STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO REGION

STAFF SUMMARY REPORT (Andree Greenberg) MEETING DATE: October 9, 2013

ITEM: 5D

SUBJECT: Web-Based California EcoAtlas Update – Status Report

CHRONOLOGY: August 2006 – Initiation of pilot project requiring wetland project information as part

of water quality certification

April 2007 – Board information item on Wetland Tracker features and functions December 2008 and January 2010 – Board information items on Wetland Tracker

DISCUSSION:

In June 2013, the California Wetland Monitoring Workgroup rolled out the new California EcoAtlas (www.ecoatlas.org). The EcoAtlas is an online tool that supports science-based wetland and stream management decisions statewide. The EcoAtlas was initially developed by the San Francisco Estuary Institute (SFEI) as the "Wetland Tracker" and later the "California Wetlands Portal" under the auspices of the California Water Quality Monitoring Council (http://www.mywaterquality.ca.gov/monitoring council/).

Essentially, the EcoAtlas is a web-based portal designed to answer the questions such as where are the State's wetlands and streams and how are they doing? EcoAtlas is an interactive tool that contains:

- A new statewide base map of aquatic resources, including wetlands and streams. This map assembles the best available data from across the State into one unified map;
- Maps that peer through time, revealing the historical extent of aquatic resources in areas where SFEI's Historical Ecology studies have been completed;
- Information about State and federally-permitted projects including maps, activity logs, permit details, contact information, and file libraries; and
- The results of wetland and stream condition assessments.

Wetland and Stream Protection Program

The Water Board's Wetland and Stream Protection Program (Program) seeks to preserve, protect, restore, and enhance the Region's wetlands, streams, and other aquatic resources that are waters of the State. The Board's ability to issue federal Clean Water Act section 401 water quality certifications (401 permits) that condition the discharge of dredge or fill material to waters of the State is the cornerstone of the Program. As specified in the Basin Plan, the Board or the Executive Officer may issue a 401 permit if the permit applicant demonstrates that filling is unavoidable, water quality impacts have been minimized, and all mitigation designed to compensate for the unavoidable impacts will ensure a net gain in aquatic resource quality and quantity.

Since August 2006, Board staff has used the EcoAtlas and its predecessor portals to track the 401 permit-required compensatory mitigation that involves stream and wetland

creation, restoration, enhancement and preservation. At that time, we started requiring all permit applicants to use a standardized form that includes: (a) the location of the proposed project; (b) the type and amount of aquatic resources proposed to be impacted by the project and to be preserved, enhanced, created and/or restored as compensation for the impacts; (c) the performance criteria of the compensatory mitigation to be monitored and achieved; and (d) maps that depict the mitigation areas.

Other Uses of the EcoAtlas

The EcoAtlas provides the information that allows us to review and analyze wetland and stream losses and gains in our Region and to determine whether our Program complies with the State and federal "no net loss" policies in terms of aquatic resource acreage, linear feet, and function. The EcoAtlas is also a useful planning tool that allows permit applicants to correlate their mitigation proposals with existing aquatic resources and other mitigation and restoration projects within the same watershed. The EcoAtlas can also be used to help identify unpermitted activities and estimate the amount of their impacts.

In 2009, Board staff reviewed and analyzed 74 permitted projects impacting 90 separate wetland and riparian habitats¹ (http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/401_cert s/2009 CWP Report.pdf). That review determined the following:

- (1) The number of impacts to separate depressional wetland and riparian habitats increased in 2009 compared to previous years;
- (2) Projects that impacted riparian habitats were the highest by number, but more than half of these projects were classified as repair and maintenance that did not result in permanent habitat loss;
- (3) Riparian habitat gained the most acres followed closely by estuarine;
- (4) When tracked by linear feet, projects that impacted riparian habitat showed a mitigation gain of three linear feet gained for each foot lost; and
- (5) No impacted habitat type recorded a net loss for 2009, and most had gains of over two acres for each acre lost.

In 2010, Board staff reviewed and analyzed 57 permitted projects that impacted 99 separate wetland and riparian habitats

(http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/401_cert s/2010_CWP_Report.pdf). That review determined the following:

- (1) As before, riparian habitats remained the most impacted, but almost half were repair and maintenance projects that did not result in permanent habitat loss;
- (2) The number of impacts to separate depressional and estuarine habitats had increased;
- (3) Estuarine habitat increased substantially because of one restoration project focused on endangered species, with corresponding decreases in depressional habitats (wetland) and unvegetated drainage ditches (riparian);
- (4) The net habitat acreage gains increased from 10 in 2006-07, 18 in 2008 (3,053

¹Habitat refers to the separate types of wetland and riparian habitats impacted within a given project. Many projects impact more than one habitat type.

if large restoration projects are included), 50 in 2009, to 231 in 2010; and (5) Vernal pools had lower mitigation than the previous year, indicating that impacts to these sensitive systems should be avoided.

Need for online 401 permit application tool to complement the EcoAtlas

Staff has been working with the State Board, other Regional Water Boards, permit applicants, consultants and SFEI on developing an online 401 permit application tool (online application). The goal of the online application is to enable the permit applicant to file a standardized application online, improve the completeness of its application, track the status of its application, and track the impacts avoided and minimized from application to final permit issuance. Reaching resolution on appropriate impact avoidance and minimization can be the most time-consuming step during the 401 permitting process, and yet we do not currently have a mechanism to track our time and effort in doing so. The online application would help us accomplish this.

The California State Auditor audited the State and Regional Water Boards' 401 permit program and issued an audit report in June 2013. The report concluded the Water Boards could improve consistency and efficiency of the 401 permit program by implementing a single application form and ensuring that applications are processed within required time frames. The online application would readily improve program consistency and efficiency.

A pilot online application has been tested by our staff and permit applicants who volunteered. The online application is being fine-tuned based on comments from the test drive. Once implemented, the online application will automatically populate the EcoAtlas, so we will be able to track not only each 401 permit application but also all permitted projects. Use of the online application will eliminate the need for an applicant to submit its standardized application form only to have Board or SFEI staff enter the information from the form to the EcoAtlas.

Conclusion

Information and features in the EcoAtlas can help us set priorities for the Program, make informed permitting and enforcement decisions to manage our aquatic resources, and improve our efforts to preserve, protect, restore, and enhance our Region's streams, wetlands, and other aquatic resources. It also provides the public with easy access to the information about the value and health of our aquatic resources. The online application will further enhance Program transparency and accountability and make the 401 permit process more consistent and efficient.

RECOMMEN-DATION: No action needed.