Tool for Environmental Assessment and Management (TEAM)

**Description**
This software package creates graphs and tables that allow experts to compare the relative strengths of adaptation strategies using both quantitative and qualitative criteria. TEAM assists the user in evaluating issues such as equity, flexibility, and policy coordination. The user lists the strategies across the top of the table and the evaluation criteria down the side, then enters a score indicating the relative performance of each strategy under the various criteria. This table can then be used to construct a variety of graphs of the data. It will not necessarily identify the optimal strategy (unless one strategy outperforms all others in all criteria), but is instead designed to allow the user to more clearly see the strategies’ relative strengths and weaknesses.

**Appropriate Use**
TEAM is useful when it is important to consider a wide range of criteria and to explicitly identify unquantifiable and uncertain aspects associated with potential adaptations. It should be used in conjunction with other decision-making tools (e.g., cost-benefit analysis, discussion and workshops with key decision-makers).

**Scope**
All locations; covers coastal zones, water resources, agriculture, as well as a general assessment component; national or site-specific.

**Key Output**
Relative effectiveness of alternative adaptation measures across a range of criteria.

**Key Input**
A ranking of how well policy objectives are met using alternative strategies.

**Ease of Use**
Relatively easy to apply; more rigorous results require more analysis; only basic computer skills are needed.

**Training Required**
A user with an understanding of key policy objectives could achieve proficiency in 1 to 2 days.

**Training Available**
Contact Susan Herrod-Julius for more information (see Contacts below).

**Computer Requirements**
IBM-compatible 386 with a 3.5” drive and a mouse; Microsoft Windows 3.1 and Excel 5.0c spreadsheet software.

**Documentation**
The user’s manual can be obtained from Ms Susan Herrod Julius (see the email given below). See also the web site http://cfpub.epa.gov/gcrp (>”data, documents and tools”> “publications and presentations”)

**Applications**
Used in China, Costa Rica, Venezuela, Trinidad, Italy, Egypt, and Malawi.

**Contacts for Tools, Documentation, Technical Assistance**
Susan Herrod-Julius, 8601D, U.S. EPA Headquarters. Ariel Rios Building, 1200 Pennsylvania Avenue, N.W., Washington, DC 20460; Tel: 202.564.3394; e-mail: herrod-julius.susan@epa.gov.

**Cost**
Free to obtain documentation.

**References**
### Adaptation Decision Matrix (ADM)

**Description**
The ADM uses multicriteria assessment techniques to evaluate the relative effectiveness and costs of adaptation options. Users are asked to specify criteria that will be used to evaluate options and weight the criteria. Scenarios of current climate and climate change can also be used. Users are asked to give a score (e.g., 0 to 5) on how well each criterion is met under a particular scenario for each option. The scoring can be based on detailed analysis or expert judgment. Scores can be multiplied by weights and summed up to estimate which options best meet the criteria. The scores can be compared to relative costs to assess cost-effectiveness.

**Appropriate Use**
This approach is useful when many important benefits of meeting policy objectives cannot be easily monetized or expressed in a common metric. However, detailed research and analysis are needed to provide a basis for the evaluation; otherwise the scoring may be mainly subjective.

**Scope**
All locations; all sectors; national or site-specific.

**Key Output**
Relative cost-effectiveness of alternative adaptation measures.

**Key Input**
A ranking of how well policy objectives are met using alternative strategies; estimated costs of adaptation measures.

**Ease of Use**
Relatively easy to apply; more rigorous results require more analysis; only basic computer skills are needed.

**Training Required**
A user with an understanding of key policy objectives could achieve proficiency in 1 to 2 days; however, additional training may be required to develop skill in estimating costs of adaptation measures.

**Training Available**
Contact Stratus Consulting for more information (see Contacts below).

**Computer Requirements**
IBM-compatible 286; Lotus 1-2-3 or Excel spreadsheet software helpful.

**Documentation**

**Applications**
Used by participants in the U.S. Country Studies and UNEP assistance programs (e.g., Kazakhstan, Cameroon, Uruguay, Bolivia, Antigua, Estonia, Pakistan and Barbuda).

**Cost**
No cost for documentation or diskette with template of the decision matrix.

**References**