



United States Department of the Interior



NATIONAL PARK SERVICE
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IN REPLY REFER TO:
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6 JUN 1991

Memorandum

To: Regional Directors
From: Associate Director, Natural Resources
Subject: Role and Function of the Geographic Information Systems Division

For FY 1991, funding and staffing for the Geographic Information Systems Division (GISD) have been increased to accelerate action to achieve the goal of effective operation of GISs at parks, Regional offices and program offices. This increase is specifically intended to be responsive to the need for enhancement and use of existing park GIS data bases and systems, as well as extending the use of GIS technology Servicewide.

These new resources help to support the Natural Resource Program goal to strengthen the technical capability of Regions and parks to manage natural resources. In response to this increase, I have directed the Geographic Information Systems Division to analyze the organizational structure and the various roles and functions of the Division with the goal of realigning it to strengthen the partnership with Regional offices, and to enhance the scope and quality of the services offered by the Division, Regions, and NPS program offices. Based on this analysis, which involved review of Regional GIS Plans and discussions with Regional contacts and other Natural Resource Directorate organizational units which interact with the Division, we are developing a new organizational structure focusing on:

- ▶ policy, planning and implementation;
- ▶ hardware and software technologies; and
- ▶ geographic data technologies.

As these plans are finalized we will be providing you with additional information. Upon completion of the GISD reorganization, the Division will be operating under a new paradigm designed to strengthen the partnership between the Division and Regional offices. Historically, the Division has served parks one-on-one, assisting with data base development and providing user support. This one-on-one approach is no longer possible. In the past 7 years, operational use in parks, Regions, and program offices has grown rapidly to a number of users that is far greater than the GISD can directly support. In addition, it is envisioned that the majority of national parks will ultimately be GIS users (e.g., the Inventory and Monitoring Program has identified 240 parks that could benefit from the development and use of GIS data bases). Many factors have lead to the current and future



use of GIS: the Director's leadership, a number of highly successful applications using GIS technology within the Service, Park Service managers' knowledge and acknowledgement of the benefits of GIS, increased availability of digital data, increased power and decreased cost of computers, and a proliferation of versatile software. In summary, current and potential park demands for GIS require additional one-on-one technical support to achieve effective use of GIS throughout the Service. Many parks have already moved to develop these support capabilities internally or have worked with regions to develop such support at the regional office or at CPSUs. The GISD, therefore, can better serve parks by playing a stronger guidance and coordination role. Therefore, GISD must relinquish its direct support to parks to those closer to the parks. Instead, the GISD will maintain its position as a center of expertise on GIS and remote sensing technologies and increase its leadership as the Service's policy and program office for the development and implementation of GIS and remote sensing technologies throughout the NPS.

The strategy for the future of GIS in the Park Service therefore includes the following four elements:

- ▶ GISD will strengthen its Servicewide leadership for GIS implementation. GISD will accelerate (1) development of policy, standards, guidelines and procedures and (2) identification of appropriate GIS and remote sensing technology. To discharge these responsibilities the Division will develop, issue and maintain a handbook, that will be the model for GIS implementation in parks Servicewide.
- ▶ GISD will assist Regional Offices in planning, developing, and implementing the GIS model in parks.
- ▶ GISD will help establish and enable regional/CPSU/park technical support centers to provide data base construction and technical support (e.g. hardware and software installation, analyses, etc.).
- ▶ GISD will work with NPS program offices, which fund data gathering or development activities, to develop standards for their respective program-specific GIS-compatible data bases and to develop program-specific GIS applications.

A portion of GISDs current funding base (approximately \$300K in FY 1991 and \$400K in FY 1992) and a requested funding increase for FY 1992 (an additional \$550K and 4-10 FTEs) will go to Regional Offices to help establish and enable Regional/CPSU/park technical support centers to help provide data base construction and user support. While we will continue to seek funding for Servicewide GIS implementation, it will be the Regions' and program offices' respective responsibilities to identify and/or request, through the budget process, the resources (funds and staffing) to the parks, Regions, program offices, and support centers to develop and use GIS data.

I acknowledge that implementation of these Servicewide GIS program objectives will take time and will require a significant commitment to these objectives by both Regions and program offices. Even though it might appear to be a long and difficult task, I can point to early successes that reinforce our approach. The Alaska Regional Office has been successfully functioning for several years as a data base development and analysis center for the Region. The North Atlantic and Southeast Regional Offices have made significant progress in developing this capability. The Interagency Resources Division of the Cultural Resources Directorate has established a capability to develop data bases and perform analyses. Some parks including YOSE, GLAC, EVER, SAMO, SHEN, INDU, and YELL have become self sufficient regarding most GIS activities.

I commend you for your past accomplishments in implementing GIS and for moving forward with your Regional GIS Plans that identify strategically how you envision your Region proceeding with GIS implementation. We found that each of the submitted plans adequately met a critical job element of the Director's Performance Standard: to develop "GIS plans which identify the parks for which a GIS will be developed, the priorities and schedule for development and a strategy for supporting each GIS." The GISD will be providing comments on your plans in the context of Servicewide GIS program emphasis discussed above. At that time GISD will also be providing more details on the Servicewide direction and requesting a refinement of the current Regional GIS plans. These plans will form the basis for a well-reasoned, comprehensive implementation of GIS technology Servicewide aimed at ultimately providing park management with a useful tool to help in the decision-making process.

In addition, you will soon be asked to identify several projects within your Region to be funded from GISD's current base. These projects should be designed to develop or strengthen your capability to provide technical and data base development support to your parks. This request will also offer funding for the purchase of UNIX workstations to replace outmoded PC-based GIS computers. These PC-based computers were developed by GISD as an inexpensive hardware alternative for several parks to accelerate their experience with GIS. Because computer costs have decreased and GISD must continually program the PC-based computers to be capable of using advanced versions of GIS software, these computers have become an expensive burden for GISD and are more cost effective to replace than maintain.

The activities of the GISD are focused on and are a part of my continued emphasis on the enhancement of research and natural resource management programs in the NPS, and on an effective partnership with the Regions and parks. I am convinced that the Servicewide strategy developed by the GIS Division is a positive step which strengthens the Division's partnership with Regional Offices. I look forward to your support in implementing this program.

A handwritten signature in cursive script, reading "J. Eugene Hester". The signature is written in dark ink and is positioned to the right of the main text block.

cc: Associate Directors