

## Reader's Guide to Briefing Material

Please note: Materials posted on the webpage are tentative; final hardcopies will be available at the workshop.

### Section 1. General Workshop Information

Includes the workshop's prospectus, agenda, a list of participants, and instructions for the breakout groups.

### Section 2. North Slope Ecoregions and Climate Scenarios

Background material describing the three North Slope ecoregions, including land status and vegetation. **It is particularly important to read Climate Scenarios I and II (pages 2:4 and 2:5), which form the basis of discussion during the Breakout Groups.**

### Section 3. Hydrology

An introduction to hydrologic processes in the Arctic, with annotation describing potential changes under Climate Scenarios I and II. This material will be subject of Amy Tidwell's oral presentation on Monday morning.

### Section 4. Permafrost-influenced Geomorphic Processes.

Background material describing the geomorphic processes that shape the arctic landscape, in four settings: Beaufort Coast, Coastal Plain, Floodplains, and Foothills, with an emphasis on the influence of permafrost degradation. This material will be the subject of Torre Jorgenson's presentation on Monday morning entitled "Permafrost-influenced Geomorphic Processes".

### Section 5. Pathways of Ecosystem Change

Conceptual models illustrating pathways of ecological change in response to climate change and ongoing geomorphic processes. The models include preliminary hypotheses regarding those ecotypes that are likely to increase or decrease. This material will be the subject of Torre Jorgenson's presentation on "Integration—Potential Ecosystem Pathways." Ecotypes included in these models are described in detail in Section 6.

### Section 6. Habitat Models for Fish and Wildlife

A detailed description of ecotypes (after Jorgenson and Heiner 2003) is provided for reference. Distribution of ecotypes among ecoregions is depicted in a map figure and in tabular form. **Habitat models for birds (Figure 6.2), fish (Figure 6.3), and mammals (Figure 6.4) list ecotypes of importance for each group in the lower panel of each figure. Changes in the relative abundance of these ecotypes will be the focus of Breakout Session 1.**

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## Section 7. Climate Effects on Fish and Wildlife

Background information on the fauna of arctic Alaska (birds, page 7:1; fish, page 7:8, and mammals, page 7:13) and mechanisms of climate influence on the species groups. **Two example conceptual models are provided for each group (birds, Figures 7.1 and 7.2; fish, Figure 7.3; mammals, Figure 7.4), illustrating important potential climate influences. These models will form the basis for discussion in Breakout Session 2.**

## Section 8. Additional Background Readings

Primary sources recommended by workshop participants to provide background information on arctic environmental change and its effects on birds, fish and mammals. Please note that these readings are provided for scholarly use only.