# NEW DEVDELOPMENTS IN MARKING OPTIONS FOR SALMON

Concluding remarks NPCC

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# TECHNOLOGIES

* CODED WIRE TAG

* PIT TAG

* RADIO TAG

* ACOUSTIC TAG

* GENETIC RECOGNITION

# FUNCTIONS

* DETECT PRESENCE

* RECOGNIZE GROUPS

* RECOGNIZE INDIVIDUALS

* RECOGNIZE PARENTAGE

# PURPOSES

* DETERMINE MOVEMENT

* DETERMINE PRESENCE IN HARVEST

* ESTIMATE POPULATION SIZE

* ESTIMATE POPULATION COMPOSITION

* ESTIMATE MORTALITY

* ESTIMATE REPRODUCTION

# COMPARISONS

* COST PER TAG

* TAG LIFE

* TAG EFFECT ON FISH

* COST OF DETECTION

* LOGISTICS OF DETECTION

# DESIGN CONSIDERATIONS

* SAMPLE SIZE

    --STATISTICAL RESOLUTION

* CONFOUNDING INFLUENCES

    --FLOW,TEMPERATURE,SEASON

* "LOOSE ENDS"

    --INTERPRETATION OF NON-DETECTION

      ---INCOMPLETE DETECTION

      ---MOVEMENT DEVIATION

# WHAT IS THE QUESTION?

* POSSIBLE TRAIN WRECKS

    --HARVEST OF ESA STOCKS

    --SUPPLEMENTATION FITNESS EFFECT

* LONG-STANDING CONTROVERSY

    --FLOW/SURVIVAL

    --TRANSPORTATION

# PLANNING

* PLAN STUDY TO TARGET QUESTION
* DESIGN
    --WORKSHOPS
    --REVIEW
* SYSTEM-WIDE PARTICIPATION
* BUDGET
    --LONG TERM

# BASIS FOR REVIEW

* STATE QUESTION (TESTABLE)
* PROPOSE CONCRETE DESIGN
* SIMULATE "DATA" SETS
        --FOR EACH HYPOTHESIS
* ANALYSE "DATA"
* VERIFY THAT ANALYSIS
        RESOLVES QUESTION