

GYA Science Agenda Workshop

Tuesday November 3, 2009

Optional Field Trip to YNP (Pre-registration required)

A field trip will be led by topic experts on the Greater Yellowstone. Planned itinerary includes stops in Paradise Valley, near Gardiner, Blacktail Ponds, and the Lamar Valley. A microphone will allow for science and management presentations during drive time, with speakers slated. Stops will be made along the way for more in depth discussion of the three workshop drivers: climate change, invasive species, and land use changes. Ample opportunity will be provided for walks, stretching, and wildlife viewing. Lunch will be provided. Consider bringing cameras, binoculars, and gear for inclement weather.

8:00 AM Bus departs from Holiday Inn, Bozeman

6:00 PM Bus returns to Holiday Inn, Bozeman

Wednesday November 4, 2009

Day 1 Objectives:

- 1) Review current understanding of how climate change, land-use change, and invasive species act as drivers of ecological change in the GYA over a 10-50 year time period, using expertise of participants as well as using analyses and summaries of past science.
- 2) Identify the critical knowledge gaps and science needed by managers over the next 10-20 years to adaptively address expected changes and challenges associated with the drivers.

8:00 – 8:30	Sign in/Registration	
8:30 – 8:40	Logistics and orientation	Scott Bischke , Workshop Facilitator
8:40 – 8:50	Welcome	Suzanne Lewis , Superintendent Yellowstone National Park
8:50 – 9:20	Keynote Address Responding with new science to pervasive threats and challenges to wildland ecosystems	Dave Schimel , CEO National Ecological Observatory Network
9:20 – 9:40	Workshop Overview Background, purpose, objectives, and deliverables	Tom Olliff , Chief Yellowstone Center for Resources, Yellowstone National Park
9:40 – 10:10	Plenary 1: Implications of climate change for the GYA wildlands	Kit Batten , Science Advisor to the Deputy Secretary of the Interior
10:10-10:30	Break	

10:30 – 11:00	Plenary 2: Why land use changes on private lands matter to GYA wildlands	Andrew Hansen , Professor of Ecology, Montana State University
11:00 – 11:30	Plenary 3: Implications of exotic species invasions for GYA wildlands	Jack Williams , Senior Scientist, Trout Unlimited
11:30-12:45	Lunch	
12:45 – 1:00	Breakout sessions: objectives, methods, and expected outcomes	Scott Bischke
1:00 – 2:30	1st Breakout Session	
	1) Brainstorm ecological changes (past, present, future)	<i>Driver</i> / Facilitator / Note taker
	2) Identify the key science questions that address the expected management challenges resulting from these changes	<i>Climate Change</i> / Bob Gresswell / Stacey Ostermann-Kelm
	3) Identify where we already have enough information to take management action now	<i>Invasive species</i> / Todd Kipfer / Emily Yost <i>Land Use Change</i> / Dave Mcwethy / Cass Bromley
2:30 – 2:50	Break	<i>Prep time for spokesperson presentations</i>
2:50 – 3:20	Return to main conference room for large group session: progress reports by each breakout group	Spokesperson selected by each group (facilitator will not serve as spokesperson)
3:20 – 5:00	2nd Breakout Session	Outcome of this session should be a list of science questions for each driver and a set of criteria for tomorrow’s goal of setting priorities for each driver
	1) Further refine science questions 2) Develop and begin applying criteria to identify science priorities for each driver	<i>(same teams and locations as 1st breakout session)</i>
5:00	Adjourn	
5:00 – 6:00	Free time; 10 min walk to new USGS building for a tour with Jeff Kerschner	(Main room needs to be fully vacated to allow for dinner and social set up)
6:00 – 7:00	Social hour (wine, beer, mineral water)	Hosted by the Yellowstone Park Foundation
7:00 – 8:00	Dinner (catered by Bozeman’s Bountiful)	<ul style="list-style-type: none"> Yellowstone Park Foundation mission, Paul Zambernardi or Nina Jaeger of YPF Welcome from John Varley, Big Sky Institute, MSU
8:00 – 8:30	Talk: Greater Yellowstone Science—Past, Present, and Future	Paul Schullery (introduced by Sue Consolo-Murphy , Grand Teton National Park)

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Day 2 Objectives:

- 1) Prioritize the needed science for each driver, and make recommendations on how science agendas can be strategically implemented based on existing institutional capacities, and identify needs for new capacity as appropriate.
- 2) Identify the next steps (“who”, “what”, and “when”) in generating written workshop products and developing science agendas.

8:00 – 8:45	Main conference room; reports by each breakout group on results from day 1 breakout #2	Spokesperson selected by each group
8:45-10:30	<u>3rd Breakout Session</u> Finalize priority science questions and research approaches (same teams and locations as previous breakout sessions).	Outcome of this session should be a final list of science questions for each driver and a set of research priorities to and approaches to address these science questions
10:30 – 11:00	<i>Break</i>	<i>Prep time for spokesperson presentations</i>
11:00 – 12:00	Return to main conference area. Presentation of final results from 3 rd breakout. Conclusions (dissent allowed) on final list of science questions for each driver and a set of research approaches.	Spokesperson selected by each group
12:00 – 1:15	<i>Lunch</i>	
1:15 – 2:30	Panel discussion with audience input focused on workshop objectives: <ol style="list-style-type: none"> 1. Review current understanding of how climate change, land-use change, and invasive species act as drivers of ecological change in the GYA over a 10-50 year time period. 2. Identify the critical knowledge gaps and science needed by managers over the next 10-20 years to adaptively address expected changes and challenges associated with the drivers; 3. Prioritize the needed science for each driver, and make recommendations on how science agendas can be strategically implemented based on existing institutional capacities, and identify needs for new capacity as appropriate. 	<p style="text-align: center;"><u>Panel Discussion with Audience Q&A</u></p> <p>Moderator: Tom Olliff, YNP</p> <p>Panelists:</p> <p><i>Land managers (tentatively)—</i></p> <ul style="list-style-type: none"> • Mary Erickson, USFS (climate change) • Steve Kallin, USFWS (invasives) • Chris Lehnertz, NPS (land use change) <p><i>To be named by breakout groups—</i></p> <ul style="list-style-type: none"> • Climate Change spokesperson • Invasive species spokesperson • Land use change spokesperson

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4. Identify the next steps (“who”, “what”, and “when”) in generating written workshop products and developing science agendas.
 5. How can we combine research and management opportunities across drivers (i.e., integrative thought process)?
 6. How can we foster communication crossover between agencies, academia, independent researchers, land managers? And what role does each group play?
 7. How do science needs developed during workshop become integrated into management decision making?
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2:30 – 2:50

Break

2:50 – 3:20

Summary of workshop accomplishments and science agenda challenges

Dave Schimel, CEO National Ecological Observatory Network

3:10 – 3:20

Workshop closing comments and thanks

Glenn Plumb, Chief, Branch of Aquatic and Wildlife Resources, Yellowstone Center for Resources, YNP

3:20

Adjourn

Have a safe journey home!

Organizing committee:

Sue Consolo-Murphy (NPS), Yvette Converse (USFWS), Molly Cross (WCS), Steve Gray (UWY), Andrew Hansen (MSU), Cathie Jean (NPS), Virginia Kelly (GYCC), Jeff Kershner (USGS), Todd Kipfer (MSU), Tom Olliff (NPS), Glenn Plumb (NPS), Dan Tinker (UWY), Kathy Tonnessen (RM-CESU), Dan Tyers (USFS), John Varley (MSU), Leigh Welling (NPS), Cathy Whitlock (MSU)

also providing support Scott Bischke (MountainWorks), Laurie Trautman, Emily Yost (NPS)