

Spatial CMS

Leverage Your GIS Data

To maximize the rich information in an organization's GIS, it must be combined with other key business data and processes. Mason, Bruce & Girard, Inc. (MB&G) has developed an effective and flexible Spatial Content Management System (Spatial CMS) which integrates Enterprise GIS with a best-of-breed CMS, providing access to the combined capabilities of these systems within a secure web-based interface.

Our Spatial CMS is highly adaptable and supports a wide range of data collection, storage, organization, and sharing workflows. In creating our Spatial CMS platform, MB&G has drawn on our extensive experience with enterprise GIS, mobile technologies, application development, and land management to create an enterprise data management solution that maximizes an organization's existing investment in hardware, software, data, processes, and training. Backed by Enterprise technologies such as ArcGIS and Drupal, our platform is the most robust, scalable, extensible, and secure CMS available, and is currently being used by many private and institutional organizations.

Spatial CMS for a forestry client



Spatial CMS for a transportation client

- Stores and manages large volumes of spatial and non-spatial content
- Implements robust workflows and supports automated processes and notifications
- Maintains strict role-based security for all content
- Maximizes investment in enterprise GIS, mobile technologies, data models, and workflows while implementing currently missing business processes
- Integrates and enhances existing systems into a common management environment
- Produces high-quality and timely information to support effective management
- Supports changes to schemas, custom reports, and revised workflows through a highly extensible and configurable framework
- Provides reliable and consistent access to GIS content using Esri's on-site (ArcGIS for Server) or cloud hosted (ArcGIS Online) platforms
- Utilizes the highly-scalable and extensible Drupal CMS to provide a common platform for integration of enterprise systems and secure access to business information



**Please direct inquires to:
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SPATIAL CMS CASE STUDY:

ODOT Program Management & Mitigation and Monitoring Reporting System

MB&G is currently managing Oregon Department of Transportation's (ODOT) monitoring and maintenance program for over 50 biology and wetland mitigations sites under a 10-year state-wide contract. MB&G is responsible for annual site monitoring, monitoring reports, maintenance plans, and oversight of contractors to ensure state and federal environmental permit compliance for each of the program sites.

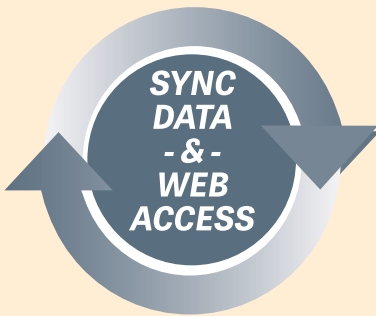
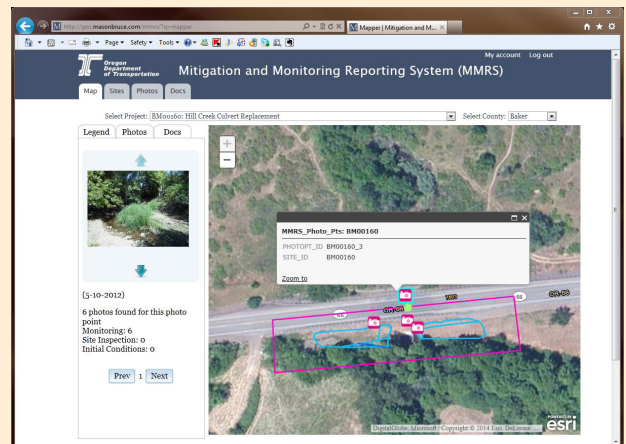
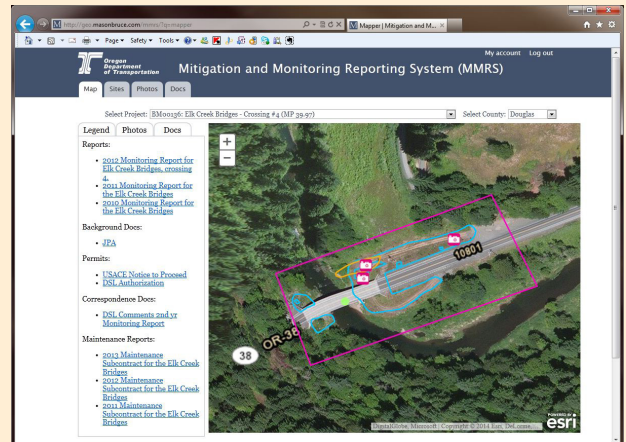
To support data management, including query and display of the large volume of field collected data, agency documents, and map information, MB&G developed a web application called Mitigation and Monitoring Reporting System (MMRS) which is based on MB&G Spatial CMS framework. MMRS supports a range of users from MB&G field biologists and subcontractors to MB&G and ODOT project managers. The

application supports upload of documents and photos; tight integration of GIS and GPS data; and notifications based on specific site activities. In addition to maintaining details and status for all MB&G managed sites, the system currently stores thousands of photos and

hundreds of documents. The reporting functionality of MMRS allows MB&G Staff to generate and deliver annual reports in ODOT's approved reporting format dynamically from the data and photos maintained by the system.

MMRS combines aspects of a modern Content Management System with the functionality of an intuitive Web Mapping Application. It is built using industry standard technologies including Microsoft's SQL Server and Esri's ArcGIS Server. It displays site photographs in an easy-to-use tool to quickly flip through images and view metadata such as descriptions and dates. Content within the system is explicitly

linked to associated projects and map features. The map interface supports a range of methods for easy navigation and high resolution aerial imagery. MMRS has streamlined management activities by providing a common interface to produce reports and access all relevant project information including GIS data, aerial imagery, documents and photographs.



"I have been impressed by the high-quality of work performed by MB&G staff, the firm's dedication to high professional standards, and their persistence in maintaining the project schedule and budget. We look forward to continue working with MB&G in the future."

Karl Wieske
Project Manager – Various Projects
Oregon Department of
Transportation

MB&G

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