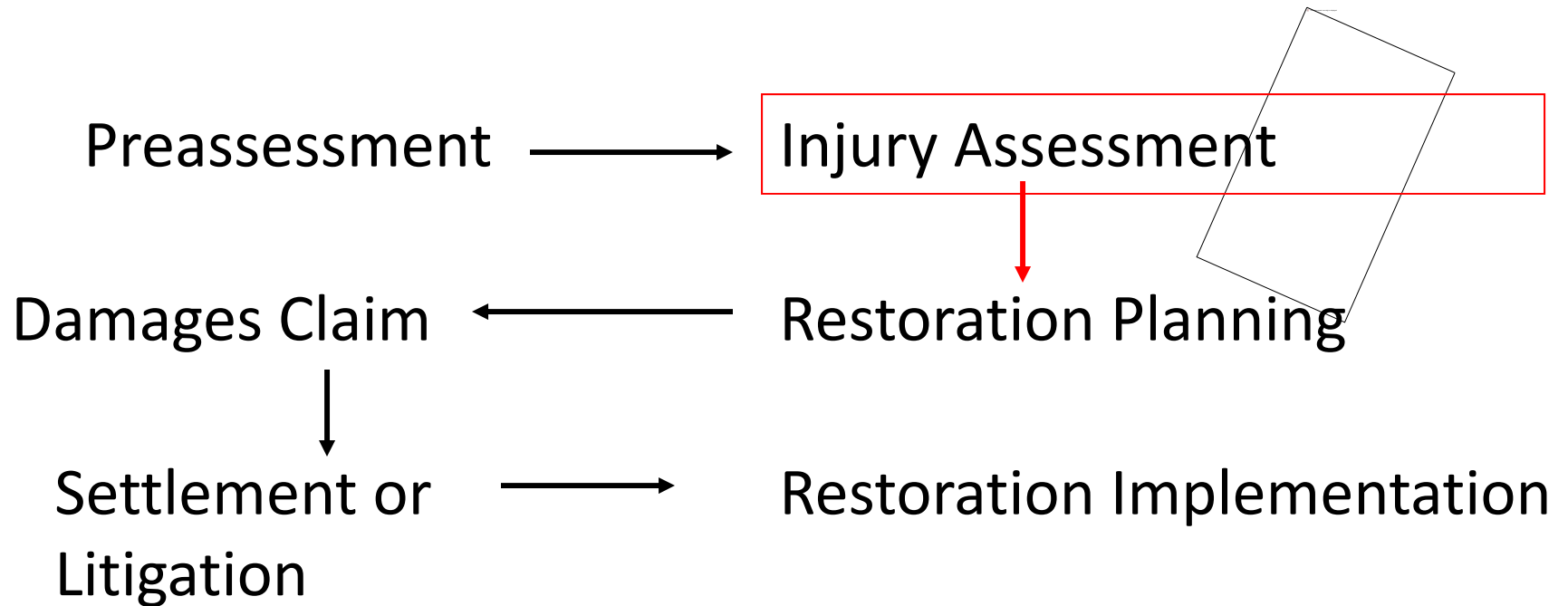


Natural Resource Damage Assessment and Restoration

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

Mercury

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

Consumption Risks: (muscle [THg] concentrations in *C. serpentina*)

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