CALIFORNIA Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Online 401: From Pilot to Production

Pilot Study Final Report

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CONTRIBUTION NO. 711
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Project Background

Pursuant to Clean Water Act Section 401, the Regional Water Boards (Water Boards) are responsible for certifying projects that might impact waters of the State by dredging or filling activities. The main objective of this project was to develop an online application tool for 401 Water Quality Certification and/or Waste Discharge Requirements (referred to as the Online 401 application tool in this report). The Online 401 application tool will increase the efficiency of the certification process by facilitating the submission of standardized and complete electronic applications by applicants, improve the consistency of the certification process, and provide transparency and a comprehensive picture of permitted activities at the Water Boards.

Furthermore, the Online 401 application tool will help to capture the impacts avoided and minimized in addition to the impacts permitted. This is significant because the 401 Program's regulatory hierarchy is to avoid and minimize before mitigating the unavoidable impacts. Unfortunately, staff's time spent on avoiding and minimizing impacts has not been well tracked and recognized.

Staff members from Regions 2 and 4 and the State Board worked with the San Francisco Estuary Institute-Aquatic Science Center (SFEI-ASC) to develop the Online 401 application tool based on one common form, which is included in Appendix 1. Presently, the State Board and each Water Board use similar but different 401 application forms. Figure 1 outlines the 401/WDR workflow incorporated into the Online 401 application tool. Important features include a mapping tool to ensure the consistent entry of project boundaries, impacts and mitigation of aquatic resources; the ability to complete form sections in any order and within more than one session; the ability to upload an unlimited number of supporting documents associated with an application; and the administrative tracking of regulatory time clocks with automated email notifications for important deadlines.

Pilot Study Highlights

The Online 401 Application Tool Pilot Study (Pilot Study) was conducted from 2012-2013. As part of the Pilot Study, SFEI-ASC held 3 tutorial sessions of the Online 401 application tool in June and July 2012. Regions 1, 2, 4, 6, 9 and the State Board participated, along with five 401 permit applicants, to use the tool on a trial basis and to provide feedback. A total of 15 staff and 5 applicants were trained using the beta Online 401 application tool. In addition, four 1-hour training sessions were held via webinar for individuals who were unable to participate in the original training sessions. These training sessions were held on July 27, 2012 for Region 6 staff, August 20, 2012 for Water Rights staff, September 25, 2012 for Southern California Edison applicants, and March 8, 2013 for CalTrans and San Diego applicants. A total of 4 staff and 6 applicants were trained to use the beta Online 401 application tool during these subsequent trainings. Additionally, an in-person demo of the tool was provided to staff in Region 3 on June 12, 2013.

In summary, the Pilot Study consisted of 7 trainings with 31 participants; see Appendix 2 for a complete

list. Staff from the State Board, 6 Water Boards and 11 applicants provided approximately 100 comments; see Appendix 3 for a summary. Feedback received during the Pilot Study was reviewed and prioritized by staff from the State Board and SFEI-ASC. The most common comments included improvements to the mapping functionality for long, linear features, such as utility or transportation lines; clarifying information being requested by rewording questions, adding new fields or panels, expanding drop-down options, and/or adding guidance text; expanding the file upload feature to accept more than one file at a time for a given question; and improvements to the user interface to enhance its usability.

Next steps include modifying the tool per the prioritized feedback and developing a roll-out and outreach plan before the tool can be officially released for use. Ongoing costs for hosting and maintenance include server maintenance, bug fixes, software patching and updates, and database administration. New feature enhancements would require additional funding to develop, test, and implement.

As part of the Pilot Study, it was attempted to establish a benchmark for the amount of time currently required for an application to be submitted and reviewed. However, since each Water Board uses a different form and review processes, we were not able to quantify this.

Assessment of Current System

The California Integrated Water Quality System (CIWQS) is the 401 Program's database used to store current and historical information on the certification of projects. Enhancements have recently been made to improve efficiency and accuracy of data uploaded by providing a data entry "wizard". In addition, the database has been recently expanded to include details about program impacts and compensatory mitigation.

Currently, the 401 certification application process is paper-based and has the following limitations:

- Lack of a standard form: The State Board and each Water Board use a similar but different 401 application form. This lack of consistency results in confusion for applicants because the requirements vary by Water Board.
- Lack of tracking of regulatory time clocks: There are set regulatory timeframes for an application's completeness review and certification action (approval or denial). Staff have difficulties managing these timeframes for multiple projects and as a result miss deadlines.
- Communication inefficiencies: Communication with applicants is infrequent due to staff workload. There is usually time-consuming back and forth communications about what is needed for a complete application. The applicant has difficulties determining the status of their application and who to contact.
- Lack of central repository for supporting materials: There is no centralized location for storing project files. As a result, files are managed and stored by the assigned staff for an application. In addition, sending project files through regular mail is slow, and when dealing with large files,

is difficult through email.

- Poor tracking of administrative record: The administrative record for a certification is tracked manually, by transferring milestone dates to spreadsheets and photocopying information such as fees received or important emails. Relying on staff to track fees received, rather than through a centralized database, has resulted in errors in obtaining full project fees.
- Inefficient processing of applications: Manually converting key application and certification information into an electronic format is inefficient and an unnecessary cost to the Water Boards.
- Lack of shared GIS platform: Staff can request to have ArcMap installed on their computer. This allows them access to approximately 170 data layers (including land cover, station and facility locations, 303d waterbodies, regional board boundaries, etc.). However, this system does not provide the capability for staff to work with the applicant on a shared GIS platform to review impact locations and land cover information.
- Lack of standardized spatial information: Project boundary polygons, impacts, and mitigation sites are not recorded in a standard map format or uploaded to a database. If staff have the expertise, they can digitize a project polygon, however, this information is not stored in a central database. Due to the lack of standardized spatial data, projects cannot be easily displayed on a web-based map or viewed within the context of other projects or datasets.

Functional Requirements

The new system for conducting the 401/WDR permit application process must be a web-based tool that meets the following 401 Program's needs and functional requirements:

- support the reporting of program performance metrics;
- promote statewide consistency and staff efficiency in the permit application process;
- deliver convenient, reliable and accurate reporting of key program information to management and the public;
- provide an unambiguous application process to the public that asks for information that can be provided with reasonable effort;
- promote improved data accuracy through automated checks;
- facilitate real-time tracking of projects and regulatory timelines;
- generate standard reports and summaries of 401 permit activity;
- support basic project management tools to staff such as automated communication to the public, tracking regulatory timelines, fees, and status of application submittals;
- export application data to CIWQS and promote complementary development and integration of these systems in the future;
- analyze project effects on aquatic resources and habitat in context of surrounding landscape;
- analyze site suitability of compensatory mitigation in relation to surrounding landscape and track compensatory mitigation site performance over time;
- provide GIS capabilities to assess project effects on watershed resources, track compensatory

mitigation performance, and evaluate “no-net loss” of wetlands; and
- support tracking of key process milestones, site visits, compliance reporting, enforcement actions and a repository for certifications, related documents and key emails.

Proposed Solution

The recommendation is to use a web-based application system that allows for data entry, editing, and administrative reporting. The chosen web-based method does not have proprietary software requirements, increases the transparency of the process, and offers the maximum flexibility for future feature development and leveraging other tools.

This system will provide the following benefits:

- increase program effectiveness and efficiency, and reduce costs by centralizing all application data in one system with a common set of review procedures and mapping capability;
- allow consistent entry of spatial data for project boundaries and impacts and mitigation of aquatic resources;
- ability to add additional customized subject panels to address region-specific questions if needed;
- ability to summarize the 401 Program across the state through one database and create new summaries as new reporting needs are identified;
- allow for automatic email notifications to assist with workflow and deadlines;
- leverage existing investments and tools developed for online visualization tools;
- use open source technology that is not dependent on proprietary software and has a large user group community as a resource;
- ability to summarize staff effectiveness in mitigating impacts;
- ability to track when monitoring reports are due and have been received;
- ability to exchange information with other systems, such as CIWQS, ECM, and other applications developed for displaying and visualizing data;
- ability to integrate 401 project data with other data systems, such as CRAM that can provide a condition assessment in the context of a 401 permit action;
- provide a central electronic repository for all documents related to an application and assist with paperless office requirements;
- increase program consistency across all the Water Boards and improve administrative processes responding to the State Auditor’s Report recommendations (2012-120);
- support the Water Board Strategic Plan Goal 5 to improve transparency and accessibility of information to the public;
- support the Water Board Strategic Plan Goal 6 to enhance consistency across the Water Boards, and to ensure effective, efficient and predictable processes; and
- support the Water Board’s Agency Information Strategy Goal 3 to support the mission and Goal 4, for e-government solutions to improve data quality and public access, and Priority 6 to

improve transparency and accountability.

The limitations or cons associated with the proposed solution include:

- Requires all applicants and Water Boards to use the same habitat classification scheme. With this new requirement, crosswalks will need to be developed to assist applicants and staff in correctly classifying habitats for their projects
- Requires dedicated funding to add new features and functionality, ensure the system is running properly with optimum levels of performance, and modify as needed to accommodate future browser updates
- Requires dedicated funding for hosting costs to update servers, hardware, and infrastructure as the system expands and technology changes
- Requires dedicated funding and staffing for training, outreach, training materials, and help desk support to address user questions and provide technical assistance
- Requires a comprehensive roll-out and training strategy plan to accompany the release of the new tool to prevent both applicant and staff frustration. The plan will need to address the region-specific needs and questions of the different Water Boards.
- Requires a core team lead by an agency person to coordinate the roll-out. The team would also include technical members from the tool development team.

Rationale for the Selected Solution

The proposed solution is a web-based application process allowing Water Board staff and project applicants to conveniently and efficiently move through an application process that is both transparent and unambiguous. Having a centralized application database that chronicles the status of all certification applications would provide immediate program administration efficiencies and information on active program workload. Progress on applications and staff assignments would be summarized in a single database.

The web-based system would provide a more user-friendly interface and transparency to the applicants submitting the required information. Filling out the information by subject panel with convenient file-uploading capability would eliminate the frustration with the current, opaque paper application process. The online application process would also include internal project management functions mentioned above that would greatly shorten processing time by allowing managers to receive automated email notifications; dynamically track staff assignments and workloads; enhance staff capabilities to review application materials and maps with the applicant on a shared platform; and make changes, receive additional files and efficiently track the current status of the various regulatory clocks.

Key application information would be transferred to other relevant tools, such as CIWQS and EcoAtlas. The CIWQS database tracks certification and compliance information and is relied upon to document program performance. Currently, this is a manual process which can be automated. EcoAtlas is a visualization tool that displays approved projects within a landscape and watershed context.

The new tool will also help with public notice compliance and paperless office requirements. Water Board staff have a difficult time responding to public record requests. The automated public notice and the availability of information online will assist staff in their workloads. Since the new tool will serve as a central repository for storing supporting documents for an application, staff will no longer need to scan and upload documents.

Describe Other Alternatives

This section describes the pros and cons of several alternatives for hosting and maintaining the Online 401 application tool and database once the tool has been finalized.

Alternative 1: Integrate 401/WDR application process into CIWQS

Modify the current California Integrated Water Quality System (CIWQS) to allow web-based data entry forms for applicants to enter and edit their application information. CIWQS staff at the State Water Resources Control Board (SWRCB) will be responsible for hosting, maintaining, and implementing future feature enhancements to the tool.

Pros	Cons

● All application data will be stored in CIWQS and maintained by SWRCB staff
● Provides CIWQS with pertinent certification and compliance information used to document program performance from moment of application origination
● No need to transfer project data from a separate system into CIWQS
	● Requires the modifications to CIWQS to do the following:
	  ● manage application information in the database
	  ● provide administrative functionality, tracking of regulatory time clocks, and automated email notifications
	  ● provide data entry and editing of application data
	  ● include GIS capabilities for digitizing application polygons
	  ● provide a central repository for emails and supporting documents associated with an application
	  ● develop a common platform for applicants and staff to review and edit applications
	● Requires a Budget Change Proposal to cover ongoing support costs
	● Some requested functionality/features might not be accommodated
	● Not compliant with AB 2408 mandate for tier III data center hosting

Alternative 2: Host in Federated Data Center or Amazon Web Services (AWS) and maintained by Regional Data Center

Host the Online 401 application tool externally with one of the state's Regional Data Centers (RDC). The RDC will be responsible for hosting, maintaining, and implementing future feature enhancements to the tool. The RDC will have the expertise and capacity for maintaining the tool's main components, which include database management, GIS functionality, and web application programming and mapping.

Pros	Cons
● Meets the tier III data center requirements of AB 2408 ● RDC staff can remotely exercise their diverse skill set, capacity and experience required to maintain and enhance the application tool ● Possibility of cost-sharing and leveraging other project work to enhance Online 401 ● Maintain the integrative value of the EcoAtlas technology "ecosystem" by sharing common innovations across EcoAtlas, CRAM, and Online 401 ● Potential for new funding models to support the technology	● Requires ongoing funding to cover the hosting and maintenance costs ● Requires ongoing funding to provide technical training and help desk support ● Requires additional funding for any future feature enhancements ● Separate from CIWQS system and integration points must be created

Alternative 3: Hosted and maintained by the SWRCB

Host the Online 401 application tool internally at the SWRCB. Staff at the SWRCB will be responsible for hosting, maintaining, and implementing future feature enhancements to the tool. SWRCB staff will have the expertise and capacity for the tool's main components, which include database management, GIS functionality, and web application programming and mapping.

Pros	Cons
● Tool will be hosted and maintained by SWRCB staff rather than a contractor	● Requires dedicated staff capacity and expertise in database management, GIS, and web application programming and mapping technologies ● Requires costs for hosting, maintaining, and implementing future feature enhancements to be absorbed or addressed through budget change proposals ● Does not match supported skills sets ● Requires ongoing funding to provide technical training and help desk support ● Not compliant with AB 2408 mandate for tier III data center hosting

Estimated Costs for Alternatives

Task/service	**Alternative 1:** Integrate 401/WDR application process into CIWQS[1]	**Alternative 2:** Host in Federated Data Center or AWS and maintained by RDC[2]	**Alternative 3:** Hosted and maintained by the SWRCB[3]
Develop data entry forms	$250,000	n/a	n/a
Develop geospatial functionality in ArcSDE or Oracle Spatial (approved data systems, licensing costs not included)	$250,000	n/a	n/a
Technology knowledge transfer	$12,000	n/a	$30,000
Estimated costs - fixed	$512,000	n/a	$30,000
Hosting	$3,000	$3,000	$3,000
Maintenance (functional and system updates)	$40,000	$40,000	$40,000
Administrative support[4]	$203,400	$203,400	$203,400
Estimated costs - annual	$246,400	$246,400	$246,400

[1] This state-supported option represents assumed costs since the actual labor costs are unknown. Costs for developing the data entry forms and geospatial functionality are based on development costs for the current Online 401 application tool, which are approximately $500,000. Technology knowledge transfer costs are based on training 1 DBA, 2 data technical analysts, 2 web application developers, and 1 GIS analyst. Estimated costs per person are $2,000.

[2] Maintenance costs are based on a percentage of the total development costs. As new functionality is implemented into the application tool, maintenance costs would increase as maintenance responsibilities expand.

[3] This state-supported option represents assumed costs since the actual labor costs are unknown. Technology knowledge transfer costs are based on training 1 DBA, 2 data analysts, 2 web application developers, and 1 GIS analyst to ensure there is redundancy in staff expertise to maintain the database and application tool. Estimated training costs per person are $5,000.

[4] These administrative support costs are estimated for the first 5 years after the release of the Online 401 application tool. Annual support costs may be reduced after the program stabilizes.

Hosting, maintenance and administrative support costs are annual estimates. The estimate for administrative support costs ($203,400) was based on the following assumptions. A billing rate of $100/hour (hr) was used in calculations.

- Webinars: 10 webinars, 4 hrs each by 2 people ($8,000)
- Videos: 2 videos, 5 minutes in length, 5 hrs by 1 person ($1,000)
- In-person visits/demos: 1 visit to each of the 9 Water Boards, 8 hrs by 1 person, plus 8 hrs for demo preparation ($8,000)
- Brochure: 1 brochure, 16 hrs by 2 people ($3,200)
- Other communication efforts: 16 hrs by 2 people ($3,200)
- Help desk support: 2 person-years (PY) with a salary of $60,000 and ⅓ PY for a supervisor ($180,000)

Risks Associated with not Completing Project

If there is no follow-through on the investments in the time and money made to date on this project, there is a risk of applicants and staff losing confidence in the state's commitment to improve the 401 certification/WDR process and increase its efficiency. Abandonment of current efforts or the development of a wholly new system may cause confusion with select staff and applicants who have already participated in the Pilot Study and trained on the beta version of the Online 401 application tool.

As part of this project, a common 401 certification form was developed based on input from staff at the SWRCB and Water Boards 2 and 4. The risk of not completing this project would result in the continuation of each Water Board using their own 401 certification/WDR form. This approach would ***fail*** in its ambitions to:

- increase program effectiveness and efficiency,
- improve programmatic consistency across the state,
- promote transparency in an otherwise very opaque process,
- instill public trust in a modern system run by state stewards, and
- reduce costs by centralizing all application data in one system with a common set of review procedures and mapping capabilities.

In addition, by not using a common system for storing emails and documents associated with applications, it would be more costly for the Water Boards to transition to a paperless office as required by the State Board's IT Plan. Without GIS capabilities, staff will not be able to:

- assess project effects on watershed resources,
- track compensatory mitigation performance, or
- evaluate "no-net loss" of wetlands.

Proposed Project Approach

The Online 401 application tool was developed with a grant from the USEPA in 2008-2010. During the initial phase, staff from the State Water Board and Water Board Regions 2 and 4 participated in the tool's development. In 2012-13, the SWRCB funded a Pilot Study to demonstrate the use of the tool by applicants and staff from Water Board Regions 1, 2, 3, 4, 6, and 9.

The proposed project approach is to capitalize on these investments made to-date in the tool and in improving the certification application process and management. Additional SWRCB funding ($100K) has been requested to complete the existing Online 401 application tool by incorporating and addressing the feedback received during the Pilot Study. The project's Feasibility Study Report process will identify sustainable funding to implement the roll-out plan (outlined below) for the tool and provide hosting, maintenance, and administrative support to ensure the successful implementation of the Online 401 application tool throughout the entire state.

Implementation and Roll-out Plan

Successful adoption and roll-out of the Online 401 application tool will require an implementation and roll-out plan that addresses the following:

- implement Pilot Study feedback into the standard form;
- provide opportunity for Water Boards to comment on revised form;
- finalize the Online 401 application tool based on Pilot Study feedback and revised form;
- test the final tool in different browsers, especially Internet Explorer;
- engage staff at Water Boards who did not participate in the Pilot Study;
- develop training materials, including webinars that can be posted on the website;
- develop technical documentation to guide applicants and staff on using the tool;
- develop an outreach and training strategy;
- conduct statewide trainings for applicants and staff on how to use the tool;
- provide statewide technical assistance and help desk support for the tool; and
- identify secure funding for tool maintenance, training and help desk support.

Figures

Figure 1: Online 401/WDR Workflow Diagram

Figure 1. Online 401/WDR workflow diagram

For brevity in diagram, "401" refers to 401 certification and Waste Discharge Requirements

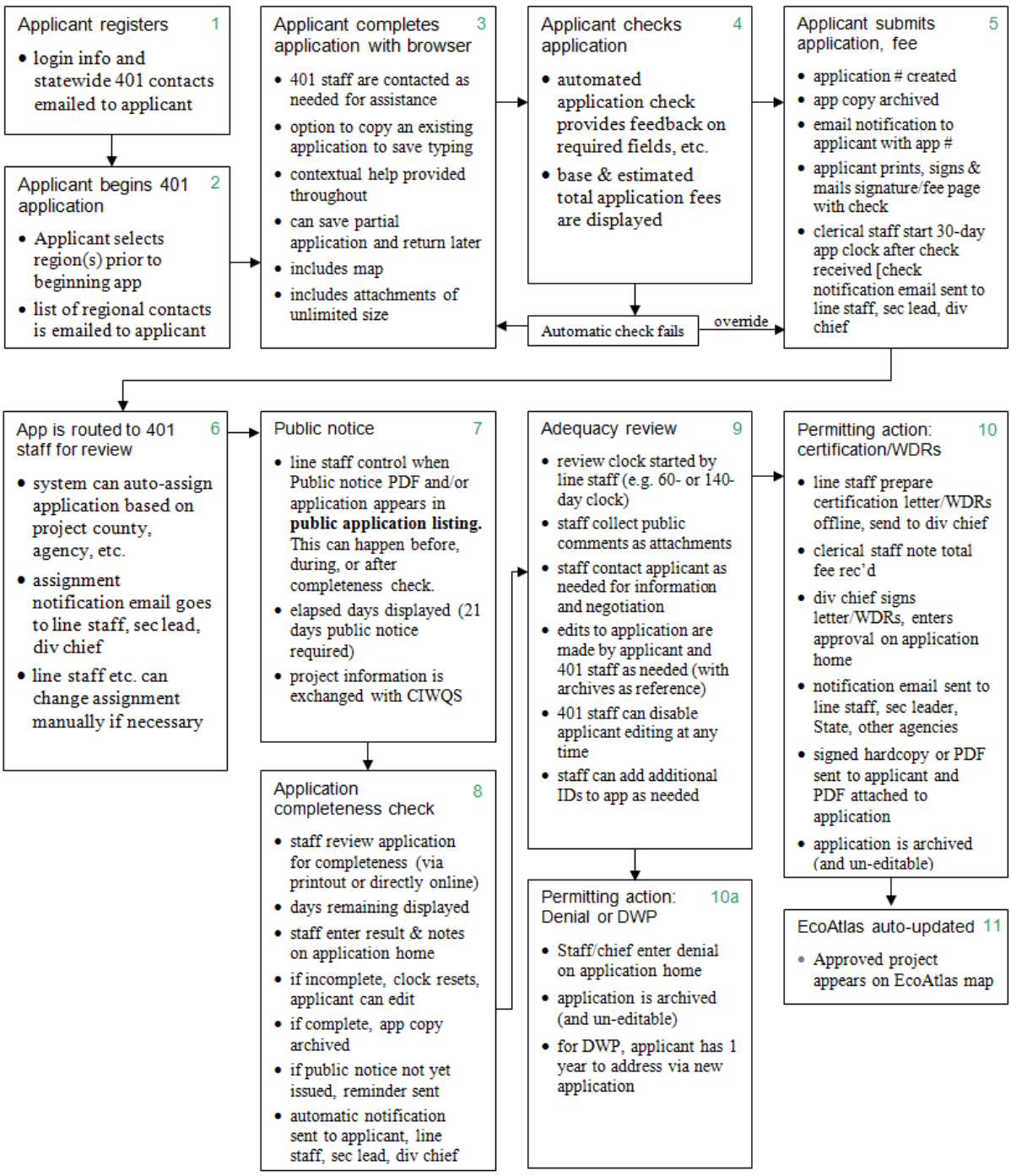


Figure 2: Online 401 Application Tool Technology Stack

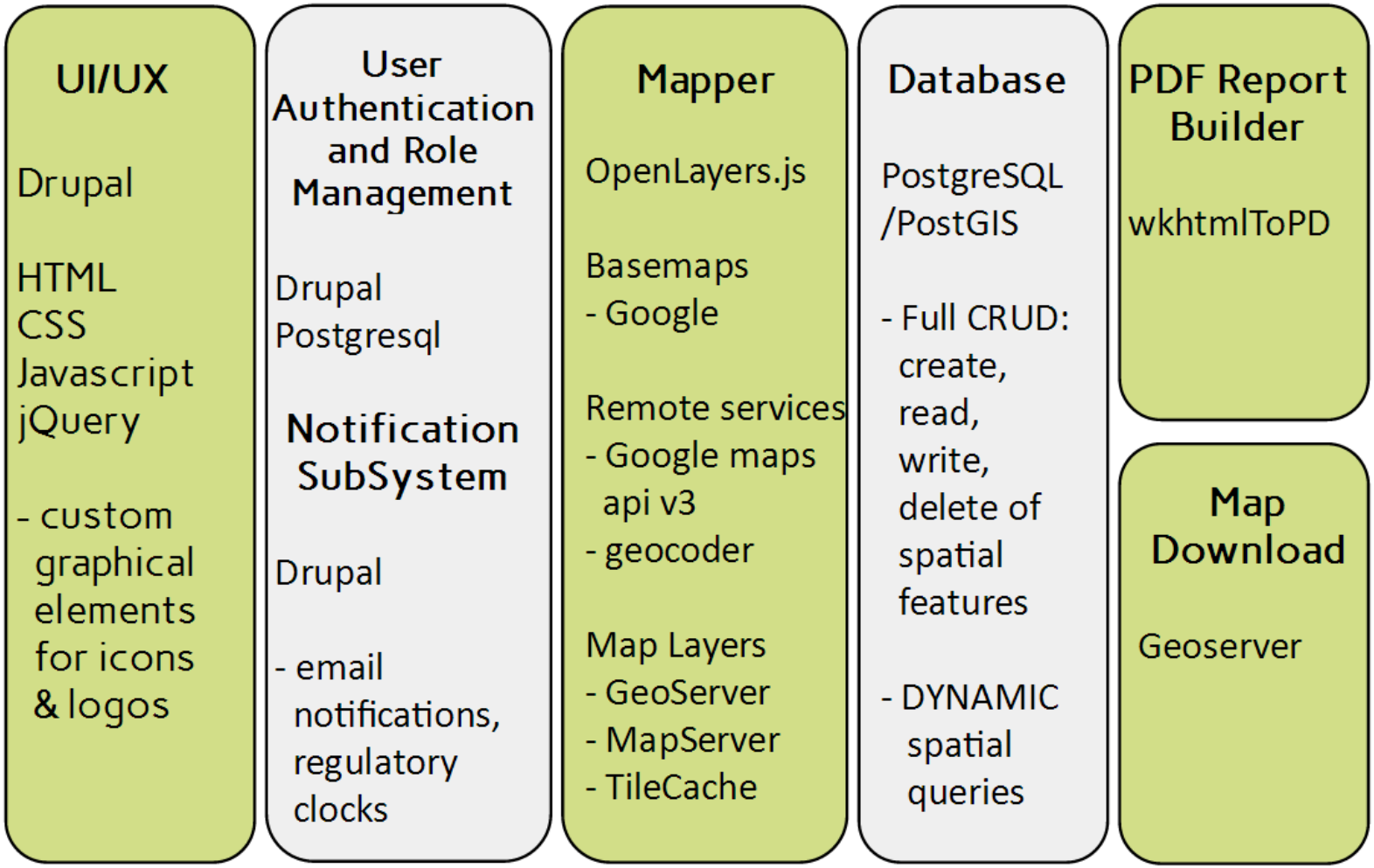
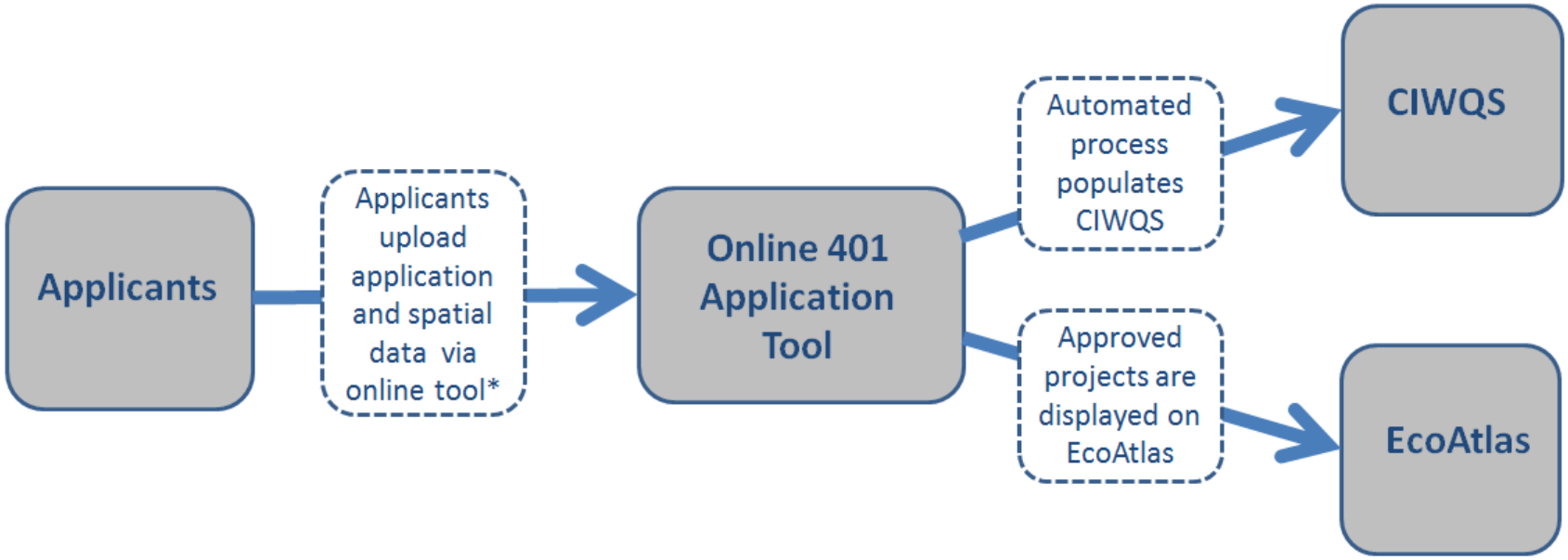


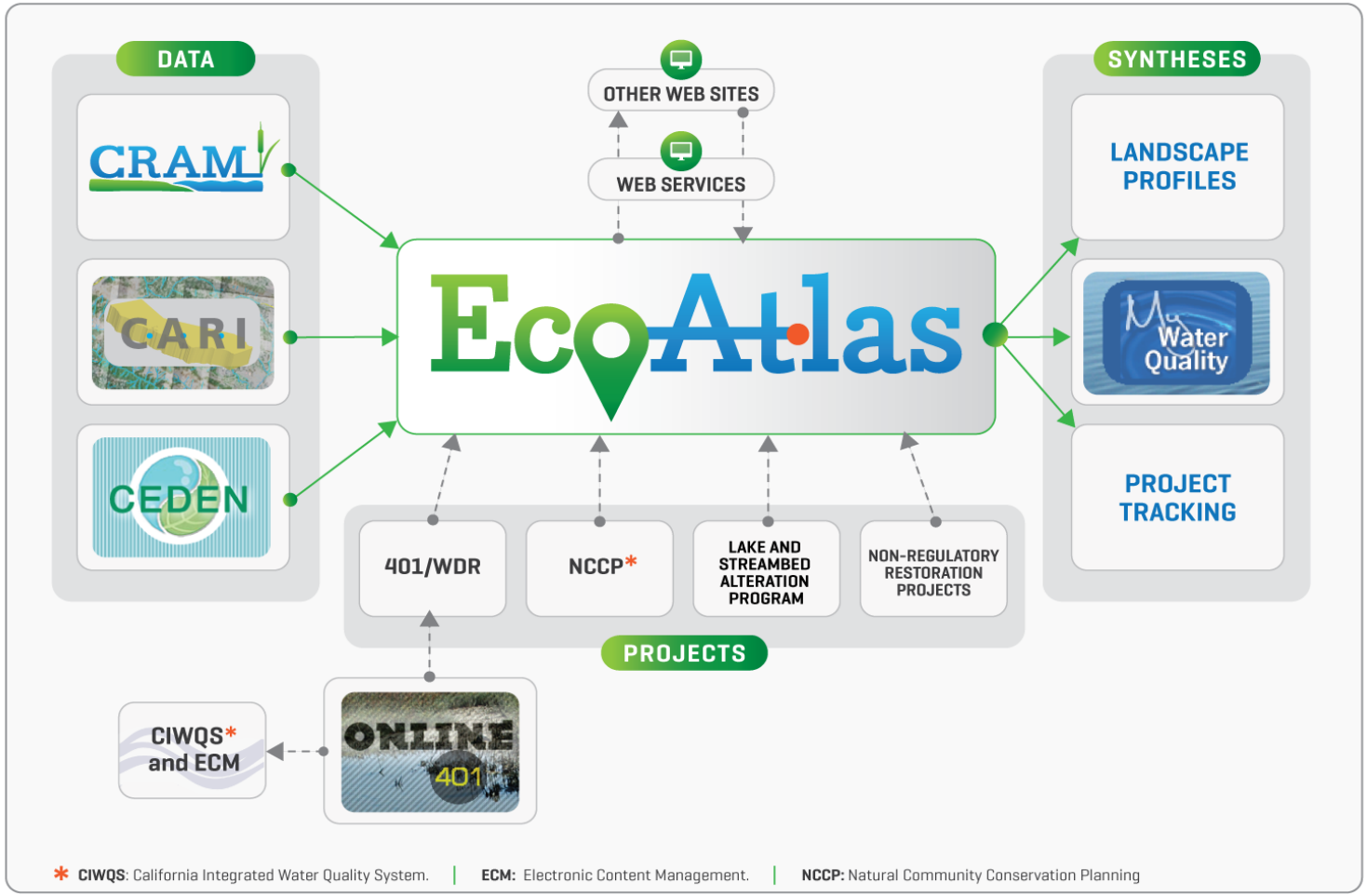
Figure 3: 401 Certification Application Process: Current System

Figure 4: 401 Certification Application Process: Proposed System



* In cases when applicants submit paper applications, State and Regional Board staff will upload application data via online tool.

Figure 5: 401 Certification Application Process: Proposed Integration with EcoAtlas



Appendices

Appendix 1: List of Pilot Study Participants

Online 401 Application Tool Trainings

A total of 20 staff and 11 applicants were trained during the seven training webinars and demos. A list of trainings and participants is included below.

The following training webinars and demos were conducted:

- June 21, 2012 - 15 attendees
- June 26, 2012 - 5 attendees
- July 27, 2012 – 1 attendee (Region 6)
- August 20, 2012 – 3 attendees (Water Rights group)
- September 25, 2012 – 2 attendees (Southern California Edison applicants)
- March 8, 2013 – 4 attendees (CalTrans, San Diego applicants)
- June 12, 2013 – 1 attendee (Region 3)

State and Water Board staff:

- Region 1: Stephen Bargsten (6/21/12)
- Region 2: Margarete Beth (6/21/12), Ben Livsey (6/21/12), Shin-Roei Lee (6/26/12)
- Region 3: Kim Sanders (6/12/13)
- Region 4: LB Nye (6/21/12), Dana Cole (6/21/12), Valerie Carrillo (6/21/12)
- Region 6: Tobi Tyler (7/27/12)
- Region 9: Mike Porter (6/21/12), Kelly Dorsey (6/21/12), Darren Bradford (6/26/12)

State Board:

- 6/21/12: Bill Orme, Catherine Woody, Cliff Harvey, Jeanie Mascia
- 6/26/12: Bob Solecki
- 8/20/12: Erin Ragazzi, Jeff Parks, Oscar Biondi

Applicants:

- State Board: Crystal Miller (6/21/12), Jean Bandura (6/21/12)
- Southern California Edison: Alexa LaPlante (9/25/12), Stephanie Fincher (9/25/12)
- Los Angeles County: Jemellee Cruz (6/21/12)
- San Diego County: Malia Durand (6/26/12)
- Santa Clara Valley Water District: Ryan Heacock (6/26/12)
- CalTrans, San Diego: Michelle Madigan (3/8/13), Susan Scatolini (3/8/13), Pauline Lamphere (3/8/13), Sandra Lavender (3/8/13)

Appendix 2: Summary of Feedback Comments

Approximately 100 comments were received during the Pilot Study. Four main themes emerged from the feedback.

Enhancements to the mapping functionality:

- works well for small, one-site projects, but needs improvement for large linear projects
- add functionality to import attributes from shapefile or KML
- add functionality to modify aquatic resource amounts in summary tables below map and add edits to warnings list and visually highlight fields that have been manually edited

Enhancements to the file upload functionality:

- allow >1 file to be uploaded at a time for a question
- add the file upload functionality to additional questions

Modifications to the content being requested:

- expand drop-down selection lists
- add new questions (e.g., basin plan codes)
- add text boxes for Yes/No questions
- auto-populate county field based on map
- add region-specific questions as new panels

Improvements to the user interface:

- improve guidance for completing questions
- provide better auto-saving or save reminders
- clarify wording and reorder questions

Appendix 3: Online 401: From Pilot to Production Prezi Presentation

On February 10, 2014, Cristina Grosso and Tony Hale from SFEI presented "Online 401: From Pilot to Production" to State Water Resources Control Board, Office of Information Technology staff. The link to view Prezi presentation is: http://prezi.com/otfttnw63xtl/?utm_campaign=share&utm_medium=copy

Appendix 4: Standard Application Form for 401 Water Quality Certification and/or Waste Discharge Requirements

Staff members from Regions 2 and 4 and the State Board worked with the San Francisco Estuary Institute-Aquatic Science Center (SFEI-ASC) to develop one common application form. During the Pilot Study, Regions 1, 3, 6 and 9 contributed feedback and suggestions to improve the content of the questions and identify region-specific questions.

A copy of the common application form used to develop the Online 401 application tool is included on pages 21-26. Feedback comments from the Pilot Study need to be incorporated into this form and application tool.

STATE OF CALIFORNIA – CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
<State or Regional Board Title>

Linda S. Adams
Secretary for Environmental Protection

Arnold Schwarzenegger
Governor

APPLICATION FOR CLEAN WATER ACT §401 WATER QUALITY CERTIFICATION AND/OR WASTE DISCHARGE REQUIREMENTS

IMPORTANT: Complete this form if you are proposing dredge and/or fill activities in
(1) waters of the U.S. subject to a Clean Water Act (CWA) section 404 permit from the U.S. Army Corps of Engineers (USACE) and a state section 401 water quality certification (WQC), or
(2) waters of the State, subject to State issuance of Porter-Cologne Water Quality Control Act Waste Discharge Requirements (WDRs)[1]. If the project involves a Federal Energy Regulatory Commission (FERC) license or amendment to a FERC license, a 401 WQC application should be sent to the State Water Resources Control Board's Division of Water Rights.

1. APPLICANT NAME AND/OR ORGANIZATION	2. AUTHORIZED AGENT NAME AND TITLE (an agent is not required)

3. APPLICANT'S ADDRESS	4. AGENT'S ADDRESS

5. APPLICANT'S PHONE, FAX, and EMAIL	6. AGENT'S PHONE, FAX, and EMAIL
Phone:	Phone:
Cell:	Cell:
Fax:	Fax:
E-mail:	E-mail:

7. STATEMENT OF AUTHORIZATION [this section will be moved to a paper signature sheet]

I hereby authorize _____ to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this application.

APPLICANT'S NAME/TITLE	APPLICANT'S SIGNATURE (This must be signed by the Applicant, not the authorized agent)	DATE

PROJECT INFORMATION

8. PROJECT NAME OR TITLE

[1] In some cases where a CWA section 404 permit will not be issued by the Corps for the project, coverage under General WDRs (GWDRs) may be appropriate. The GWDRs this application can be used to apply for include:

- State Water Resources Control Board Order No. 2004-0004-DWQ, Statewide GWDRs for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction, for projects with proposed dredged and/or fill discharges to waters of the State that do not exceed two-tenths of an acre, 400 linear feet of stream bank or shoreline, and 50 cubic yards of dredged material. ("Waters of the State" is defined pursuant to Water Code section 13050, subdivision (e) as "any surface water or groundwater, including saline waters, within the boundaries of the state.") Additional information and applications for the above-cited Orders can be found at the Water Board's website (http://www.waterboards.ca.gov/lahontan/) under links to Permitting Questions/General Permits.

Contact State or Regional Board staff for more information.

Notes last updated: 9/13/11

9. **PROJECT STREET ADDRESS INCLUDING CITY** (if applicable)

10. **LOCATION OF PROJECT**

11. **DRIVING DIRECTIONS TO THE SITE**

12. **DRIVING REGULATORY CATEGORY** (Select one regulatory category for the overall project.)

- ☐ **Compensatory mitigation**
- ☐ **Restoration without permanent mitigation**
- ☐ **Stream alteration or stream repair and maintenance (temporary impacts only, no permanent mitigation required)**

13. **PROJECT PURPOSE** (Describe the reason or purpose for the overall project.)

14. **IMPACT/BENEFIT TYPE** (Select the project impact or benefit that best describes the principal effect of the project.)

Waterway/Shoreline Modification – Beach Nourishment
Waterway/Shoreline Modification – Canals
Waterway/Shoreline Modification – Other
<Drop Down List of many others>

15. Is this project part of a general order, or is it an individual permit?

Regional General Permit ☐
Nationwide General Permit ☐
Main Permit ☐

PROJECT DESCRIPTION

16. **DESCRIPTION OF ACTIVITIES** (Provide a full, technically accurate description of all activities, including all impacts and mitigation. Include information on any impact or mitigation already initiated.)

17. Is the water body "isolated" (Has the USACE relinquished jurisdiction over the water body?)
YES ☐ **NO** ☐ if yes, provide Corps disclaimer letter or other source of disclaimer information.

18. Does the proposed project involve in-channel hydromodification, floodplain modification, stream restoration, or bank stabilization?
YES ☐ **NO** ☐

19. Is the proposed project within the 100-year floodplain?
YES ☐ **NO** ☐

20. **FILL** (indicate type(s) of material, including earthen, proposed to be discharged to wetlands and/or other waters of the State or U.S.)

21. Does the project involve a diversion of water?
YES ☐ **NO** ☐ if yes, answer questions 1-3 below

1. Have you contacted the Department of Water Rights and/or filed appropriate documents for your diversion?
YES ☐ **NO** ☐

2. Describe how water will be diverted around work area (include Water Diversion Plan, if applicable).

3. Describe the flow event the water diversion is designed for (e.g., Q_5, Q_{10}, Q_{25}, Q_{100}). Include calculations, if applicable.

22. What are the pre and post project flow rates (e.g., Q_5, Q_{10}, Q_{25}, Q_{100}) and volumes?

23. **DREDGE** (indicate type(s) of material, including earthen, proposed to be dredged from wetlands and/or other waters of the State or U.S.)

24. What type of dredging is being performed?
New ☐ **Maintenance** ☐

25. What type of dredging method will be used?

26. Please provide total cubic yards (for project duration) _____

27. Please describe the method of transfer and containment as well as the method and location of spoil disposal.

28. Please describe the results of analyses conducted on dredged material composition.

29. **PROPOSED SCHEDULE**
Groundwork start date: _____

Groundwork end date: _____

Monitoring start date: _____

Monitoring end date: _____

Additional schedule details (e.g. inactive periods):

DELINEATION INFORMATION

30. **NAME** (person delineating extent of waters of the U.S. and/or waters of the State)

31. **DATE(S) OF DELINEATION** (attach delineation worksheets):

32. **TITLE:**

33. **AFFILIATION AND STATEMENT OF QUALIFICATIONS:**

34. Was the delineation performed according to the Corps' Supplemental Guidelines?
1. **YES** ☐ **NO** ☐ (Arid West Supplement)

2. **YES** ☐ **NO** ☐ (Western Mountains, Valleys and Coast Supplement)

35. Has the delineation been verified by the Corps?

YES ☐ If yes, attach verification letter from Corps, verified delineation map, and provide date of verification: _____

NO ☐ If no, attach delineation map sent to Corps for verification.

PROJECT SITE MAP

36. PROJECT SITE MAP

IMPACT INFORMATION

37. IMPACT MAP

38. AVOIDANCE OF IMPACTS Describe alternatives considered and other efforts to **avoid** specific and overall impacts to waters of the US and State, including redesigning the project to completely avoid all impacts to waters.

39. MINIMIZATION OF IMPACTS If project impacts are unavoidable, describe alternatives considered and other efforts to **minimize** specific and overall impacts to waters of the US and State, including hydromodification, stormwater, and waterbody impacts during project construction and during the operating life of the project. Examples of minimization of impact include, but are not limited to, bridge or arch culvert instead of round culvert, bioengineering stabilization practices instead of riprap alone. Discuss both in terms of temporary (e.g., land disturbance by grading) and permanent impacts (e.g., new paving).

40. BEST MANAGEMENT PRACTICES (BMPs) Describe all BMPs proposed to minimize specific and overall impacts to waters of the US and State, 1) during project implementation (e.g., Erosion and Sediment Control and Stormwater Treatment Measures and Source Control Measures) and 2) post-project to ensure water quality impacts are minimized.

COMPENSATORY MITIGATION

41. MITIGATION MAP

42. MITIGATION DETAILS

1. Provide Mitigation Plan (PDF) if available. If not available, provide project details including location, type, funding, performance or success criteria, monitoring, and long-term protection.

2. Does the mitigation involve temporary or permanent impacts not included in this application?

YES ☐ NO ☐

43. MITIGATION BANK If contributing to a Mitigation Bank or In-Lieu fee program provide the following

Mitigation Bank/In-Lieu Program Name: Name of Bank/Program Operator:

Operator Address & Phone:

Cost (USD) of mitigation bank contribution/in-lieu fee:

Bank/Program Location (latitude/longitude, county, city):

The size of the mitigation bank contribution is entered in the application map.

CEQA

44. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) Identify the type of CEQA process and the status of CEQA documents prepared for the project. Although a copy of a draft or final CEQA document is not required for a complete application, it is required to be submitted and reviewed prior to a certification/WDRs action or permit issuance.

45. CEQA Document Type (Environmental Impact Report, Negative Declaration, etc.):

46. CEQA Project Title:

47. Lead Agency and Contact Information:

48. Agency: _____
Contact Name: _____
Phone No. : _____

49. Address:

_____

50. State Clearinghouse Number:

_____

51. Has the document been certified/approved by the Lead Agency (Notice of Determination issued) and/or has a Notice of Exemption been filed?
YES ☐ if yes, include a copy of the certification/Notice of Determination

NO ☐ if no, provide the expected approval date and document type

ADDITIONAL INFORMATION

52. **ENVIRONMENTAL DOCUMENTS** (list any non-CEQA environmental documents that have been prepared for the project and/or the project site. Provide the date of the document and the name of the individual, firm, or agency that prepared it. Provide a copy of delineations and endangered species surveys.)

53. HAS THE USACE OR APPLICANT PROVIDED PUBLIC NOTICE OF THIS APPLICATION FOR WATER QUALITY CERTIFICATION?

USACE: YES ☐ NO ☐ Date: Type of Notification: Agency Name and Contact:

Applicant: YES ☐ NO ☐ Date: Type of Notification: Media Name and Contact:

IF PUBLIC NOTICE HAS NOT BEEN MADE, provide the name, address, and phone number (if available) of adjacent property owners, lessees, etc., and any other parties known to be interested in the project:

54. OTHER PERMIT OR REGULATORY ACTION DOCUMENTS

1. (List other local, state or federal licenses, permits, regulatory actions, agreements and applications that will be required for any construction, operation, maintenance, or other actions associated with the project. Include information on any de-watering, NPDES permit, storm water construction permits, or Streambed or Lakebed Alteration Agreements. Attach PDF copies of all draft or final documents.)

AGENCY	CONTACT (with phone)	TYPE OF DOCUMENT	PERMIT OR REGULATORY ID NUMBER	DATE APPLIED	STATUS [in review approved, denied]	DATE OF ACTION
USACE						
USFWS (Biological Opinion)						
CA DFG						
<Drop Down List of many others>						

2. Does the project require a Federal Energy Regulatory Commission (FERC) license or amendment to a FERC license?
YES ☐ attach PDF copy of application
NO ☐

3. Does the project involve more than one acre of land disturbance and thus require a NPDES Storm Water Construction Permit?
YES ☐ NO ☐

4. Has a Storm Water Pollution Prevention Plan been prepared?

YES ☐ attach PDF copy

NO ☐ explain why no copy has been prepared:

55. **THREATENED/ENDANGERED SPECIES**

1. Does the project require coordination with the US Fish and Wildlife Service or National Marine Fisheries Service under the Federal Endangered Species Act?

YES ☐ attach PDF copy of biological opinions/reports

NO ☐ provide/attach a basis of determination

2. Does the project require coordination with the State of California Department of Fish and Game under the California Endangered Species Act?

YES ☐ attach PDF copy of biological opinions/reports

NO ☐ provide/attach a basis of determination

56. **OTHER PROJECTS BY THE APPLICANT** (List and describe other projects implemented or planned that are in any way related to the proposed project, or that may impact the same waterbody. Attach additional documents if necessary.)

PROJECT NAME	DESCRIPTION	WATERBODY AND WATERSHED	DATE IMPLEMENTED/PLANNED

57. **COMMENTS or ADDITIONAL INFORMATION** Any additional comments on information on the project.

58. **APPLICATION FEE** Provide an initial deposit of **$640.00**, the fee required for a complete application. A check made out to the State Water Resources Control Board should be mailed with the signature page (see below).

Check No. | **Amount**

The fee balance will be determined based on total impacts and must be paid prior to certification; refer to the fee calculator [link to online fee calculator].

59. **HAS ANY PORTION OF THE WORK BEEN INITIATED?**

YES ☐ if yes, please provide an explanation below

NO ☐ (no work within waters of the State and or U.S. has occurred)

Please Provide Explanation (Describe the initiated work within waters of the State and/or U.S., and explain why it was initiated prior to obtaining a permit. Indicate whether any enforcement action has been taken by any government agency (federal, state, or local agency). Attach additional pages as necessary.):

60. **ATTACHMENTS** Submit all attachments requested in this form, such as delineations, species surveys, mitigation plans, biological reports and permits, as PDFs files. Please submit all site photos as JPEG files, at least 2 megapixels in size. There is no formal limit on file size or number. If submittal of certain documents in PDF format is impractical and paper mail must be used, indicate documents to be sent on paper, and send these with the signature page and application fee.

Descriptive names for all paper documents being sent: _____

61. **CERTIFICATION/SIGNATURE**

In addition to submitting the final application online, the completed statement of authorization and signature page must be completed by hand and mailed in with original signatures of the applicant and if applicable, the agent. The signature page and the application fee deposit should be mailed to: <Regional or State Board address>