

Fish Advisories in Shared Waters – Establishing Consistency

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Are State Boundaries Barriers?



Can Fish Swim?

- Fish (and crabs) don't obey state boundaries
- Anglers consuming the "same" fish
- Public confused by different or conflicting advisories
- Concern from Health & Outreach Perspective
- Many rivers/bays are state boundaries (e.g., Mississippi R., Ohio R., Colorado R.)

Consistent Advisories - Potential Problems & Barriers

- Inconsistency - intrastate water bodies; Multiple interstate boundaries
- Unwillingness or inability to compromise
- Assumption that current advisory is protective/adequate

Consistent Advisories - Potential Problems & Barriers

- Policy of current administration
- Current intrastate agency agreements
- Recognition of shared resources



New York

Pennsylvania

New Jersey

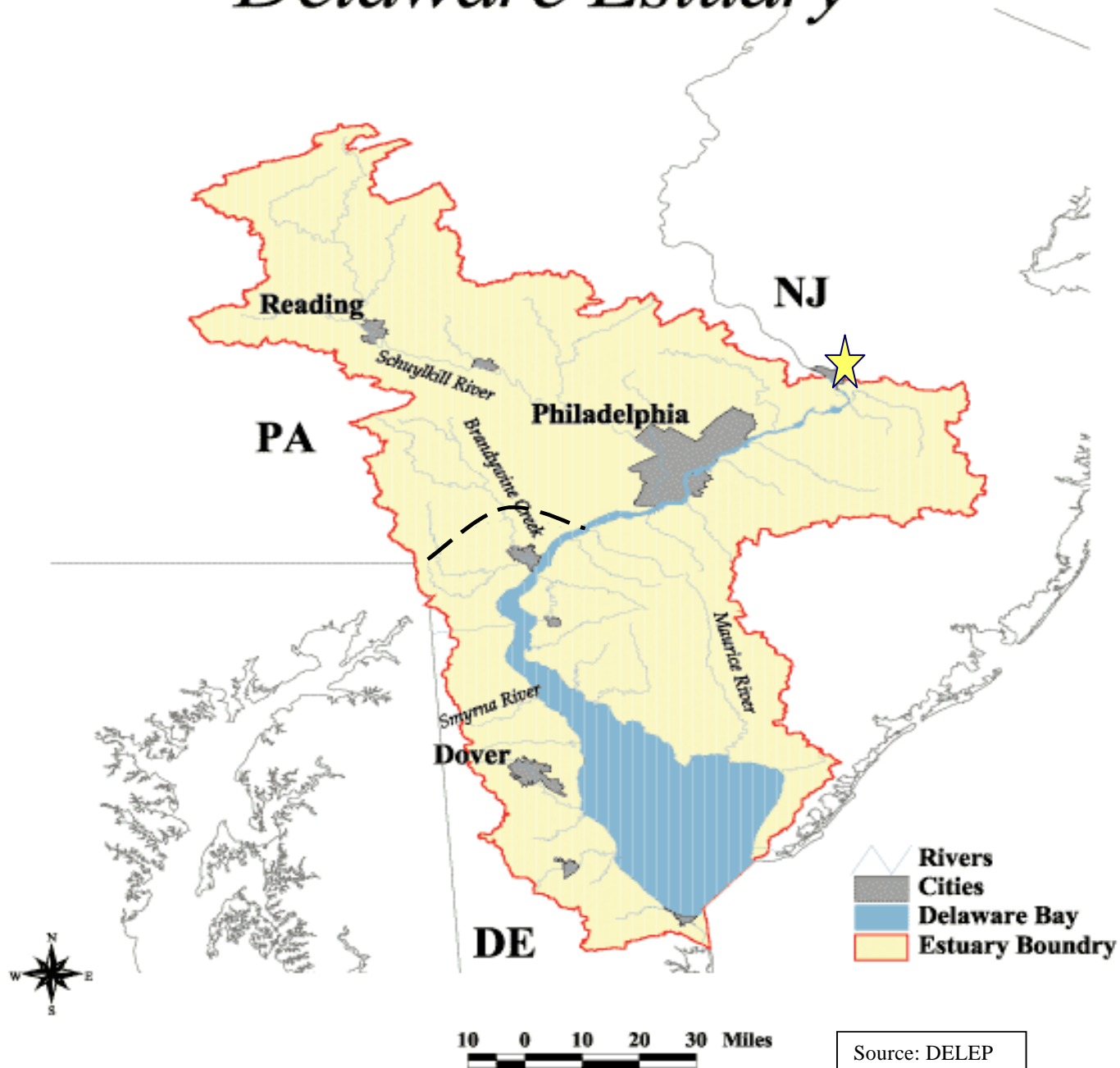
Maryland

Delaware

Source: DRBC



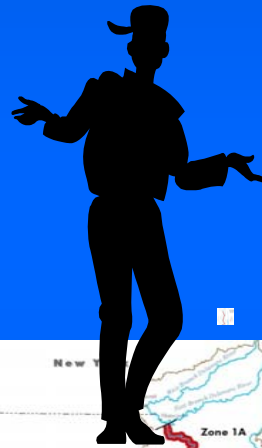
Delaware Estuary



Prior to Consistent Advisory - 2003

Water Body	Species	NJ PCB Advisory using 10^{-5} Cancer Risk	NJ PCB Advisory using 10^{-4} Cancer Risk	Delaware
Delaware River (DE/NJ/PA border to C&D canal)	All finfish	Do not eat (DE)		Do not eat
Delaware Bay (C&D Canal to mouth of bay)	Striped Bass	Do not eat	4 meals per year	1 meal per year
	Bluefish	Do not eat (>24") 1 meal/year (<24")	4 meals per year (>24") 1 meal/month (<24")	No advisory
	American eel	1 meal per year	4 meals per year	1 meal per year
	Channel Catfish White catfish, White perch	1 meal per year (DE advisory)		1 meal per year

???



Key to Success

- NJDEP Commissioner Campbell and DNREC Secretary Hughes requested the development of consistent fish consumption advisories in the shared waters of Delaware and New Jersey

History of Advisories

Past

- NJ since 1982 (1989 in Delaware Est.)
- DE since 1986 (1994 in Delaware Est.)
- Developed separately
- NJ adopted some DE advisories in 1990's
- DE, NJ, PA, EPA & DRBC: Fish Consumption Advisory Team (FCAT) under Delaware Estuary Program

May 2003 Meeting

- Delaware DNREC:
 - Division of Water Resources
 - Division of Fish and Wildlife
- Delaware DHSS:
 - Division of Public Health
- New Jersey DEP:
 - Division of Science, Research & Technology

Reasons for Differences:

- DE: multiple contaminants
- NJ: individual contaminants
- DE: 10^{-5} cancer risk (mandated by Delaware's waste cleanup law)

Reasons for Differences (cont.):

- NJ: "range approach" (10^{-5} and 10^{-4} ; no longer used)
- Different data sets
- Differences in risk assumptions (e.g., 30 year vs. 70 year exposure)

Similarities in Advisories

- Delaware Bay: Cannel catfish, white catfish, white perch – NJ lists DE advisory
- Delaware River: NJ lists DE advisory of “Do not eat” for all species
- High-risk population: both states recommend “do not eat”
- **Build on Consistencies!!**

Resolution for Consistent Advisories in Shared Waters

- DE agreed to add Bluefish to State's Advisories (NJ Data)
- NJ agreed to use 10^{-5} cancer risk
- DE/NJ agreed to use DE 2002 striped bass data and NJ assumptions for advisory

*State of New Jersey
and
State of Delaware
Issued Consistent Advisories
March 2004*

Prior to Consistent Advisory

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Delaware River (DE/NJ/PA border to C&D canal)	All finfish	Do not eat (DE)		Do not eat
Delaware Bay (C&D Canal to mouth of bay)	Striped Bass	Do not eat	4 meals per year	1 meal per year
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2004 New Jersey and Delaware Fish Consumption Advisories for Shared Waters of the Delaware Estuary/Delaware Bay

Area	Species	Advisory	Contaminants of Concern**
Delaware River (DE/NJ/PA Border to the Chesapeake & Delaware Canal)	All Finfish	Do not eat	PCBs, Dioxin, Chlorinated Pesticides, Mercury
Delaware Bay (C&D Canal to the Mouth of the Delaware Bay)	Bluefish	Do not eat fish larger than 6 lbs or 24 inches	PCBs, Mercury
		No more than 1 meal per year for fish < 6 lbs or <24 inches*	
	Striped Bass White Perch American Eel Channel Catfish White Catfish	No more than 1 meal per year*	PCBs, Mercury

Notes:

* Women of childbearing age and children should not consume these fish.

** Proper trimming and cooking of fish can reduce but not eliminate the risk associated with PCBs, dioxins, and chlorinated pesticides. Trimming and cooking does not reduce the risk associated with mercury.

2006 Advisories

- Recent data shared
- Technical staff communication
- Expanded advisories to weakfish
- Revised bluefish advisory
- Issued revised advisories March 2006

2006 Advisories in Shared Waters

Area	Species	Advisory	Contaminants of Concern**
Delaware River (DE/NJ/PA Border to the C&D Canal)	All Finfish	Do not eat	PCBs, Dioxin, Chlorinated Pesticides, Mercury
Delaware Bay (C&D Canal to the Mouth of the Delaware Bay)	Bluefish <= 14 inches Weakfish	No more than 1 meal per month	PCBs
	Bluefish > 14 inches Striped Bass White Perch American Eel Channel Catfish White Catfish	No more than 1 meal per year*	PCBs, Mercury

* Women of childbearing age and children should not consume any amounts of these fish.

Benefits of Consistent Advisories

- Uniform and more effective message to anglers and fish consumers in both states
- Improved comprehension by the public
- Increase public health protection
- Coordinated state outreach efforts

Benefits of Consistent Advisories (cont.)

- Sharing of resources and data
- Meets the DE/NJ and Delaware Estuary Program's goal of consistent advisories
- Consistent basis for 303(d) Listing and TMDL development (leading to clean up)

Lessons Learned

- Need (simple) consistent advisories
- Public has difficulty understanding the advisory (even without conflicting & complex messages for the same fish in the same water body).
- Clear message to the public (risk communication) is more important than differences in technical procedures (risk assessment assumptions).

Conclusions

- Share Data
- Compromise
- Management Mandate
- Public better informed
- Benefits - reach more of the public and leverage cleanups

