

CALIFORNIA COASTAL COMMISSION

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August 25, 2005

TO: CALIFORNIA COASTAL COMMISSIONERS

FROM: PETER M. DOUGLAS, EXECUTIVE DIRECTOR

**SUBJECT: STAFF RECOMMENDATION ON CONTRACT FOR EVALUATION OF
COMMISSION'S COMPUTER NETWORK FOR INTEGRATION AND
MAINTENANCE OF INTERNET MAPPING CAPABILITIES
(For Commission consideration at its September 14-16, 2005 meeting)**

This recommendation was developed by Greg Benoit and Jonathan Van Coops, Coastal Program Analysts, Mapping/GIS Unit, working under the direction of Susan Hansch, Chief Deputy Director.

Recommendation

Staff recommends that the Commission authorize the Executive Director to enter into a contract, not to exceed \$20,000, to provide the Commission's Information Systems Unit (ISU) and Mapping/GIS Staff with an evaluation of hardware and software installation and maintenance requirements for internet access to Geographic Information Systems (GIS) data. Funds for this contract will be made available from the California Coastal Conservancy by means of the existing Coastal Trail Mapping Memorandum of Understanding. Any agreement resulting from the execution of this contract will be from approximately October 3, 2005 through June 30, 2006. The evaluation report prepared pursuant to this agreement will be submitted by January 17, 2006.

Motion

I move that the Commission authorize the Executive Director to enter into a contract for an amount not to exceed \$20,000, to provide an internet mapping integration and maintenance evaluation.

Staff Analysis

The California Coastal Commission's Mapping/GIS Unit is developing Internet Mapping (IM) applications for *internal* use by Commission staff. Through these applications, the Mapping/GIS staff will provide desktop access to GIS compatible data and high-resolution aerial photography. These *internal* applications are mapping utilities accessible only to Commission staff.

In addition, the Mapping/GIS Unit is currently pursuing several GIS initiatives which require IM applications that provide internet access to GIS data for users *outside* the Commission's computer network, including the State Coastal Conservancy. The Commission does not currently have personnel available or the expertise to evaluate the requirements for establishing

and maintaining externally accessible IM applications. In response to this need, the Commission's ISU and Mapping/GIS Unit staff have solicited qualified vendors via an RFP to evaluate the Commission's computer system for adequacy in implementing and maintaining *external* IM applications. The Commission will comply with all requirements of state contracting procedure in the solicitation, evaluation and award to a qualified consultant. The selected consultant's main task will be to prepare a report documenting what implementation steps are required, any additional software and/or hardware required, and the ongoing management and maintenance costs required to run the system. Based on this evaluation and report, the Commission's ISU management team can proceed with establishing the network infrastructure necessary to support externally accessible IM applications.

By soliciting professional contracting services, the Commission will establish a clear and effective internet mapping deployment strategy. This strategy will serve the current needs of Commission staff as well as future needs as use of the system increases.

The selected consultant will evaluate the requirements of hosting an external IM application, including, but not limited to, the following elements:

Management and Maintenance

IM architecture design: The consultant's evaluation will address specific system architecture requirements for support of IM applications.

Full evaluation of the Commission and coastal community needs and requirements, rules and design elements: Needs will be determined, competing values and goals resolved, and a secure and scalable design produced.

System maintenance and management: Full evaluation of maintenance and site management responsibilities.

Technical Considerations

System analysis: The evaluation will include an assessment of existing hardware infrastructure for adequacy in serving GIS data rapidly over the internet to multiple clients.

Firewall compatibility and security: The evaluation will address firewall compatibility with existing IM software for adequacy in facilitating external access to GIS data over the internet while maintaining the maximum level of security for the Commission's network.

Software configuration and installation: The evaluation will include an assessment of existing IM software installations and web service software installations for adequacy in serving GIS data rapidly over the internet.

Server configuration and load capacity: The evaluation will include an analysis of the Commission's hardware configuration and its ability to successfully respond to the anticipated usage of the IM services.

Data storage: The evaluation will comment on and recommend adequate levels of data storage for a GIS data server suitable for IM services.