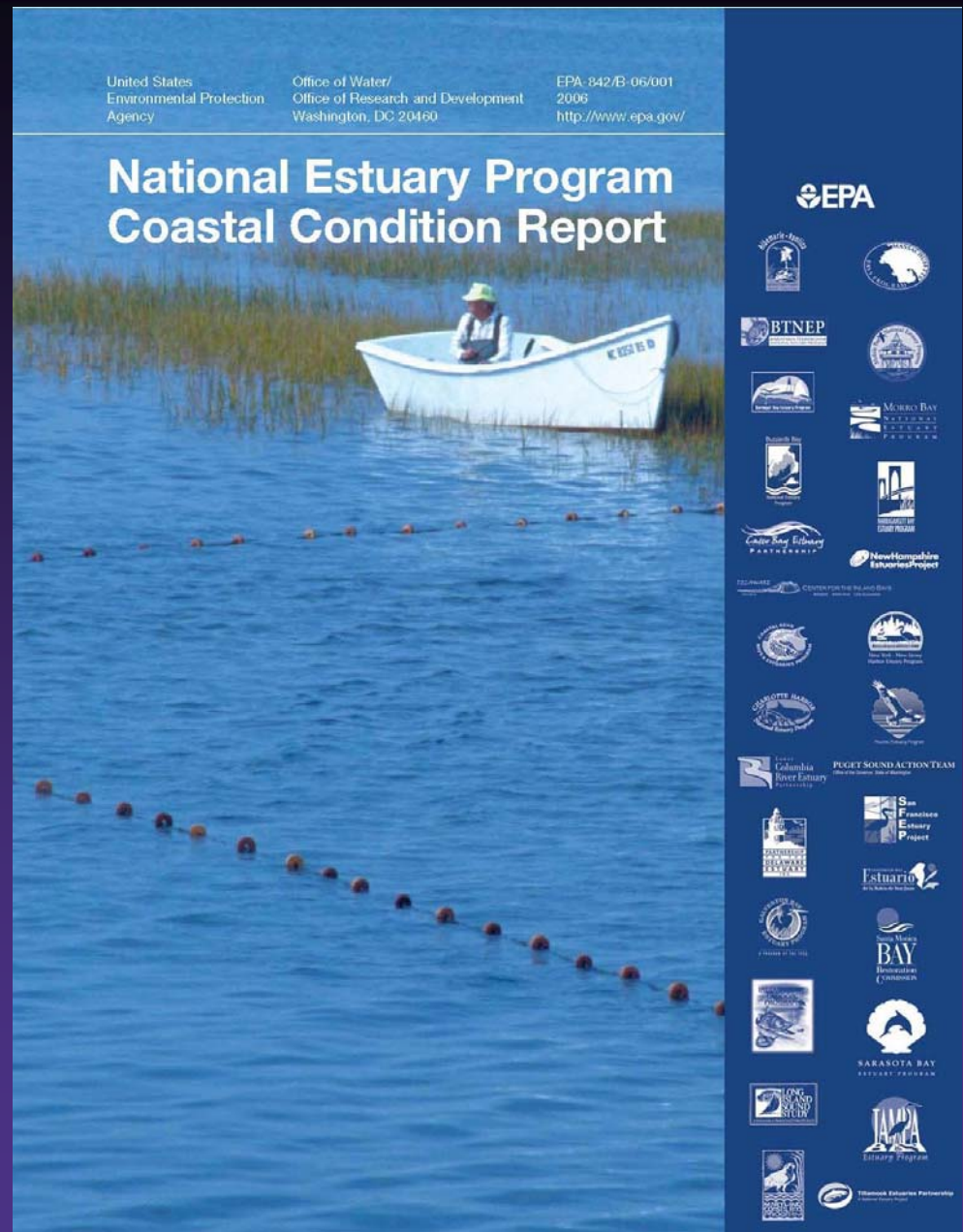


Accountability:

Can we show improvement in the NEPs?

Barry Burgan, US EPA, OW
EMAP Symposium
April 11, 2007



National Estuary Programs

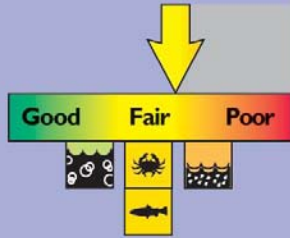


National Coastal Assessment

- Based ~1250 sampling stations in all 28 NEPs from 1997-2003 to determine condition using EMAP approach
- Includes NEP/partner data during the same time-frame. Data are not collected in a consistent and comparable fashion.

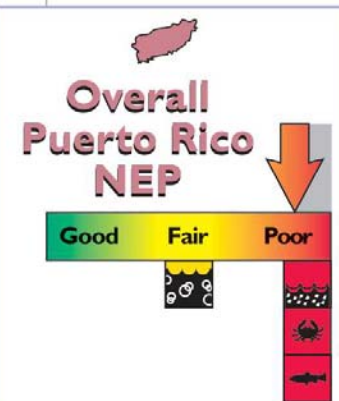
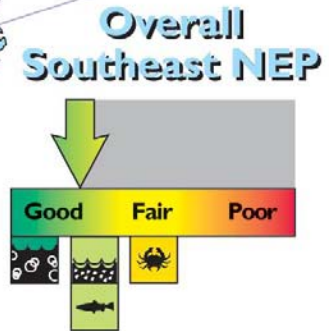
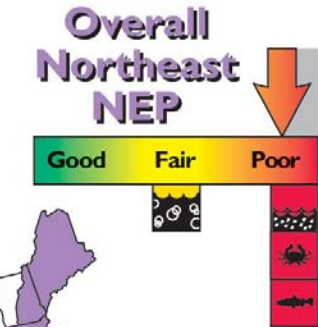
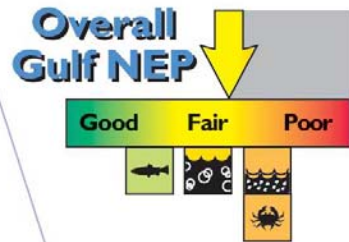
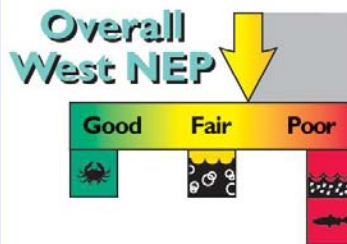
Overall NEP Condition

Overall National NEPs Estuary Condition



Ecological Health

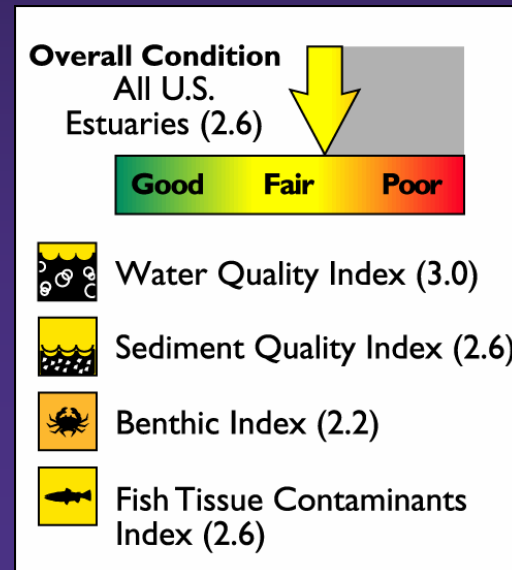
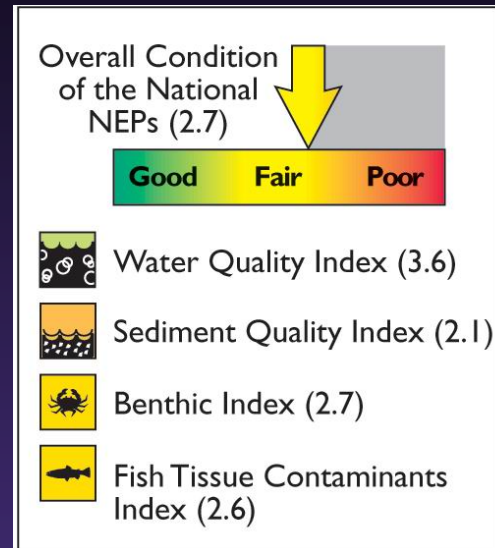
- Water Quality Index
- Sediment Quality Index
- Benthic Index
- Fish Tissue Index



Overall Estuary Condition

NEP
Estuaries

All US
Estuaries



Population Pressures



Figure 1-2. Population distribution in the United States in 2000 (U.S. Census Bureau, 2001).

Population Density

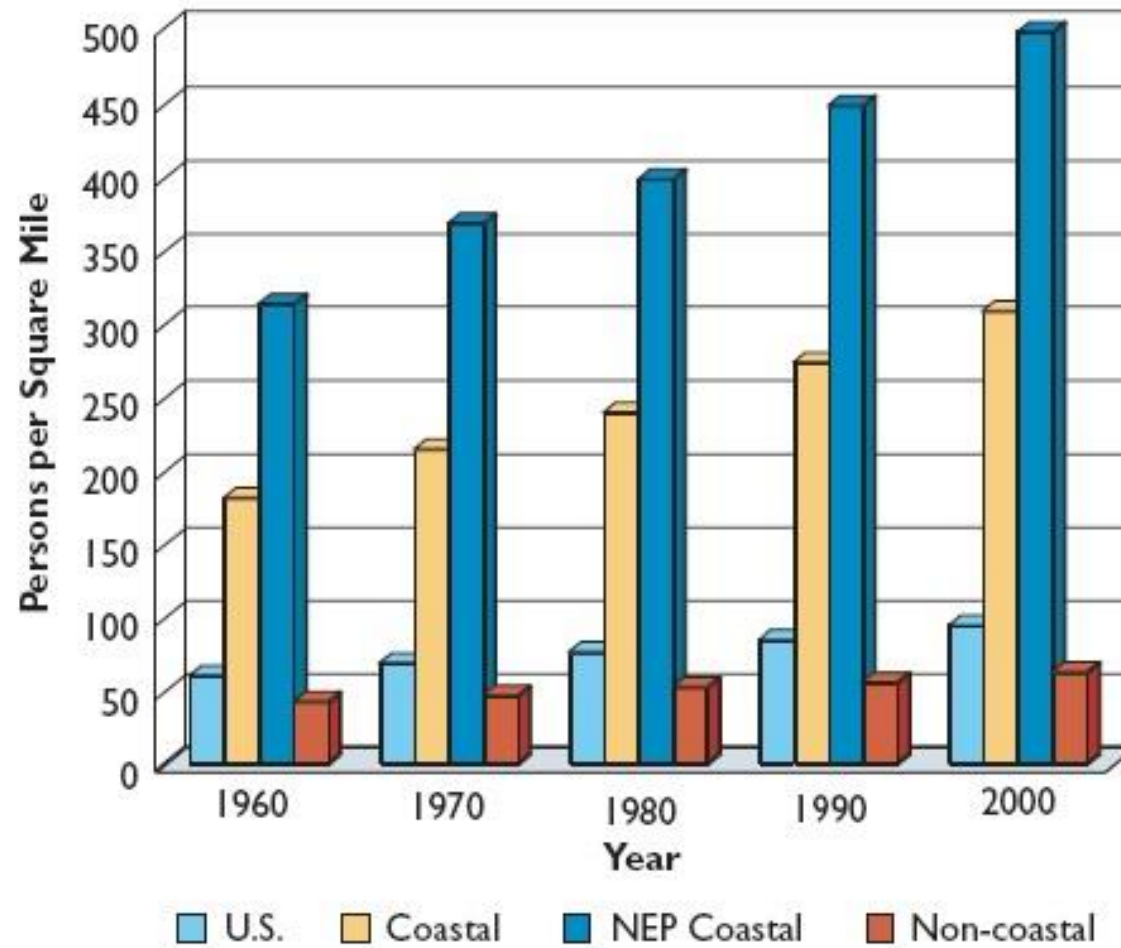


Figure I-4. Population density data for the United States from 1960 to 2000 (U.S. Census Bureau, 1991; 2001).

NEP CCR Conclusions

- NEPs scored better than or equal to all other estuaries despite significant population pressures in the 1990s
- Based upon National Coastal Assessment data can be used in unbiased estuarine comparisons
- NEPs have valuable site specific data but is not collected in way to present national or regional snap-shot
- Need combination of both

NEP coordinated and integrated monitoring, over time, could involve:

- Periodic probabilistic sampling for estuary comparisons and to evaluate changes in baseline conditions
- Moored instrumentation to document temporal dynamics
- Estuary specific monitoring targeting specific issues of concern

