

# U.S. Fish and Wildlife Service Polar Bear Team



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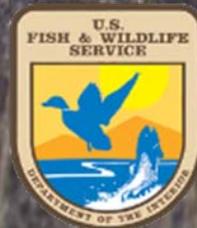
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T.D. DeBruyn Photo

# Polar Bear Conservation/Recovery Planning Overview



# Distribution of Alaska Polar Bear Stocks



**RUSSIA**

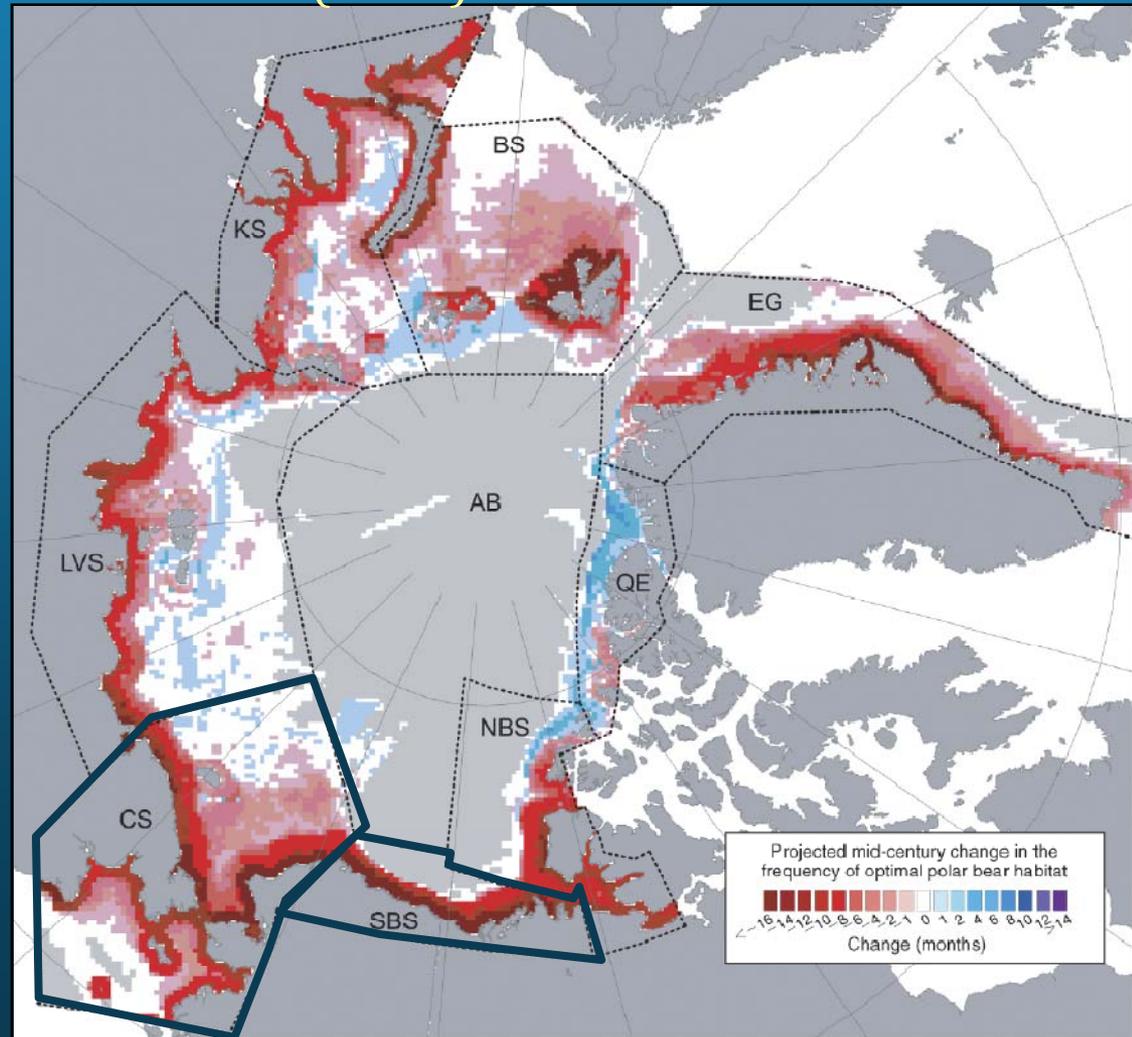
**ALASKA**

**CANADA**

-  Beaufort Sea Stock
-  Chukchi/Bering Seas Stock

# Loss of polar bear sea ice habitat

Durner et al. (2008)



- Continued loss of the polar bear's sea ice habitat is projected in most parts of the Arctic.
- Some of the greatest losses will occur in the southern Beaufort and Chukchi Seas.

# Federal Authorities Under Which Polar Bears are Managed



- Marine Mammal Protection Act
- Endangered Species Act



# Authorities Under Which Polar Bears are Managed

1973 Agreement on the Conservation of Polar Bears

1988 Inuvialuit/Inupiat Agreement – Southern Beaufort Sea

1994 Alaska Nanuuq Cooperative Agreement

1994 Polar Bear Conservation Plan

2007 U.S./Russia Bilateral Treaty – Chukchi Sea

2008 ESA Final Rule

2009 Polar Bear Range States' Action Plans



# Why Develop a Conservation/Recovery Plan Now?

## □ Under the MMPA:

- All marine mammals are protected under the Marine Mammal Protection Act (MMPA),
- The MMPA specifies that conservation plans should be completed for any species designated as “depleted”,
- Species listed as endangered or threatened under the ESA are automatically considered depleted.
- Conservation Plans should be modeled after ESA Recovery Plans.

# Why Develop a Conservation/Recovery Plan Now?

- Under ESA Sec. 4(f)(1) - Recovery Plans

**The Secretary shall develop and implement plans ... for the conservation and survival of endangered species and threatened species listed pursuant to this section, unless he finds that such a plan will not promote the conservation of the species...**

# Goal of the Plan

•The goal of recovery programs typically is to restore listed species to a point where they are secure, self-sustaining components of their ecosystem, so that the protections of the ESA are no longer required.



•Polar Bear Plan Goal- ensure that polar bears remain a healthy, functioning, and resilient component of the Bering-Chukchi and Beaufort Sea ecosystems.

# Elements of the Plan

## □ Sec. 4(f)(1) cont.

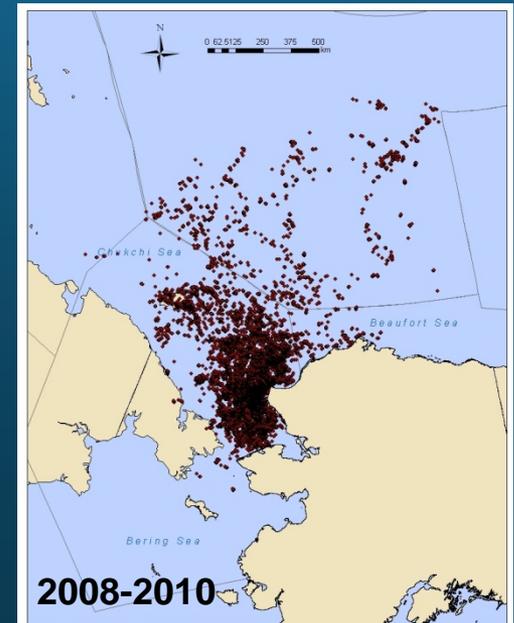
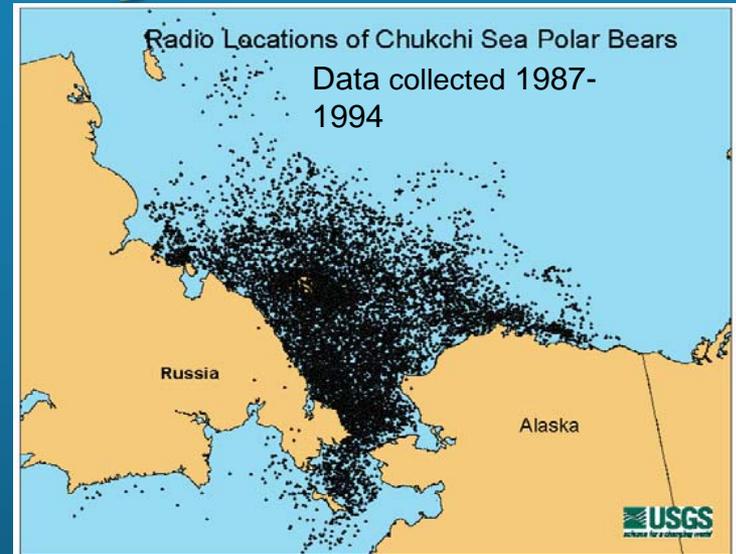
### (B) incorporate in each plan –

- (i) a description of such site-specific management actions as may be necessary to achieve the plan's goal ...
- (ii) objective, measurable criteria which, when met, would result in a determination ... that the species be removed from the list; and
- (iii) estimates of the time required and the cost to carry out those measures needed to achieve the plan's goal ...”



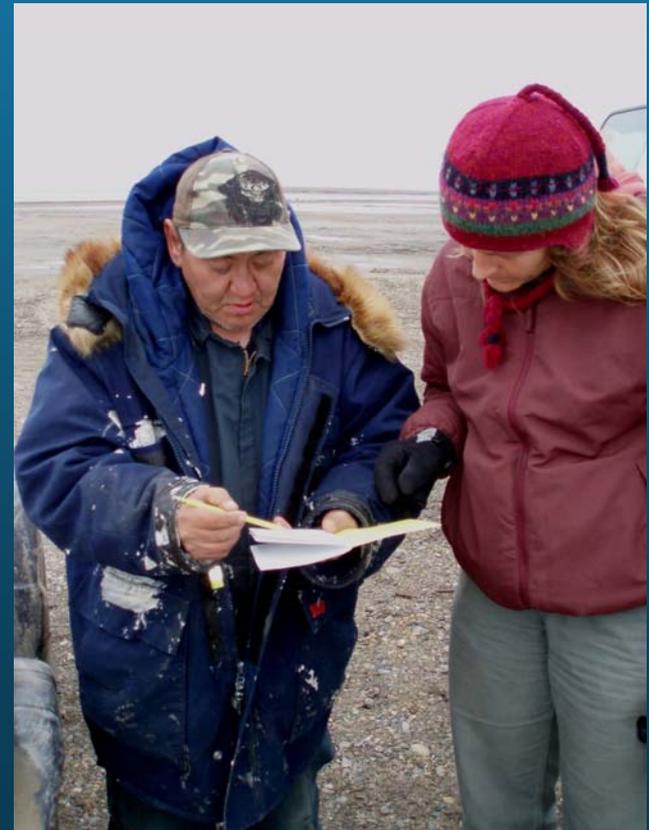
# Role of Recovery Plans

- Provide a road map to recovery
- Structure and organize the recovery effort
- Identify research and management tasks, and their priorities, necessary to implement the recovery strategy

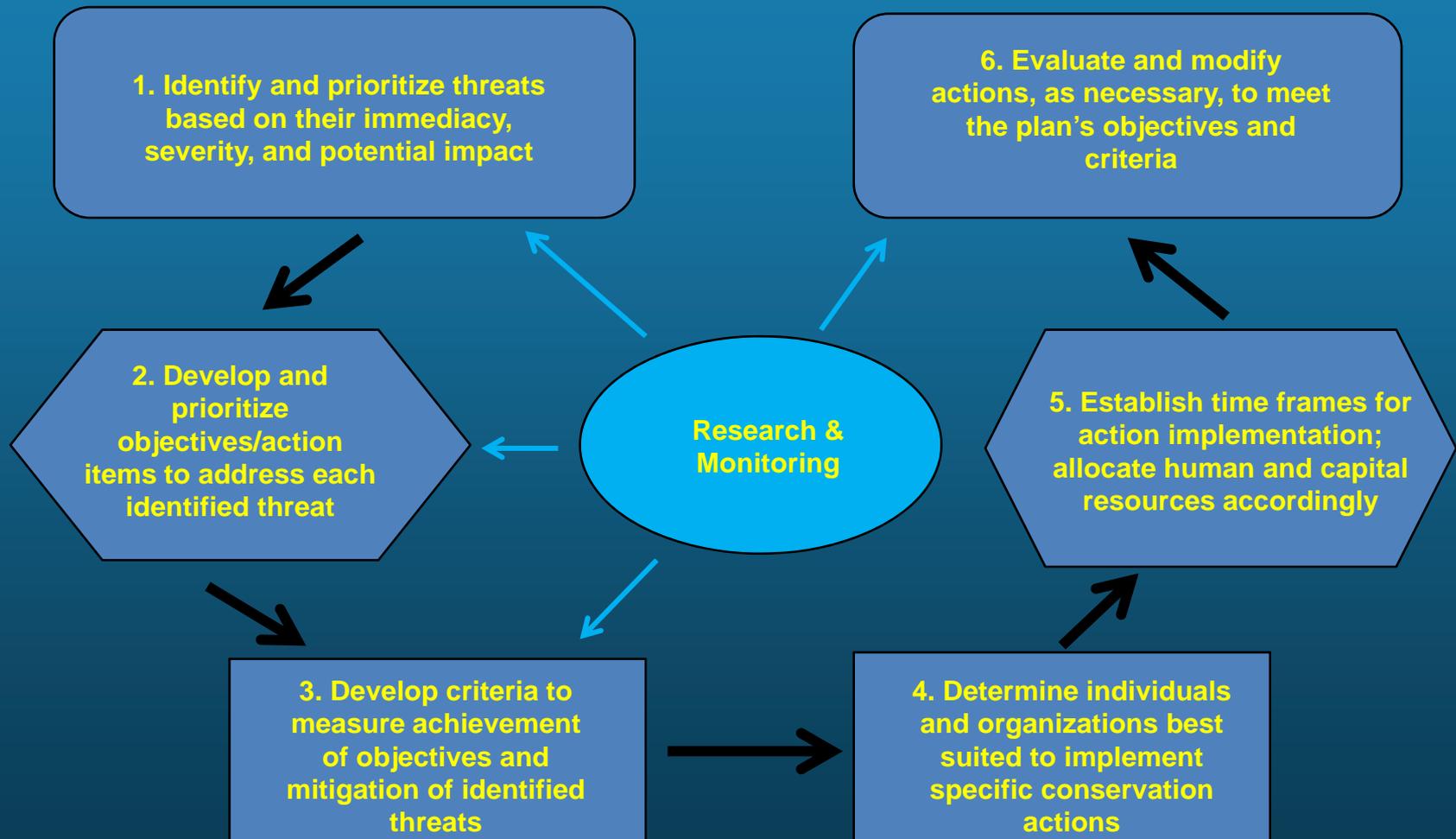


# Role of Recovery Plans

- Provide context and guidance for implementation of other sections of the ESA (e.g., Section 7)
- Serve as outreach tools
- Guide monitoring (species, threats, implementation)
- Obtain funding

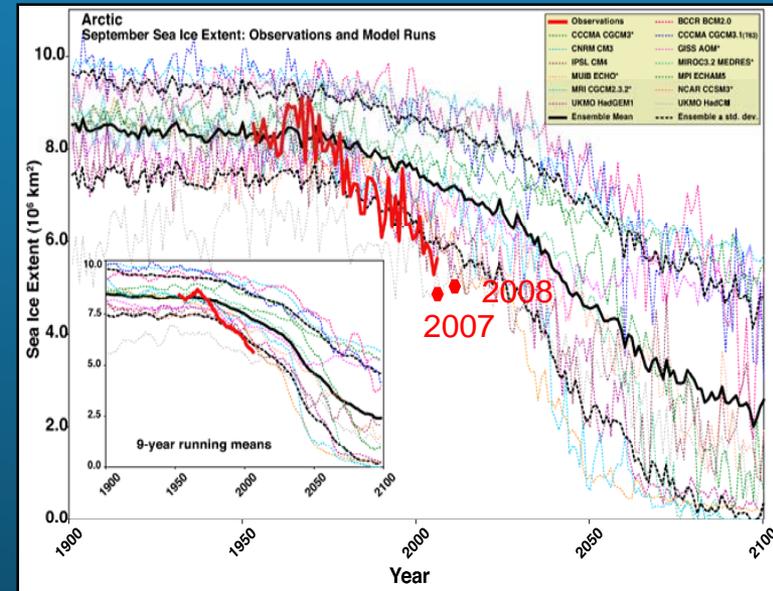


# Polar Bear Planning Process



# Threats Assessment

- A central part of the recovery plan (everything flows from this)
- Organized by threats associated with each ESA listing factor
  - Ranked according to their immediacy, severity, and potential impact to the species
  - Should link to recovery actions



# Threats Assessment

- (A) the present or threatened destruction, modification, or curtailment of its habitat or range;**
- (B) overutilization for commercial, recreational, scientific, or educational purposes;**
- (C) disease or predation;**
- (D) the inadequacy of existing regulatory mechanisms;**
- (E) other natural or manmade factors affecting its continued existence.”**

**June 2010 workshop**

# Threats Assessment

- Overview of the causes of the species decline
- Identifies continuing, new, or anticipated threats and the source of threats
- Addresses the magnitude (scope, intensity, immediacy), likelihood, and potential impact of identified threats
- Helps develop site specific actions to mitigate identified threats

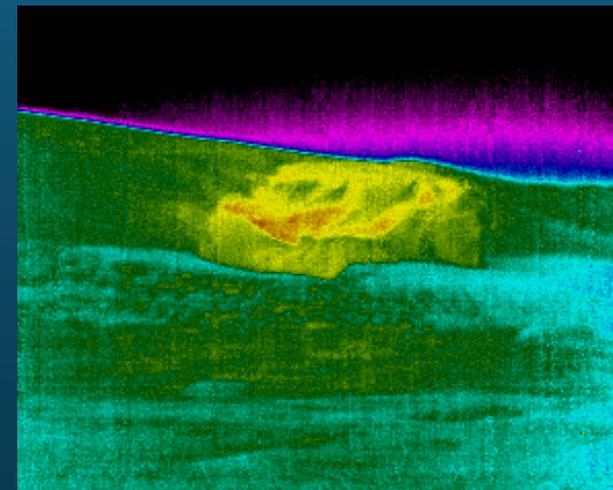
# Objectives and Criteria

- Goals can be subdivided into discrete objectives which describe the conditions necessary for achieving the goal.
- The objectives are broad statements about the recovery needs for polar bears, linked directly to the priority concerns identified in the threats assessment.
- The criteria are the *objective and measurable* metrics by which you identify whether the objectives to address threats have been met



# Recovery Actions

- Describe and justify the actions necessary to achieve the plan's goals and objectives
- Describe the monitoring actions necessary to track the effectiveness of these actions and the status of the species
- Should clearly relate to the threats that caused listing in the first place
- Actions should be discrete, site-specific, fundable chunks



# Recovery Actions

## Monitoring:

- Population - to meet recovery criteria
- Threats – to determine intensity and level
- Actions – to see if actions are having the desired effect



# Implementation Schedule

Draws all plan actions together into a succinct table which:

- Estimates costs; can be used to secure funds
- Prioritizes recovery actions
- Identifies *potential* responsible parties, but does not *obligate* those parties to participate
- Establishes timeframes for accomplishing actions

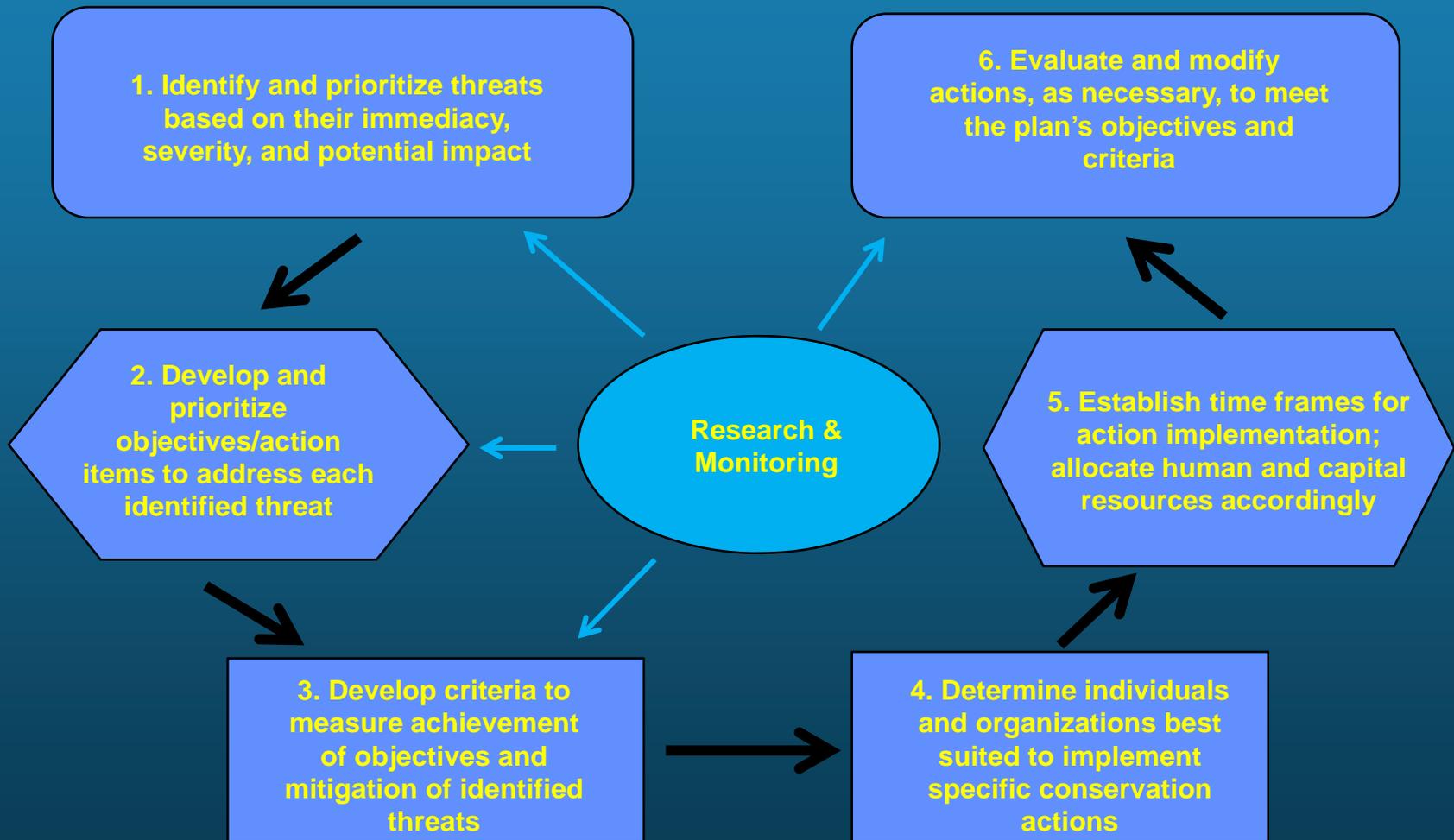
# Prioritization

## Action Priorities

- **Priority 1** – actions that must be taken to prevent extinction or irreversible decline
- **Priority 2** – actions that must be taken to prevent significant decline/adverse impact short of extinction
- **Priority 3** – all other actions needed for full recovery

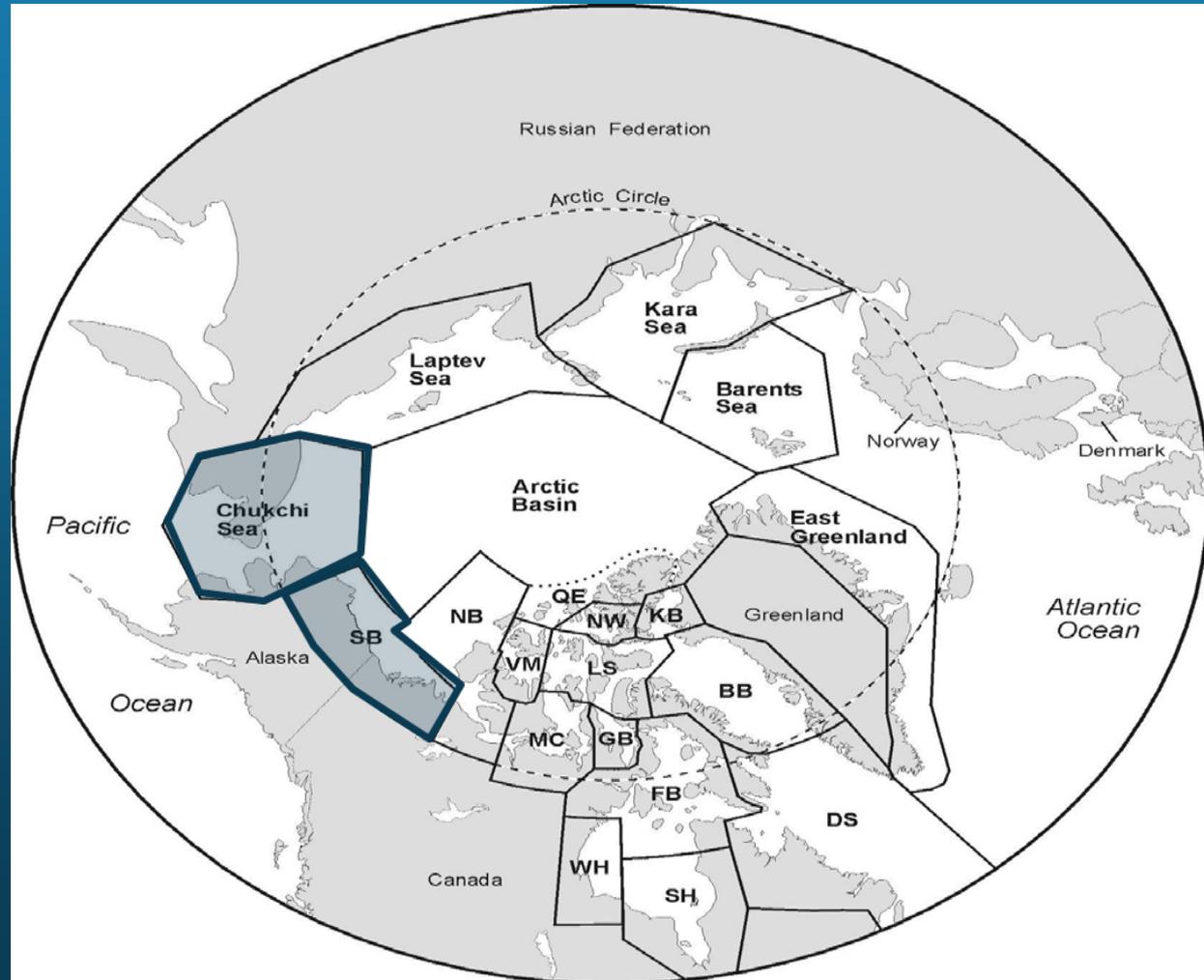
**Assigning priorities does not imply that some recovery actions are of low importance; rather it implies that they may be deferred while higher priority actions are implemented.**

# Polar Bear Planning Process

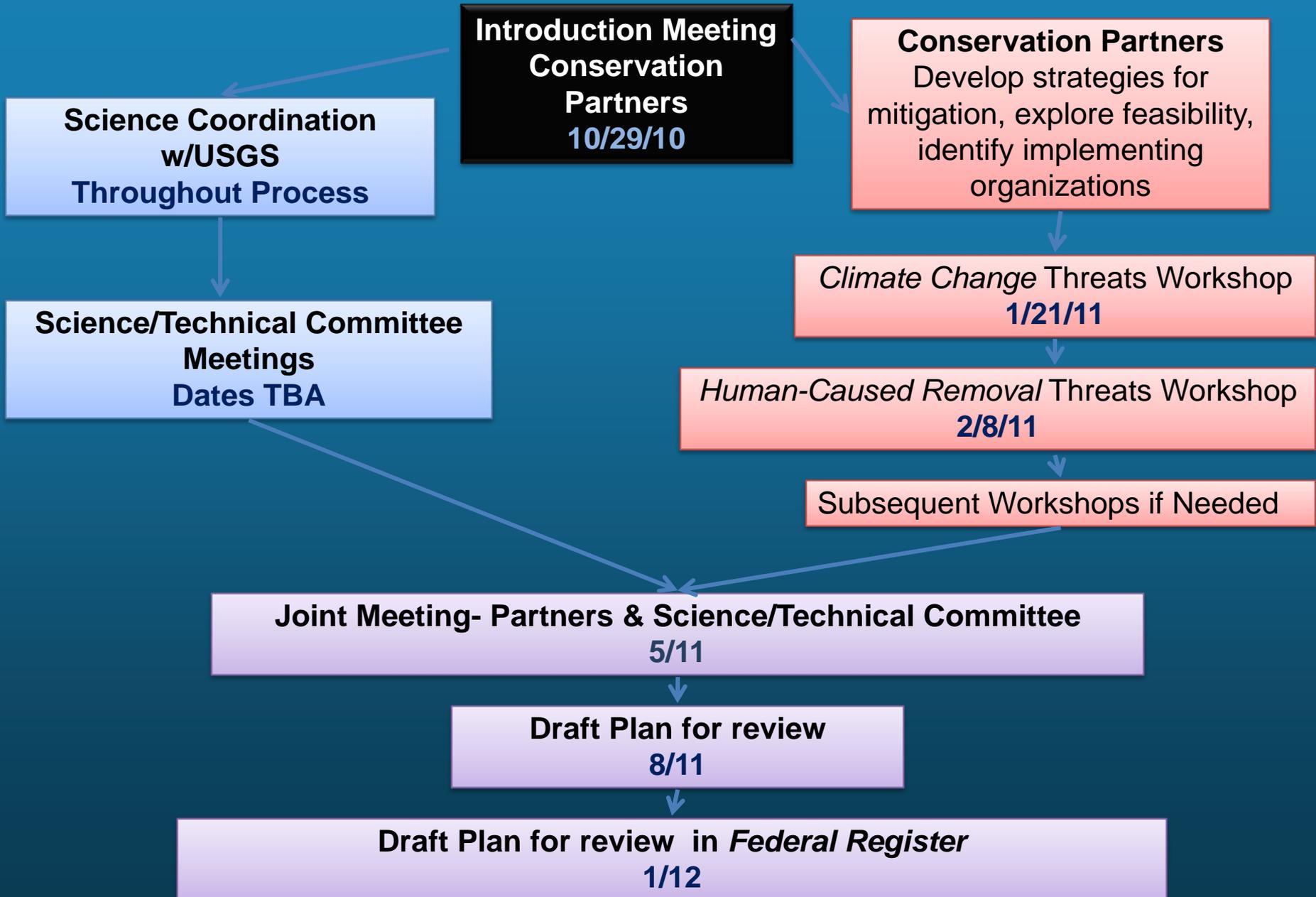


# Draft Schedule for Polar Bear Plan

- Parallel and complimentary process to the Range States' Action Plans.
- U.S. planning process is iterative, likely will extend beyond 2011



# Polar Bear Conservation/Recovery Planning Process



# Successes From 1994 Conservation Plan

1. Co-management with Nanuuq Commission
2. Incidental Take Program
3. USGS- quantifying habitat use (denning areas, sea ice)
4. Research to quantify the size of the populations in Beaufort and Bering/Chukchi
5. Harvest monitoring program
6. Bilateral treaty with Russia

# Questions?



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