REAL LIFE EXPERIENCES
PURSUING LEVEE RE-ACCREDITATION

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REAL LIFE EXPERIENCES
INTRODUCTION & COMMENTS

• Current Hoelscher Projects
  – 2 as Certifying Engineer
  – 1 as Subconsultant to the Certifying Engineer
  – 1 as Interior Drainage Analysis Engineer
  – 1 as Consultant to a Major Levee Stakeholder

• Disclaimers
  – 4 PAL projects
  – 1 non-PAL project
    • No information included from this project for contractual reasons
  – Specific names, locations, projects and clients not provided
REAL LIFE EXPERIENCES

- OVERVIEW OF LEVEE SYSTEMS
- PAL ELIGIBILITY......OR NOT
- LEVEE COMPLIANCE STANDARDS
- RE-ACCREDITATION COSTS
- FEDERAL LEVEE POLICY CHALLENGES
- IDENTIFIED CONCERNS
- THOUGHTS AND SUGGESTIONS
OVERVIEW OF LEVEE EXPERIENCES

- LEVEE SYSTEMS IN GENERAL TERMS
- RIVERS
- OWNERS & CLIENTS
- AREAS PROTECTED
PAL ELIGIBLE....OR NOT

• PALs AND 44 CFR 65.10
  – Definitions via PM 43
    • USACE levee?
    • “Provide BFE protection”
  – Designation by Guidelines
    • Levee scenario B

• COLLABORATION WITH USACE
  – Acceptable vs. Unacceptable !!

• PAL PROCESS “ASSUMPTION”
  – Compilation of design & O&M data
  – Validation of available data

• PAL COMPLIANCE
  – Standards & Timetable….not so simple!
  – Certification package via PAL process
    “still requires detailed evaluation & analyses”
PAL ELIGIBLE….OR NOT

LEVEE SCENARIOS SUMMARY

COE levees:
- Built by COE
- Authorized by Congress
- Built by other but incorporated into COE program by act of Congress
- Federal project O&M’d by COE or turned over to local for O&M
- Non-federal project included in RIP

SCENARIO A
- NON COE levee but are shown to provide BF protection
  - A1: if 85.10 is believed to be met
  - A2: if 85.10 is believed to be met EXCEPT for maintenance deficiency

SCENARIO B
- COE levee eligible for PAL
  - FIRM shows BF protection
  - No other info indicates BF protection not provided
  - Inspection rating is “acceptable”

SCENARIO C
- COE levee but with known deficiencies but are shown to provide BF protection
  - C1- “MAJOR PROBLEMS”
    - inspection rating as “fair, poor or unacceptable”
    - RIP status set to “inactive”
    - No 1-yr correction period provided
  - C2- “MINOR PROBLEMS”
    - inspection rating as “fair, poor or unacceptable”
    - RIP status as “active” prior to 9/30/05
    - COE offers one time 1-yr correction period

SCENARIO D
- COE levee but not providing BF protection

SCENARIO E
- COE levee shown to provide BF protection but actually does not
  - Shown providing protection but COE or FEMA data indicates otherwise
  - Inspection is not “fair, poor or unacceptable” but levee failed or overtopping < 100 yr.
PAL ELIGIBLE... OR NOT

• **PALs AND 44 CFR 65.10**
  - Definitions via PM 43
    • USACE levee?
    • Provide BFE protection
  - Designation by Guidelines
    • Levee scenario B

• **COLLABORATION WITH USACE**
  - Acceptable vs. Unacceptable !!

• **PAL PROCESS “ASSUMPTION”**
  - Compilation of design & O&M data
  - Validation of available data

• **PAL COMPLIANCE RAMIFICATIONS**
  - Standards & Timetable... not so simple!
  - “Certification” via PAL process.....
    still requires detailed evaluation & analyses
LEVEE COMPLIANCE
“STANDARDS”

• USACE STANDARDS..... “GOLD”
  – EM 1110-2-1913... “LEVEE DESIGN” APRIL 2000
  – ETL 1110-2-569...”underseepage guidance” MAY 2005

• STANDARDS
  – POLICY “UPGRADES”
  – TIMING VS. PAL PROCESS PERIOD
  – “CERTIFICATION” ➔ “NFIP LEVEE SYSTEM EVALUATION”
  – ETL 570 ....2007 ➔ EC 6067....2010
  – FLOOD FIGHTING VS. O&M

• CHANGING “STANDARDS”
  – INJECTED UNCERTAINTY FOR PRIVATE “CERTIFICATION”
RE-ACCREDITATION COSTS

• **BIFURCATION**
  – PHASE I: UPFRONT COMPILATION & ENGINEERING
  – PHASE II: CONSTRUCTION?….COULD BE BIG $$$

• **IMPACTS OF COSTS**
  – OWNER CAPABILITIES EXTREMELY LIMITED
  – REVENUE SOURCES BASED ON O&M ONLY

• **FUNDING THE COSTS**
  – PROPERTY TAX RATES
  – NEW TAXING ENTITIES
  – STAKE HOLDERS

• **PHASE I COSTS**
  – YEARS OF NORMAL REVENUE
FEDERAL LEVEE POLICY CHALLENGES

• FEMA
  – PRECLUDED CERTIFIED USACE DATA
  – “OVER CERTIFICATION” DILEMMA

• USACE
  – GENERALLY
    • NO NEW CERTIFICATION
    • NO DATA CERTIFICATION
    • ONLY LEVEES OWNED AND OPERATED
IDENTIFIED CONCERNS

• USACE VS. FEMA PROCESSES
  – THE GOOD, THE BAD AND THE UGLY
    • 84-99 INSPECTIONS AND PAL LETTERS

• ORIGINAL LEVEE DESIGN STANDARDS
  – AG VS. URBAN FACTORS OF SAFETY

• REMAPPING & INSURANCE
  – LEGISLATION …..5 YR DELAY FOR RATES
  – INSURANCE VS. MAPPING IMPACTS
IDENTIFIED CONCERNS

• LIABILITY
  – OLD DATA MUST BE “RECREATED”
  – INCREASES TO COSTS AND SCHEDULE
  – CONTINUED RISK FOR ENGINEER

• COSTS
  – MUCH HIGHER THAN ANTICIPATED
  – LIABILITY ISSUES

• PAL COMPLIANCE PERIOD
  – ACCREDITATION IS A “FROM SCRATCH” PROCESS
THOUGHTS AND SUGGESTIONS

• OUTREACH AND EDUCATION TO OWNERS AND ENGINEERS
  – PROCEDURES CAN BE AMBIGUOUS
  – OWNERS HAVE RELIED ON USACE …mixed signals
  – CONFUSION WITH PL84-99 AND 44 CFR 65.10
    • Especially the costs

• POLICY CHANGES
  – COMMUNICATION…ROUTINE UPDATES

• PAL COMPLIANCE PERIOD
  – NOT JUST A PAPER CHASE
THOUGHTS AND SUGGESTIONS

• **FUNDING EVALUATION**
  - LEVEE OWNERS NEED MORE TIME
    • Phase I vs. Phase II costs
  - IDENTIFY OVERALL COSTS
    • Including construction

• **FINANCIAL RESOURCES**
  - OWNERS HAVE LIMITED FUNDS
  - OWNERS CAN’T AFFORD IMPROVEMENTS
  - STATE OR FEDERAL ASSISTANCE?
REAL LIFE EXPERIENCES
PURSUING LEVEE RE-ACCREDITATION

QUESTIONS?