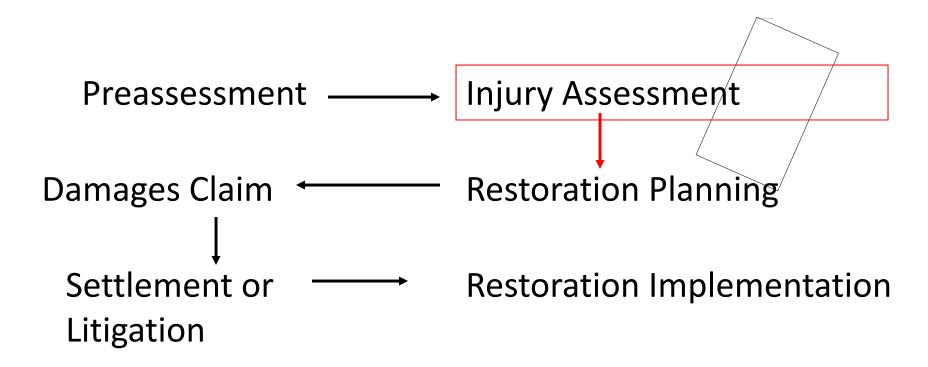
# Natural Resource Damage Assessment and Restoration

### Goal = RESTORATION

- •To compensate the public for injuries to natural resources caused by a release of a hazardous substance.
- Compensation must restore, replace, or acquire the equivalent of lost resources/resource services (restoration).

## **NRDA/Restoration Process:**



## **Turtle project summary**

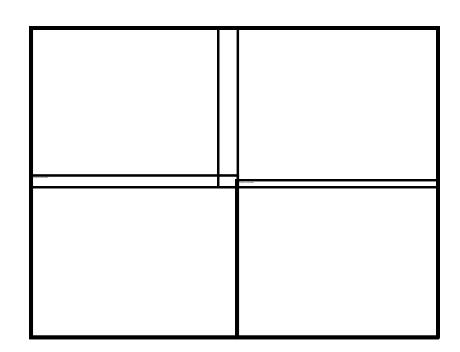
#### **Capture summary**

- Total of 3 field seasons ('06, '10, '11)

~3,500 turtles marked 276 gravid females 3,644 eggs collected

#### <u>Mercury</u>

Developed tissue relationships
for sustainable monitoring
-Blood & nail to muscle & egg [THg]



### <u>Consumption Risks:</u> (muscle [THg] concentrations in *C. serpentina*)

- -%MeHg ranged from 86.6-96.3%
- Middle River: 0.008-0.151 ppm (wwt); Ave:  $0.041 \pm 0.005$
- South River Ref: 0.023-0.294 ppm (wwt); Ave:  $0.142 \pm 0.015$
- South River Cont: 0.399-7.652ppm (wwt); Ave:  $2.638 \pm 0.146$

#### Reproductive effects: (Hatch success)

\*\*\*Uncertainty re # injured

- C. serpentina: ~12% reduction at average egg [THg] (25% at upper range)
- C. picta: ~10% reduction at average egg [THg] (21% at upper range)
- S. odoratus: no reduction in hatching success
- P. rubriventris: not enough gravid females for analysis (but Hg low)

# Restoration Planning and Implementation

- Public involvement in restoration planning.
  - Informal briefings and restoration scoping.
  - Public review and comment on Restoration Plan.
- Restoration Plan required
- Trustee Council must remain the final decision maker.
- All restoration must be closely related to the actual injuries (nexus).
- Consistency with all laws, Trustee policy, management goals, and objectives.
- Not already planned or funded, or otherwise required by law or permit.