

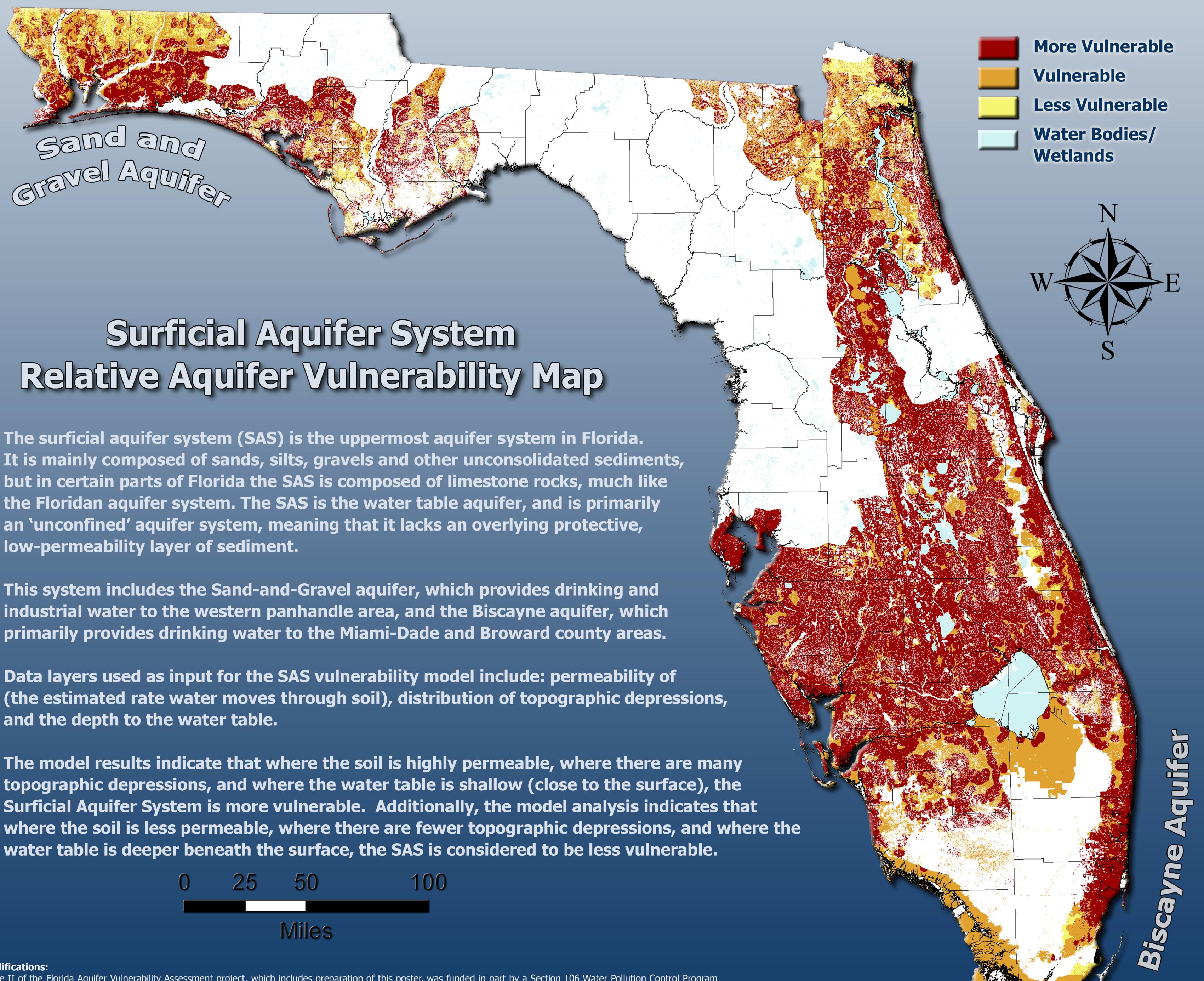
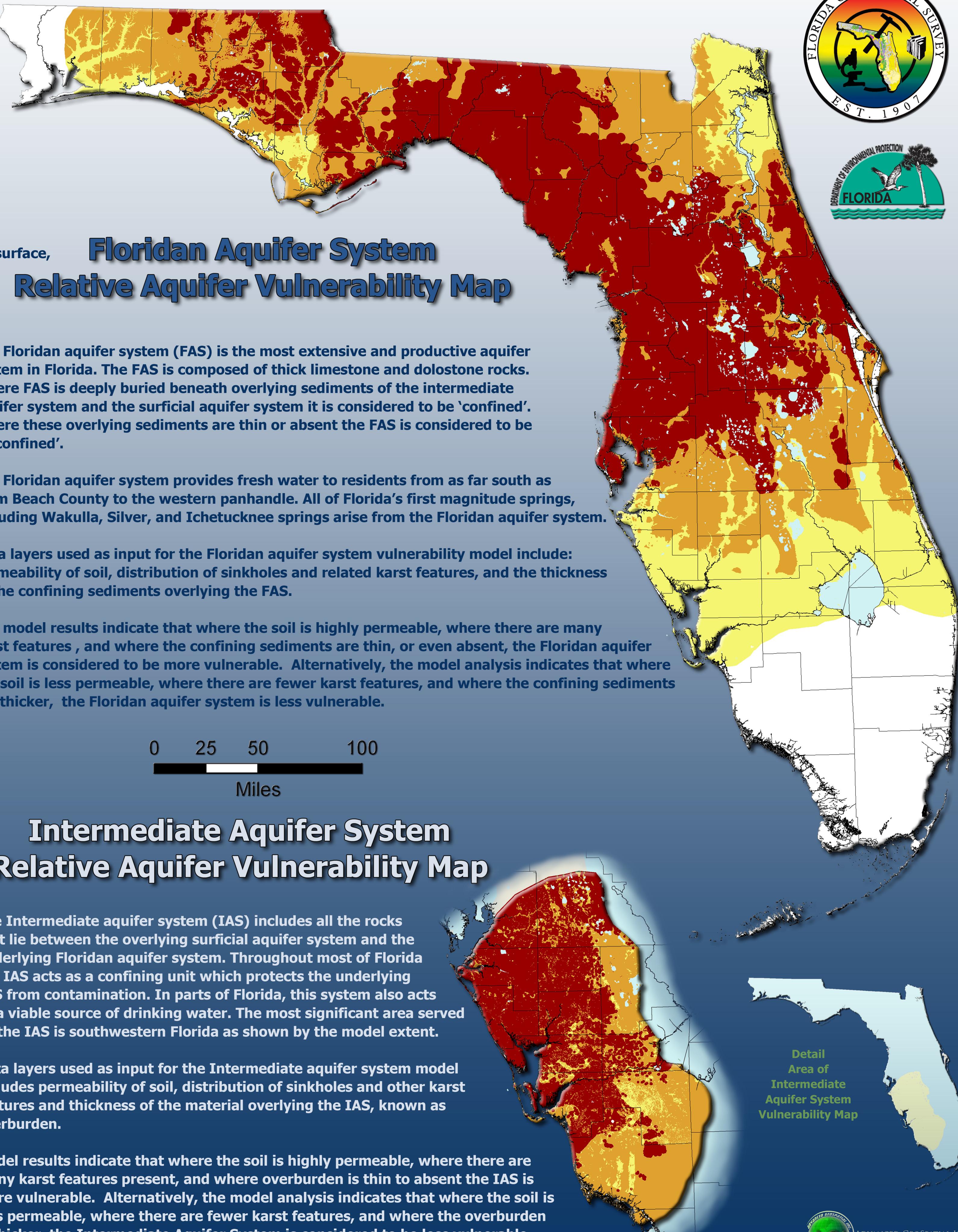
Florida Aquifer Vulnerability Assessment (FAVA) - A Tool for Protecting Florida's Ground-Water Resources

What is an aquifer vulnerability assessment?

Aquifer vulnerability assessments are used to produce maps of ground water vulnerability and are designed to assist community planners, environmental regulators, resource managers, local governments, and other professionals in meeting their objectives for improving water-resource protection. Florida's aquifer systems are of the most prolific sources of ground water in the United States. These aquifer systems provide drinking water to over 90% of Florida's residents and visitors, and give rise to hundreds of unique springs across the state. It's important to remember that although these sources of water occur underground, they are all, to some degree, vulnerable to contamination from land surface, and there is no such thing as an invulnerable aquifer. The FAVA model results provide ways for us to identify relative vulnerability zones within a study area and are developed using science-based, statistical techniques.

The FAVA project represents a major regional modeling effort and involves development of vulnerability maps for all three major aquifer systems in Florida: the Floridan aquifer system, the intermediate aquifer system and the surficial aquifer system. The models are focused on areas where the aquifers are major sources of fresh water.

Some factors affecting aquifer vulnerability in Florida include: the rate water moves through soil, how deeply buried aquifer systems are beneath land surface, number and density of sinkholes and other karst features, and water levels of the aquifers. Data layers representing these factors are created using geographic information systems (GIS) and are used along with water-quality information to develop aquifer vulnerability maps displayed here.



Qualifications:
Phase II of the Florida Aquifer Vulnerability Assessment project, which includes preparation of this poster, was funded in part by a Section 106 Water Pollution Control Program grant from the U.S. Environmental Protection Agency (US EPA) through a contract with the Florida Department of Environmental Protection/Florida Geological Survey (FDEP/FGS). The total cost of Phase II of the FAVA project was \$234,899, of which 11% was provided by the US EPA. The FAVA maps were developed by the FDEP/FGS or its contractor to carry out agency responsibilities related to management, protection, and responsible development of Florida's natural resources. Although efforts have been made to make the information in these maps accurate and useful, the FDEP/FGS assumes no responsibility for errors in the information and does not guarantee that the data are free from errors or inaccuracies. Similarly FDEP/FGS assumes no responsibility for the consequences of inappropriate uses or interpretations of the data on these maps. As such, these maps are distributed on an "as is" basis and the user assumes all risk as to their quality, the results obtained from their use, and the performance of the data. FDEP/FGS further makes no warranties, either expressed or implied as to any other matter whatsoever, including, without limitation, the condition of the product, or its suitability for any particular purpose. The burden for determining suitability for use lies entirely with the user. In no event shall the FDEP/FGS or its employees have any liability whatsoever for payment of any consequential, incidental, indirect, special, or tort damages of any kind, including, but not limited to, any loss of profits arising out of use or reliance on the maps or support by FDEP/FGS. FDEP/FGS bears no responsibility to inform users of any changes made to this data. Anyone using this data is advised that resolution implied by the data may far exceed actual accuracy and precision. Comments on this data are invited and FDEP/FGS would appreciate that documented errors be brought to the attention of FDEP/FGS staff. Because part of this data was developed and collected with U.S. Government and/or State of Florida funding, no proprietary rights may be attached to it in whole or in part, nor may it be sold to the U.S. Government or the Florida State Government as part of any procurement of products or services.

