DRAFT SCHEDULE – SUBJECT TO CHANGE

GEOMORPHIC & ECOLOGICAL FUNDAMENTALS FOR RIVER RESTORATION
August 18-22, 2014  Sagehen Creek Field Station, Truckee, California

Monday
8h  Introduction to Sagehen Field Station: Essential survival information (Jeff Brown, Manager)
9h  Course overview (Kondolf/Wilcock)
9h30 Restoring river connectivity/processes, the Espace de Liberté (Kondolf)
10h30 Break
11h Alluvial sediment. Types of sediment problems, grain entrainment and benthos adaptation, frequency and distribution of disturbance (Wilcock)
12h Lunch (Note: dress for the field by the end of lunch)
13h Flow regime adaptation. Organisms in fluvial environments: natural history and population biology (Limm)
14h Sagehen Creek: Facies and Habitat Mapping (Limm, Wilcock, Kondolf)
Small groups prepare channel feature/habitat/facies map
17h30 Participant introductions (beer provided)
19h  Dinner
20h Geologic overview of Lake Tahoe region (Ken Adams, invited)

Tuesday
8h  Fluvial geomorphology I. Channel patterns & forms, channel/floodplain interactions, relating channel dimensions to Q, channel adjustments (Kondolf)
9h  Hydrology and hydraulics, estimating transport rates and their uncertainty. Flood frequency & flow duration, estimating critical discharge, sediment transport, uncertainty (Wilcock)
10h  Break
10h30 Fluvial geomorphology II: Channel adjustments (Kondolf)
11h30 Controls on ecosystem function. River food webs and ecosystem services (Limm)
12h30 Lunch break
13h30 Channel classification in river restoration (Kondolf)
14h Sagehen Creek: Forecasting benthic populations, monitoring bed conditions: demonstrate flow and sediment sampling methods (Shaw). Pebble Count (Wilcock, Kondolf, Shaw).
18h  Pebbles & Beer: Analyze data from field and introduce spreadsheet exercise. Calculate frequency of floods, sediment disturbance & transport.
19h  Dinner
20h  An algal view of stream ecology (Andy Rost, invited)
**Wednesday**

8h  Flood frequency and bed mobilization on Sagehen Creek: computations from field data.
9h  Incorporating sediment transport in channel design. Equilibrium vs performance-based channel design. (Wilcock)
10h30 break
10h45  Suspended sediment loading trends in the Middle Truckee River watershed (Shaw)
11h15 Stream table demonstration concurrent with lunch (Natali) rotate during lunch, groups of appx ten for 20min each
12h45  Field Trip to the Truckee River (Kondolf, Wilcock)
Truckee River Gorge: human alterations and restoration strategies (Pittman)
Wingfield Park: urban stream restoration, whitewater parks (Litchfield)
19h  Dinner
20h  Overview of Lake Tahoe basin restoration (Swanson)

**Thursday**

8h  Field trip to Lake Tahoe basin streams.
Blackwood Crk, Upper Truckee River, Trout Ck, Meeks Ck (Kondolf, Swanson) (Bring swim suit for Lake Tahoe at Meeks Ck)
19h  Dinner
Film: The River (Lorentz 1937), influential documentary about land-use, flooding, & the TVA to the rescue

**Friday**

8h  Trinity River Restoration Program: large-scale restoration at the program scale (McBain)
9h  Trinity River geomorphic studies: Geomorphic flow basis & application (tracer rocks, riparian scour, sediment transport, release hydrographs). (McBain)
10h  Break
10h30  Trinity River: High flow management gaming exercise looking at sensitivity of various bedload transport relationships and optimizing high flow releases (Wilcock, McBain)
12h  Workshop (Stories & Sandwiches): Participants present problems faced in their work for discussion, over sandwiches. (Kondolf, McBain, Tompkins, Wilcock)
14h  Restoring floodplain function (Tompkins)
15h  Closing comments and discussion (Kondolf, McBain, Tompkins, Wilcock)