IDAWRA Brownbag: Wed. April 9, 2014; 11:30 - 1:00 pm "Big Wood River Post-Fire Flood Damage Risk Impact Assessment from the 2013 Beaver Creek Fire near Hailey"

Speaker: Darrell Eidson, P.E., D.WRE, Hydraulic Engineer, U.S. Army Corps of Engineers, Walla Walla

Wednesday, April 9 , 11:30 -1 pm (talk will start at 11:45)

Location: Washington Group Plaza Training Room (turn right at the desk)
720 Park Blvd
Boise, ID 83712
Cost: Free
IDAWRA thanks the Corps of Engineers for providing the venue.

"Big Wood River Post-Fire Flood Damage Risk Impact Assessment from the 2013 Beaver Creek Fire near Hailey"

In August 2013, the Beaver Creek wildfire burned more than 110,000 acres of public and private land northwest of Hailey, Idaho. The majority of the burned area drains to the Big Wood River, with an overall drainage area of over 600 square miles at Hailey, ID.

While increased runoff and erosional response within and immediately downstream of burned areas became readily apparent following September 2013 rainstorm activity, the more widespread increased flood risk along developed areas of the Big Wood River was not well understood. In cooperation with Federal and State agencies, and local governments, the U.S. Army Corps of Engineers leveraged existing models developed for previous studies to assess the relative hydrologic and hydraulic response of post-fire conditions to the existing flood risks along the Big Wood River. Using an existing numerical hydrologic model from an adjacent, and in many ways quite similar, watershed, adjustments of the modeling parameters to represent post-fire conditions within the Big Wood watershed facilitated estimation of the response and projection of frequency discharges at points of interest along the Big Wood River. These estimated increased discharges were then used with an existing numerical hydraulic model to project post-fire river stages. Relative changes in peak runoff and water surface elevations permitted determination of areas at increased risk for flood damages within developed areas along the river. As estimate of potential flood risk consequences associated with debris flow 'dam' formation and collapse was also performed, utilizing information developed by USGS in parallel support of the impacted communities.

While peak runoff increases at the sub-basin level were often significant, collective flow peaks following routing were more modest. River stage impacts were generally moderate, as well, though several areas where potential increased flood risk could be significant were identified. And while debris dam formation is less probable, the consequences in terms of potential for increased flood damages is quite significant.

	Name	Organization	Email	Signature
1	Ryan Carnie	GeoEngineers	rcarnie@geoengineers.com	
2	Even Miller	GeoEngineers	esmiller@geoengineers	
3	Michael Homza	GeoEngineers	mhomza@geoengineers	
4	Rick Collingwood	FOWR	kimj01@cableone.net	
5	Bruce Parks	USGS-WRD retired	parksbruce@yahoo.com	
6	Jen Pierce	BSU	jenpierce@boisestate	
7	Suzy Cavanagh	Tetra Tech	suzy.cavanagh@tetratech.com	
8	Thad Jones	Tetra Tech	thad.jones@tetratech.com	
9	Chuck Dillon	USBR	cdillon@usbr.gov	
10	Frank Gariglio	CH2M Hill	frank.gariglio@ch2m.com	
11	Steve Hannula	MWH	on file	
12	JAIRO HERNANDEZ	BSU	jairohernandez@boisestate.edu	
13	Steve Jirik	BLM	sjirik@blm.gov	

14	Kerrie Weppner	BSU	Kerrieweppner@boisestate.edu	
15	Jennifer Johnson	USBR	jmjohnson@usbr.gov	
16	DAVE O'Dea		DAVEODEA@GMAIL.COM	
17	BRYCE BOLIN	BLM		
18	Kurt Wiedemann	BLM	Kwiedemann@blm.gov	
19	Mary McGown		drmcgee@juno.com	Mary McGown
20	Virginia Gillam	IGS	vgillerm@uidaho.edu	
21				
22				
23				
24				
25				
26				
27				
28				

29	Robby Jost	Boise State	robbyjost@u.boisestate.edu	Robby Jost
30	Brandon Hobbs	USACE	brandon.w.hobbs@usace.army.mil	Brandon W. Hobbs
31	Mark Mendenhall	USACE	mark.a.mendenhall@...	
32	Danielle Tarman	IDEQ		Danielle Tarman
33	Charles Slaughter	CER, IDAHO	cslaugh@uidaho.edu	Charles Slaughter
34				
35				
36				
37				
38				
39				
40				
41				