

Wildlife Response to Environmental Arctic Change (WildREACH):
 Predicting Future Habitats of Arctic Alaska
 17–18 November 2008
 Westmark Hotel
 Fairbanks, Alaska
Agenda

Day 1	Monday, 17 November 2008
Registration:	7:30 a.m. - 9:30 a.m.
7:30 a.m.	Arrival and Coffee Service
Plenary Session Held in Gold Room	
8:00 a.m.	Welcome <i>Geoffrey Haskett</i> <i>Regional Director</i> <i>U.S. Fish and Wildlife Service</i>
8:10 a.m.	Introductions <i>Philip Martin</i> <i>U.S. Fish and Wildlife Service</i>
8:30 a.m.	Workshop Goals and Structure <i>Philip Martin</i> <i>U.S. Fish and Wildlife Service</i>
8:50 a.m.	Observed Climate Change in Northern Alaska <i>Martha Shulski</i> <i>University of Alaska Fairbanks</i>
9:05 a.m.	Projected Climate of Northern Alaska <i>Peter Larsen</i> <i>The Nature Conservancy</i>
9:20 a.m.	Coastal Processes <i>David Atkinson</i> <i>University of Alaska Fairbanks</i>
9:35 a.m.	Permafrost and Active Layer Dynamics <i>Vladimir Romanovsky</i> <i>University of Alaska Fairbanks</i>
9:55 a.m.	Permafrost-Influenced Geomorphic Processes <i>Torre Jorgenson</i> <i>ABR Environmental Services, Inc.</i>
10:15 a.m.	Plenary Discussion/Q&A
10:30 a.m.	Break
10:50 a.m.	Vegetation Change <i>Eugenie Euskirchen</i> <i>University of Alaska Fairbanks</i>
11:05 a.m.	Hydrologic Processes <i>Amy Tidwell</i> <i>University of Alaska Fairbanks</i>

11:20 a.m.	<p>Hydrology Panel - Predicting Change</p> <ul style="list-style-type: none"> • <i>Matthew Sturm – Snow Cold Regions Research and Engineering Laboratory</i> • <i>Doug Kane – Water Balance University of Alaska Fairbanks</i> • <i>Larry Hinzman – Feedbacks University of Alaska Fairbanks</i> • <i>Anna Liljedahl – Feedbacks University of Alaska Fairbanks</i>
11:50 a.m.	Plenary Discussion/Q&A
12:30 p.m.	Lunch (On your own)
1:30 p.m.	<p>Integration – Potential Ecosystem Pathways</p> <p><i>Torre Jorgenson ABR Environmental Services, Inc.</i></p>
1:50 p.m.	<p>Charge to Working Groups</p> <p><i>Philip Martin U.S. Fish and Wildlife Service</i></p>
2:00 p.m.	<p>Working Groups Breakout Session I</p> <p>Working Groups will be presented with scenarios of climate and landscape change that would affect landscape-scale habitat availability, e.g., broad scale conversion from one habitat type to another. What species (or species attributes) would be sensitive indicators of the hypothesized changes?</p> <ul style="list-style-type: none"> • Bird Working Group <i>Leader: Philip Martin, U.S. Fish and Wildlife Service</i> • Fish Working Group <i>Leader: Jeff Adams, U.S. Fish and Wildlife Service</i> • Mammal Working Group <i>Leader: David Payer, U.S. Fish and Wildlife Service</i> • Managers Working Group <i>Leader: Deborah Rocque, U.S. Fish and Wildlife Service</i>
3:30 p.m.	Break
4:00 p.m.	<p>Return to Plenary Session: Working Group Reports</p> <ul style="list-style-type: none"> • Bird Working Group • Fish Working Group • Mammal Working Group • Managers Working Group
5:00 p.m.	Summary of Day's Discussion; Plans for Day 2
5:15 p.m.	Adjourn
5:30 p.m. - 7:30 p.m.	<p>Reception and Poster Session (Light food and cash bar)</p> <ul style="list-style-type: none"> • All participants are encouraged to bring a poster that describes synthesis research, data, and modeling needs within their area of interest, or relevant research findings from integrated projects.

Day 2	Tuesday, 18 November 2008
8:00 a.m.	Arrival and Coffee Service
8:15 a.m.	Review of Day 1 Discussion, Day 2 Goal, Workshop Products
8:25 a.m.	Trophic Systems - Herbivores <i>Brad Griffith</i> <i>University of Alaska Fairbanks</i>
8:40 a.m.	Trophic Systems - Aquatic <i>Mark Wipfli</i> <i>University of Alaska Fairbanks</i>
8:55 a.m.	Charge to Working Groups <i>Philip Martin</i> <i>U.S. Fish and Wildlife Service</i>
9:10 a.m.	Working Groups Breakout Session II (Working Groups break as needed) Climate-associated processes may lead to changes in habitat suitability which cannot easily be equated with change in availability. Examples include: changes in water temperature that affect physiological processes of fish, enhanced food availability due to increased primary and secondary productivity, changing seasonality that results in asynchrony between optimal food availability and critical life history phases. Based on the scenarios of climate change outlined in the previous Breakout, what are the most important mechanisms by which climate would affect habitat suitability? Express the relationships and mechanisms in the format of "box-and-arrow" conceptual models.
11:15 a.m.	Return to Plenary Session: Report of Working Groups <ul style="list-style-type: none"> • Bird Working Group • Fish Working Group • Mammal Working Group • Managers Working Group
12:00 p.m.	Lunch (On your own)
1:00 p.m.	Return to Plenary Session
1:15 p.m.	Bayesian Network Modeling <i>Erik Beever</i> <i>U.S. Geological Survey</i>
1:30 p.m.	Empirical Temperature Downscaling: Improving Thermal Information Detail <i>David Atkinson</i> <i>University of Alaska Fairbanks</i>
1:45 p.m.	Charge to Working Groups <i>Philip Martin</i> <i>U.S. Fish and Wildlife Service</i>
2:00 p.m.	Working Groups Breakout Session III Focusing on the conceptual models identified in the previous breakout session, what are the key areas where reducing uncertainty in physical process models would enhance our ability to predict habitat change? What would we most like modelers and researchers in other disciplines to work on?

3:30 p.m.	Break
4:00 p.m.	<p>Return to Plenary Session: Report of Working Groups</p> <ul style="list-style-type: none"> • Bird Working Group • Fish Working Group • Mammal Working Group • Managers Working Group
4:30 p.m.	<p>Identify Areas of Commonality Among Working Groups</p> <p>Panel Discussion: Working Group Leaders, Workshop Participants</p>
5:00 p.m.	<p>Summary, Discussion, and Next Steps</p> <p><i>Philip Martin</i> <i>U.S. Fish and Wildlife Service</i></p>
5:15 p.m.	Workshop Adjourns

Day 3	Wednesday, 19 November 2008
U.S. Fish and Wildlife Service Conference Room, Federal Building	
9:00 a.m.	<p>Invited Writing Group</p> <p><i>U.S. Fish and Wildlife Service Staff</i> <i>& invited Workshop Participants</i></p> <ul style="list-style-type: none"> • Synthesis of Key Results and Themes from Workshop <p>The third day is intended for a small group of participants that are willing to make a substantial commitment to drafting and reviewing the final document from this workshop. If you are interested in participating, please contact Philip Martin at 907-456-0325 or philip_martin@fws.gov.</p>
12:00 p.m.	Adjourn