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Interagency Watershed/Ecosystem Initiatives Meeting, October 1996

A-Team April 1997

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**Interagency Watershed/Ecosystem Initiatives Meeting
Environmental Management Technical Center
October 17 and 18, 1996**

The Environmental Management Technical Center (EMTC) sponsored an interagency meeting on Upper Mississippi River Basin watershed/ecosystem initiatives on October 17 and 18, 1996. The meeting's purpose was to present watershed and ecosystem projects and programs by agencies that have a stake in the Upper Mississippi Basin and find opportunities for cooperation. Representatives from the EPA, USGS Biological Resources Division, the USGS Water Resources Division, the Natural Resources Conservation Service, and the Metropolitan Council of Environmental Services attended. Presentations on on-going or planned activities were made by the EMTC, the Upper Mississippi River Science Center, the EPA's Mississippi River Team, USGS Water Resources Division in Iowa and Minnesota, and the Natural Resources Conservation Service Midwest Regional Office on projects that related to Basin watershed and basin ecosystem issues and their relationship with the Basin's floodplains.

Three action items were agreed to by the group:

1. Workgroup

Four people agreed to nominate members for participation in an initial workgroup. The workgroup will have two objectives: (1) define priority watershed selection criteria, and (2) set goals and objectives that are common to all agencies. Pete Redmon EPA, George Garclavs USGS-WRD, James Weiner USGS-BRD, Gary O'Oneill NRCS will nominate members for the workgroup.

2. Mail List

EMTC has created and will maintain a mailing list. Possibly upgrade to listserver as interest and funds increase.

3. Open Web Site

This is a long-term proposal, which would require additional funding. This would be a site that researchers and managers could access to find data on a watershed basis, as well as present, in a public forum, research projects and opportunities. It also could provide links to related home pages, such USGS-WRD, EPA, NRCS, and states. Perhaps using watersheds as the organizing model. It could list priority areas, access resources and network of contacts per subject area.

Environmental Management Technical Center Projects¹ Related to Basin Scale Initiatives

Fluvial Transport and Processing of Sediment and Major Plant Nutrients in the Upper Mississippi River Basin

This is a multi-agency (USGS/BRD, USEPA, USCOE) project that will compile and analyze data on suspended sediment, nutrients, and flow from the Upper Mississippi River mainstem and tributaries (above Cairo, Ill). The project will: (1) create a documented, comprehensive, and accessible database of monitoring data, (2) begin quantifying sources and sinks of nitrogen, phosphorus, and sediment in the basin, and (3) examine temporal patterns of flux and processing at seasonal and multi-year time scales. The project will evaluate the water and material contributions of approximately 60 of the largest tributaries to the mainstem.

Application of a Spatial-Process Model of Nonpoint Source Pollution

Available data will be modeled to extrapolate sediment and agrichemical loadings at a regional scale as well as demonstrate the importance of water quality management at individual farm and watershed scales. Because of legislative spatial constraints on the Long Term Resource Monitoring Program, this project is proceeding with limited funds and external support is being sought.

Water Quality and Sediment Monitoring by the Long Term Resource Monitoring Program on the Upper Mississippi River

The Long Term Resource Monitoring Program (LTRMP) on the Upper Mississippi River has conducted limnological monitoring of the River since 1988. Since 1993, this program has monitored plant nutrients and suspended sediment at bi-weekly intervals in approximately 40 major tributaries to the Mississippi River and at more than a dozen locations on the River mainstem. These data will prove invaluable in evaluating the longitudinal and temporal (seasonal and multi-year) flux of nitrogen, phosphorus, and sediment and the connections between material flux, landuse, and hydrologic events in the Upper Basin.

Sediment Budgets for Selected Mississippi and Illinois River Reaches

FY 1997 will be the third year of data collection to develop sediment budgets for two pilot river reaches, one each on the Upper Mississippi and Illinois Rivers. Data are collected within each reach and at the mouths of major tributaries.

Basemaps and GIS coverages of tributary watersheds

¹ Includes internal as well as partnered projects.

As part of a comprehensive strategy to analyze landscape features of watersheds that influence their capacity to contribute sediment and other materials to the Mississippi River, the watershed boundaries of all tributaries that empty into the river, regardless of size, are being created. Watershed coverages are coded by stream order and size of drainage area. The next step in the strategy will be to create a complementary coverage of USGS and other agency gaging stations.

Systemic Database Development (SAST Extension)

Increasing awareness of the systemic nature of many Mississippi River problems points to the necessity of a basin database. Short-term crises such as the 1993 Midwest Flood, or a potential hazardous spill, require unanticipated but immediate access to natural and human resource data from spatial subsets of the system. A federal-state cooperative effort (an extension of SAST work that followed the 1993 flood) is being proposed to create a distributed database on natural resource and emergency response issues. A vision statement outlining the concept will be distributed this fall to interested federal and state organizations for review and to solicit greater participation.

USGS Ecosystem Program Proposal Related to Nutrient Enrichment

A proposal has been submitted to the USGS Ecosystem Program to integrate science within the basin and Gulf of Mexico mixing zone for the purpose of quantifying, understanding and addressing the problem of nutrient enrichment within the system. The proposal seeks multi-year funding beginning in FY 1998, although the science strategy would have to be established in FY 1997. It would involve the effort of offices within all USGS Divisions, and the coordination of USGS science with the management activities of federal and state agencies.

Historical Discharge and Water Elevation Database

This database has been developed as part of the Long Term Resource Monitoring Program. The database provides easy access to the historical record, beginning in the late 1800's but mainly from the 1930's forward, of daily river water elevations and discharges from gages located throughout the Upper Mississippi River System. A software package makes it possible to subset the data and to calculate annual averages over selected time periods. These data should be useful in evaluating past relationships between nutrients and discharge.

Upper Mississippi River System Land Cover and Use

This spatial database is being developed to present a snap shot of floodplain land cover and use for the Upper Mississippi and Illinois Rivers at a single point in time, 1989. Coverages are being derived from aerial photographs. To date 166 land cover and use categories are

included in the database. Approximately 70% of the UMRS will be completed by the end of 1996.

Adaptive Environmental Assessment

A cooperatively planned and supported series of workshops are being organized to develop a collaborative understanding (among all river stakeholders) of the natural floodplain ecosystem and its response to human activities. The exercise uses two models, at basin and navigation pool spatial scales, to simulate changes in water quality, quantity, depth, sediment, vegetation and associated economic consequences, in response to alternative management policies. The State of Minnesota, the Upper Mississippi River Basin Association and the EMTC have supported the exercise to date. The EMTC currently provides planning support and technical review.

Illinois River Water and Sediment Database

A comprehensive water and sediment database, covering 60 years of sediment surveys and 10 years of suspended sediment monitoring data for the Illinois River and its major tributaries will be available by the Spring of 1997. Cooperative research and monitoring projects with the Illinois Water Survey in the Illinois River Basin, including the changes in land use practices within watersheds that may have contributed to increases in soil erosion and sedimentation, have generated a significant amount of data that could be applicable to other streams.

Upper Midwest Gap Analysis Program (UMGAP)

As part of a comprehensive biodiversity assessment, UMGAP is producing meso-scale (minimum mapping unit of 1 to 5 acres) current land cover maps for the states of Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio and Wisconsin. Utilizing automated classification of Landsat Thematic Mapper satellite imagery, vegetation is being classified to the alliance level (dominant overstory species) in the UNESCO/TNC/FGDC classification system. Also being developed are maps of public ownership and of terrestrial vertebrate species distribution.

Integrated Science for the Mississippi River System

We propose to supply the information needed by management agencies and the general public to quantify, understand, and address nutrient enrichment within the Mississippi River System (System). This multidisciplinary and multiagency effort would be the first to integrate physical, chemical, and biological data across the entire System.

Ecosystem Name and Location

The System includes the Mississippi River Basin and the mixing zone in the Gulf of Mexico (Figure 1). Spatial scales for summarization of selected data include the basin, selected subbasins, stream network, selected floodplain rivers, deltaic and coastal plains, and the mixing zone. The Mississippi River Basin, the third largest in the world, is home to more than 110 million people. It drains 41% of the United States, including all or parts of 31 states and two Canadian provinces. The size of the System requires the coordinated efforts of offices within the Eastern and Central Regions of the USGS.

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Environmental and Resource Management Issues

The System includes a complex mixture of natural resources. The complexity and size of the System, in combination with local, state and federal agency boundaries, has often led to fragmented approaches to resource management. Scientific databases developed to resolve problems within the System have frequently been organized along state or federal agency lines rather than spatial boundaries more appropriate to effective solutions.

In July, 1996, representatives of U.S. Geological Survey (USGS) Division and State offices, National Biological Service Centers, the Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (USFWS), the Natural Resources Conservation Service (NRCS), the National Park Service (NPS) and the U.S. Army Corps of Engineers (USACOE) met to begin planning a strategy for integrated USGS science within the System. Two issues were proposed as potential focal points: Nutrient Loading/Gulf Hypoxia and Habitat Degradation. These issues are related, as habitat degradation in parts of the system has contributed to increased nutrient enrichment downstream, while hypoxia is considered to be only part of an overall pattern of habitat degradation in the Gulf of Mexico. The nutrient enrichment issue has generated widespread heated discussion about extent, causal factors, consequences, and alternative

solutions. The issue involves natural resources of great economic value from the Midwest to the Gulf. We will focus on the specific problem of nutrient enrichment and recognize habitat restoration as one of several potential solutions to the problem.

Problem Description: Nutrient Enrichment In the Mississippi River System

A seasonal zone of hypoxia covering as much as 7,000 square miles has been detected in the Gulf of Mexico. The zone threatens multimillion dollar fish and shellfish industries. One hypothesis suggests that the hypoxic zone is caused by excessive nutrients entering the river, primarily from the Midwest. However, hypotheses implicating other factors, such as point source pollutants and altered sediment delivery to the Gulf coast have also been proposed. Ecological changes in upstream reaches of the System (e.g. algal blooms, fish kills) have been linked to nutrient enrichment.

Several factors, including land use change, tributary channelization, and climate patterns have likely contributed to or influenced nutrient enrichment and altered transport and processing rates within the basin and stream network. But we don't know the answers to the questions of "How much?" or "Where?" Causal factors and severity of ecological consequences throughout the System vary. However, their spatial patterns are large and require the integration of efforts of scientific, regulatory, and management agencies. Bottomland hardwood declines and resulting forest fragmentation, for example, and the effect of these changes on nutrient transport, need to be considered in light of the value of the Mississippi River corridor to migratory birds.

Information needs

Much related information exists but needs to be compiled at the appropriate spatial scale. Other data remain to be collected. Existing and new data will be used to address the following needs:

- Status, trends, and forecasts of land use and cover,
- Mass balance of water, nutrients, sediments, and pesticides,
- Relative contributions of these materials from sub-basins,
- Role of the floodplain in nutrient processing,
- Responses of native plants and animals to nutrient loading,
- Ecosystem and economic modeling of alternatives (i.e., reduced loadings, riparian restoration) to reduce nutrient enrichment,
- Science-based yardsticks for measuring, and public participation in defining acceptable levels of ecosystem health,
- Information transfer for timely management access to data and results.

Anticipated Impacts of the Proposal

The integrated science strategy will be designed to promote a continued, focused process by which Federal, State, tribal, and local agencies and participants can identify effective and practical solutions to nutrient enrichment within the System. Solutions could take the form of local nutrient reduction projects (such as riparian buffer strips) implemented with the technical assistance of the NRCS, or expansion of nutrient storage areas within floodplain rivers. Spatial

distribution of projects would be coordinated through the NRCS's Conservation Priority Areas Program. Coordination with management agencies will be vital to providing information to evaluate newly proposed solutions. A proposed public education workshop series (Mississippi River Basin Alliance) could provide a much needed link between the scientific institutions, the public and private sectors, and government policy initiatives.

Interdivisional, Interdisciplinary Collaboration and Partnerships

The July integration meeting demonstrated that a wide variety of USGS/NBS monitoring, analytical, experimental, remote sensing, mapping, data management, and modeling capabilities can be willingly brought to bear on immediate information needs. Examples of data, maps and models that can be provided by ongoing scientific programs or studies include:

- Status and trends of floodplain river populations and habitats from the Long Term Resource Monitoring Program.
- Status and trends of water quality and stream flow, and biocriteria development from the USGS National Water Quality Assessment Program, the National Stream Quality Accounting Network, and the Agricultural Research Service Water Quality Initiative.
- Nutrient and Contaminant concentrations along the mainstem of the Mississippi River from the recent USGS Mississippi River Study.
- Land use and vegetative cover maps from the NBS Gap Program, the USFWS National Wetlands Inventory, the NRCS National Resources Inventory, and inventories from the Louisiana Coastal Zone (1956-1988) and the Lower Mississippi Valley.
- Aerial photographs and satellite images from the EROS Data Center, NAPP, NASA, and the Mid-Continent Mapping Center.
- Flood impacts from the Scientific Assessment and Strategy Team that responded to the flood of 1993. An initiative to expand the Team's work to the lower Mississippi River could provide additional data in support of predicting future floods and their impacts.
- A model of Illinois River hydrology, ecology and economy being developed by a consortium of State of Illinois agencies with NSF/EPA funds.
- USGS Geologic Division Mississippi River Carbon Program.
- Benthic Fish Habitat Assessment of the Missouri River from the Biological Resources Division Cooperative Units.

Multidisciplinary teams of scientists, representing all USGS Divisions within the Eastern and Central Regions, will be formed to plan and execute the data compilation, analysis, modeling and reporting elements of the initiative. One of their first tasks will be to establish a strategy that matches different work activities to the spatial elements of the System.

Framework for Collaboration Between Agencies:

A management agency framework for collaboration at the scale of the defined Mississippi River System is needed. Headquarters-level staff of federal agencies are now meeting to assess the Gulf of Mexico Hypoxia problem (the USGS is formal partner to the Gulf of Mexico Program) and determine how their respective capabilities can be effectively coordinated. Our science strategy will be regularly updated to support recommendations originating from these meetings and to foster organization and coordination at the System scale.

Many multi-agency organizations exist in association with subbasins or river reaches. Examples include the Mississippi Interstate Cooperative Resources Association, the Upper Mississippi River Basin Association, the Upper Mississippi River Conservation Committee, the Lower Mississippi River Conservation Committee, Ohio River Sanitation Commission, the Missouri River Natural Resources Committee, the Missouri River Basin Association, the Mississippi River Basin Alliance, and the Lower Mississippi Valley GIS Steering Committee. System level coordination will rely heavily on communication networks already established by these organizations.

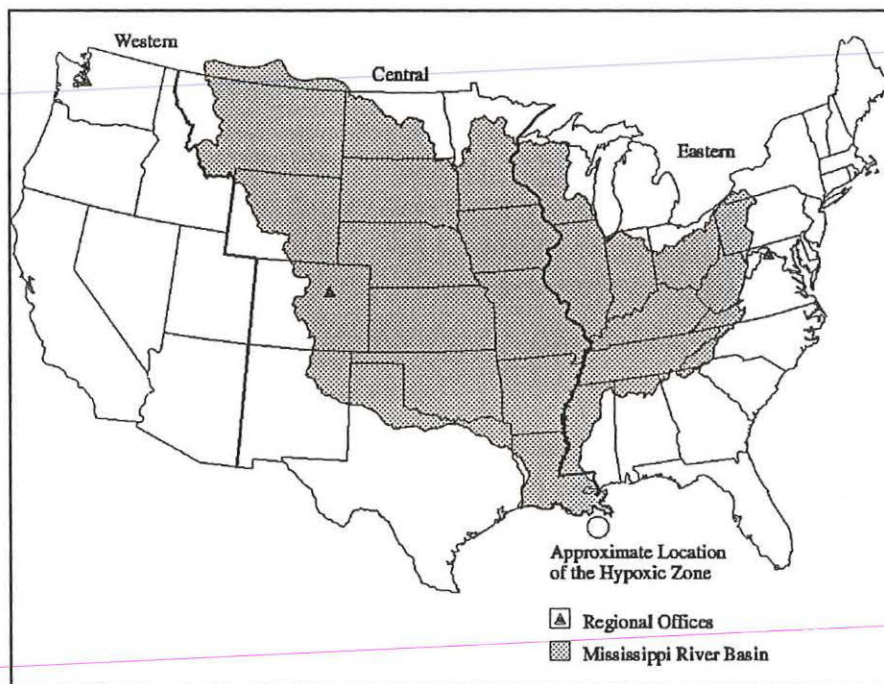


Figure 1. The Mississippi River System and USGS Regional Boundaries.

LONG TERM RESOURCE MONITORING PROGRAM
ANALYSIS TEAM MEETING MINUTES
April 23, 1997
LaCrosse Wisconsin

A meeting of the Long Term Resource Monitoring Program (LTRMP) Analysis Team convened at 8:00 AM on April 23 at the Holiday Inn in LaCrosse Wisconsin. Attending were team members and others from the states of Illinois, Iowa, Minnesota, Missouri, Wisconsin, the U.S. Geological Survey Biological Resources Division (USGS - BRD) and Water Resources Division (USGS - WRD), the U.S. Army Corps of Engineers (Corps), the National Park Service, and the U.S. Environmental Protection Agency (EPA). An attendance list is attached.

Analysis Team chairman Tim Schlagenhaft welcomed team members and called the meeting to order. No agenda changes were proposed. Tim reported that participants in the pre-meeting conference call decided on the limited agenda of the meeting, to include the LTRMP out-years budget, the USGS BRD review, the Management review, and the Science review.

Tim Mihuc of the INHS distributed a proposal for continuation of main channel trawling presently being conducted through the LTRMP for the Corps Navigation Study.

Tim Schlagenhaft distributed a letter sent from the Analysis Team to the EMPCC regarding the LTRMP budget.

Ken Lubinski reported that the minutes of the February Analysis Team meeting are not complete, but that they will be sent out to Team members shortly. Ken explained that Bob Delaney was preparing for the EMP Report to Congress Issues Resolution meeting and could not attend today's meeting.

Strategic Planning

Ken Lubinski reported that the EMTC is conducting strategic planning for LTRMP activities through year 2002, assuming full funding and using the guidance provided by the LTRMP Management and Science Review teams as well as the USGS-BRD review. The EMTC is also conducting long term strategic planning for work under multiple programs in addition to the LTRMP.

Norm Hildrum distributed the FY97 LTRMP Annual Work Plan (AWP). Norm reported that Analysis Team comments on the earlier draft were incorporated. Budget figures were not included until the final version. The FY96 budget figures reflect the amounts actually charged, and the FY97 figures are the amounts planned. The new Goal 5 incorporates program planning activities including tracking LTRMP efforts with the Analysis Team and other coordination functions. The AWP includes allocation of staff salaries by task.

Don Williams said that the EMTC should not spend EMP funds on non-LTRMP strategic planning for the EMTC. USGS funding should be used for that purpose. Ken Lubinski noted that the EMTC is not receiving funding from the USGS BRD, yet there is a need to conduct strategic planning. Don said that the Corps will discuss this matter with the USGS, and recognizes a need for cost accounting. Tim Schlagenhaft said that he recognizes the need for strategic planning for both LTRMP and EMTC.

Norm Hildrum remarked that the EMTC frequently receives unfunded requests, and needs to account for this unfunded support work. The Goal 5 accounts are intended to track these activities. John Wetzel asked if the budget table in the AWP shows non-LTRMP support activities. Norm said that Appendix B shows FY96 non-LTRMP support. FY97 non-LTRMP support funding is not yet fully known.

Norm distributed a paper describing short-term strategic planning. John Wetzel asked how the Analysis Team can track progress on specific tasks. Norm noted that the FY97 AWP lists FY96 products and completion dates and also lists FY97 activities, products, and completion dates by Operating Plan tasks (Table 4). This will allow continuous tracking of LTRMP work.

Norm explained that the EMTC went through a budgeting exercise through the year 2002 using three basic assumptions for reallocation of available funds: 1) LTRMP funding will remain constant at \$5.955 million through FY2002. 2) Emphasis will be placed on monitoring data collection and LTRMP support functions. 3) Effort will be made to minimize the impact of inflation on current staff (EMTC, field stations, cooperators). Norm reviewed the budget reallocations for FY98. Contingency funds for emergency equipment replacement were reduced from \$57,800 to \$32,800. The USGS - BRD did provide some funding last FY for field safety equipment replacement for field stations, however, funds are not available for orderly replacement of equipment. Norm then reviewed the last page of the handout, a summary of out-year budget cuts. The USGS pool-scale sediment budget work will continue with an additional two pools to be completed in the next three years. Bathymetry work will continue for another three years. Tim Schlagenhaft asked about Management Applications Division salaries. Norm said that partnership salaries have been reduced to \$0 for the out years. Tim asked which permanent staff positions will be filled at EMTC. Ken Lubinski said that there are presently vacancies for fisheries specialist, writer/editor (being recruited), geospatial specialist, vegetation specialist, and partnership coordinator (Barry Drazkowski's former position). Ken noted that these positions may not be filled with people from the same disciplines, based on the outcome of strategic planning. A general biologist is being recruited for the Management Applications Division. Norm said that they haven't had a chance to evaluate the effects of budget reallocation on information sharing. They currently plan to reduce reports publication costs by encouraging publication in refereed journals then distributing reprints and through electronic postings of reports. Ken Barr asked if the USGS overhead rates will remain the same as they were with NBS. Norm affirmed

that at least for this FY, they will remain at 19% for work by the EMTC, and 5% for pass-through funding to other agencies. A new Corps - Interior agreement could change this allocation. Tim said that the Analysis Team needs to consider the impact of budget cuts and within-program reallocations before providing approval. Norm said that the EMTC will send out information on the impacts of budget cuts and reallocations to the Analysis Team within two weeks. Ken Lubinski said that strategic planning may affect the out-years budgets, and that the EMTC has to finish strategic planning before completing the FY98 AWP. Tim said that the Analysis Team needs to consider the strategic plan and to revisit the budget at the next meeting before. Bill Bertrand said that he was pleased with the strategic planning effort and documentation to date. Ken Barr asked if the EMTC plans to hold workshops with its partners on strategic planning. Norm and Ken Lubinski said that the EMTC staff has been occupied with annual monitoring reports, but that they do plan to hold workshops with partners and these may be Analysis Team and EMP-CC meetings. The EMTC staff will review the monitoring data and the Science and Management review reports prior to the strategic planning workshops. John Wetzel said that the EMTC needs to consider plans for full funding through year 2002, with increased funding in years to follow.

Tom Boland announced that Russ Gent is leaving Iowa to live in New Mexico. The Analysis Team thanked Russ for his fine work with the Iowa LTRMP Field Station, and wished him well with a round of applause.

Ken Lubinski distributed a handout describing the EMTC strategic planning process. Ken reviewed the draft mission statement. Gordon Farabee said that he looks forward to the merging of the EMTC with the Upper Mississippi Science Center. Gordon observed that the Midwest Science Center attends to the Missouri River, and that the EMTC/UMSC need to focus on the UMRS, otherwise there would be competition for large river ecology research funding. Pete Redmon noted that the EPA does not have a large rivers research program. Tim Schlagenhaft asked if the LTRMP should be included in the EMTC mission statement. Tim said that he fears dilution of LTRMP activities through non-LTRMP work at the EMTC and through merger with the UMSC. Dan Wilcox said that in addition to the problem of redirection of LTRMP funding to non-LTRMP activities, there is the problem of dilution of EMTC staff time with non-LTRMP activities. Norm Hildrum said that the EMTC has modified its budget tracking process, and Ken Lubinski said that dilution of staff time can be avoided through good management. John Wetzel said that a distinguishing feature of the LTRMP is its partnership effort, and that should be included in the mission statement. John asked further if the Analysis Team should guide the EMTC as well as the LTRMP. Ken Lubinski replied that the USGS - BRD wants to revise the annual planning process for all science centers to include peer review of proposals and merit-based competition for research funding. Tim Schlagenhaft expressed concern about EMTC mission expansion, that EMTC focus on the LTRMP may be lost. Don Williams said that the Corps will continue to insist upon execution of the LTRMP Operating Plan, with

funding contingent on approved Annual Work Plans. The Corps and Interior will prepare a new Memorandum of Agreement. Dan Wilcox expressed concern about LTRMP effort being diluted by continued rounds of program planning. Ken Lubinski replied that he doesn't anticipate major changes in the LTRMP as a result of EMTC strategic planning. John Wetzel noted that the USGS - BRD needs to participate in the LTRMP Analysis Team and the EMPCC.

Ken Lubinski distributed a handout with information on options for change in the LTRMP. Ken reviewed the list of potential changes. Ken Barr remarked that reliance on publication of LTRMP research in scientific journals would greatly delay information transfer to partners. Norm Hildrum said that project status reports are being prepared for quick release with provisional results and discussion of findings. The EMTC will continue to produce annual reports of monitoring data. Dan Wilcox noted that with a continuing reduction of LTRMP funding for research work, there won't be much subject matter acceptable for publication in scientific journals.

Ken Lubinski discussed using the strategic planning effort to focus EMTC activities. EMTC currently gets requests from too many masters, and are swamped with too much work. Solutions include better assessment of information needs for natural resources management, encouraging the development of objectives for future condition of the UMRS ecosystem, simpler and more conservative annual work plans, and increasing the diversity of scientific activity to retain the interest and tenure of senior scientific staff. Dan Wilcox noted that the repeated soliciting of partner expectations inevitably results in increased expectations for work. Ken Lubinski noted that there is plenty of work, but that the EMTC has to become more selective in what it commits to do. Rich Kuklas asked if the EMTC has an FTE (full-time-equivalent employees) ceiling. Ken said that the EMTC does have an FTE ceiling, and that they are presently down 5 people. The EMTC can hire university people as the budget allows.

Tom Boland said that he doesn't think that expansion of EMTC programs is necessarily better. It can build to a level of bureaucracy that is crippling. Tom said that he is very concerned about maintaining focus on the original intent of the LTRMP, and that he is a proponent of a lean program focused on the LTRMP Operating Plan. Bill Bertrand concurred. Don Williams remarked that the EMTC staff must inevitably plan for post-EMP existence.

Ken Lubinski distributed a handout describing the EMTC activities while maintaining a focus on the UMRS. Ken distributed proposed alternative organization charts for the EMTC. Norm Hildrum explained that the reduced number of EMTC Divisions is based on the Management and BRD reviews. Tim Schlagenhaft said that strategic planning is being conducted to determine the structure of the future LTRM and EMTC programs. The EMTC organization should structure itself based on the outcome of strategic planning. Ken Lubinski said that the USGS - BRD needs a revised EMTC

organization chart to allow recruiting for new staff to proceed.

Program Reviews

Upon reconvening after a noon break, Ken Lubinski distributed handouts and discussed the findings of the LTRMP Science, Management, and USGS - BRD reviews. Ken compiled the review team recommendations into categories: Planning, science, information transfer, geospatial technologies, personnel, operations, partners, and politics.

Program Planning

Gordon Farabee said that the USGS - BRD should be made aware of Analysis Team concerns that the LTRMP should be the primary EMTC emphasis. Bill Bertrand expressed concern that the USGS - BRD is distancing the EMTC from the states. Bill suggested that the Analysis Team send a letter to the USGS - BRD emphasizing the LTRMP partnership with the states, and inviting the USGS - BRD to participate in the Analysis Team and perhaps should have a seat on the EMPCC. Bill said that the states should have a strong voice in EMTC strategic planning and the future of the LTRMP. Don Williams observed that the EMTC is spending a lot of time on details of a new mission statement without any immediate funding prospects. Pete Redmon said that the LTRMP should expand to address basin-scale matters. Dan Wilcox noted that the LTRMP has already initiated research work that will contribute to forecasting the future condition of the UMRS channels and floodplain. Bill Bertrand said that the Analysis Team should define the role of the LTRMP in UMRS watersheds. Dan Wilcox remarked that the EMTC can't possibly act as a clearinghouse for information on everything. The LTRMP already has good plans for linking the UMRS to watersheds in the basin, and needs additional funding to get the job done. Don Williams suggested that any non-LTRMP funding for EMTC work should be for projects that are directly relevant to the LTRMP. Dan Wilcox observed that the Analysis Team doesn't care about outside-LTRMP work, only that the LTRMP work gets done in a technically competent and timely manner. Tim Schlagenhaft said he believes that external BRD and other programs have interfered with the LTRMP, and that this needs to be avoided in the future. The Analysis Team needs to carefully work with the EMTC on the partners expectations list, identify tasks, examine scopes of work, proposed products, schedules, costs, and set priorities. Between now and the August meeting, the Analysis Team will refine the partners expectations list. Dan Wilcox observed that there are all kinds of data and research needs for natural resources management on the UMRS. The LTRMP cannot possibly address them all. Don Williams said that LTRMP strategic planning should include states, EPA, NRCS, USGS, and the Corps, to identify who can and will do what. Ken Lubinski said that the USGS - BRD wants a competitive research proposal and funding process. Don Williams agreed that LTRMP research scopes of work and funding proposals are needed. Dan Wilcox observed that peer review of LTRMP research scopes of work would be an additional step, but could provide some added value. John Wetzel said that given the present budget prospects, there won't be much in the way of new

LTRMP research starts. Ken Lubinski reported that the USGS -BRD wants competitive funding for multi-year monitoring proposals as well as research work. Bill Bertrand said that the USGS - BRD should not be setting priorities for LTRMP work, especially since funding for the LTRMP is not forthcoming from that agency. Don Williams said that the new memorandum of agreement between the Corps and Interior should address these matters. John Wetzel observed that the USGS -BRD apparently views partner consultation as a burden that exceeds its value, referring to a finding on page 2 of the handout.

Science

Ken Lubinski explained that both the Science and the BRD review teams identified a need for more analysis of monitoring data and research. Tim Schlagenhaft said that the EMPCC has emphasized continued monitoring over further research and management and integration activities. Don Williams recalled that FY97 was intended to be a year for refinement of LTRMP monitoring designs. Tim Schlagenhaft asked how this will be done. Ken Lubinski said that the annual work planning process will be simplified, the field stations will provide further help to relieve the burden on EMTC senior scientists, and the monitoring results will be reviewed. Tim asked what analyses will be performed, how might they relate to management needs, and is more funding needed. Ken said that more funding couldn't speed the work, the EMTC staff is trying to get things done sequentially. Bill Bertrand said that there is a great need to analyze and visualize the spatial distribution and temporal availability of habitat types in the UMRS. Dan Wilcox agreed but noted that this cannot be done using monitoring results alone. Dan reminded the team of ongoing LTRMP research work on this subject. Gordon Farabee noted that the Science review team and the BRD review team did not agree on the National Water Quality Assessment (NAWQA) approach to the temporal frequency of monitoring. John Wetzel suggested that the LTRMP could expand its spatially random sampling by sampling like strata in other pools. Gordon Farabee concurred. Dan Wilcox suggested that the Analysis Team needs to seriously consider its monitoring information needs requirements in order to make informed trade-offs between monitoring and applied research.

Information Transfer

Ken Lubinski said that the review teams agreed that annual monitoring reports should be produced sooner. Tim Schlagenhaft recounted that the Management review committee recommended that more brief project status reports be produced, increase electronic access to reports, and that a simplified non-technical "Health of the River" report be produced for distribution to the public.

Geospatial Technologies

Ken reported that the EMTC geospatial staff and capabilities received high marks and compliments from the review teams. Tim Schlagenhaft commented that geospatial staffing and infrastructure at EMTC should not have a life of its own, but should be used strictly to support LTRMP ecological analyses. Terry Dukerschein observed that

there is apparently a problem with setting priorities between the present Geospatial and Ecology Divisions at EMTC. Dan Wilcox noted that there has been considerable effort at geospatial technology development at EMTC, clearly beyond what is needed for the LTRMP Operating Plan. Tim Schlagenhaft echoed Terry's concern that EMTC geospatial activities should be strictly in support of LTRMP tasks. Tim Mihuc asked if the EMTC is competing with other USGS geospatial centers. Ken Lubinski didn't think so, adding that the EMTC geospatial unit is quite cost-effective.

Personnel

Ken said that the USGS -BRD wants GS-12 grade staff to enter the research scientist review process. The Science review committee recommended that the EMTC hire a geomorphologist, and a person to provide clinical experimental design, monitoring survey design, and statistical assistance.

Operations

Ken said that the BRD has recommended a single Science Division at EMTC, following the standard BRD Science Center organization model. Dan Wilcox asked if USGS - BRD has provided any FY97 funds for equipment maintenance and replacement like they did last year. Ken said that they have not.

Mission Statement

Ken Lubinski emphasized that the draft mission statement was prepared as part of the strategic planning process for the EMTC. John Wetzel suggested to change "working with others" to "working with partners." Ken concurred. Ken said that the EMTC strategic planning process will be completed by the end of September. Doug Blodgett asked why "large river systems" rather than "floodplain rivers" appears in the draft mission statement. Ken said that it was used to simplify the statement. Tim Schlagenhaft asked what will be the process for the EMTC strategic planning? Ken said that the EMTC intends to identify a scientific approach that balances attention to the needs of the Center's various partners and audience. EMTC staff need to complete the annual monitoring reports, probably by June. They want to have monitoring results available prior to meeting with partners to further refine and identify information needs as part of the strategic planning workshops. Ken Barr asked who should participate. Ken Lubinski replied that the EMTC scientific staff, the UMSC scientific staff, Analysis Team members, and others should participate in the workshops. The goal is to incorporate input from the workshops into the LTRMP strategic plan and the FY98 LTRMP AWP. Don Williams suggested that agencies with funded programs like the NRCS and EPA should participate. Ken noted that it is hard to count on "maybe" funding sources. Dan Wilcox suggested that it would be important to gain commitments from other agencies and identify known non-EMP funding sources to further LTRMP activities.

Action Items

1. Partners Information Needs

Tim Schlagenhaft said that the Analysis Team will review the partners needs and expectations list in the FY97 AWP, and will participate in the above-mentioned workshop at EMTC to identify and refine information needed for UMRS natural resources management. Doug Blodgett asked about the FY98 LTRMP budget. Ken Lubinski said that the EMTC is operating on the assumption of full funding. Don Williams said that he hasn't heard anything yet on the FY98 budget allocations.

2. Main Channel Trawling

Ken Barr asked that the Analysis Team consider including main channel trawling as part of the LTRMP monitoring program. Ken announced that the trawling vessel and trained crew (Tim Mihuc, INHS field crew leader) are funded through September this year under the Navigation Study. Tom Boland and Dan Wilcox concurred, noting the original intent for LTRMP to include main channel fish monitoring. Bill Bertrand suggested that the UMRS states should collaborate on a proposal for federal aid program funds to the USFWS to support continued main channel fish sampling on the UMRS. Dan Wilcox suggested that states participating in the Mississippi Interstate Cooperative Resource Association (MICRA) should consider supporting continued main channel trawling work in the UMR. Dan said that he will forward the main channel trawling proposal to the new Corps of Engineers Mississippi Valley Division office. Tim Mihuc said that there is an urgent need to arrange continued support for the main channel trawling work, in order to keep the trained crew on board. Bill Bertrand said that he will look into federal aid funding through the USFWS. Ken Lubinski said that he will examine LTRMP trade-offs that would be necessary to continue the main channel trawling under the LTRMP budget.

3. Impacts of Funding Rreallocations

Norm Hildrum said that the EMTC will prepare an assessment of impacts of budget reallocations on the program. The assessment will be available in time for discussion at the August Analysis Team meeting.

4. Invitation to USGS - BRD

Tim Schlagenhaft said that he will draft a letter to BRD inviting their involvement in LTRMP strategic planning. Tim will send the draft letter to Analysis Team members for review in about 3 weeks.

5. Analysis Team Letter to EMTC

Tim said that he will draft a letter stating that the LTRMP should remain the central, most important EMTC program. The letter will also state that the Analysis Team would not support an expanded EMTC mission unless and until LTRMP products are delivered on time. Tim will provide a draft letter to Analysis Team members by May 1.

Don Williams said that he will bring up Analysis Team concerns about the LTRMP and EMTC mission expansion at the upcoming EMPCC meeting.

Next Steps

Tim Schlagenhaft polled Analysis Team members and announced that the next conference call with EMTC will be on May 28 at 9:00 A.M. The conference call will include Analysis Team members, field team leaders, and EMTC management. Main channel fish sampling and the agenda for the August meeting will be subjects of discussion.

The next Analysis Team meeting will be held in the Quad Cities on August 19-20.

Tim Schlagenhaft thanked all for participating. The meeting was adjourned at 4:10 P.M.

Respectfully submitted,
Dan Wilcox

Attendance List
 LTRMP Analysis Team Meeting
 April 23, 1997
 Holiday Inn, LaCrosse Wisconsin

<u>Name</u>	<u>Agency, Location</u>	<u>Telephone Number</u>
Bill Bertrand	Illinois DOC	309-582-5611
Doug Blodgett	Illinois NHS LTRMP Field Stn.	309-543-6000
John Dettmers	Illinois NHS	618-466-9690
Tim Mihuc	Illinois NHS	618-466-9690
Russ Gent	Iowa DNR LTRMP Field Stn.	319-872-5495
Tom Boland	Iowa DNR Bellvue	319-872-4976
Tim Schlagenhaff	Minnesota DNR Lake City	612-345-3365
Walt Popp	Minnesota DNR LTRMP Field Sta.	612-345-3365
Terry Dukerschein	Wisconsin DNR LTRMP Field Sta.	608-783-6169
John Wetzel	Wisconsin DNR LaCrosse	608-785-9994
Gordon Farabee	Missouri DOC	314-751-4115
Ken Lubinski	USGS - BRD EMTC	608-783-7550
Norm Hildrum	USGS - BRD EMTC	608-783-7550
Tom Kelly	USGS - BRD EMTC	608-783-7550
Don Williams	USCOE NCD Chicago	312-886-5470
John Barko	USCOE Waterways Exp. Sta.	601-634-3654
Ken Barr	USCOE Rock Island	309-794-5349
Dan Wilcox	USCOE St. Paul	612-290-5276
Pete Redmon	USEPA Region 5 UMR Team	312-886-6110
Rich Kuklas	National Park Service	402-341-8413
Rob Brown	USGS - WRD Iowa	319-358-3600
Bob Bunchmiller	USGS - WRD Iowa	319-358-4191

Report of Analysis Team Meeting, April 23, 1997

Attending for EMTC were Lubinski (all day), and Hildrum and Kelly (morning).

Lubinski provided a draft meeting agenda (attached). With the agreement of the group, we used this agenda through the day.

Two items were handled very quickly. Chair Schlagenhaft (MN) noted the AT's letter response to the EMP-CC (copies were handed out). Hildrum handed out and led a discussion of the FY 1997 AWP.

Regarding the AWP:

Wetzel (WI) called attention to the importance of Table 4, the product spreadsheet. We confirmed its importance and noted that we will attempt to include at each AT meeting a report on products due since the last meeting.

We called attention to the "5.x.x.x" numbers in the budget spreadsheet and their purpose for tracking time spent on work not normally covered under the other LTRMP goals, objectives or strategies. Williams (NCD) disagreed with using LTRMP dollars (planned 12K in the 1997 AWP) for staff time to develop the EMTC Strategic Plan, and suggested that this needed to be considered as the MOU between BRD and the Corps is re-written.

Hildrum presented copies of the spreadsheet that described our budget-cutting strategy through 2002, assuming level funding. Although numerous detailed questions were asked (bathymetry, vacant positions, etc.), responses from the AT about the logic that was used (ie. preserve data collection and analysis) were affirmative.

Lubinski presented the same strategic planning material that was presented to EMTC staff the previous week. During the course of the presentation, most attention seemed to be on how LTRMP would continue under the broadening scope of the EMTC. Key points of the mission statement were discussed.

As a last item before lunch, Lubinski and Hildrum presented the 4 organizational options under consideration at EMTC.

After lunch, the discussion was directed toward review of the reports provided by the three 1997 review committees. Lubinski handed out subject indexes to two of the reports, BRD and SRC. Schlagenhaft and Boland provided additional comments related to recommendations made by the Management Review Team.

Later a brief discussion of the option of supporting main channel fish sampling took place.

In general, the tone of the meeting was open and professional. The biggest concern expressed by the Analysis Team was that LTRMP activities not be jeopardized by other expanding programs at the EMTC and that they retain a major role in directing the LTRMP even as BRD annual work planning procedures are implemented. A highlight of the meeting was the AT's willingness to shepard a clarification of the Management Information Needs list (appendix in FY 1996 AWP) (see below). Williams (NCD) suggested the relationship between the AT and both the LTRMP and EMTC be an agenda item for discussion at the next EMP-CC meeting.

As a result of the day-long discussions, Chair Schlagenhaft prepared an action draft list that included the following items:

The AT agrees with the EMTC recommended approach to budget cutting through 2002 assuming full funding. However, the AT requests from EMTC a more detailed text description of the impacts to program products of those cuts by the August meeting.

The AT will draft a letters to BRD and the EMTC stating that they want to retain an important role in guiding LTRMP. They may also recommend that a BRD representative attend a future AT meeting to entertain questions from the Team (2-3 weeks).

The Chair will arrange with other team members to review and clarify the management information needs list (by June 1).

* EMTC will organize a conference call (May 28, at 9 am) between AT members and Team Leaders to discuss progress on identifying options to fund main channel fish sampling and establish an agenda for the August meeting.

Team members that wish to be included in the Strategic Planning Workshop this summer will contact Lubinski.

Additionally, EMTC needs to get the minutes from the previous AT meeting out within the next couple of weeks.

The next AT meeting was scheduled for 19-20 August at the Bettendorf Holiday Inn.

* K. S. Lubinski August 24, 1997

319/355-4761

ANALYSIS TEAM MEETING, APRIL 23, 1997, POTENTIAL AGENDA TOPICS

MORNING

- 1) Letter from Analysis Team to EMP-CC (Schlagenhaft)
- 2) Presentation of FY 1997 AWP (Hildrum, Kelly)
- 3) LTRMP short-term strategic plan (budget cutting approach through 2002) (Hildrum)
- 4) EMTC and LTRMP in 1997: Where we are, where we are going (Lubinski)
- 5) Remaining tasks related to LTRMP strategic planning (Lubinski)
 - compilation of review committee comments and recommendations
 - synthesis of management information needs
 - data reviews
 - Workshop(s)
 - identification of targets
- 6) Proposed EMTC Mission Statement (handout only)

AFTERNOON

- 1) EMTC strategic planning (audience, content and schedule) (Lubinski)
- 2) EMTC Mission statement and issues (Lubinski)
- 3) Common themes from 1997 review committees (Lubinski)

LONG TERM RESOURCE MONITORING PROGRAM
ANALYSIS TEAM MEETING MINUTES

July 28 - 29, 1997

Bettendorf, Iowa

A meeting of the Long Term Resource Monitoring Program (LTRMP) Analysis Team convened at 1:00 P.M. on July 28 at the Holiday Inn in Bettendorf, Iowa. Attending were team members and others from the states of Illinois, Iowa, Minnesota, Missouri, Wisconsin, the U.S. Geological Survey Biological Resources Division (USGS - BRD), the U.S. Army Corps of Engineers (Corps), the National Park Service, the U.S. Environmental Protection Agency (EPA), and the Minnesota-Wisconsin Boundary Area Commission (MN-WI BAC). An attendance list is attached.

Analysis Team chairman Tim Schlagenhaft welcomed team members and called the meeting to order. No agenda changes were proposed.

Partner Needs and Expectations

Tim Schlagenhaft and John Wetzel distributed a condensed list of partners needs and expectations for the LTRMP. Tim explained that he and John had jointly condensed the many different expectations into a set of five statements. Bill Bertrand asked what was meant by "describe future management scenarios." Tim explained that Goal 3 of the LTRMP Operating Plan calls for work to support planning for river management. An example would be forecasting the future condition of the river under different systems of water level management, as was done for Pool 25. Tim said that he and John Wetzel thought that information on the condition of the river system is needed within three time frames: pre-impoundment, post-impoundment, and present. Don Williams and Dan Wilcox suggested that in addition to historical retrospectives, a very important effort is to forecast future condition of the river environment. Tom Boland said that the LTRMP Operating Plan should not be forgotten in the course of another round of strategic planning.

Tim Schlagenhaft led a discussion on the five statements in the expectations list. Rich Astrack asked if impacts of other human activities in addition to navigation should be added to the first statement. Tim Schlagenhaft thought that the emphasis for this point should be on navigation effects, but added that the effects of levees should be included. Ken Lubinski said that the LTRMP strategic planning process will include a matrix of partner expectations x Operating Plan. Bob Delaney said that the needs expectation list should not be a re-casting of the Master Plan description of the LTRMP. Gordon Farabee suggested that the statement should be revised to include navigation system operation and maintenance.

Jim Fisher emphasized a need to study physical processes; river hydrology and geomorphology. Pete Redmon and John Wetzel added that chemical processes should be included. Dan Wilcox suggested that the first word, "Describe" in each statement be replaced with "Quantify."

Dan Wilcox asked which species, and what aspects of species abundance and distribution are intended to be included in the third statement. Don Williams asked what time periods were intended. Tim Schlagenhaft said that the intent was to examine the changes in general community structure and species, species abundance, and spatial distribution over the four time periods of interest (before dam construction, following construction of the navigation dams, present, and future). Jim Fisher noted that "Its something we want, but we don't know what we're looking for." Dan Wilcox suggested that the LTRMP has limited resources, especially for research, and an all-taxa examination of UMRS species, life requisites, and habitat associations would be an enormous effort. Dan reported that a matrix of guilds of riverine organisms and physical habitat types is being prepared for the Navigation Study and may be used or developed further for the EMP Habitat Needs Assessment.

Tom Boland remarked that the previous discussion was "Deja vu all over again." Tom said that the same subjects were discussed at length in development of the Operating Plan which is the framework for LTRMP work. John Wetzel said that he wants to have a simple LTRMP products list based on partners expectations. Dan Wilcox noted that the LTRMP is a complex program, the Operating Plan was developed through detailed coordination, and the Analysis Team needs to attend to progress in executing the Operating Plan. Scott Gritters said that the recent Annual Work Plans all look alike. Don Williams and Bob Delaney reviewed the process for developing the Annual Work Plans.

LTRMP Strategic Planning

Ken Lubinski distributed a handout and described the proposed strategic planning process. A 5-year plan (through remaining 5 years of the presently-authorized EMP) will be prepared. The plan will be based on management information needs. Tom Pullen noted that the DOI/Army memorandum of agreement needs to be updated, and the EMP Report to Congress process is generating recommendations for changes to the EMP. Tom said that identification of information needed for planning river management will happen regardless of LTRMP strategic planning. Dan Wilcox suggested that the Corps needs to make its information needs known more clearly, and to identify what information the Corps is presently developing.

Don Williams asked what is intended in the fourth expectations statement about ecological interactions. Tim Schlagenhaft said that he and John Wetzel want to hear from USGS scientists about work in this area. Tom Pullen suggested inserting "chemical" in the last part of the statement, "...affected by physical and biological changes in the UMRS." Dan Wilcox suggested re-wording the last expectations statement to: "Forecast future conditions under different management scenarios..."

Ken Lubinski said that the LTRMP Strategic Plan will be done by the end of calendar year 1997 and will cover calendar years 1998 through 2002. Bob Delaney said that the Strategic Plan must use assumptions about future program funding levels. Tom

Boland asked if the strategic plan is for LTRMP or the EMTC. Ken Lubinski said that an EMTC strategic plan will be prepared, but that the majority of work at the EMTC is related to the LTRMP.

The Analysis Team adjourned at 4:30 PM and reconvened at 8:00 AM on July 29.

Tim Schlagenhaft noted that the Analysis Team has not seen minutes from the February or April 1997 meetings. Dan Wilcox said that he was not present at the February meeting, but had recorded the April meeting minutes, coordinated a draft, incorporated corrections, and provided the corrected April meeting minutes to the EMTC for distribution to the Analysis Team. Bob Delaney said that the minutes of the two previous meetings will be distributed to team members.

Tom Boland introduced Scott Gritters as the new Iowa LTRMP Field Station Team Leader.

Dan McGuinness briefed the Analysis Team on the report being jointly prepared by the UMRCC and the MN-WI BAC. Dan said that the report name has been changed to : A Strategy for Operation and Maintenance of Natural Resources of the UMR. The change reflects a change in intent of the UMRCC to have a free-standing report rather than a reactionary companion report to the Corps Navigation Study. The next draft will have much the same content as the first draft, but the organization of the report will revolve around steps in the management cycle. Dan remarked that writing the report would stop if the job (of effective integrated river management) was being done. Ken Lubinski said that the Summit process is leading toward systemic objectives for desired future condition of the river system. Gordon Farabee noted that Dr. Ron Nasser of the USFWS, Vicksburg Mississippi, has prepared an Aquatic Plan for the Lower Mississippi River Conservation Committee (LMRCC). John Wetzel suggested dropping partner "needs" from the "Partner needs and expectations" list title.

Channel Trawling

Ken Lubinski said that the subject was discussed during the conference call with Analysis Team members preceding the meeting, and that the States do not have funds available to support continued channel trawling. Navigation Study funds for channel trawling end with the end of this federal fiscal year. Tim Schlagenhaft and Tom Pullen suggested that the LMRCC and Missouri River interests be contacted. Gordon Farabee said that he sent a letter to Senator Bond of Missouri, recommending that the USFWS Fisheries Assistance program continue the channel trawling work. Dan Wilcox said that the Analysis Team has to consider if it wants to have deep channel fish sampling as part of the LTRMP monitoring, as was originally intended. Bob Delaney said that in light of the LTRMP budget situation and sturgeon and paddlefish concerns, it would be most appropriate for the USFWS Fisheries Assistance program to continue the channel trawling. Bob said that the LTRMP can provide \$42,000 to support a short-term continuation of the main channel trawling

effort (providing the crew continues) for three months (October thru December) this fall. This might provide time for the USFWS Fisheries Assistance Program to arrange funding for the trawling effort. Ken Lubinski said that the trawling boat and crew cost about \$250,000/year with travel costs. Ken said that the LTRMP can allocate the \$42,000 for the short-term trawling work because 3 tasks are ending this FY: Public Survey (\$15,000), Status and Trends Report (\$15,000), and Pool 8 Hydraulic Modeling (\$12,000).

Public Information and Education

John Wetzel asked that the EMTC develop a strategy for public information and education about the LTRMP. Dan Wilcox noted that the EMTC staff has a large backlog of work, public information and education work is not in the LTRMP Operating Plan, and that the States, the USFWS, and the Corps all have staff dedicated to public information and education. Bill Bertrand said that many people along the river want public meetings. Tom Boland said that this responsibility shouldn't be dumped on the EMTC, noting that, "It's our job to inform the public." John Wetzel said that it is critically important to reach certain influential people to ensure program reauthorization. Dan Wilcox said that professionally, there is a big difference between information transfer to the public and political advocacy. Tim Schlagenhaft proposed that the field stations work with State public information and education people on information transfer to the public. Dan McGuinness and Gordon Farabee suggested that the State public information and education people get together at EMTC and develop a strategy. Tom Pullen and Jerry Skalak noted that there will be a series of public meetings about the draft EMP Report to Congress, which will provide opportunity for the public to hear about the LTRMP. Tom Boland suggested that the EMP field stations hold "open houses" to provide the public the chance to learn about LTRMP findings and to speak with field station staff. John Wetzel, Terry Dukerschein, and Dan McGuinness said that they will coordinate a meeting of the State, Corps, and USFWS public information and education people, field station leaders, and Analysis Team members.

Science Review Committee Recommendations and Strategic Planning

Ken distributed a handout of his summaries of the Science Review Committee recommendations. Ken reviewed the recommendations, noting that implementing them so far this year has been difficult because of greater than anticipated effort on strategic planning. Changes will be made to the water quality and sediment monitoring, with increased attention to tributaries, and sampling in conjunction with sampling of other components. There will be an increased emphasis on analysis of data to provide information needed for planning river management.

Budget

Ken Lubinski distributed a set of handouts about the LTRMP budget. Full EMP funding is authorized at \$19.455 million, the House version of the budget bill has \$16.7 million, and the President's budget has \$14.0 million. Ken said that even assuming a

compromise EMP budget of \$15.35 million, the LTRMP would be in a damage control mode. Ken noted that the Corps has the discretion to allocate funding within EMP between the HREP program and the LTRMP. John Wetzel said that after last year's reallocation of funds from the HREP program to the LTRMP, the EMPCC is likely to support some cut in the LTRMP budget, but perhaps not a cut in proportion with the HREP program. Bob Delaney said that the Corps has proposed reduced EMP annual budgets. Tom Pullen said that Mississippi Valley Division may change the FY98 funding for EMP. Bob Delaney said that the LTRMP strategic planning process will assume that the program will continue through the year 2002. Ken Lubinski reviewed alternatives for budget cutting. John Wetzel asked what FY97 budget savings were realized by the position vacancies at EMTC. Bob Delaney said that in anticipation of budget problems in FY98, he has not filled four EMTC staff positions and the salary and support cost savings of approximately \$250,000 will cushion anticipated FY98 funding shortfalls. Ken Lubinski said that if even one field station had to close, the LTRMP could be expected to lose state support. Bob Delaney said that he didn't share that opinion, at least at that level of intensity. Jerry Skalak noted that political and scientific considerations for continuing field station operations are different. Dan Wilcox said that production of monitoring data alone is unsatisfactory. Research and analysis are also needed to generate information needed for management. Tim Schlagenhaft emphasized the value of long term monitoring data sets. Dan Wilcox said that monitoring data left unanalyzed goes stale, losing information value rapidly.

Ken Lubinski further reviewed budget cutting options. Options include reducing fish monitoring, water quality monitoring, and field station work. These changes would involve staff reductions at field stations. John Wetzel said that a major program restructuring is being discussed, not an emergency 1-year cut. John thought that there isn't enough time to examine and reach recommendations on program restructuring before the September EMPCC meeting. John suggested a short-term (1-year) accommodation, with the field station budgets reduced by \$50,000 each, and the EMTC budget reduced by \$450,000 to make up the anticipated \$750,000 shortfall. Tim Schlagenhaft recounted the April letter from the Analysis Team to the EMPCC recommending non-monitoring EMTC functions. Bob Delaney said that a cut requiring program restructuring appears inevitable. Bob said that the best we can probably hope for is \$16.7 million for EMP in FY 1998. Bob said that he is prepared to "buffer" the LTRMP budget with FY97 savings for up to a year, giving time to sort out program restructuring. Bob said that this strategy is dependent on using the \$250,000 savings from not filling important EMTC staff positions, not filling those positions in FY98, reduced overhead assessments, and reduced travel. Program restructuring must take place before the start of FY99. Tim Schlagenhaft proposed to use FY98 to conduct program restructuring. Tom Boland said that the Bellevue LTRMP field station is "below critical mass" and that he is interviewing for a staff replacement. Tom asked if should proceed with hiring a \$30,000/year staff position. Tim Schlagenhaft suggested that the Analysis Team recommendation to the EMPCC be a maximum \$750,000 LTRMP FY98 cut, and use savings from existing vacancies to carry the program

through FY98 to allow restructuring. Tim said that the Analysis Team may have to meet again if the EMPCC insists on proportional cuts to the HREP program and the LTRMP. Tom Pullen reported that the Corps has started discussions on the LTRMP, but no conclusions have been reached yet. Tom said that the LTRMP can be reorganized well or badly, and that he sees the sense in giving the LTRMP the time needed to reorganize. Tom Boland noted again that the Iowa field station needs to replace a key staff position. Ken Lubinski said that the LTRMP needs to be flexible to accommodate the field stations when possible.

Ken Lubinski said that the Status and Trends report is nearing completion. The executive summary will be sent to the Analysis Team for review.

Action Items

Tim Schlagenhaft summarized items for action:

- Complete the partners expectations list, and obtain signatures from Analysis Team members
- The EMTC will prepare a draft LTRMP strategic plan, provide it to the Analysis Team, and hold a strategic planning workshop in September.
- Gordon Farabee will contact the LMRCC and Missouri River interests and Bob Delaney will ask the USGS Upper Mississippi Science Center about supporting the channel trawling boat and crew.
- John Wetzel, Terry Dukerschein, and Dan McGuinness will organize a workshop with State and Federal public information and education staff before January 30.
- Tim Schlagenhaft will work with Bob Delaney on a letter to the EMPCC regarding the FY98 LTRMP budget.
- Ken Lubinski will contact John Dettmers to inform him on the three-month extension of channel trawling work.

Next Meeting

The next Analysis Team meeting will be in January/February 1998. The Analysis Team will be notified on meeting time and place by mail following the September EMPCC meeting.

EMP Report to Congress and Public Meetings

Jerry Skalak reminded Team members that the public review draft of the EMP Report to Congress is going out this week, and that five public meetings about the EMP will be held along the rivers in September.

The meeting adjourned at 12:00.

Respectfully submitted,
Dan Wilcox

Attendance List
LTRMP Analysis Team Meeting
July 28-29, 1997
Holiday Inn, Bettendorf, Iowa

<u>Name</u>	<u>Agency, Location</u>	<u>Telephone Number</u>
Bill Bertrand	Illinois DOC	309-582-5611
Doug Blodgett	Illinois NHS LTRMP Field Stn.	309-543-6000
Tom Boland	Iowa DNR Bellvue	319-872-4976
Tim Schlagenhaft	Minnesota DNR Lake City	612-345-3365
Terry Dukerschein	Wisconsin DNR LTRMP Field Sta.	608-783-6169
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Bob Hrabek	Missouri DOC	573-243-2659
Robert Delaney	USGS - BRD EMTC	608-783-7550
Ken Lubinski	USGS - BRD EMTC	608-783-7550
Linda Leake	USGS - BRD EMTC	608-783-7550
Tom Kelly	USGS - BRD EMTC	608-783-7550
Tom Pullen	USCOE - MVD Vicksburg	601-634-5851
Don Williams	USCOE Chicago	312-886-5470
Ken Barr	USCOE Rock Island	309-794-5349
Dan Wilcox	USCOE St. Paul	612-290-5276
Rich Astrack	USCOE St. Louis	314-785-9000
Pete Redmon	USEPA Region 5 UMR Team	312-886-6110
Rich Kuklas	National Park Service	402-341-8413
Dan McGuinness	MWBAC	715-386-9444