

# Map and Drawing Standards for the South Pacific Division Regulatory Program

## Regulatory Program Workshop

May 01, 2015

**Zachary Fancher**

Project Manager, California North Branch

Sacramento District Regulatory Division

[zachary.j.fancher@usace.army.mil](mailto:zachary.j.fancher@usace.army.mil)

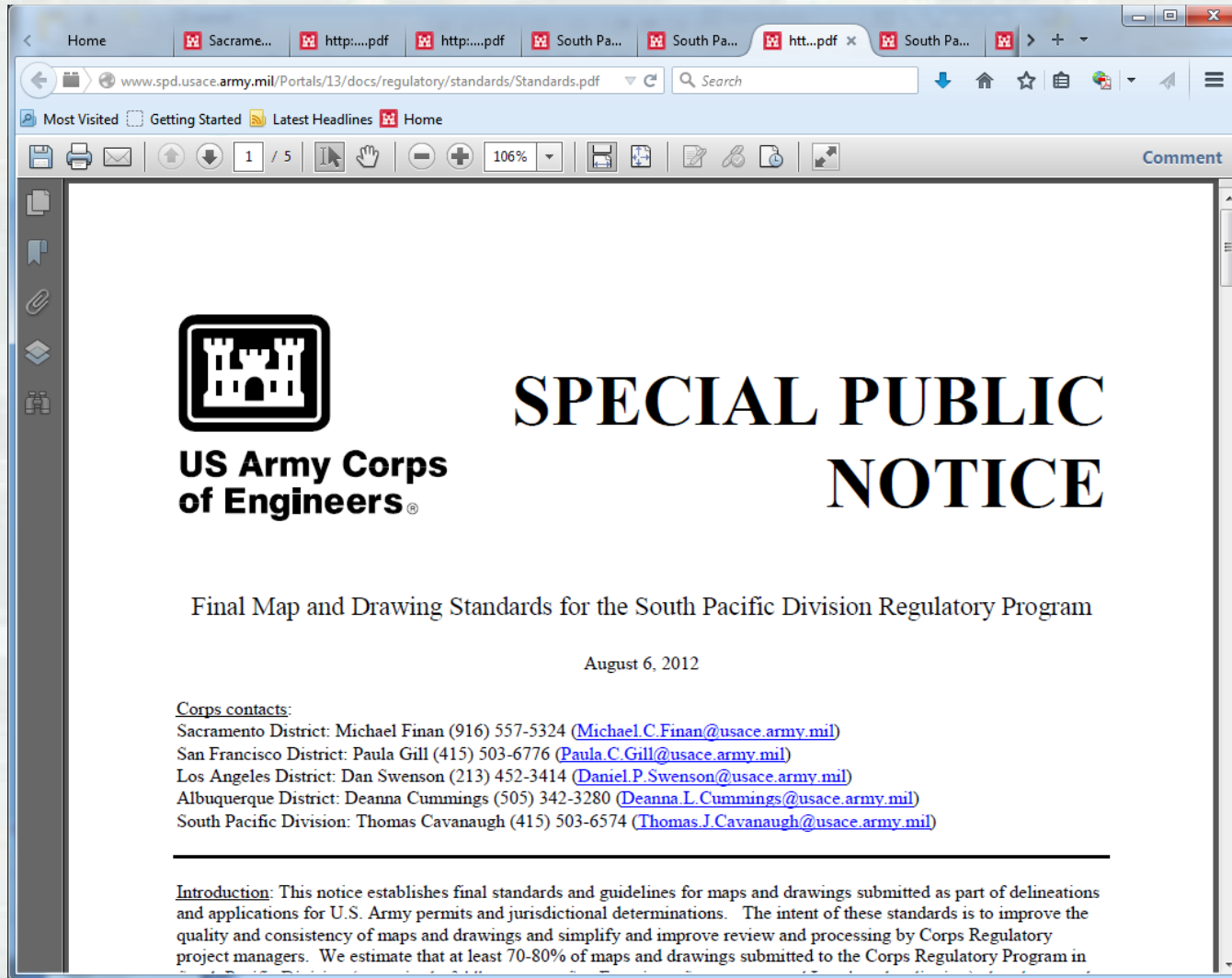
Ph. 916.557.6643




US Army Corps of Engineers  
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# August 06, 2012 Public Notice



The screenshot shows a web browser window with the address bar displaying [www.spd.usace.army.mil/Portals/13/docs/regulatory/standards/Standards.pdf](http://www.spd.usace.army.mil/Portals/13/docs/regulatory/standards/Standards.pdf). The browser interface includes a search bar, navigation buttons, and a toolbar with icons for print, zoom, and other functions. The main content area displays the following text:

  
**US Army Corps  
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## SPECIAL PUBLIC NOTICE

Final Map and Drawing Standards for the South Pacific Division Regulatory Program

August 6, 2012

Corps contacts:  
Sacramento District: Michael Finan (916) 557-5324 ([Michael.C.Finan@usace.army.mil](mailto:Michael.C.Finan@usace.army.mil))  
San Francisco District: Paula Gill (415) 503-6776 ([Paula.C.Gill@usace.army.mil](mailto:Paula.C.Gill@usace.army.mil))  
Los Angeles District: Dan Swenson (213) 452-3414 ([Daniel.P.Swenson@usace.army.mil](mailto:Daniel.P.Swenson@usace.army.mil))  
Albuquerque District: Deanna Cummings (505) 342-3280 ([Deanna.L.Cummings@usace.army.mil](mailto:Deanna.L.Cummings@usace.army.mil))  
South Pacific Division: Thomas Cavanaugh (415) 503-6574 ([Thomas.J.Cavanaugh@usace.army.mil](mailto:Thomas.J.Cavanaugh@usace.army.mil))

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Introduction: This notice establishes final standards and guidelines for maps and drawings submitted as part of delineations and applications for U.S. Army permits and jurisdictional determinations. The intent of these standards is to improve the quality and consistency of maps and drawings and simplify and improve review and processing by Corps Regulatory project managers. We estimate that at least 70-80% of maps and drawings submitted to the Corps Regulatory Program in



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## SOUTH PACIFIC DIVISION

# US Army Corps of Engineers

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### Concrete Canoe Races at Cochiti Lake

COCHITI LAKE, N.M. – Two concrete canoes race April 11. Cochiti Lake was the scene of a unique part of the 44th annual ASCE Rocky Mountain Regional Conference, when schools participating in the conference raced concrete canoes at the lake.

Story

### FEDERAL FLOOD RISK MANAGEMENT STANDARD

South Pacific Division

**BUILDING STRONG®**  
*And Taking Care Of People!*

**Brigadier General Mark Toy**  
South Pacific Division Commander

**Lt. Gen. Bostick**  
**Coast Guard hosts Lt. Gen. Bostick for Port of Long Beach tour**

Coast Guard sector commander Capt. Jennifer Williams (2nd from right) hosts (from left) Brig. Gen. Mark Toy, Lt. Gen. Thomas Bostick and Col. Kimberly

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The screenshot shows a web browser window displaying the website [www.spd.usace.army.mil/](http://www.spd.usace.army.mil/). The browser's address bar and tabs are visible at the top. The website header includes the US Army Corps of Engineers logo and the text "SOUTH PACIFIC DIVISION". A navigation menu below the header lists: ABOUT, BUSINESS WITH US, MISSIONS, LOCATIONS, CAREERS, MEDIA, LIBRARY, CONTACT. The main content area features a news article titled "Concrete Canoe Races at Cochiti Lake" with a photo of people in canoes. To the right is a "FEDERAL FLOOD RISK MANAGEMENT STANDARD" banner. Below the banner is a profile for "Brigadier General Mark Toy, South Pacific Division Commander" with a photo. At the bottom left, there is a section for "Lt. Gen. Bostick" and social media links for Facebook and Twitter. A large red arrow points from the social media section towards the bottom of the page.



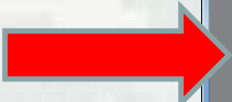
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- Regulatory Public Notices:** A green button with a red border highlights the link [SPD Public Notices and References](#). Below it are links for 'Albuquerque District Public Notices', 'Los Angeles District Public Notices', 'Sacramento District Public Notices', and 'San Francisco District Public Notices'.
- Most Requested:** A list of links including 'Employment with the Corps', 'Division News', 'Regulatory Program', and 'Small Business Information'.
- Districts of South Pacific Division:** A map of the western United States is shown, with a red box highlighting the South Pacific Division area. Below the map is a list of districts: 'ALBUQUERQUE DISTRICT', 'LOS ANGELES DISTRICT', 'SACRAMENTO DISTRICT ...', and 'SAN FRANCISCO DISTRICT'.
- Video Section:** A video player is embedded, showing a construction site. The video title is 'The New Fort Irwin Hospital project is underway'. Below the video is a search bar with 'Search' and 'Clear' buttons, and a video thumbnail for 'Fort Irwin New Replacement Hospital Project Update'.

At the bottom of the page, there is a 'BUILDING STRONG®' banner with various logos (SHARP, SALUTE, U.S. ARMY, YouTube, Facebook, Twitter) and a footer containing links for 'Accessibility', 'Contact Us', 'FOIA', 'Information Quality Act', 'Link Disclaimer', 'No Fear Act', 'Privacy & Security', 'Public Inquiries', 'Site Map', and 'USA.gov'. The URL in the browser's address bar is [www.spd.usace.army.mil/Missions/Regulatory/PublicNoticesandReferences.aspx](http://www.spd.usace.army.mil/Missions/Regulatory/PublicNoticesandReferences.aspx).




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SOUTH PACIFIC DIVISION

 **US Army Corps of Engineers**

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HOME > MISSIONS > REGULATORY > PUBLIC NOTICES AND REFERENCES

### References

#### QMS Processes

These are internal process documents which will affect how permit applicants and their representatives will work with SPD subordinate districts. These documents are for "Information Only." The controlled versions reside on the SPD QMS SharePoint Portal. Please verify that the version of any document is the current one prior to proceeding.


- 12501-SPD Standard Operating Procedure for Determination of Mitigation Ratios
- 12502-SPD Regulatory Program Emergency Procedures
- 12503-SPD Regulatory Administrative Appeal Process
- 12504-SPD Essential Fish Habitat Procedures
- 12505-SPD Uniform Performance

### Public Notices

Under the Corps' Regulatory Program, a public notice is the primary method for advising all interested parties of a proposed activity for which a permit is sought. Public notices are also published to inform the public about new or proposed regulations, policies, guidance or permit procedures.

Public Notices published by the South Pacific Division (SPD) under the Regulatory Program are posted on this page. SPD public notices are primarily published to inform the public about new or proposed guidance, templates, procedures, and regional general permits, which are applicable to more than one of SPD's subordinate districts. Once a public notice is available on-line, notification of the SPD Public Notice is sent to individuals on the mailing lists of the appropriate districts by each of the affected districts.

### Public Notices

 1 2 3

**CLEAN WATER ACT INTERPRETIVE RULE FOR 404(f)(1)(A) - 2/2/2015:** The U.S. Environmental Protection Agency (EPA) and the U.S. Department of the Army (Army) are announcing the withdrawal of an interpretive rule addressing the exemption from permitting provided under section 404(f)(1)(A) of the Clean Water Act (CWA). The agencies want to make clear that the statutory exemption of 404(f)(1)(A) still remains available for use when applicable for discharges of dredged and/or fill material associated with normal farming, silviculture, and ranching activities that are part of an established operation and that do



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The main content area is divided into two columns. The left column is titled "References" and contains a section for "QMS Processes" with a list of documents: "12501-SPD Standard Operating Procedure for Determination of Mitigation Ratios", "12502-SPD Regulatory Program Emergency Procedures", "12503-SPD Regulatory Administrative Appeal Process", "12504-SPD Essential Fish Habitat Procedures", and "12505-SPD Uniform Performance".

The right column is titled "Public Notices" and contains two sections. The top section provides a general overview of public notices. The bottom section, also titled "Public Notices", features a red arrow pointing to a specific notice: "CLEAN WATER ACT INTERPRETIVE RULE FOR 404(f)(1)(A) - 2/2/2015: The U.S. Environmental Protection Agency (EPA) and the U.S. Department of the Army (Army) are announcing the withdrawal of an interpretive rule addressing the exemption from permitting provided under section 404(f)(1)(A) of the Clean Water Act (CWA). The Army wants to make clear that the statutory exemption of 404(f)(1)(A) still remains available for discharges of dredged and/or fill material associated with normal farming, silviculture, and other activities that are part of an established operation and that do not require a permit under section 404 of the CWA." A pagination control shows "1 2 3".



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**Sidebar Content:**

- 12510-SPD Wetlands Determination and Delineation Procedures for Irrigated Lands
- Regional Guidelines and Standards**
  - The following documents have been developed for use within all of South Pacific Division's (SPD) subordinate districts. They were developed to assure consistency within the Regulatory program across SPD and to aid the Regulated public in developing acceptable submittals.
  - Regional Compensatory Mitigation and Monitoring Guidelines
  - Regional Mapping Standards** (highlighted with a red box and a red arrow)
- Mitigation Banking Templates**
  - California Mitigation Banking Checklists (rev. 9/2010) (.pdf)
  - California Mitigation Bank Enabling Agreement Template (rev. 5/2008) (.pdf)
  - California Long-term Management Plan Template (rev. 5/2008) (.pdf)
  - California Conservation Easement Template (rev. 3/2010) (.pdf)

**Main Content Area:**

**FINAL REGIONAL COMPENSATORY MITIGATION AND MONITORING GUIDELINES - 12/31/2014:** The South Pacific Division has published a notice announcing FINAL Regional Compensatory Mitigation and Monitoring Guidelines to be followed in South Pacific Division's subordinate districts (Albuquerque, San Francisco, Sacramento, and Los Angeles districts) regarding procedures for compensatory mitigation as required for processing of Department of the Army (DA) permits under Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, and Section 103 of the Marine Protection, Research, and Sanctuaries Act.  
*Expiration date:*

**ATTACHMENTS:** [Regional Compensatory Mitigation and Monitoring Guidelines](#) | [Mitigation Monitoring Report Form](#)

**CLEAN WATER ACT INTERPRETIVE RULE FOR 404(f)(1)(A) - 6/11/2014:** On 21 April 2014, the USEPA and the Corps of Engineers (Corps) published a Notice of Availability and Public Comment (79 FR 22276) to announce the availability of an interpretive rule regarding the applicability of the exemption from permitting provided under section 404(f)(1)(A) of the Clean Water Act (CWA) for discharges of dredged and/or fill material associated with certain agricultural conservation practices based on the Natural Resources Conservation Service (NRCS) conservation practice standards that are designed and implemented to protect and enhance water quality. The interpretive rule was effective on April 03, 2014. The public comment period has been reopened through July 07, 2014, in response to stakeholder requests. Comments submitted between the close of the original comment period and the re-opening of this comment period will be accepted and considered.  
*Expiration date: 7/7/2014*

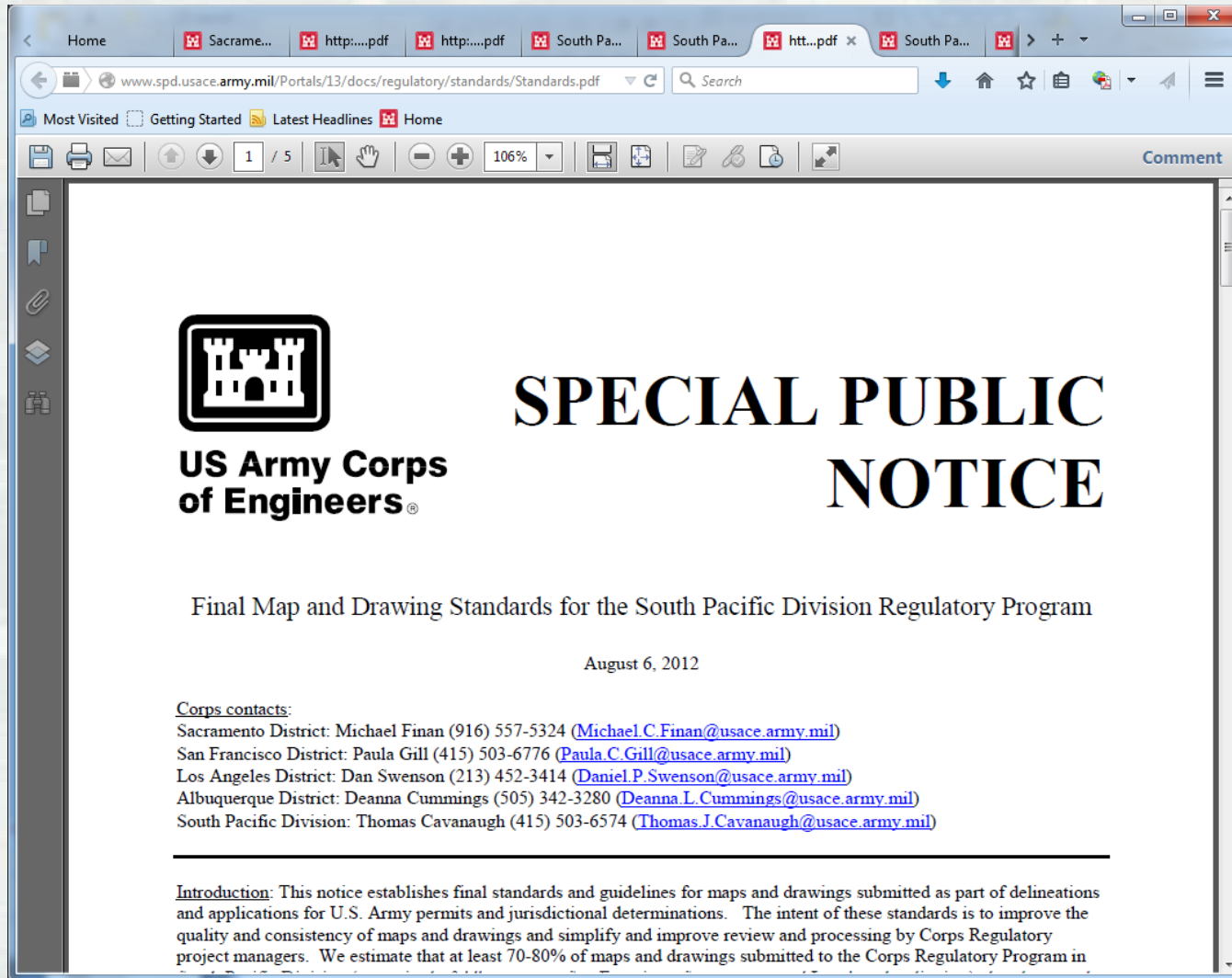
**CLEAN WATER ACT PROPOSED RULE FOR DEFINITION OF WATERS OF THE U.S. - 4/18/2014:** On 21 April 2014, the USEPA and the Corps of Engineers (Corps) are publishing for public comment a proposed rule defining the scope of waters protected under the Clean Water Act (CWA), in light of the U.S. Supreme Court cases in U.S. v. Riverside Bayview, Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC), and Rapanos v. United States (Rapanos). The proposed rule was developed to enhance protection for the nation's public health and aquatic resources, and increase CWA program predictability and consistency by increasing clarity as to the scope of "waters of the United States" protected under the Act.  
*Expiration date: 7/21/2014*

www.spd.usace.army.mil/Portals/13/docs/regulatory/standards/Standards.pdf






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# Applicability

- **Standards apply to all submittals to Regulatory Divisions within the Districts of the Corps' South Pacific Division**
  - ▶ Delineation maps
  - ▶ Proposed projects (impact maps)
  - ▶ Mitigation plan and long-term preservation maps
  - ▶ As-built plans (post-construction drawings)
  - ▶ Mitigation monitoring report maps
  
- **May be (and will be) updated**
  - ▶ An update to the 2012 Standards is in review now
  - ▶ Don't worry! – most of the changes are minimal and are primarily clarifications



# Applicability

- **Standards can be modified or waived at Corps' discretion**
  - ▶ Small or temporary impacts
  - ▶ Applicant has limited financial resources
  - ▶ Emergencies
  - ▶ Restorations with limited funding
  - ▶ Reauthorizations or maintenance, repair, rehabilitation, where original authorization included adequate drawings
  
- **Compensatory Mitigation Plan drawings/maps**
  - ▶ Must adhere to the Standards even if Standards are waived for the overall project



# The Intent of the SPD Map and Drawing Standards

- Improve the quality and consistency of map products sent to Corps Regulatory Division
- Simplify and facilitate review and processing by Corps Regulatory project managers
- Good maps = clear story = faster review times and fewer requests for additional information



# Map and Drawing Standards Organization

- **General Standards section**
  - ▶ The broadest of the map and drawing requirements
  - ▶ Specifies format and required elements for ALL maps submitted
  
- **Additional sections focused on specific types of maps or plans**
  - ▶ e.g., for proposed projects, delineations, mitigation maps, etc...
  - ▶ Specify format and required elements for specific map types



# General Standards

## ▪ Format of submittal

- ▶ Both paper and electronic versions are required
- ▶ PDF is the preferred electronic document format
- ▶ Electronic document requirement may be waived for applicants without software access
- ▶ If GIS files are submitted, the preferred format is ESRI shapefile. Metadata needs to include at a minimum, datum(s) used, coordinate system, projection, and cartographer contact information
- ▶ Please submit electronic files on CD/DVD, or via links to a secure FTP site. No flash drives!!



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# General Standards

- **A few words on data formatting...**

- ▶ The current (2012) Map and Drawing Standards ask that shapefiles and tables in reports that describe the extent of aquatic resources, impacts, and permittee-responsible mitigation, conform to the format of three Excel workbooks that are accessed via links in the Standards text.
- ▶ The Updated Map and Drawing Standards (now in review) will point to a single consolidated Excel workbook that has individual tabs for each of the feature types listed above.
- ▶ **Heads Up!** Even though PMs don't always ask for data to be formatted as described in the workbooks, they may, especially when dealing with large numbers of aquatic features or impacts. It is technically a requirement that data conform to the format in the Excel workbooks, though this is not always enforced by the PM.





# General Standards

*Submission of both a location (vicinity) map AND plan view map is a minimum requirement*

## ■ Location Maps

- ▶ At least one must use a USGS 7.5-minute quadrangle sheet as its basemap
- ▶ Quadrangle name identified
- ▶ Project study boundary clearly outlined and annotated
- ▶ Should include recognizable landmarks
- ▶ Include adjacent local roadways
- ▶ North arrow



# General Standards

*Submission of both a location (vicinity) map AND plan view map is a minimum requirement*

## ■ Plan View Maps

- ▶ At least two control points on opposite corners, with latitude and longitude clearly annotated
- ▶ Date prepared/revised
- ▶ Name and organization of the cartographer
- ▶ Bar scale and scale text
- ▶ North arrow



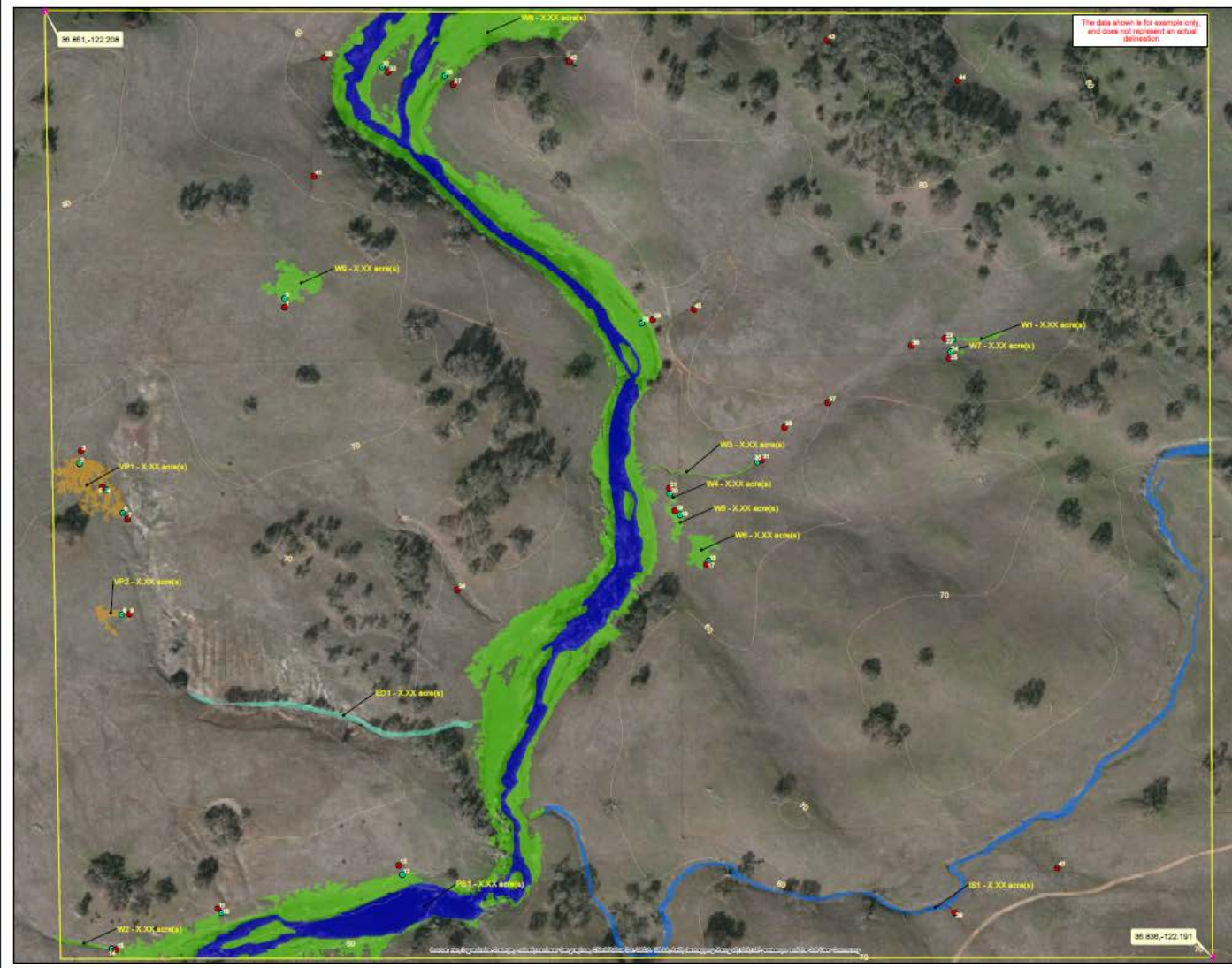
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## ■ Plan View Maps

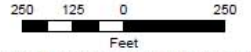
- ▶ Legend for all relevant features on the map – this means wetlands and other waters of the U.S., the project boundary, project construction footprint, impacts to waters of the U.S., etc. **Legend should include acres or square feet in parentheses for EVERY relevant feature or class of features!**
- ▶ If elevations are shown, the vertical datum being used must be indicated on the map
- ▶ Locations of any cross-sectional views must be annotated clearly (e.g. “A-A”)





**Figure X:**  
**Delineation of Wetlands and**  
**Other Waters of the U.S.**  
**for the Hypothetical Project Site**

- Legend**
- Map Reference Point
  - Survey Area Boundary (X.XX Acres)
  - Upland Sampling Point
  - Wetland Sampling Point
  - Topography (10-foot Contour Interval)
- Wetlands (X.XX acres)**
- Vernal Pool (X.XX acres)
  - Wetland (X.XX acres)
- Other Waters (X.XX acres)**
- Ephemeral Drainage (X.XX acres)
  - Intermittent Stream (X.XX acres)
  - Perennial Stream (X.XX acres)



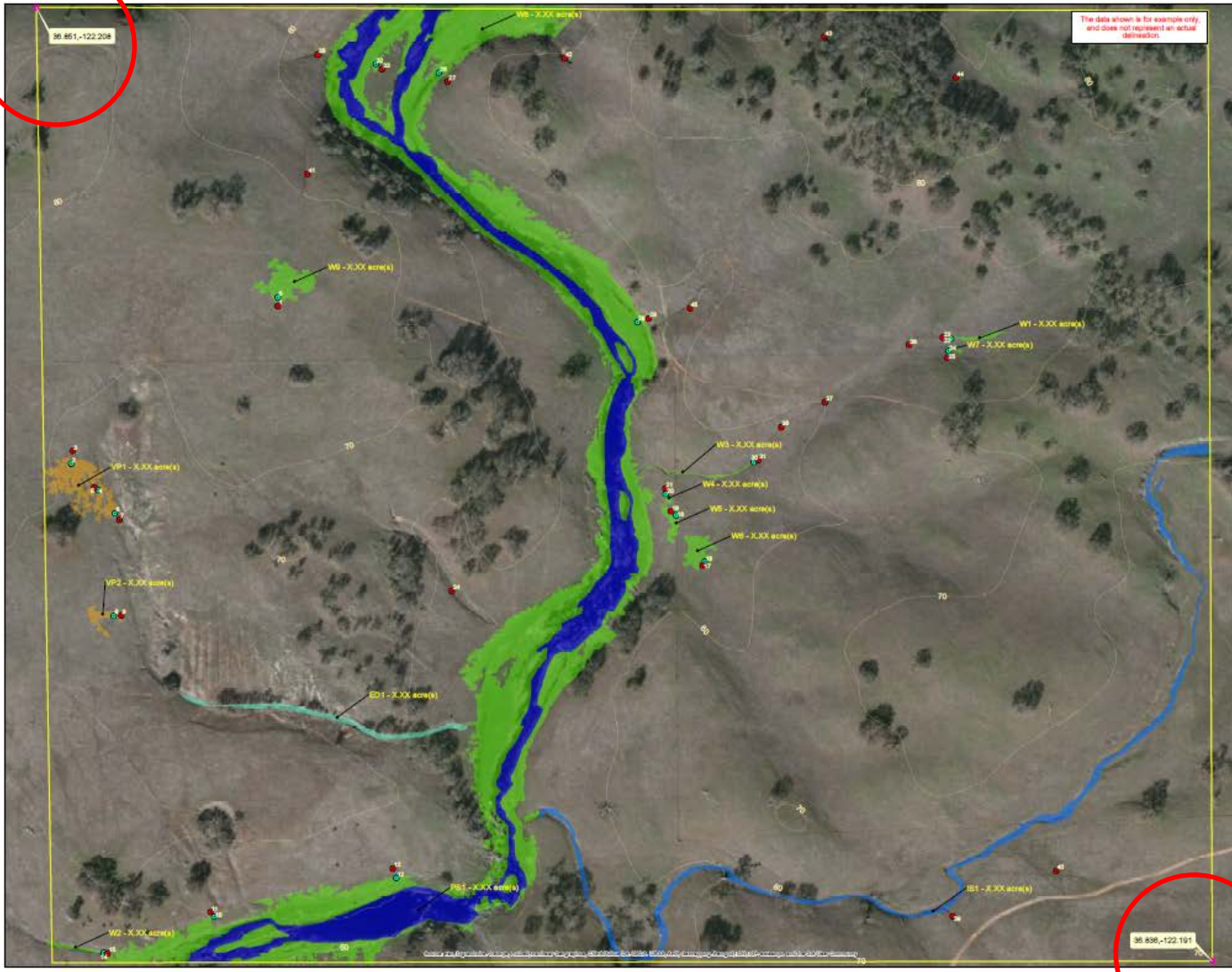
Coordinate System: NAD 1983 UTM Zone 10N  
 Projection: Transverse Mercator  
 Datum: North American 1983  
 Vertical Datum: NAVD88, U.S. Feet  
 1 inch = 250 feet

Created on April 30, 2013  
 Revised on April 09, 2015

Made in accordance with the  
*Final Map and Drawing Standards for the*  
*South Pacific Division Regulatory Program,*  
 as amended on August 6, 2011, by:  
 Joe Regalator, Project Manager  
 California South Branch  
 U.S. Army Corps of Engineers  
 South Pacific Division  
 Sacramento District, Regulatory Division  
 1325 J Street, Room 1350  
 Sacramento, California 95814-3922



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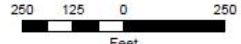


The data shown is for example only, and does not represent an actual delineation.



**Figure X:**  
Delineation of Wetlands and Other Waters of the U.S. for the Hypothetical Project Site

- Legend**
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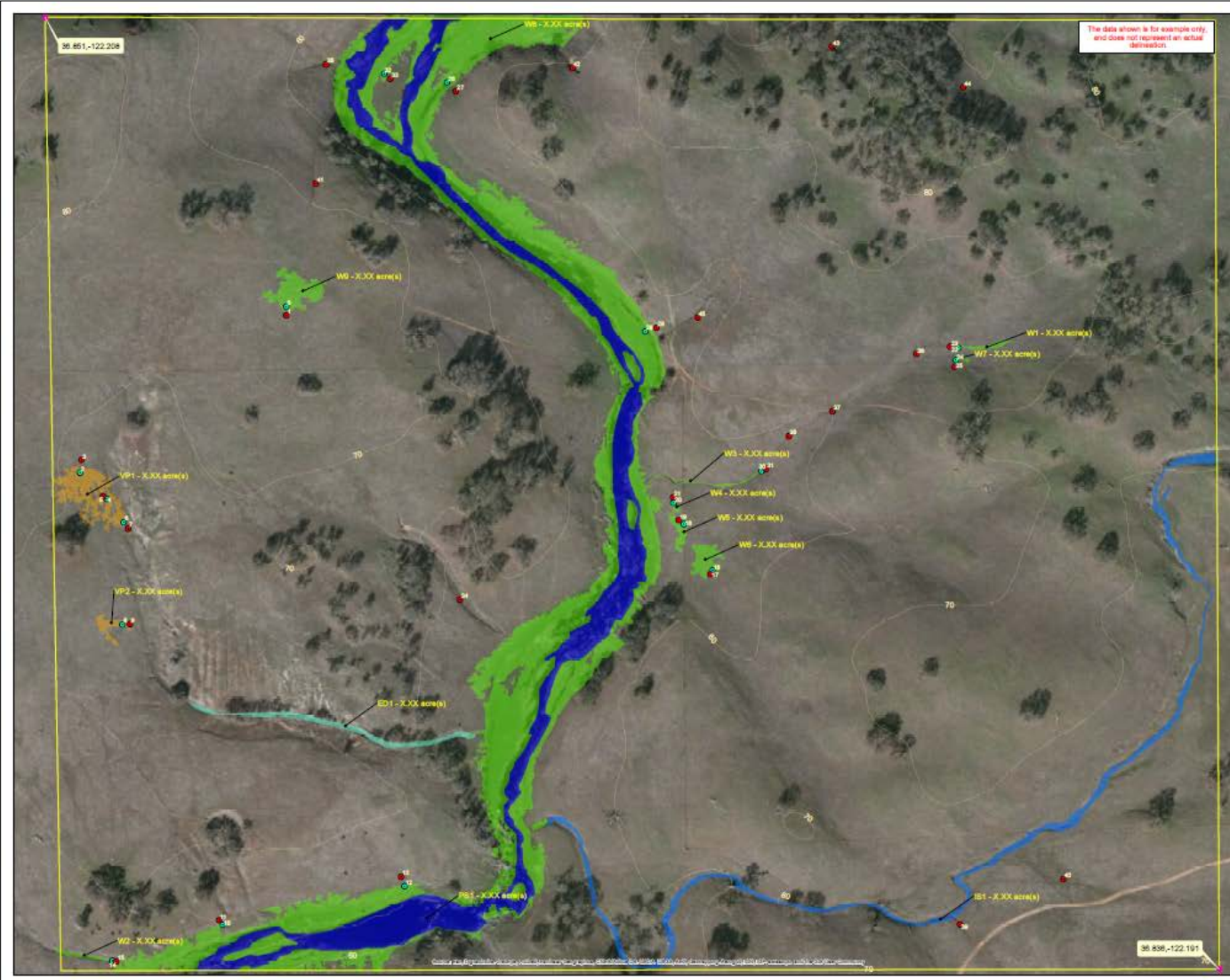
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**Figure X:**  
**Delineation of Wetlands and**  
**Other Waters of the U.S.**  
**for the Hypothetical Project Site**

- Legend**
- Map Reference Point
  - ▭ Survey Area Boundary (X.XX Acres)
  - Upland Sampling Point
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250 125 0 250  
Feet

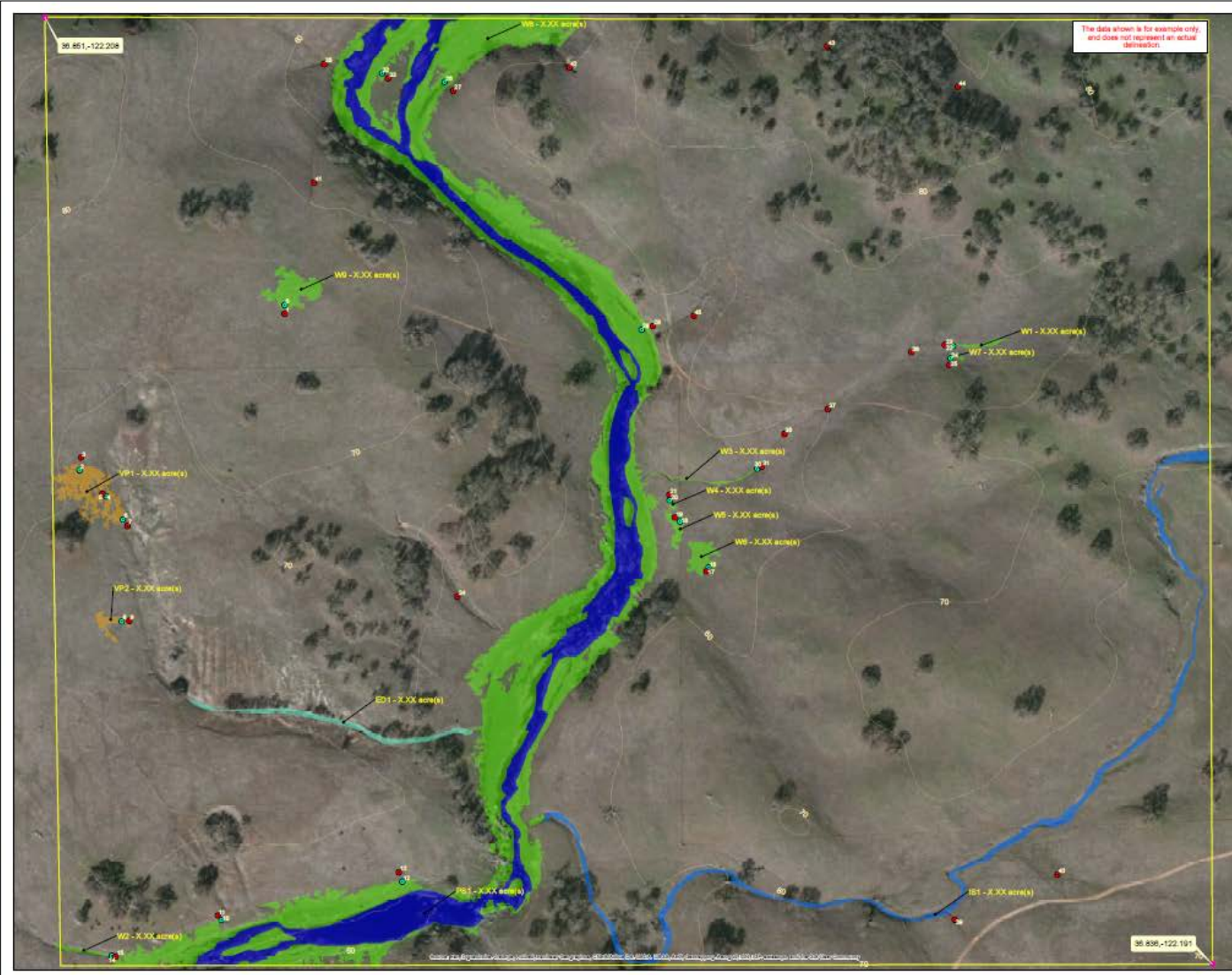
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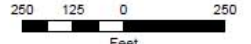


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 Sacramento, California 95814-3922



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# General Standards

- **Basemaps used in Plan View Maps**
  - ▶ Topography is required, and should be shown on at least one map
  
  - ▶ Aerial photography (if used)
    - Date stamped
    - Orthorectified
    - Source identified
    - Choose imagery with maximum visibility of aquatic resources (e.g. wet season)







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# Specific Standards

## ▪ Cross-Sectional Views

- ▶ Must have a bar scale and scale text, for both the horizontal and vertical dimensions
- ▶ Vertical datum must be indicated
- ▶ If there are tidal areas within survey area, identify the location and elevation of both the Mean High Water and the High Tide Line
- ▶ **Cross-Sectional Views are required for:**
  - Proposed Projects / Construction Drawings
  - Mitigation Plans / Long Term Preservation Maps
  - As-Built / Post-Construction Drawings
- ▶ Cross-Sectional Views for Delineation Maps are required at PM's discretion



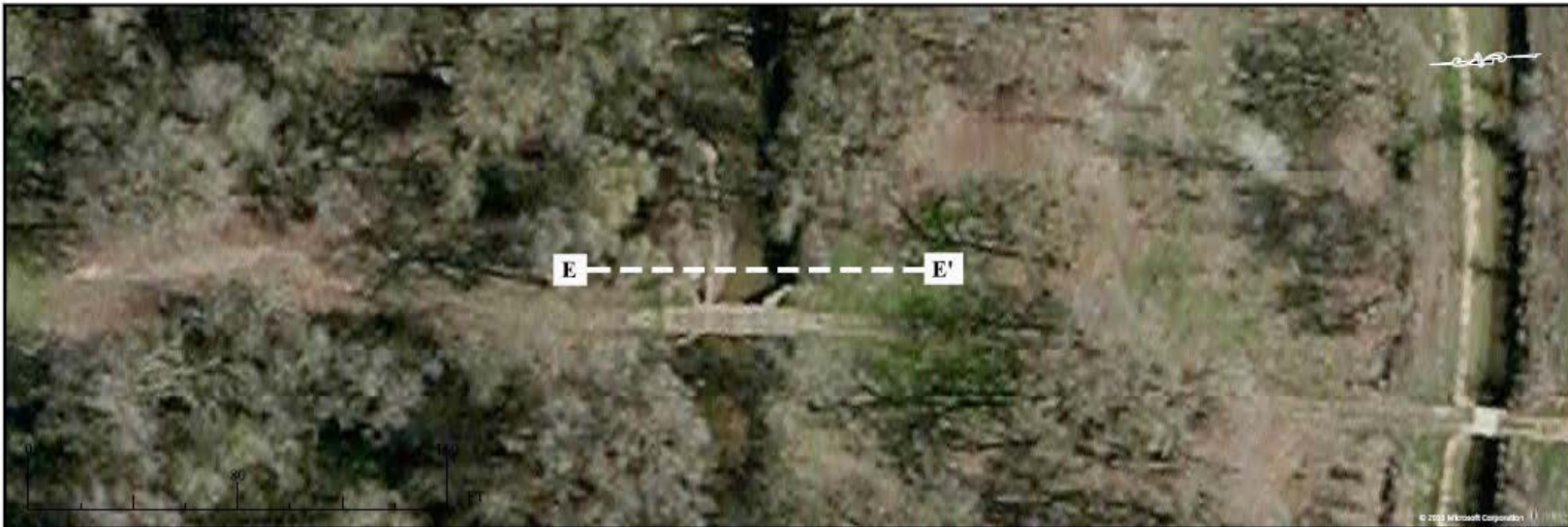


R:\\_Head Gate\3760.00 PWA\2015-01 Fish Screen Type\AC03\2015-01 Fish Screen Type (NAVD83).dwg 2/20/2015 11:05 AM

NO.		DATE	REVISION
<b>PLAN AND PROFILE SITE MAP</b>			
SCALE: AS NOTED			
JOB NO: 27605			
BY: JB			
CHK: **			
DATE: 02/18/2015			
THIRST			
1		10	
SHEET 23			

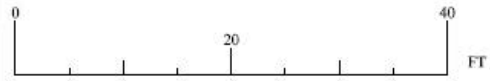
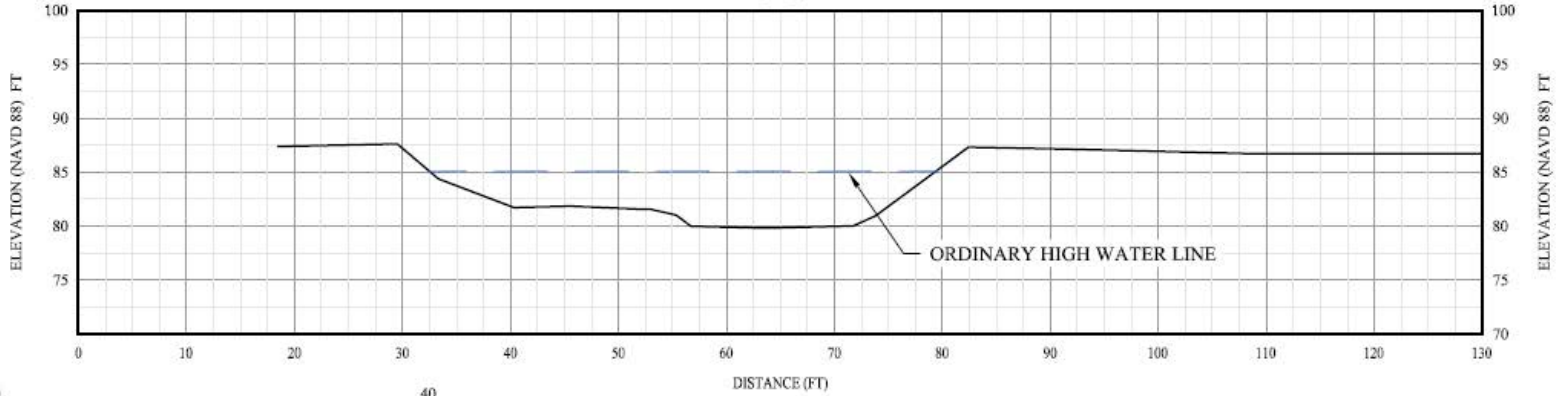


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NO.	DATE	REVISION

CROSS SECTION  
E - E'



E - E' PLAN AND PROFILE

SCALE: AS NOTED
JOB NO: 2760-5
BY: JB
CHECK: -
DATE: 02/15/2015
SHEET 8 OF 10 SHEETS

R:\\_Flood Control\2760.00 FWA\2015-01 Fish Screen Topo\ACAD\2015-01 Fish Screen Topo (NAVD88).dwg 2/20/2015 11:05 AM



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# Specific Standards

- **Proposed Projects**

- ▶ All proposed fills, structures, and limits of work within and adjacent to wetlands and potential waters of the U.S. must be shown
- ▶ Clearly annotate all fills, structures, and limits of work as either permanent or temporary



# Attachment 1. Proposed Wetland Impacts



### Map Features

- Project BSA <sup>1</sup>
- Culvert
- Bridge Location (Span)
- Temporary Impact Areas**
  - Proposed Work Area
  - Proposed Staging Area
  - Construction Creek Access
- Permanent Impact Areas**
  - Approach Roadway Work
  - Storm Drain
  - Bridge Footing
  - Bridge Wingwalls
  - Fill
  - Dredging Limits
  - Rock Slope Protection

- Wetlands**
- Riparian Scrub Wetland
- Other Waters**
- Perennial Creek
- Intermittent Drainage

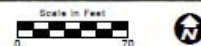
	Permanent Impacts	Temporary Impacts
Riparian Scrub Wetland	0.182	0.011
Perennial Creek	0.042	0.002
Intermittent Drainage	0.057	0.000
<b>Total</b>	<b>0.281</b>	<b>0.013</b>

<sup>1</sup> Boundary Source: City of Sutter Creek, with edits based on additional project components  
Photo Source: Microsoft 2011 (ESRI World Imagery layer accessed 3/24/2015)

USGS 7.5' Topographic Quadrangle: Amador City  
1:24,000



2012-106



Map Date: 3/24/2015  
Coordinate System: NAD 1983 StatePlane California II FIPS 9402 Feet



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# Attachment 1. Proposed Wetland Impacts



### Map Features

- Project BSA <sup>1</sup>
- Culvert
- Bridge Location (Span)
- Temporary Impact Areas**
- Proposed Work Area
- Proposed Staging Area
- Construction Creek Access
- Permanent Impact Areas**
- Approach Roadway Work
- Storm Drain
- Bridge Footing
- Bridge Wingwalls
- Fill
- Dredging Limits
- Rock Slope Protection

- Wetlands**
- Riparian Scrub Wetland
- Other Waters**
- Perennial Creek
- Intermittent Drainage

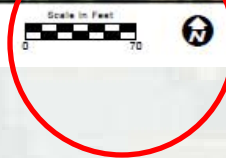
	Permanent Impacts	Temporary Impacts
Riparian Scrub Wetland	0.182	0.011
Perennial Creek	0.042	0.002
Intermittent Drainage	0.057	0.000
<b>Total</b>	<b>0.281</b>	<b>0.013</b>

<sup>1</sup> Boundary Source: City of Sutter Creek, with edits based on additional project components  
Photo Source: Microsoft 2011 (ESRI World Imagery layer accessed 3/24/2015)

USGS 7.5' Topographic Quadrangle: Amador City  
1:24,000



2012-106



Map Date: 3/24/2015  
Coordinate System: NAD 1983 StatePlane California II FIPS 9402 Feet



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# Attachment 1. Proposed Wetland Impacts



### Map Features

- Project BSA <sup>1</sup>
- Culvert
- Bridge Location (Span)
- Temporary Impact Areas**
- Proposed Work Area
- Proposed Staging Area
- Construction Creek Access
- Permanent Impact Areas**
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- Dredging Limits
- Rock Slope Protection

- Wetlands**
- Riparian Scrub Wetland
- Other Waters**
- Perennial Creek
- Intermittent Drainage

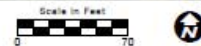
	Permanent Impacts	Temporary Impacts
Riparian Scrub Wetland	0.182	0.011
Perennial Creek	0.042	0.002
Intermittent Drainage	0.057	0.000
<b>Total</b>	<b>0.281</b>	<b>0.013</b>

<sup>1</sup> Boundary Source: City of Sutter Creek, with edits based on additional project components  
Photo Source: Microsoft 2011 (ESRI World Imagery layer accessed 3/24/2015)

USGS 7.5 Topographic Quadrangle - American City  
1:24,000



2012-106



Map Date: 3/24/2015  
Coordinate System: NAD 1983 StatePlane California II FIPS 9402 Feet



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## Attachment 1. Proposed Wetland Impacts

### Map Features

- Project BSA <sup>1</sup>
- Culvert
- Bridge Location (Span)
- Temporary Impact Areas**
- Proposed Work Area
- Proposed Staging Area
- Construction Creek Access
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- Approach Roadway Work
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- Rock Slope Protection

- Wetlands**
- Riparian Scrub Wetland
- Other Waters**
- Perennial Creek
- Intermittent Drainage

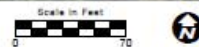
	Permanent Impacts	Temporary Impacts
Riparian Scrub Wetland	0.182	0.011
Perennial Creek	0.042	0.002
Intermittent Drainage	0.057	0.000
<b>Total</b>	<b>0.281</b>	<b>0.013</b>

<sup>1</sup> Boundary Source: City of Sutter Creek, with edits based on additional project components  
Photo Source: Microsoft 2011 (ESRI World Imagery layer accessed 3/24/2015)

USGS 7.5' Topographic Quadrangle: Amador City  
1:24,000



2012-106



Map Date: 3/24/2015  
Coordinate System: NAD 1983 StatePlane California II FIPS 9402 Feet



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### Map Features

- Project BSA <sup>1</sup>
- Culvert
- Bridge Location (Span)
- Temporary Impact Areas
  - Proposed Work Area
  - Proposed Staging Area
  - Construction Creek Access
- Permanent Impact Areas
  - Approach Roadway Work
  - Storm Drain
  - Bridge Footing
  - Bridge Wingwalls
  - Fill
  - Dredging Limits
  - Rock Slope Protection

#### Wetlands

Riparian Scrub Wetland

#### Other Waters

Perennial Creek

Intermittent Drainage

	Permanent Impacts	Temporary Impacts
--	-------------------	-------------------

Riparian Scrub Wetland	0.182	0.011
Perennial Creek	0.042	0.002
Intermittent Drainage	0.057	0.000
<b>Total</b>	<b>0.281</b>	<b>0.013</b>

<sup>1</sup> Boundary Source: City of Sutter Creek, with edits based on additional project components  
 Photo Source: Microsoft 2011 (ESRI World Imagery layer accessed 3/24/2015)

USGS 7.5' Topographic Quadrangle: Amador City  
 1:24,000



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# Specific Standards

- **Post-Construction Drawings (As-Builts)**

- ▶ Should be the same size and spatial alignment as the authorized grading plans
- ▶ Any deviations from fills and structures authorized as part of an approved pre-construction map must be indicated.



# Specific Standards

## ▪ Delineation Maps

- ▶ Survey area boundary should be clearly symbolized, and should include all potential waters of the U.S.
- ▶ Location and extent of all areas meeting the three wetland criteria, and/or having an Ordinary High Water Mark, must be shown on the map, even if area is a potential “Preamble Water” (e.g., upland ditch)
- ▶ Each type of boundary (e.g., OHWM, wetland, high tide line) must be clearly symbolized and differentiated
- ▶ Each line or polygon representing a potential water of the U.S. must be labeled with a unique name



# Specific Standards

- **Delineation Maps**

- ▶ Show locations of all data points, labeled according to their corresponding data sheets
- ▶ A wetland boundary should be based on at least one set of paired data points; one data point within the proposed wetland boundary, and one **immediately** outside of it.

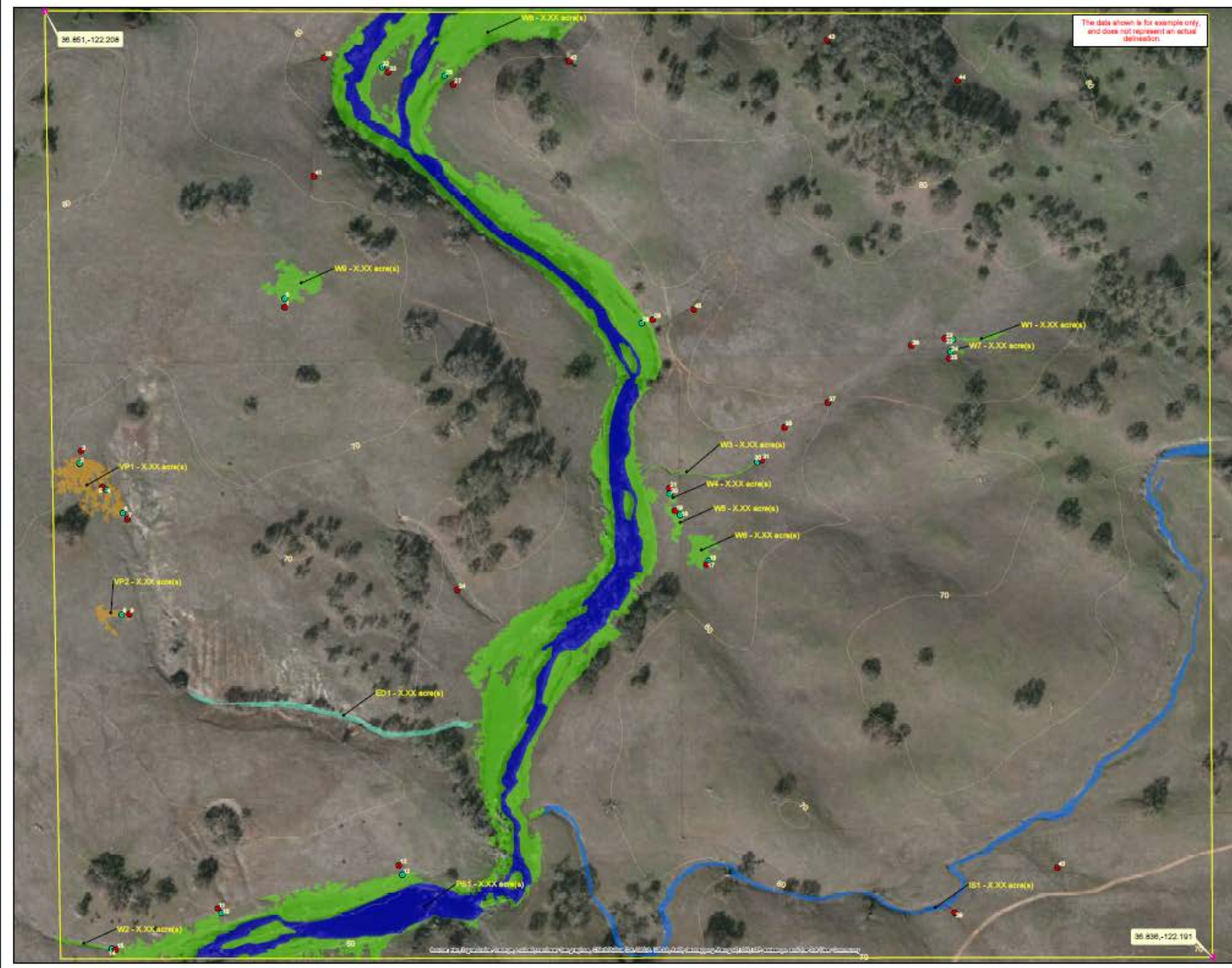


# Specific Standards

## ▪ Delineation Maps

- ▶ Identify the Ordinary High Water Mark (OHWM)
  - Show representative widths between the OHWMs on opposing banks using a transect line labeled with the width in feet
  - An average width may be acceptable for **uniform** channel reaches
  - Cross section may be required by the PM. If required, indicate the OHWM elevation
  
- ▶ If there are tidal areas within the survey area, identify location and elevation of Mean High Water and High Tide Line on all maps and cross sections



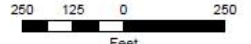


The data shown is for example only, and does not represent an actual delineation.



**Figure X:**  
**Delineation of Wetlands and**  
**Other Waters of the U.S.**  
**for the Hypothetical Project Site**

- Legend**
- Map Reference Point
  - Survey Area Boundary (X.XX Acres)
  - Upland Sampling Point
  - Wetland Sampling Point
  - Topography (10-foot Contour Interval)
- Wetlands (X.XX acres)**
- Vernal Pool (X.XX acres)
  - Wetland (X.XX acres)
- Other Waters (X.XX acres)**
- Ephemeral Drainage (X.XX acres)
  - Intermittent Stream (X.XX acres)
  - Perennial Stream (X.XX acres)



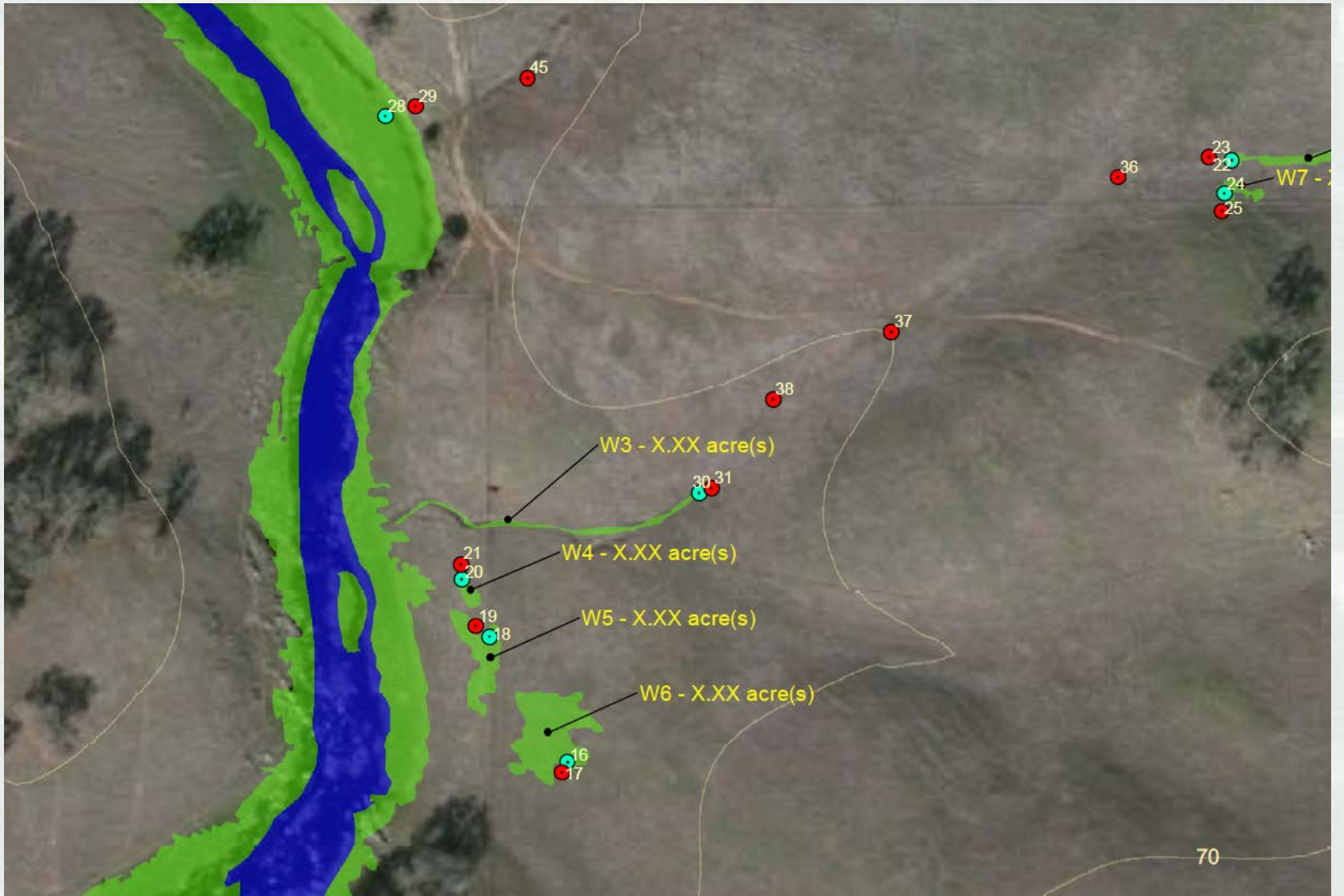
Coordinate System: NAD 1983 UTM Zone 10N  
 Projection: Transverse Mercator  
 Datum: North American 1983  
 Vertical Datum: NAVD88, U.S. Feet  
 1 inch = 250 feet

Created on April 30, 2013  
 Revised on April 09, 2015

Made in accordance with the  
*Final Map and Drawing Standards for the*  
*South Pacific Division Regulatory Program,*  
 as amended on August 6, 2011, by:  
 Joe Regalator, Project Manager  
 California South Branch  
 U.S. Army Corps of Engineers  
 South Pacific Division  
 Sacramento District, Regulatory Division  
 1325 J Street, Room 1350  
 Sacramento, California 95814-3922



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# Specific Standards

## ▪ Delineation Maps

- ▶ How do the **Map and Drawing Standards** relate to the **Minimum Standards for Acceptance of Preliminary Wetlands Delineations**?
- ▶ Nearly all map-related requirements of the “**Minimum Standards**” are covered by the **Map and Drawing Standards**, and often in greater detail
- ▶ The “**Minimum Standards**” differs in that
  - It requires a table on the delineation map itself that contains the names and acreages of all potential waters of the U.S. within the survey area
  - It requires the inclusion of soil maps in the delineation report



# Specific Standards

## ▪ Mitigation Plans and Long-Term Preservation Maps

- ▶ Mitigation boundaries must be clearly differentiated based on mitigation type
  - Establishment
  - Re-establishment
  - Rehabilitation
  - Enhancement
  - Preservation
- ▶ Current Map and Drawing Standards ask that boundaries be differentiated using different kinds of dotted and dashed lines.



# Specific Standards

## ▪ Mitigation Plans and Long-Term Preservation Maps

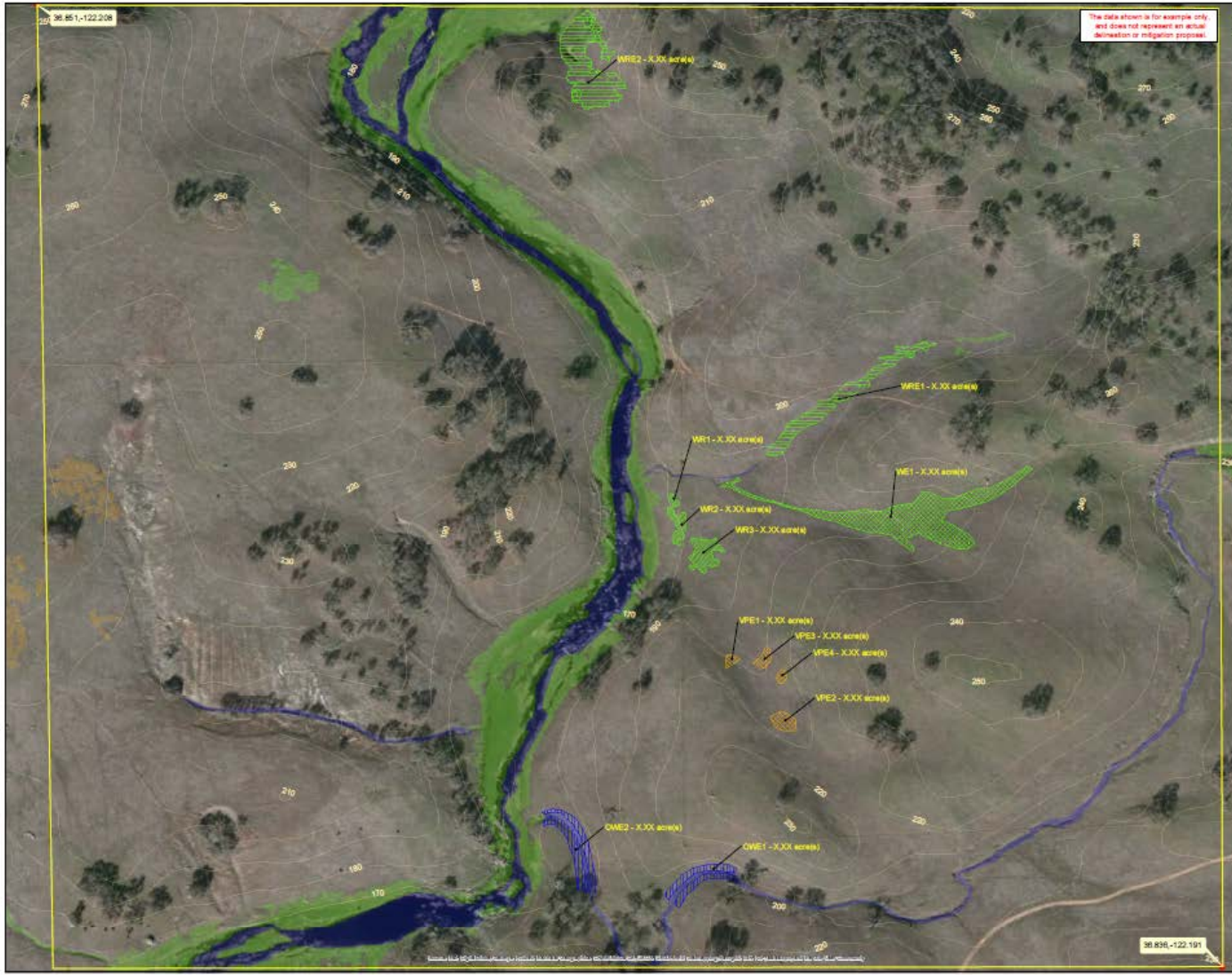
- ▶ Mitigation boundaries must be clearly differentiated based on mitigation type
  - Establishment
  - Re-establishment
  - Rehabilitation
  - Enhancement
  - Preservation
- ▶ Current Map and Drawing Standards ask that boundaries be differentiated using different kinds of dotted and dashed lines.
- ▶ This will be changing in the Updated Map and Drawing Standards!



# Specific Standards

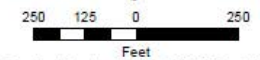
- **Mitigation Plans and Long-Term Preservation Maps**
  - ▶ Updated Standards will require mitigation areas to be differentiated by using different hatched fill symbols, rather than by different border line types
  - ▶ All mitigation sites and Long-Term Preservation boundaries must be clearly labeled with a unique name
  - ▶ Locations of mitigation sites must be shown relative to other landscape features and habitat types (e.g., riparian corridor, wetland complex, etc.)





**Figure X:**  
**Mitigation Plan and**  
**Long-term Preservation Map for the**  
**Hypothetical Mitigation Project Site**

- Legend**
- Project/Preserve Boundary (X.XX Acres)
  - Topography (10-foot Contour Interval)
  - Map Reference Point
- Pre-project Delineation**
- Waters Type**
- Open Water (X.XX acres)
  - Vernal Pool (X.XX acres)
  - Wetland (X.XX acres)
- Proposed Mitigation**
- Mitigation Type**
- Open Water Enhancement (X.XX Acres)
  - Vernal Pool Establishment (X.XX acres)
  - Wetland Establishment (X.XX acres)
  - Wetland Re-establishment (X.XX acres)
  - Wetland Rehabilitation (X.XX acres)



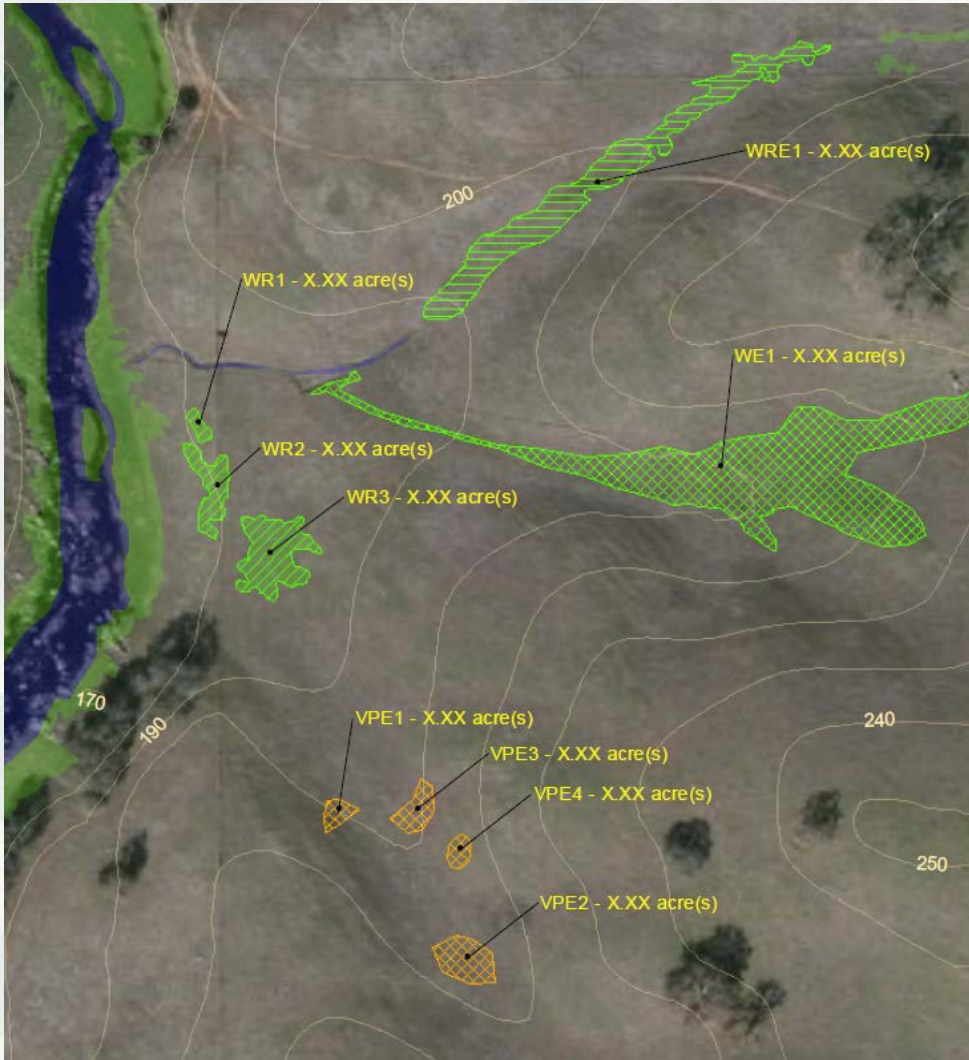
Coordinate System: NAD 1983 UTM Zone 10N  
 Projection: Transverse Mercator  
 Datum: North American 1983  
 Vertical Datum: NAVD86, U.S. Feet  
 1 inch = 250 feet

**Created on April 30, 2013**  
**Revised on November 3, 2014**


Made in accordance with the  
*Final Map and Drawing Standards for the*  
*South Pacific Division Regulatory Program,*  
 as amended on August 6, 2012, by:  
 Joe Regulator, Project Manager  
 California South Branch  
 U.S. Army Corps of Engineers  
 South Pacific Division  
 Sacramento District, Regulatory Division  
 1325 J Street, Room 1350  
 Sacramento, California 95814-2922





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## Legend


 Project/Preserve Boundary (X.XX Acres)

 Topography (10-foot Contour Interval)


 Map Reference Point

## Pre-project Delineation

### Waters Type


 Open Water (X.XX acres)


 Vernal Pool (X.XX acres)


 Wetland (X.XX acres)


## Proposed Mitigation


### Mitigation Type

 Open Water Enhancement (X.XX Acres)

 Vernal Pool Establishment (X.XX acres)

 Wetland Establishment (X.XX acres)

 Wetland Re-establishment (X.XX acres)

 Wetland Rehabilitation (X.XX acres)



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# Specific Standards

- **Mitigation Monitoring Report Maps**
  - ▶ Ground photographs included in reports must be accompanied by a map of photo points
  - ▶ Each photo point must be annotated with a number and an arrow indicating the compass direction in which it was taken
  - ▶ The photo itself should have a legend indicating photo number, the compass direction in which it was taken, the photo's geographic coordinates, and a brief explanation of the photo's relevance



# Specific Standards

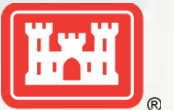
- **Mitigation Monitoring Report Maps**
  - ▶ Each discrete mitigation site must be shown on the map
  - ▶ Each site should be annotated or symbolized to indicate the mitigation type and the target habitat type
  - ▶ Any sampling presented in the monitoring report should be shown on the map







Questions?



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