

Aquatic GAP Program Update

Andrea Ostroff

Aquatic Gap Program Manager, United States Geological Survey, Reston, VA

Over the last year, the Aquatic Gap Analysis Program (AGAP) has been focusing on several aspects of the program to address program development needs. The program's major initiatives have focused on completing several watershed basin analyses through the accomplishments of AGAP partners, integrating program efforts into national initiatives, and improving the process through which information and data dissemination of AGAP products is handled. Work to improve on these goals through the implementation of programmatic standards will provide additional guidance for future projects supported through Aquatic GAP.

AGAP has a responsibility to uphold the standards of the US Geological Survey (USGS) to disseminate

information products to our stakeholders in ways that contribute to their needs most effectively. Two efforts currently underway within AGAP – a web site and a map viewer - will address this priority. The new Gap Analysis Program web site <<http://blogs.nbii.gov/gapanalysis/gap-analysis/aquatic-gap/>> will include Aquatic GAP project reports, highlights, access to data products, and an Aquatic GAP map viewer. The Aquatic GAP Viewer, a web-based application, will enable the querying and visualization of the modeled presence of over 500 aquatic vertebrate and invertebrate species in streams and rivers across the continental United States. The tool brings together data from eight regional projects (Iowa, Flint River Basin in Georgia, Kansas, Upper Missouri, Missouri, Pennsylvania, South Dakota, and Ohio) into a unified inter-

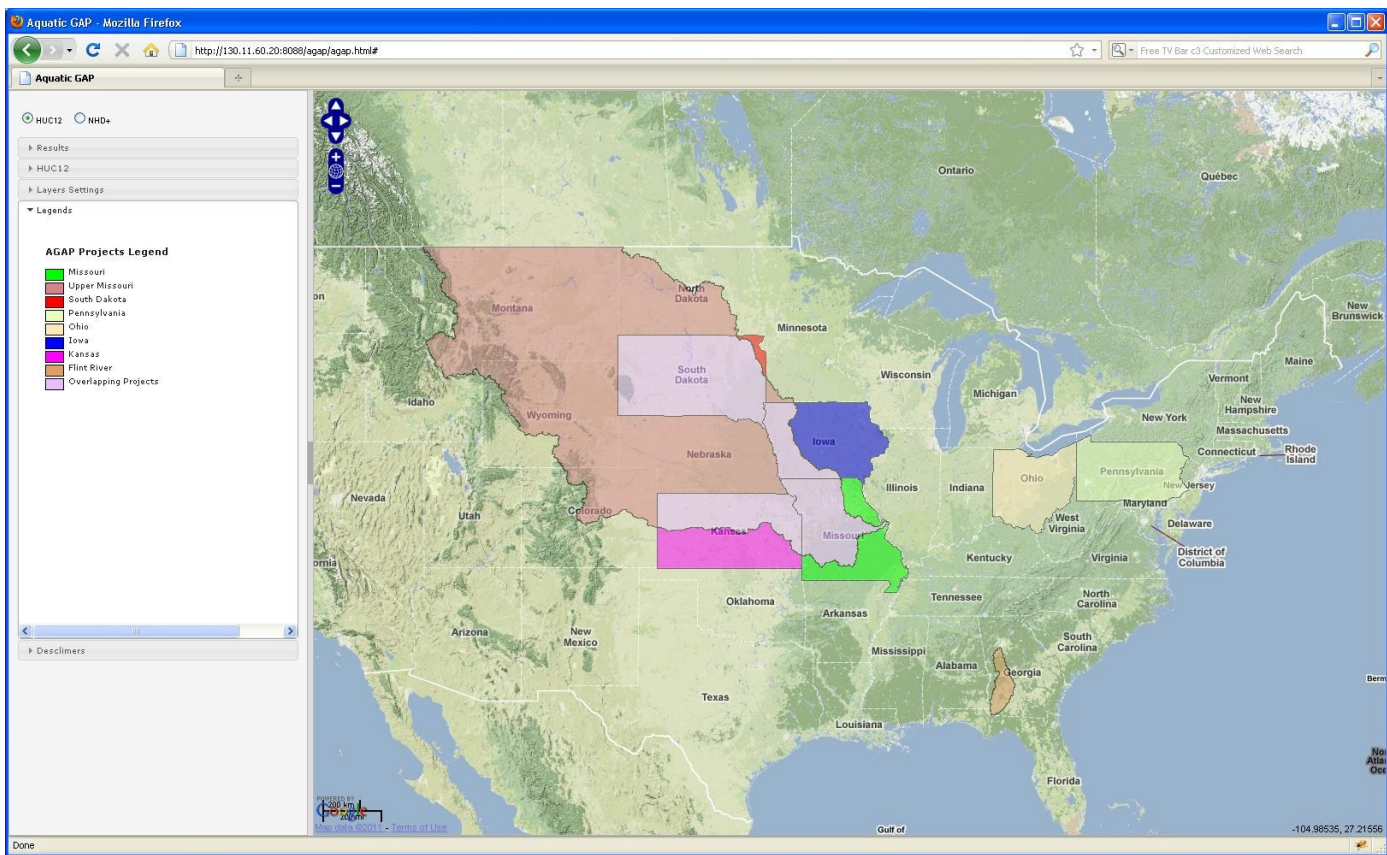


Figure 1: Distribution and spatial coverage of projects completed under the National Aquatic GAP program.

face and data model that is queryable using National Hydrography Dataset Plus (NHDPlus) catchment identifiers or Hydrologic Unit Codes (HUC12) (Figure 1). Users will access data through an intuitive map-based user interface that allows them to drill down from national, regional, and GAP project views to specific water bodies of interest. The Aquatic GAP Viewer also hosts public web services toolkits that enable the integration of Aquatic GAP species HUC12 and NHDPlus query capabilities into external applications. Visualizing Aquatic GAP data at the HUC12 scale (Figure 2) will enhance users' abilities to consider collectively the amphibian, bird, mammal, and reptile species models being generated by GAP, and will encourage the consideration of future integrated modeling approaches.

To the degree that program resources have allowed, AGAP has upheld commitments to partners who have initiated watershed basin analyses over the past several years through the completion of these projects. Based upon this level of commitment and funding support, AGAP will com-

plete the full basin analysis of the Missouri River basin and the Great Lakes watershed this year, and anticipates completion of a full basin analysis of the Colorado River in three years. These quality data products should prove valuable reference tools for the resource managers associated with those regions.

Conservation policy-makers and resource managers have a critical need for national scale data to inform decisions in a strategic and effective manner. In support of this priority, AGAP has worked closely with the National Fish Habitat Action Plan to support efforts contributing to the national assessment product. Intended for release this year by the National Fish Habitat Board, this product will include the "Status of Fish Habitats of the United States 2010" report and an online map and data viewer. One example of AGAP's contribution to the product is its support of work that corrected location inaccuracies of the geospatial data in the Army Corps of Engineers' National Inventory of Dams, and then linked them to the NHDPlus system. A necessary step to accomplish the data quality

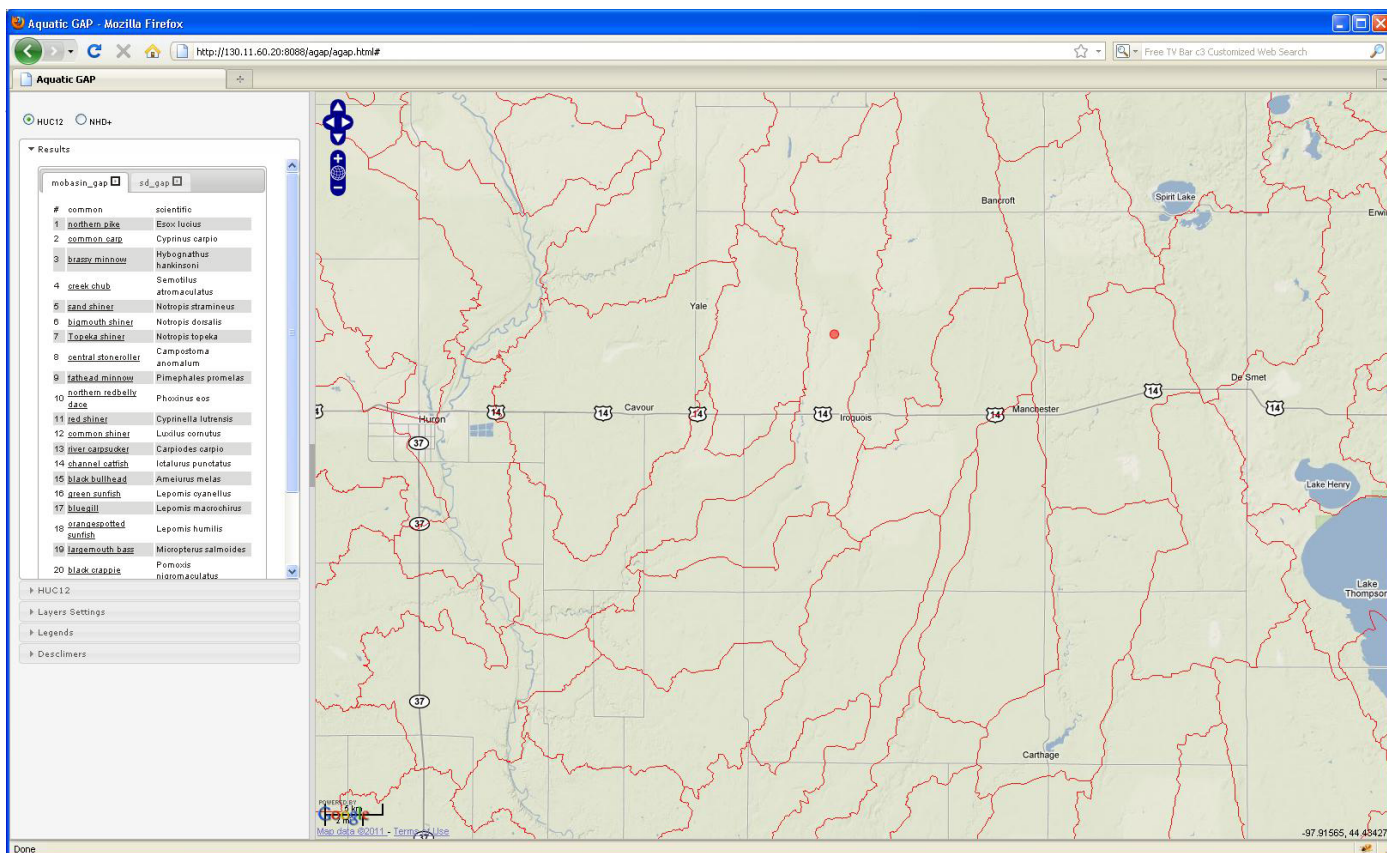


Figure 2. Predicted species occurrence results from a HUC12 spatial query.

standards established by the National Fish Habitat Board, this corrected data provided needed information to address habitat fragmentation in the national assessment. AGAP will consider support for similar national products that align with the research needs established by national initiatives like the National Fish Habitat Action Plan in the future.

In further support of the development of national scale data and products, AGAP plans to release new guidelines for future projects soon. AGAP projects will continue to incorporate all key components; however, additional guidelines will be consistent with those established by the Na-

tional Fish Habitat Board, including linking data to the finest spatial units of the scalable national framework. Program consistency will enhance the ability for future data products generated by AGAP to be leveraged and seamlessly integrated into the National Fish Habitat framework, thereby increasing the relevancy and application of products developed. Establishing these standards will increase the ability of the natural resource community and other stakeholders to use AGAP products to compare regions across the United States, to identify species and habitats not adequately represented in existing conservation lands, and to develop more strategic conservation approaches.