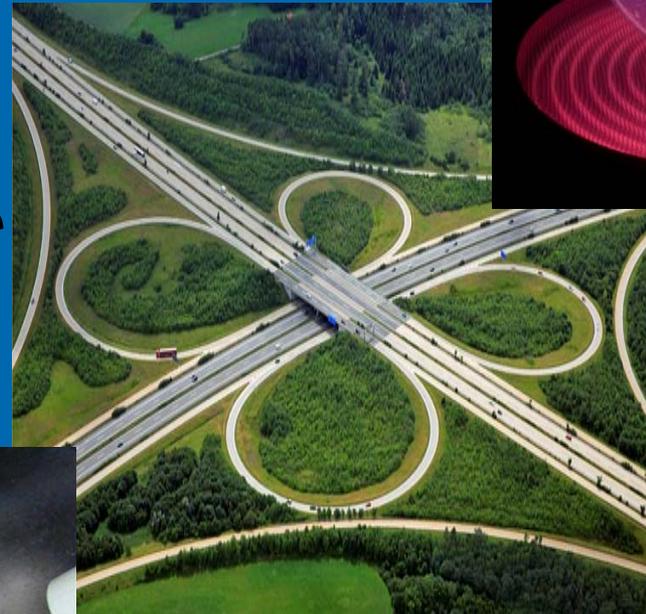


***Climate Change
and
the MSA:
Navigating the
Intersections***



Ruth Ann Lowery, Attorney-Advisor

NOAA GCF

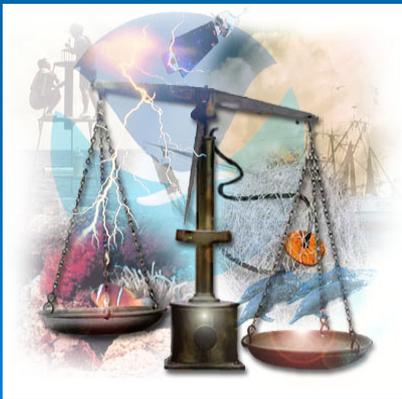
[Revised October 20, 2008]

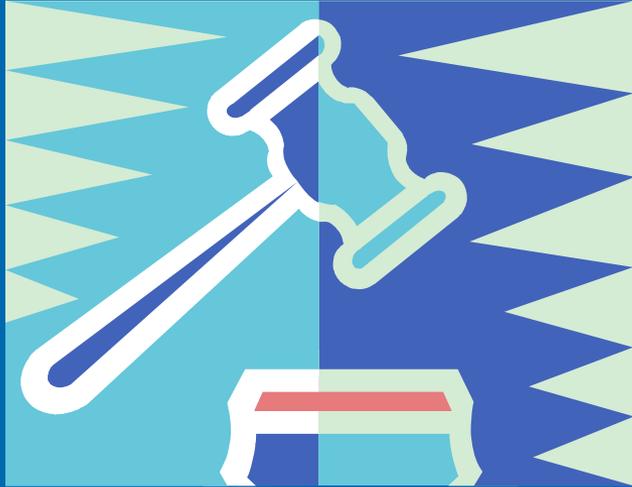
Where NOAA's Legal Team Fits In



*Jane C. Luxton,
NOAA General Counsel*

- As the science of climate change rapidly advances, the law is responding.
- Courts and other institutions have pointed to a need to consider climate change in connection with many resource management decisions.
- The current state of the law unfortunately raises more questions than answers. . .
- . . . but NOAA's Legal Team is closely following developments. . . .





The APA

(Administrative
Procedure Act)

APA: The Point

- To satisfy the APA's standards for informed and rational decision-making (which **overlays all other statutory requirements**), resource managers need to be alert to when climate-change may be a relevant factor for making decisions under their mandates.
- **Where relevant, climate-change considerations need to be evaluated and clearly documented in the administrative record.**





The MSA
(Magnuson
-Stevens
Act)

Climate Change and the MSA



Alaskan Blue King Crabs

Several provisions in the Magnuson Stevens Act would seem to **implicate climate-change related impacts** in fishery management decision-making:

Types of MSA Provisions Potentially Implicating Climate Change:

- **Content Provisions for Fishery Management Plans** (MSA § 303)
- **National Standards** (MSA § 301 and Secretarial Advisory Guidelines)
- **Rebuilding Provisions** (MSA §304)
- **Essential Fish Habitat Provisions** (MSA § 305 and Secretarial Guidelines)

FMP Content Requirements & Climate Change – Required Provisions (MSA Section 303(a))

- **Conservation and management measures** “necessary and appropriate for the conservation and management of the fishery, to prevent overfishing and rebuild overfished stocks, and to **protect, restore, and promote the long-term health and stability of the fishery**” and that comply with **National Standards** and other requirements (§ 303(a)(1))
- Assessment and specification of the **present and future condition of the fishery**; the MSY and OY; and the informational basis for the specification (§ 303(a)(3))

FMP Content Requirements & Climate Change – Required Provisions (MSA Section 303(a)) (continued)

- **Description and identification of essential fish habitat** (“those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity”) (§ 303(a)(7); 3(10))
- **Nature and extent of scientific information needed** for effective implementation (§ 303(a)(8))
- Criteria for identifying when the fishery is overfished (with **analysis of relationship of criteria to reproductive potential of the fishery**); where needed, C&M measures to prevent or end overfishing and rebuild fishery (§ 303(a)(10))

FMP Content Requirements & Climate Change – Discretionary Provisions (MSA Section 303(b))

- Management measures to conserve target & non-target species and habitats, “considering the variety of ecological factors affecting fishery populations” (§ 303(b)(12))
- Other measures, requirements or conditions and restrictions as determined “necessary and appropriate for the conservation and management” of the fishery (§ 303(b)(14))

National Standards & Climate Change

(MSA Section 301(a); 50 CFR § 600.310 *et seq.*)

➤ NS1: Conservation and management measures shall prevent overfishing **while achieving, on a continuing basis, the optimum yield from each fishery** for the United States fishing industry. (§ 301(a)(1))

- **Optimum yield**: the amount of fish which-- (A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems; (B) is prescribed on the basis of the **maximum sustainable yield from the fishery, as reduced by any relevant social, economic, or ecological factor**; and (C) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery. (MSA § 3(33); 16 U.S.C. § 1802(33))

National Standards & Climate Change

(MSA Section 301(a); 50 CFR § 600.310 *et seq.*)

➤ NS2: Conservation and management measures shall be based upon the best scientific information available. (§ 301(a)(2))

- Rules must:
 - be based on a “thorough review of all the relevant information available at the time. . .”
 - not “disregard superior data’ in reaching [the] conclusion.”
 - be “diligently researched and based on sound science.”
- The standard does *not* require:
 - “perfect or entirely consistent data.”
 - ‘the best scientific data *possible*’
- The standard is **practical**. “[S]ome degree of speculation and uncertainty is inherent in agency decisionmaking.”

National Standards & Climate Change

(MSA Section 301(a); 50 CFR § 600.310 *et seq.*)

- **NS6:** Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources and catches. (§ 301(a)(6)).

Provisions for Rebuilding Overfished Fisheries & Climate Change (MSA Section 304(e))

- (1) The Secretary shall report annually . . . and identify those fisheries that are overfished or are approaching a condition of being overfished. * * * *A fishery shall be classified as approaching a condition of being overfished if, **based on trends** in fishing effort, **fishery resource size, and other appropriate factors**, the Secretary estimates that the fishery will become overfished within two years.

Provisions for Rebuilding Overfished Fisheries & Climate Change (MSA Section 304(e)) (*cont. . .*)

- (4) “For a fishery that is overfished, any fishery management plan, amendment, or proposed regulations . . . shall—(A) specify a time period for ending overfishing and rebuilding the fishery that shall-- (i) **be as short as possible, taking into account** the status and biology of any overfished stocks of fish, the needs of fishing communities, recommendations by international organizations in which the United States participates, **and the interaction of the overfished stock of fish within the marine ecosystem**; and (ii) **not exceed 10 years, except in cases where the biology of the stock of fish, other environmental conditions. . . dictate otherwise** * * * * ”

Essential Fish Habitat Provisions

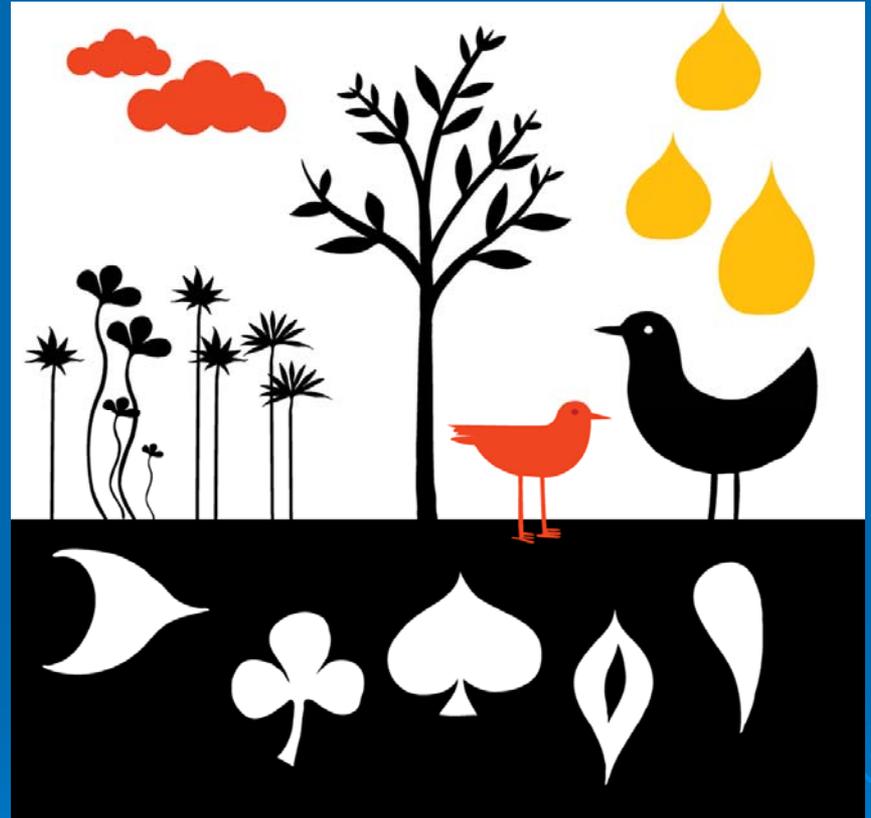
- Potential Relevance of Climate Change

- At the time of identification of EFH in FMPs: Climate change may be relevant in identifying (or later revising) designation of “**those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.**” (§ 3(10)).
 - *E.g., how the habitat is changing as a result of climate change and whether species’ range is shifting in response to climate change.*
- At the time of preparing comments and recommendations regarding other federal actions that may affect the EFH (§ 305(b)(3)).
 - *E.g., how/whether climate-change related impacts may already be degrading the baseline conditions of the habitat*

“Other Applicable Laws” Implicating Climate Change



The NEPA (National Environmental Policy Act)



Climate Change and NEPA

Where do climate change considerations come into play for fisheries actions?



- Describing current environmental conditions (similar to baseline concept)
- Describing environmental impacts of the proposed action (including direct effects, indirect effects, and “cumulative impact”)

CBD v. Nat'l Highway Traffic Safety Admin. (9th Cir. 2007)



- NHTSA had prepared an EA instead of an EIS for proposal to implement new fuel economy standards for light trucks.
- The **EA did not discuss the potential impacts of the rule on climate change or attempt to place the decision in meaningful context of ongoing climate change.**
- NHTSA responded that climate change is a global phenomenon and that the agency action was only a minor contributor.
- The **Court disagreed with NHTSA and remanded for preparation of an EIS.**

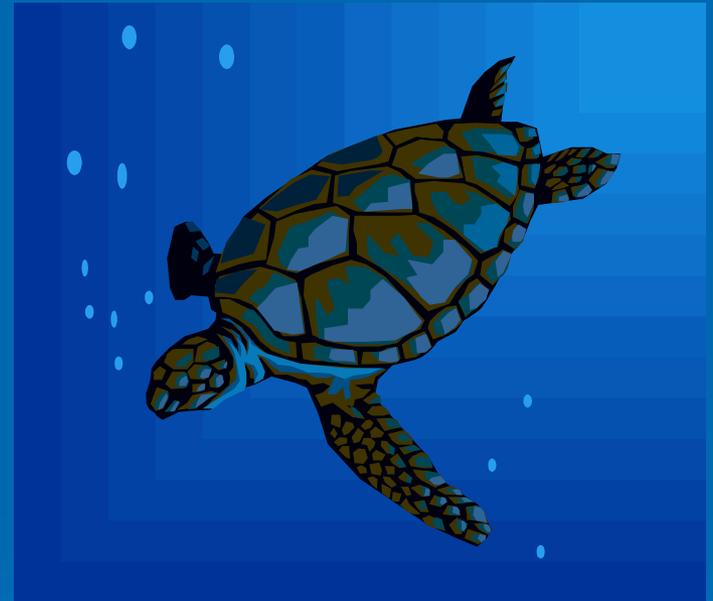
CBD v. Nat'l Highway Traffic Safety Admin. (9th Cir. 2007)



- “The impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct. Any given rule setting a CAFE standard might have an “individually minor” effect on the environment, but these rules are “collectively significant actions taking place over a period of time.”
- “Thus, NHTSA **must provide the necessary contextual information** about the cumulative and incremental environmental impacts of the Final Rule in light of other CAFE rulemakings and other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions.”

The ESA

(Endangered
Species Act)



Climate Change and ESA Section 7 Consultations on Fishery Actions



Ribbon Seals

CC May be relevant to:

- **Species status and recovery needs**, which is influenced by factors such as;
 - Present or threatened destruction or modification of habitat
 - Disease or predation
 - Other natural or manmade factors
- Describing existing conditions in the **“Environmental Baseline”**.

Examples: Climate Change & Ice-Adapted Species



Ribbon Seal



Pacific Walrus



Polar Bear

- Several species that have been subjects of listing petitions or listing actions rely on sea-ice habitat (for resting, feeding, breeding).
- Receding sea ice, related to climate change, may be a factor affecting their **status.**

Examples : Climate Change & Listed Corals

- “Stressors,” or specific conditions causing adverse impacts, include:
 - Elevated sea surface temperature (“major” stressor);
 - Elevated carbon dioxide levels
 - Sea surface level rise (potential future stressor).
- **“Climate variability and change”** is a “source process” leading to creation of certain stressor conditions .



Elkhorn & staghorn corals –
Listed as “threatened”
(NMFS, May 2006)



The ESA Requires Use of
the
**“Best Scientific and Commercial
Data Available”**
in formulating biological opinions.

PCFFA v. Gutierrez (E.D. Cal. 2008) (3 salmonids)

&

NRDC v. Kempthorne (E.D. Cal. 2007) (“Delta

- **Smelt**) challenged FWS and NMFS BiOps analyzing combined operations of a large water management (irrigation) project.
- Court held in separate decisions that both BiOps were arbitrary and capricious and **ignored the best available science.**
- Although **data was available showing effects of climate change** on hydrology of the project area, the **Services apparently assumed that certain historical climatic conditions would continue** over the project’s 25-year duration.



Delta Smelt

PCFFA v. Gutierrez (E.D. Cal. 2008) (Cont.)

- “[R]eadily available scientific **data existed** regarding the potential effects of global climate change on the hydrology of the Project area river systems. . . .
- “The BiOp **does not discuss** this global climate change data or mention that NMFS, at a minimum, considered this data. Instead, the BiOp relies on past hydrology and temperature models. . . .
- “[There was a] **total failure to address, adequately explain, and analyze the effects of global climate change on the species.**”



Key Messages:



- **Consider:** Where climate-change related impacts may affect the short- or long-term health of a fishery, such impacts may be relevant in making decisions regarding that fishery.



- **Document:** Where relevant, consideration of climate-change should be reflected in the administrative record. (*To comply with MSA, APA, ESA and NEPA.*)



- **Adapt:** Availability of useful information will vary by fishery and will improve over time. Disclose the limitations of available data; indicate where there is a need for additional information; and consider updating decisions when new information arises.



- **Particular Results not Implied:** Whether or not climate-change considerations should lead to a particular resource management decision will depend on a variety of factors, including policy choices.

Decision Cites

- PCFFA v. Gutierrez (E.D. Cal. 2008) & NRDC v. Kempthorne (E.D. Cal. 2007) (ESA Section 7(a)(2))
- CBD v. Nat'l Highway Traffic Safety Admin. (9th Cir. 2007) (NEPA)

Please Note

- This presentation provides a **general introduction to some of the ways in which climate change may be relevant** to implementation of NOAA's statutory mandates to manage and protect living marine resources under the Magnuson-Stevens Act. It does not seek to provide definitive legal advice.
- If you have specific questions, please contact the appropriate Office of the Regional Counsel or the General Counsel for Fisheries (see <http://www.gc.noaa.gov/offices.html>).

Thank you!

Ruth Ann Lowery
ruthann.lowery@noaa.gov

Attorney-Advisor
National Oceanic and Atmospheric Administration
Office of General Counsel for Fisheries
1315 East-West Highway (SSMC3, 15th Floor)
Silver Spring, MD 20910
(301) 713-9671