

SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION

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TO: Commissioners and Alternates

FROM: Will Travis, Executive Director (415/352-3653 travis@bcdc.ca.gov)
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SUBJECT: Briefing on Bay Resource Analysis Tool, BayRAT
(For Commission consideration on January 7, 2010)

Staff Report

Over the last decade, the San Francisco Bay Conservation and Development Commission (BCDC) has strengthened its mapping and spatial analysis capabilities by developing its Geographic Information System (GIS). GIS has become an increasingly powerful tool in advancing the agenda of the Commission in numerous planning and regulatory projects. In particular, the 2006 sea level rise maps that were instrumental in elevating the issue of climate change throughout the region were developed by BCDC using GIS technology. More recently, planning staff have focused on expanding the agency's ability to readily access spatial information for planning, permit analysis and public inquiries. The existing web-GIS tool, the Bay Resource Analysis Tool (BayRAT), laid a solid foundation for the new and improved BayRAT 2.0 which improves staff's ability to better understand the complex and dynamic Bay, its shoreline and the region.

The new BayRAT 2.0 decision support tool, designed and developed with staff input, allows staff to access a wide array of spatial data, perform spatial analyses and develop custom made maps. The 36 data layers available in the tool depict regional and site specific information such as BCDC permit and jurisdictional information, ecological conditions, regional land use and environmental data, and transportation and demographic data. Of particular use to staff are the records that reflect the Commission's nearly 3,500 major and minor permits, including required public access and the Commission's priority use areas. Staff can use the tool to perform spatial analyses to examine the existing conditions within a specific area. Staff can also use BayRAT to create a wide variety of maps, which can be powerful communication tools useful in both regulatory and planning projects.

Access to spatial information has never been as important than it is today. This new decision support tool allows staff to quickly retrieve spatial information and perform basic analysis and create maps on their desktops that support the ongoing work of the Commission. Furthermore, this tool enables staff to better understand and integrate information related to the complex geography of the region into regulatory and planning projects, leading to greater protection and enhancement of the San Francisco Bay.

