

## DOCKETED

<b>Docket Number:</b>	15-AFC-02
<b>Project Title:</b>	Mission Rock Energy Center
<b>TN #:</b>	213015
<b>Document Title:</b>	Presentation - Data Request Issues Resolution: Soil and Water Resources
<b>Description:</b>	PowerPoint presentations made by CEC staff at the August 26,2016 public workshop
<b>Filer:</b>	Cathy Hickman
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	8/29/2016 1:10:25 PM
<b>Docketed Date:</b>	8/29/2016

# Data Request Issues Resolution: Soil and Water Resources

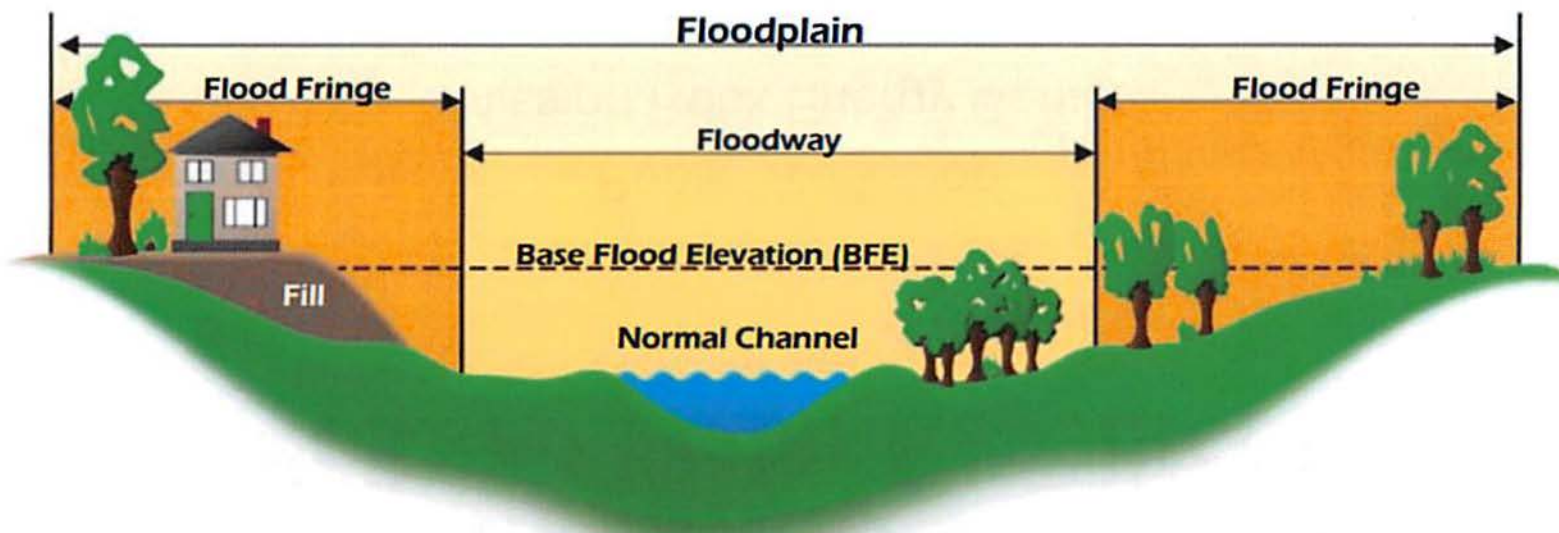
Public Workshop  
Mission Rock Energy Center  
(15-AFC-02)

August 26, 2016

Marylou Taylor

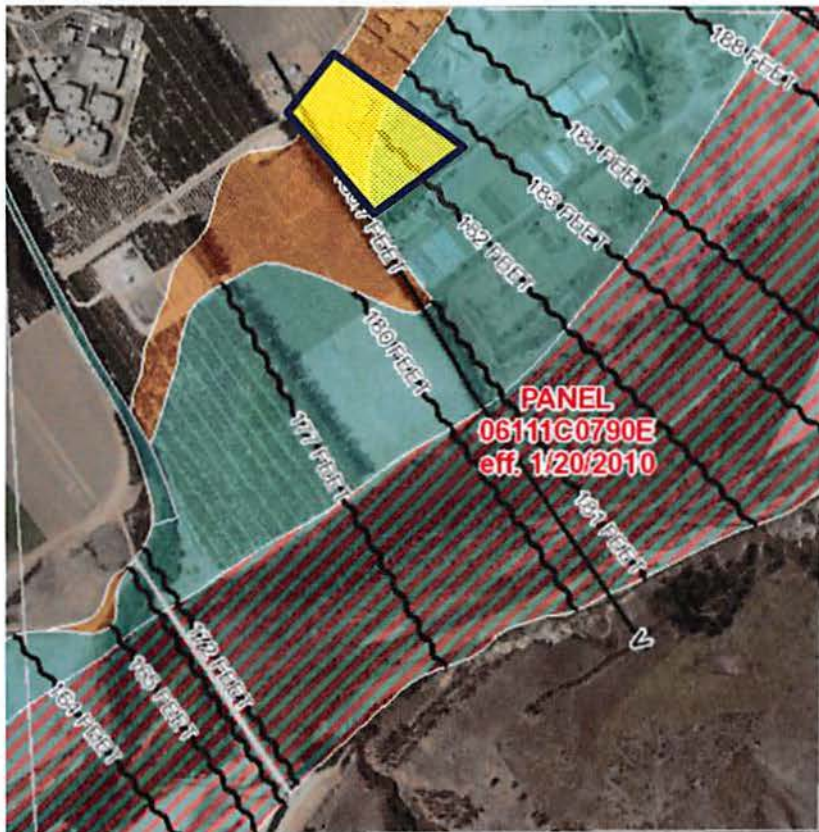


# 100-Year Floodplain



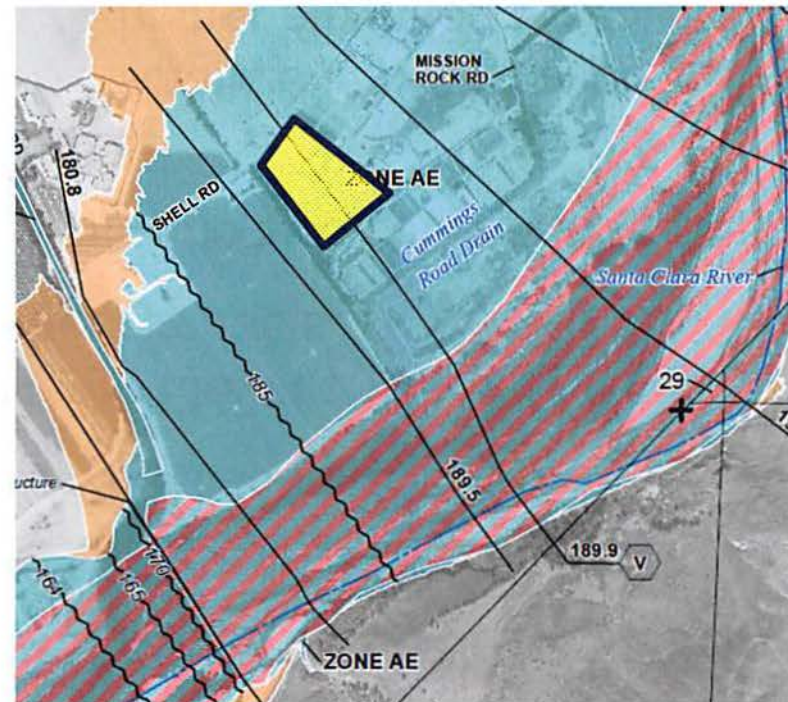
# FEMA Map Update

## 2010 Effective FIRM



FIRM – Flood Insurance Rate Map

## Preliminary FIRM



-  Regulatory Floodway
-  100-Year Floodplain
-  500-Year Floodplain
-  Project Site



# FEMA Map Update

## #68 Timing

### Request:

- FEMA map update
- Floodplain development permit

Need: Inform Committee of possible delays in start of operations.

Intent: Explain the permit process and expected length of time, FEMA's role, and where commissioning and start of operations fit in.

## #69 Base Flood Elevation

AFC: Floodplain 191.3 feet

All foundations 192.3 feet

Need: Elevation change could affect impacts

Intent: Discuss contingency plan

### Options:

1. Analyze impacts using higher elevation now
2. File petition to amend later



# Proposed Earthwork

## #71 Profiles

Request:

- Earthwork profiles (typical)
- Cross-sections (100-ft intervals)

Need: Preliminary information, similar to Ramp Profiles.

Intent: Show the extent of earthwork required to raise the site. AFC only states “maximum of 10 feet.”

## #73 Slope Protection

Request:

- Construction profiles (typical)
- Protection from erosion/scour

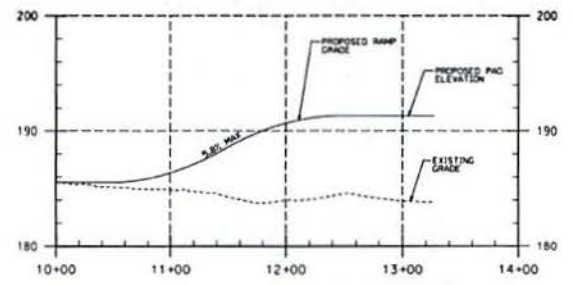
Need: Fill within floodplain is exposed to flood flows.

Intent: Describe measures of protection and discuss the potential impacts to implement them

Also for: Linear facilities

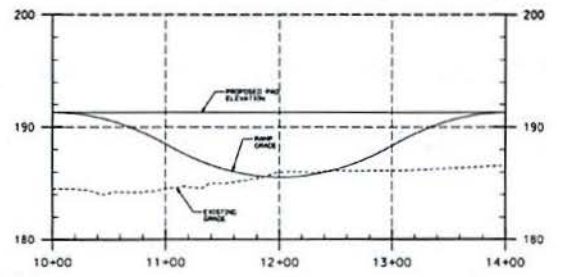


# Typical Cross Section



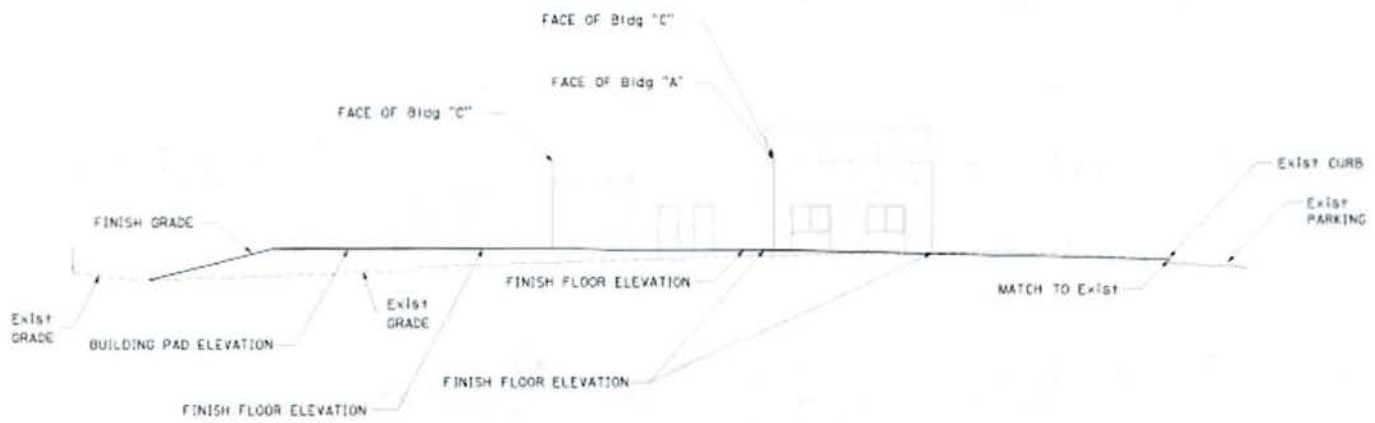
LINE SURFACE OFFSET  
 — Mission Rock Pad 191.3  
 - - - Mission Rock Top 082615  
 Scaled 10,000 Times Ver.  
 Scaled 1,000 Times Hor.

Main Entrance Ramp Profile  
 NOT TO SCALE

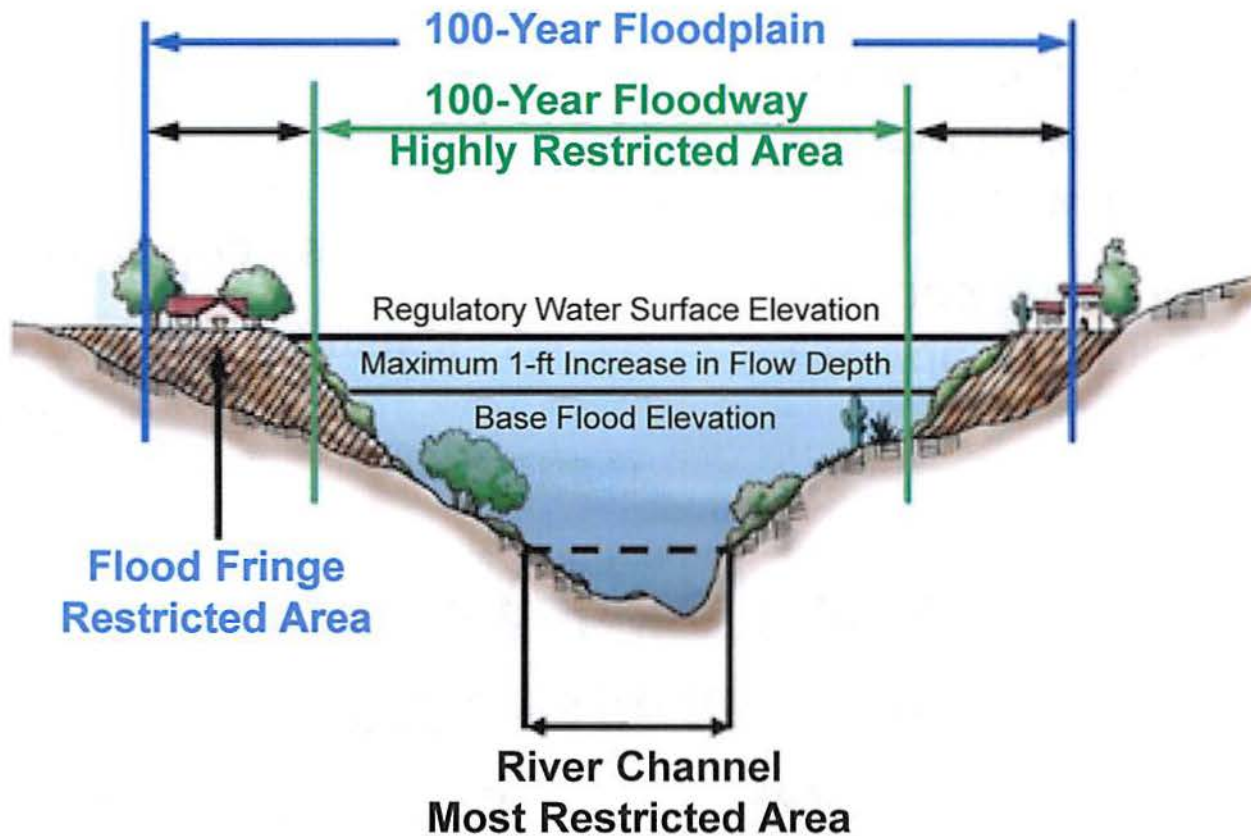


LINE SURFACE OFFSET  
 — Mission Rock Pad 191.3  
 - - - Mission Rock Top 082615  
 Scaled 10,000 Times Ver.  
 Scaled 1,000 Times Hor.

North Ramp Wall Profile  
 NOT TO SCALE



# Hydrology





# Hydrology

## #74 Offsite Impacts #75 Cumulative Impacts

### Request:

- Flood characteristics
- Offsite impacts

### Need:

CEQA analysis

### Intent:

- Provide assumptions used for flood analysis
- Determine whether there are significant impacts to surrounding properties



# Recycled Water Source

## #80 Permit Status

## #81 Relevant Information

### Limoneira:

- Current LARWQCB permitted end use is irrigation
- Amended permit needed to allow industrial end uses

### Need:

The proposed backup water source is onsite storage of Limoneira's recycled water. No other water source is identified.

Intent: Demonstrate that Limoneira is a reliable source of recycled water.

### Options:

1. Limoneira provides information demonstrating they would be able to amend the permit and deliver recycled water to the project for operation.
2. Applicant identifies another primary source, in case supply cannot be from Limoneira.

