RACER provides a practical application of a forward-looking ecosystem approach to stimulate policy recommendations to better manage arctic natural resources at a time of mounting pressure from rapid arctic change.

To the Arctic Council and its associated groups, RACER offers an instrument for understanding and applying the concept of resilience to a critical aspect of adaptation to change.

WWF
Global Arctic Programme

Martin Sommerkorn
“Return to previous arctic conditions is unlikely.”  

Arctic Report Card 2010

“We must plan for a world of change if we wish to conserve arctic ecological systems, including the services they provide to people.”

Bob Corell
Rapid Assessment of Circum-arctic Ecosystem Resilience provides a tool—missing until now—that translates future threats and pressures to the arctic environment into forward-looking scenario-based action.
Rapid Assessment of Circum-Arctic Ecosystem Resilience

- sees the regions of the Arctic as functioning ecosystems first.
- critically widens the focus of conventional conservation to an ecosystem perspective.
- highlights the need for conservation and natural resource management to support ecosystems and ecosystem services important to people by addressing the future capacity of these ecosystems to adapt.
RACER locates sources of ecological strength

RACER focuses management on maintaining the ecological machinery responsible for the conditions that living things—including people—need.

When this machinery is working well, ecosystems have the resilience they need to adapt to change—to cope with shocks and respond to opportunities while continuing to function in much the same kind of way.
Key Features – sources of regional resilience

Sources of resilience are located where key land or marine features (such as ocean polynyas, mountains, and river deltas) help generate exceptional productivity and diversity and confer the benefits of this ecological vitality to the wider ecosystems to which they belong and to the people who rely on them.
Key Features – focal points of a functional perspective of land and sea

Racer describes key features as the local combination of characteristics that drive their exceptional productivity and diversity, rather than as the species and habitats that currently exist there.
Scenarios enable a strategic forward-looking perspective

RACER assesses the persistence of key features—and their role in conferring resilience to ecoregions—by gauging the effect of variables forecast by climate models on the drivers of exceptional productivity and diversity.
Mapping Key Features and evaluating their likely persistence in a changed climate

RACER focuses conservation and management attention on the importance of minimizing environmental disturbance to places that are—and will be for the remainder of this century—sources of ecosystem resilience in the Arctic.
RACER is an overdue, new way forward that helps safeguard the functioning ecosystems at the heart of arctic life.

It empowers arctic peoples to address challenges that rapid arctic change poses for their environment and their way of life.

...in other words

RACER is an invitation and a starting point for discussions among arctic stakeholders.

supporting and technical material: www.panda.org/arctic/racer