

DRD and Science

- “DRD Science”
 - Any completed research or monitoring
 - Current efforts by members of DRD or other
 - Efforts to identify additional needs

DRD and Science

Recent meeting with these purposes:

- 1) Cross-communication and feedback regarding current efforts.
- 2) Identify key needs to be met (e.g. Coordination with spill management).
- 3) Identify key “big picture” questions.
- 4) Identify next steps for addressing key questions.

Current Efforts

Take Away:

1. Big efforts, with at least:
 - 8 people and 11 organizations investing
 - 16 different questions to increase our understanding of each core science discipline
2. This is not easy work.
 - Needs range from rafts and housing to sampling flows. How can we help meet these needs?
3. Are we getting the information we need most?
 - What more should/could we be doing? How can it be funded?

River Mechanics

Lead	Question(s)	Study Sites or Focal DRD Reaches	Needs
D. Graf (CDOW)	How do flows affect geomorphic processes in Reach 1? Has the habitat improvement work at Lone Dome improved riffle/pool habitat for Trout? Define best restoration strategies for Reach 1	Reach 1 (Lone Dome)	1. Field Assistance. 2. Catalog all past channel, bank, and floodplain work done in 1st 12 miles below dam.
D. Graf (CDOW)	How do flows affect geomorphic processes at the Dove Ck Pump sampling site? How does this reach compare w/ Lone Dome site?	Reach 3 (one site)	
D. Graf (CDOW)	How do flows affect geomorphic processes in Reach 5? How could we optimize the flow regime in order to scour fine sediment through Big Gyp valley?	Reach 5	
S. Jensen (USFS)	How is BLM land management affecting geomorphology?	Disappointment Valley, Big Gypsum Valley (3), Dry Creek Basin.	With more funding could do more surveys.

Riparian Ecology

Lead	Question(s)	Study Sites or Focal DRD Reaches	Needs
A. Coble (NAU) funded by CWCB and NAU.	Has regeneration occurred for major native tree species on lower Dolores and what flow events are associated with that regeneration? How does the regeneration and growth of cottonwoods compare below and above McPhee dam?... between the Dolores and the San Miguel Rivers?	Reaches 1-6, Above McPhee Dam, Tabeguache Preserve on San Miguel River	Vehicle, lodging, boats. Study sites above McPhee Dam. Searching for more funding to attain a full-time paid assistanship.
J. Siscoe (MVIC) funded by CWCB, FLC and others.	What Is the link between riparian habitat and aquatic habitat, fish populations and water quality?	Reach 4	1. Assistance monitoring points into the future 2. Coordinate C. Dott's work with A. Coble's and S. Jensen's.
P. Summers	What is the status/rate of vegetation encroachment onto floodplain?	Above Bradfield Bridge - permanent study site.	
S. Jensen (USFS)	How has Dolores River riparian area/channel changed over time since Dam construction?	Reaches 1-4 (Slickrock up to the Dam)	Find approximate points: GPS and repeat photography.
S. Jensen (USFS)	Is BLM meeting Rangeland Health Standards under current management?	Disappointment Valley, Big Gypsum Valley (3 sites), Dry Creek Basin.	

Cold Water Fish

Lead	Question(s)	Study Sites or Focal DRD Reaches	Needs
C. Anderson (BUGS) funded by DWCD	Why is there so much algae below the dam? What is the impact on the trout fishery? What sort of bottleneck is created for trout by warm temperatures and decaying algae at low flows?	Reach 1	Information from any past WQ sampling. Follow up: What can be done to remediate? Is there a way to use the selective outlet works for remediation?
C. Anderson (BUGS) funded by Water Quality Control Division (Nonpoint Source Program) of the CDPH&E	How can we mitigate non-point source pollution on the Dolores?	Reaches 1-6 and on to State Line	All existing information
J. White (CDOW)	What is the species composition and biomass/acre of trout and sculpin?	Reach 1	
J. White (CDOW)	What is the species composition and biomass/acre by species?	Dove Creek Pumps	

Warm Water Fish

Lead	Question(s)	Study Sites or Focal DRD Reaches	Needs
J. White (CDOW)	What is the status of 3 species of concern (flannelmouth, bluehead sucker, roundtail chub)?	Pyramid to Disappointment (14 mi portion of Reach 4)	Sampling flows (400-800cfs) in April.
D. Kowalski (CDOW)	What is the status of 3 species of concern (flannelmouth, bluehead sucker, roundtail chub)?	Big Gypsum Valley (Reach 4)	
D. Kowalski (CDOW)		Slickrock Canyon (Reach 5)	Sampling flows (400-800cfs) in April.
D. Kowalski (CDOW)		Above Gateway to Stateline	Sampling flows (400-800cfs) in April.
C. Anderson (BUGS) funded by SJCA	What is the WQ and what is the status of the habitat? What tributaries [perennial] are the most likely to be impacting the WQ on the Dolores?	Reaches 1-6 and on to State Line	Field assistance from very hardy people. A central place to base from.
S. Jensen (USFS)	Which sub-watersheds of Disappointment Creek are contributing the most salinity?	6 sites in Disappointment Valley	