

APPENDIX 6 APPROACH TO INITIAL INDICATOR SELECTION

DEVELOPMENT OF INITIAL LIST OF INDICATORS

Selection of indicators was based in large part on existing expertise, in addition to further research conducted specifically for this project. Background research on indicators relevant to freshwater resources and rivers specifically included investigations into water and conflict, water resource management, socio-economic development, and a detailed reading of the water treaties themselves, from which insights as to the relevant social, political, economic, and resource issues can be gained. From the background research, and based on expert knowledge in international environmental policy and resource management and socio-economic development, an initial list of the names of potential indicators was created. These indicators were divided into groups by whether they were spatially distributed information (i.e., maps), information derived from remote sensing imagery (which may or may not appear in map form), statistical information by country, statistical information by river basin, and miscellaneous. Also kept in mind was the need to have a broad range of indicators that covered multiple spheres -- economic, political, social, geographical, environmental, climatic, etc. The initial list of indicators was inclusive, rather than exclusive, because the list was considered part of a larger, brainstorming process.

SEARCH FOR AVAILABLE DATA, EXPANSION OF INDICATOR LIST

Searches were conducted, using books, statistical indices, and the world wide web, for possible sources for indicator data. Care was taken to obtain as much information as was readily available on the areas and years covered by the data, as well as relevant data caveats. This information was compiled into a Word table, with the following headings: Name of indicator; Info. type; Producer of data; Format of data; Data description; Additional comments; and, Location of data. Selection of data sources was guided by the following: the area of the data covered should be global; data should be from a respected source and where possible the original source of the data should be noted; and, the data should have some relevance with regards to river treaties. As searches for data were conducted, new indicators were added to the initial list.

METADATA METHODOLOGY

To manage such a large amount of data, a Metadata methodology was developed. Metadata is data that describes data. For all data obtained and used by the Basins At Risk project, project staff recorded the following information: the category of the data (to assist staff searching for specific data, the information regarding indicator data will be grouped by three categories: Biophysical, Socioeconomic, and Political); a name for the data (brief, but descriptive); a more detailed description of data and how it was derived; the source of the data, including publication/copyright information; data caveats, including our confidence level in the data (low, medium, high); any changes or adjustments (i.e., tweaking) that we made to the data (including who made the change and when); the name of the data file, file type, and file location (all contained in the name of the file); and, the formal citation to be used for the data. As data was obtained and modified for use in the project, or as new indicator data was created in-house, information regarding the changes made to the data, and who made the changes, was added to the metadata table. With this metadata, we have descriptive and bibliographical information for every file created for the TFDD project. The metadata information, currently maintained in an Excel spreadsheet, will eventually become part of an Access database containing all the BAR project data and will be made available on the TFDD website.