MS. LEON: Hello, there. This is Sarah Leon with the Fish and Wildlife Service and I'm on the phone today with Susanne Miller, Wildlife Biologist at the Marine Mammals Management Office in Anchorage, Alaska. Hi, Susanne, how are you today?

MS. MILLER: I'm doing great. Thank you.

MS. LEON: Susanne, what can you tell us about the polar bear?

MS. MILLER: Polar bears, they're marine mammals that live primarily on ice-covered seas in the Arctic region. In the U.S. this means the Bering, Chukchi and Beaufort Seas adjacent to the coast of Alaska. And they're specially evolved and adapted to the Arctic marine environment. For example, most notably, they've got white fur for camouflage that comes in useful when they're hunting seals. Their primary prey are other ice dependent species such as ring seals and bearded seals and walruses. And they also have interesting suction cup-like structures on the soles of their feet that help prevent slippage while they're traveling across ice.

They're well insulated for the cold. They're great swimmers. And one of their most amazing adaptions is the ability to feast or famine. So when food is available to them, they can accumulate large amounts of fat which they store and then use later during times when food is scarce, for example, when they are denning. And unlike other bears, only pregnant female polar bears den and they do so to give birth to cubs in snow dens and this occurs in December or January. And those cubs are very small and very
helpless when born and completely dependent on their mother and that den for their survival until they emerge in spring and head out to the ice.

MS. LEON: The polar bear was actually the first species to gain Endangered Species Act protection because of climate change. Tell us more about this, will you?

MS. MILLER: Polar bears are divided into 19 populations for management purposes. And for many of those populations, we simply don't know how polar bears are coping with environmental change. We do know however that in Alaska in the southern Beaufort Sea, which is one of the best studied polar bear populations in the world, that we have some concern. We are seeing reductions in survival of polar bears during years when more open water or less ice is present. And this has also been seen in other parts of the Arctic, for example, in Western Hudson Bay which is probably the most studied polar bear population in the world. And their loss of ice has also resulted in reduced survival for polar bears and a decline in population size.

Another trend that we're seeing here in Alaska and also this is occurring in other parts of the Arctic is an increase in bear use of terrestrial areas, the land areas, especially during the summer and fall open water period. So in the summer, as the polar pack ice starts receding further away from shore, some bears are making that decision to come to land now. And what this means for them is that typically, they've got less access to their primary prey, ringed seals, while they're on land. And they're also a lot more prone to interact with humans while they're on land.

We've also seen or some scientists have documented a land shift in denning in the southern Beaufort Sea region of Alaska so in years past where they have denned about 50/50 on ice and on land, we're seeing an increase in their denning on land which these scientists believe is related to diminishing ice conditions.

MS. LEON: What conservation actions are currently underway?

MS. MILLER: Well, in terms of the species spotlight plan, that's a short-term five year plan that is basically looking to address polar bear/human conflict during this landward shift that I just described. The three primary focuses are to work to minimize attractants in communities and work areas, in coastal areas that bears come to; to try to implement deterrence programs. This is nonlethal removal of bears out of villages and work sites. And also to develop educational and outreach materials, basically, keep people up to date on what's going on with bears and how they're responding to climate change.

We also have a long-term conservation plan that in addition to addressing bear-human conflicts, we will be working to identify research and monitoring that's going to be needed for long-term conservation. It will also include habitat protection measures and addressing sustainable harvests and also increasing our projects with our partners and our partners are tribal governments, hunters, state and federal government, the oil and gas industry, the environmental community, nonprofit organizations, and polar bear and
climate researchers. It's basically going to take all of us working together to truly benefit polar bear conservation in the future.

MS. LEON: Great. Thank you so much, Susanne, for your time today.

MS. MILLER: Thank you, too. Bye bye.

MS. LEON: This is Sarah Leon for the U.S. Fish and Wildlife Service. Thank you for listening.