

Gis solutions for environmental management essay examples

[Business](#), [Management](#)



This paperwork will comprise of what I have learned about GIS by tackling the following questions: What is the technology of Geographic Information Systems? How the ESRI's GIS products designed for environmental management? How can GIS be used to help solve the complicated physical environmental issues in the real world?

I have learned that the geographic information system technology maintain and convey information to both the community and the environment managers. The flexibility of geographic information system also permits the examination and amalgamation of numerous layers of location-based statistics plus ecological measurements. ESRI's geographic information system environmental management clarifications allows institutes when it comes to perfect coverage with enhanced statistics gathering, develop judgment creation, model vigorous environmental phenomena, distribute maps and split map data across the internet. It is also important to note that it automate dogmatic fulfillment processes, thereby, increasing efficiency with aerodynamic labor process. But what is GIS according to the course reading? Geographic information system is defined as a prevailing software tool that permits a practically unrestricted quantity of information to be connected to a geographic scene (Reston, 1998). The user can spot proceedings, locations, facial appearance, and environmental changes with unmatched clarity, through the help of GIS digital map. The geographic information system makes it possible to spot layer upon layer of information, such as soil steadiness, environmental drifts, relocation corridors, insect killer use, powder source points, hazardous misuse generators, at threat water wells, and Lake Remediation labors. It is important to note that an

effective environmental practice consider the entire range of the environment. The geographic information system achieves all these needs, since it is a flexible technology that is not limited to change. The presence of ArcGIS technology helps in presenting an extensive diversity of analytical tools to meet the needs of many natives. The natives are, therefore, in a position of making healthier judgments about the environment ([www. esri. com/environment](http://www.esri.com/environment)).

The next question that I am going to handle is about the ESRI's GIS products-how they are designed for environmental management?

Under the Server GIS category, its designs have been improved so as to enhance its functionality. The server GIS has an ArcSDE which is a superior spatial data server that provides a doorway for administration, hoarding, and using spatial data in a DBMS for any user appliance, for example ArcGIS Desktop. The server GIS with the help of ArcIMS that is known as scalable internet map server software makes the task of GIS Web publishing easier when conveying maps, statistics, and metadata to many users through the net. It is also important to note the presence of the ArcGIS Server that is a broad geographic information system server policy for venture and net application developers. It makes it possible to construct distributed and multitier venture information system configurations with the help of ESRI ArcObjects core technology. The Arcpad is a type of software that is developed with the objectives of providing database access, mapping, and GIS and global positioning system integration to clients in the meadow using handheld and mobile phone gadgets. Other products include the ESRI GIS Portal Toolkitmakes that help in creating a GIS portal by providing all the

tools and templates that are required for this task to be a success. The arcWeb Services offer access to GIS content and aptitude over the net, on demand, when needed. I can, therefore, say that the ESRI is responsible of handling the preservation, data storage, and updates. The various designs that are incorporated in the ESRI's GIS products make it possible for effective management of the environment ([www. esri. com/environment](http://www.esri.com/environment)).

Finally, I am going to explain How GIS is used in solving complicated physical environmental issues in the real world today.

With the flexibility of GIS and its expansions nature makes it possible to solve both complex and complicated physical environmental issues in the real world. The uses of optional software extensions radically expand the competences of the ArcGIS for environmental management. Hence, the task of solving complicated physical environmental issues is made possible. The ArcGIS 3D Analyst is a three dimensional topographic examination, visualization, and surface creation. These multiple functionality increases its performance when it comes to solving complicated physical environmental issues (Reston, 1998). The geographic information system also uses the ArcGIS Network Analyst that makes it possible in creating and managing network datasets. It, therefore, reduces the complex task of manually entering data, hence making it easier to manage a complex network. With the use of GIS technology, we end up saving both time and money, since one does not have to travel to the area of study-one does not have to pay the transportation cost (Reston, 1998).

Works cited

GIS Solutions for Environmental Management-Mapping Your Environmental Management

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