

**SCOPE OF WORK**

**DEVELOPMENT OF A  
WRAP INTEGRATED GEOSPATIAL INFORMATION MANAGEMENT STRATEGY (WIGIMS)**

**WESTERN REGIONAL AIR PARTNERSHIP, WESTERN GOVERNORS ASSOCIATION**

**18 July 2003**

**1. Description of Work:**

The Contractor will provide the necessary labor, materials, and equipment for research necessary for developing an integrated geospatial information management strategy and implementation recommendations for the Western Regional Air Partnership.

**2. Purpose of work:**

The purpose of this work is to analyze WRAPs geospatial information and related decision support needs, and then plan for the development of WRAP's capability to fulfill its mission by fully leveraging existing and emerging geospatial information, standards, technologies, and applications in an efficient and integrated manner. In doing so, WRAP's ability to provide the data and technical and policy tools to its clientele – state and tribal members, committees, forums, and all other interested parties – as well as to its own staff, will be improved both in the short- and long-term.

**3. Work to be performed by the Contractor:**

This project requires that the Contractor work cooperatively with WGA/WRAP staff, WRAP members, WRAP cooperators and contractors, and national- and state-level data and service providers to develop and complete six tasks as outlined below. At present, five primary geospatial information resources have been identified for future integration with respect to analytic applications and decision-making tools through the infusion of enabling technologies, and interoperability standards and specifications:

- 1) Internal WGA and WRAP information, and that produced by cooperators (e.g., ITEP)
- 2) Visibility Information Exchange Web System (VIEWS)
- 3) Emissions Data Management System (EDMS)
- 4) WRAP Regional Modeling Center
- 5) Contextual and ancillary information from emerging federal and state web services

**TASK 1: Orientation, and Preliminary Research and Interviews**

The major component of this task is for the Contractor to participate in a project initiation and orientation meeting with the WRAP project manager in Denver, CO or Ft. Collins, CO. Particulars regarding the project scope, deliverables, and delivery schedule will be discussed at the meeting. A contact list for the Needs Assessment (Task 2) and Resource Inventory (Task 3) will be provided to the Contractor at this time.

In addition, and to the greatest extent practicable, an additional meeting with the WRAP project manager and relevant WGA staff (e.g., Chris McKinnon) and WRAP cooperators/contractors (e.g., CIRA, WRAP Regional Modeling Center, ITEP) will be scheduled as close as possible to the kickoff meeting to take advantage of travel efficiencies. Conference calls could suffice for involving out-of-town participants.

This meeting will be conducted by August 31, 2003. The Contractor will complete this task no later than 1 week following the kickoff meeting. The task is anticipated to take the Contractor's senior staff no more than 3 days, including travel to the Denver area.

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### TASK 2: Needs Assessment

This task will require the Contractor to conduct an assessment of present, upcoming, and probable long-term needs of WRAP, with respect to more fully integrated information discovery, access, review, and analysis. The emphasis will be on geospatial information and related web-enabled applications and tools that support internal WRAP needs and that of WRAP members – state and tribal entities. With input from and after review by WRAP staff in regards to targets and format, questionnaires will be designed and distributed to WRAP members through the WRAP committees and forums, and selected internal WRAP/WGA staff. Description of specific potential tools for decision-support will accompany the questionnaires. Upon receipt of questionnaires and after review, follow-up communications (phone and/or email) will be initiated. A *User Needs Report* will be generated from the results of this effort.

The Contractor will deliver the *User Needs Report* no later than 30 September 2003 for review by WRAP staff. The Contractor will make all required changes within 14 days after receipt of comments on the deliverable from WRAP staff. This task is anticipated to take the Contractor's senior staff no more than 5 days, with 2.5 days support from junior staff.

### TASK 3: Resource Inventory

This task will require the Contractor to conduct an inventory of existing and emerging resources that are or will be available to address WRAP's short-term needs and allow flexibility and extensibility for the mid- to long-term. These resources include data, infrastructure, tools, enabling technologies, personnel, and funds. A *Resource Inventory Report* will be generated from the results of this effort.

The Contractor will deliver the *Resource Inventory Report* no later than 24 October 2003 for review by WRAP staff. The Contractor will make all required changes within 14 days after receipt of comments on the deliverable from WRAP staff. The task is anticipated to take the Contractor's senior staff no more than 2.5 days.

### TASK 4: Needs Evaluation and Prioritization

This task will require the Contractor to evaluate the user needs, both internal and external to WRAP, and prioritize those needs with assistance from WRAP staff at the discretion of the WRAP project manager. The task is anticipated to take the Contractor's senior staff no more than 1.5 days.

### TASK 5: Resource Assessment and Strategy Development

This task will require the Contractor to develop a set of strategies that, given existing and emerging resources, best address present and future anticipated organizational needs for the integration of geospatial data and related decision support tools. The Contractor will also document case studies of other organizations that have faced similar needs, their solutions, and lessons learned. The Contractor will propose a system design, focused on geospatial data and tools, that provide integrated discovery, access, review, and analysis functionality that best addresses WRAP needs given available resources. System properties to be addressed will be flexibility, extensibility, sustainability, compatibility/interoperability, complexity, robustness, security, as well as cost. Organizational needs will be evaluated in the context of existing or emerging resources, and gaps identified. The task is anticipated to take the Contractor's senior staff no more than 3.5 days.

### TASK 6: Geospatial IM Strategy and Implementation Recommendations Report

This task will require the Contractor to prepare a comprehensive report resulting from the preceding tasks. The report will summarize and draw from the *User Needs Report* and the *Resource Inventory Report*, and will document all research performed in Task 4 and Task 5. Based on the results of Task 5, the report will recommend one system design, and will provide a *Guidelines* section that addresses both strategic activities as well as specific system design and implementation activities.

The Contractor will deliver the *Geospatial IM Strategy and Implementation Recommendations Report* no later than

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28 November 2003 for review by WRAP staff. The Contractor will make all required changes within 14 days after receipt of comments on the deliverable from WRAP staff. This task is anticipated to take the Contractor's senior staff no more than 4 days.

### **4. Technical Specifications**

The recommendations presented in the *Geospatial IM Strategy and Implementation Recommendations Report* will adhere to existing and emerging technical standards and specifications (e.g., such as those outlined in the Geospatial Interoperability Reference Model, see – <http://gai.fgdc.gov/girm/v08/girm08.pdf>, or specified as best practices by the WGA Geographic Information Council), to the extent that these further WRAP's mission. All technical standards and specifications referenced in the Report will be summarized in a Glossary of terms, with URLs provided as appropriate.

### **5. Schedule and submittal:**

The Contractor will deliver to WRAP a draft schedule with this the proposal to be discussed at negotiations. A preliminary project completion date has been specified as 31 December 2003.

All materials to be furnished by the Contractor shall be delivered at the Contractor's expense to:

WESTERN GOVERNORS ASSOCIATION  
WESTERN REGIONAL AIR PARTNERSHIP  
ATTN: TOM MOORE  
1515 CLEVELAND PLACE, SUITE 200  
DENVER, CO 80202