to channel rehabilitation effectiveness monitoring

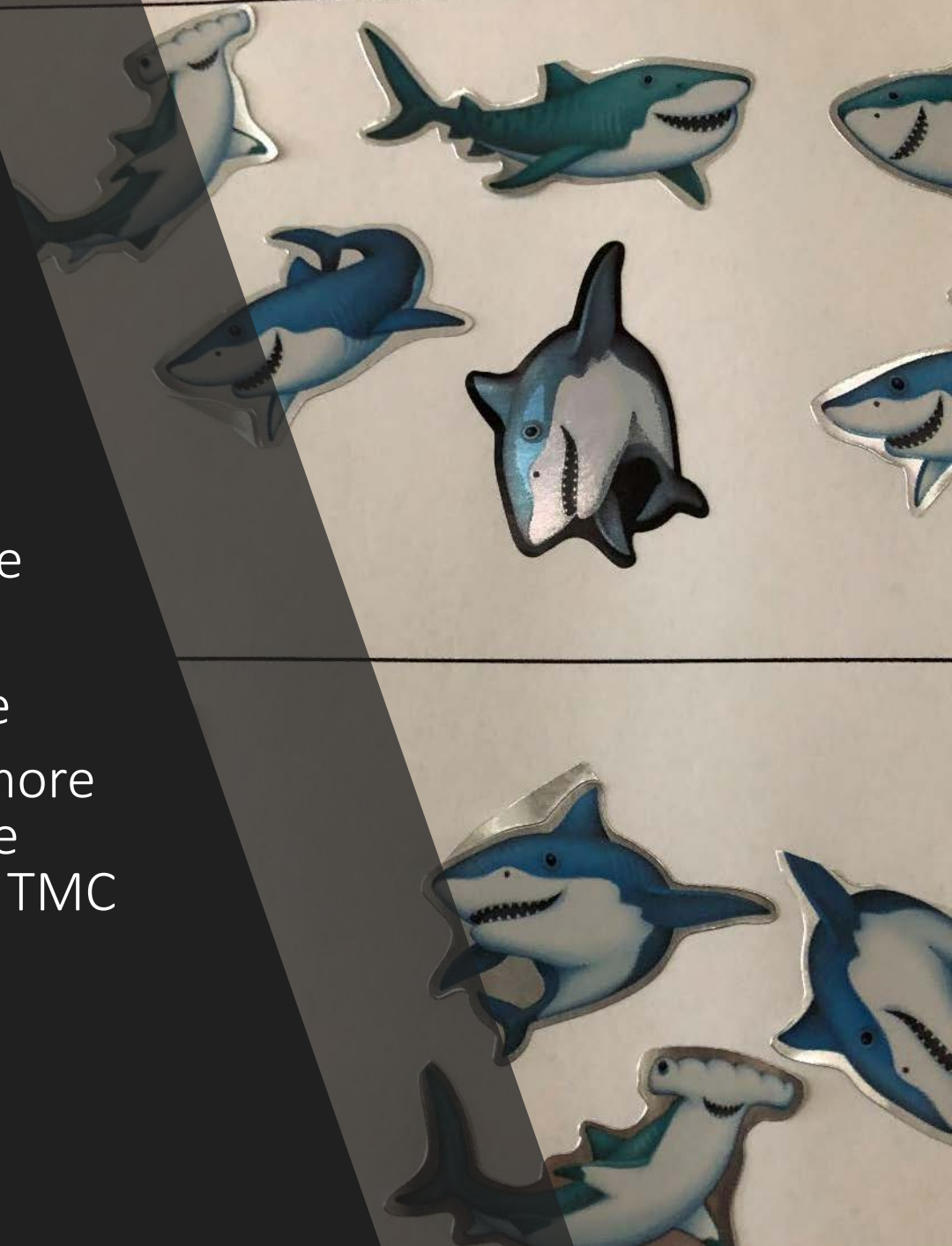
IDT Meeting 11 June 2019

Process:

- Work groups developed science questions and ideas over last several months
- Consolidated and edited by Som and Dixon
- Discussion at the IDT meeting led by individuals who proposed ideas
- Three-stage voting

Voting

- Each agency got five stickers to rank science priorities
- Discussion of outcome
- Each agency got five more stickers to rank science priorities against April TMC funding request



Flow management science priorities

1. Can variation in timing of juvenile outmigration from the Trinity explain variation in survival and be influenced by water management?
2. Can flow management tailored to meet temperature targets be an effective tool to reduce pre-spawn mortality and induce pool temperature stratification for adult salmon holding habitat? * *tied with #1*
3. How do flow and flood event timing and duration affect drift food availability and growth of juvenile salmonids?
4. Development of hydrophone monitoring method for monitoring sediment transport on the Trinity River at Lewiston, Limekiln Gulch, and Douglas City
5. Evaluate how the connectivity timing, controlled by flow management, of intermittently connected off-channel habitats impact fish use and survival
6. Apply the S3 model in conjunction with observed fish size data to evaluate assumptions regarding percent maximum consumption and food as a limiting factor for chinook salmon juveniles
7. Evaluate the effects of flow event magnitude, duration, and recession on scour (bed, bar, redds), bank collapse, and channel meandering. **tied with #6*
8. Does flow management influence cottonwood cohort success on targeted floodplain surfaces and prevent willow establishment on channel margins
9. What are the impacts of variable flow regimes on reservoir levels and recreation access **tied with #8*

IDT's priority recommendation for surplus FY20 funds if available:

- #1 – Tie between
 - Additional funding for habitat team (channel rehab effectiveness monitoring), and
 - Flow management science needs as prioritized
- #2 – Up to additional \$500k for watershed projects
- #3 – New SAB contracts



Questions?