

**U.S. DEPARTMENT OF ENERGY
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

**PRESENTATION TO
THE NUCLEAR WASTE TECHNICAL REVIEW BOARD**

**SUBJECT: CALICO HILLS RISK/BENEFIT
ANALYSIS - CONCLUSIONS AND
RECOMMENDATIONS**

PRESENTER: DR. DAVID C. DOBSON

**PRESENTER'S TITLE
AND ORGANIZATION: CHIEF, REGULATORY INTERACTIONS BRANCH
YUCCA MOUNTAIN PROJECT OFFICE
U.S. DEPARTMENT OF ENERGY**

**PRESENTER'S
TELEPHONE NUMBER: (702) 794-7940**

JULY 24-25, 1990

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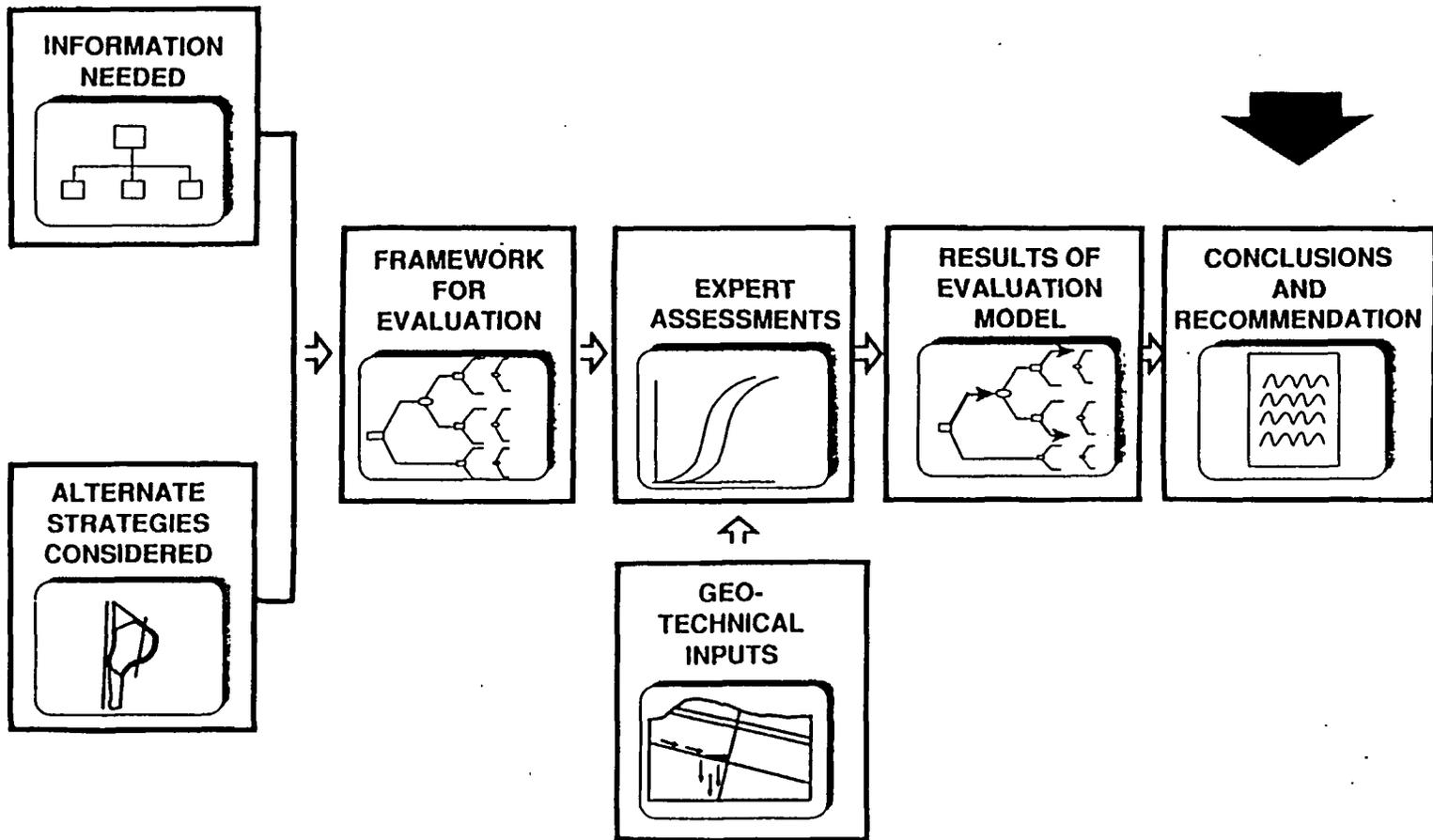
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STRUCTURE OF THE CALICO HILLS RISK/BENEFIT PRESENTATION



RESULTS OF THE CHRBA

PREDICTED PERFORMANCE

- **THE ANALYSIS SUGGESTS THAT THE YUCCA MOUNTAIN SITE IS LIKELY TO MEET THE TOTAL SYSTEM PERFORMANCE STANDARD BY A WIDE MARGIN**
- **BECAUSE EXPECTED PERFORMANCE IS VERY GOOD, TEST RESULTS ARE NOT LIKELY TO CHANGE THAT VIEW**

RESULTS OF THE CHRBA

(CONTINUED)

IMPACTS

- **ASSESSMENTS INDICATE THAT THE LIKELY IMPACTS TO PERFORMANCE ARE SMALL FOR ALL CHARACTERIZATION STRATEGIES**

BENEFITS OF ADDITIONAL TESTING

- **ANALYSIS INDICATES SIGNIFICANT DIFFERENCES AMONG STRATEGIES IN ABILITY TO CORRECTLY PREDICT HYDROLOGIC CONDITIONS**
- **TESTING IS LIKELY TO IMPROVE UNDERSTANDING OF SITE CONDITIONS AND INCREASE CONFIDENCE IN PERFORMANCE PREDICTIONS**

RECOMMENDATION

THE CHRBA TASK GROUP RECOMMENDS THAT THE DOE, AND THE ESF ALTERNATIVES TASK GROUP, SHOULD PLAN FOR CHARACTERIZATION STRATEGIES #2 OR #5, WHICH INVOLVE EXTENSIVE DRIFTING IN THE CH_n WITHIN THE REPOSITORY BLOCK

WHERE DO WE GO FROM HERE?

- **CONTINUE WITH SECOND PHASE OF CHRBA**
- **REQUEST MEETING WITH NRC TO REVIEW RESULTS OF STUDY**
- **PEER REVIEW OF TECHNICAL BASIS AND MODEL RESULTS MAY BE CONDUCTED**
- **SUGGESTION FOR PHASED APPROACH TO EXPLORATION OF CALICO HILLS WILL BE CONSIDERED AS SCHEDULES ARE DEVELOPED FOR SITE TESTING ACTIVITIES**
- **BROADER IMPLICATIONS WILL BE INCORPORATED INTO DOE'S EVOLVING REGULATORY COMPLIANCE STRATEGIES**