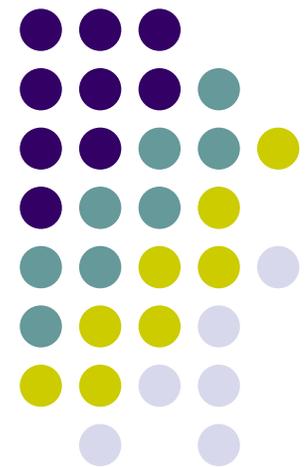


Planning Models Improvement Program (PMIP)

PCoP Conference
May 2006





Background

- PMIP – established in 2003
- **Purpose – carry out a process to review, improve and validate analytical tools and models used in CW business programs**
- Task Force Report – September 2003
- EC 1105-2-407 – Published May 2005
- Draft protocols report – published October 2005, under review



Planning Models

A representation of a system for a purpose

For certification purposes, a **planning** model is: **Any generic software package or spreadsheet or framework (i.e., HEP) used for water resources planning purposes.**

Engineering models – approved under Science Engineering and Technology (SET) Program

POLICY



- Use of certified models for all planning activities is mandatory
- Use of certified models does not replace need for ITR- still needed for input data and outputs and proper application of model.

CERTIFICATION PROTOCOLS: CRITERIA



- **Technical Quality**

- Based on validated and accepted “state of the art” theory
- Realistic representation of actual system
- Clearly addresses identified analytical requirements
- Assumptions are valid and support analytical requirements
- Incorporates Corps policies and accepted procedures
- Formulas (relationships) are correct
- Computations are appropriate and done correctly
- Clearly identified capabilities and limitations

CERTIFICATION PROTOCOLS: CRITERIA



- **System Quality**

- Supporting software tool/programming language and hardware platform are appropriate for the model
- Programming was done correctly
- Model has been tested and validated
- Data/outputs can be readily imported into other software analysis tools.

CERTIFICATION PROTOCOLS: CRITERIA



● Usability

- Quality data is readily available
- Results format is adequate and understandable
- Results provide useful information to users to support project analysis
- Results can be exported into PM documentation
- Training is readily available
- Users documentation is readily available, is user friendly and complete
- Adequate technical support is available
- The software/hardware platform used is available to most users.
- Model is easily accessible.
- Model is transparent.

CERTIFICATION PROTOCOLS



- Detailed procedures and requirements for certification
- Various certification processes
 - Existing and new models
 - By type of model
 - Geographic applicability
 - Simple to complex
 - By category (levels 1 to 4 – EC 407)
 - By type: empirical, descriptive, statistical, theoretical, qualitative, quantitative, etc.
- To be applied consistently across PCXs
- Reflect industry practice



Status

- Draft protocols – under review
- Test models – HEC-FDA, BEACH-FX and In-Stream
- Test protocols – SOW submitted to contractors, negotiating proposals (Aug 06)
- Finalize protocols – based on comments and tests (Sep 06)