

Meeting Agenda

NV Energy Reid Gardner Station Mesa Ponds M5 and M7 and Raw Water Ponds Emergency Action Plans

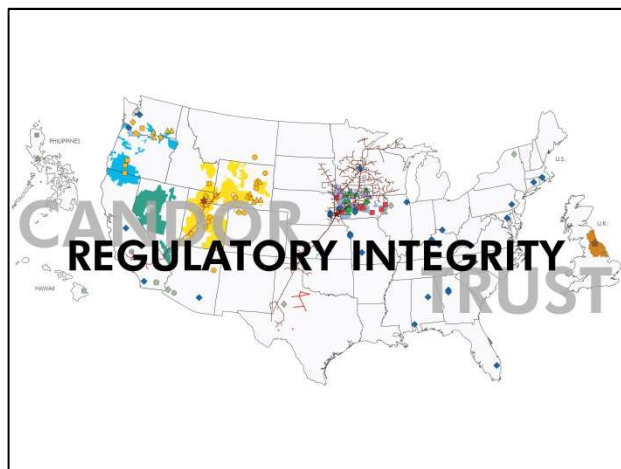
Prepared by: Michael Rojo, NV Energy Supervisor, Environmental Services

Meeting date/Time: April 9, 2020. 10:00am – 11:00am

Location: Teleconference

Invited Attendees: Solome Barton – City of North Las Vegas – Absent
Jodi Carl – Las Vegas Metropolitan Police Department – Present
Stephen Neel – Moapa Valley Fire District – Present
Misty Richardson – Clark County – Absent
John Puccioni – NVE – Present
Tony Garcia – NVE – Present
Michael Rojo – NVE – Present
Stephanie Rennick – Present

1. Introductions
2. Safety Minute
3. Reid Gardner Station Demolition and Remediation Update
4. Overview of Emergency Action Plan (EAP)
5. Emergency Action Plan – Incident Response Process
6. Emergency Action Plan – Incident Scenarios
7. Emergency Action Plan – Roles & Responsibilities



Reid Gardner Station Emergency Action Plan (EAP) - Ponds M5, M7 and Raw Water Ponds

Annual Meeting April 9, 2020

Reid Gardner Station EAP Meeting Agenda

1. Introductions
2. Safety Minute
3. Demolition and Remediation Update
4. Overview of Emergency Action Plan (EAP)
5. EAP– Incident Response Process
6. EAP – Incident Scenarios
7. EAP– Roles & Responsibilities

Reid Gardner Demolition Update



March 23, 2018



March 23, 2020

Reid Gardner Station



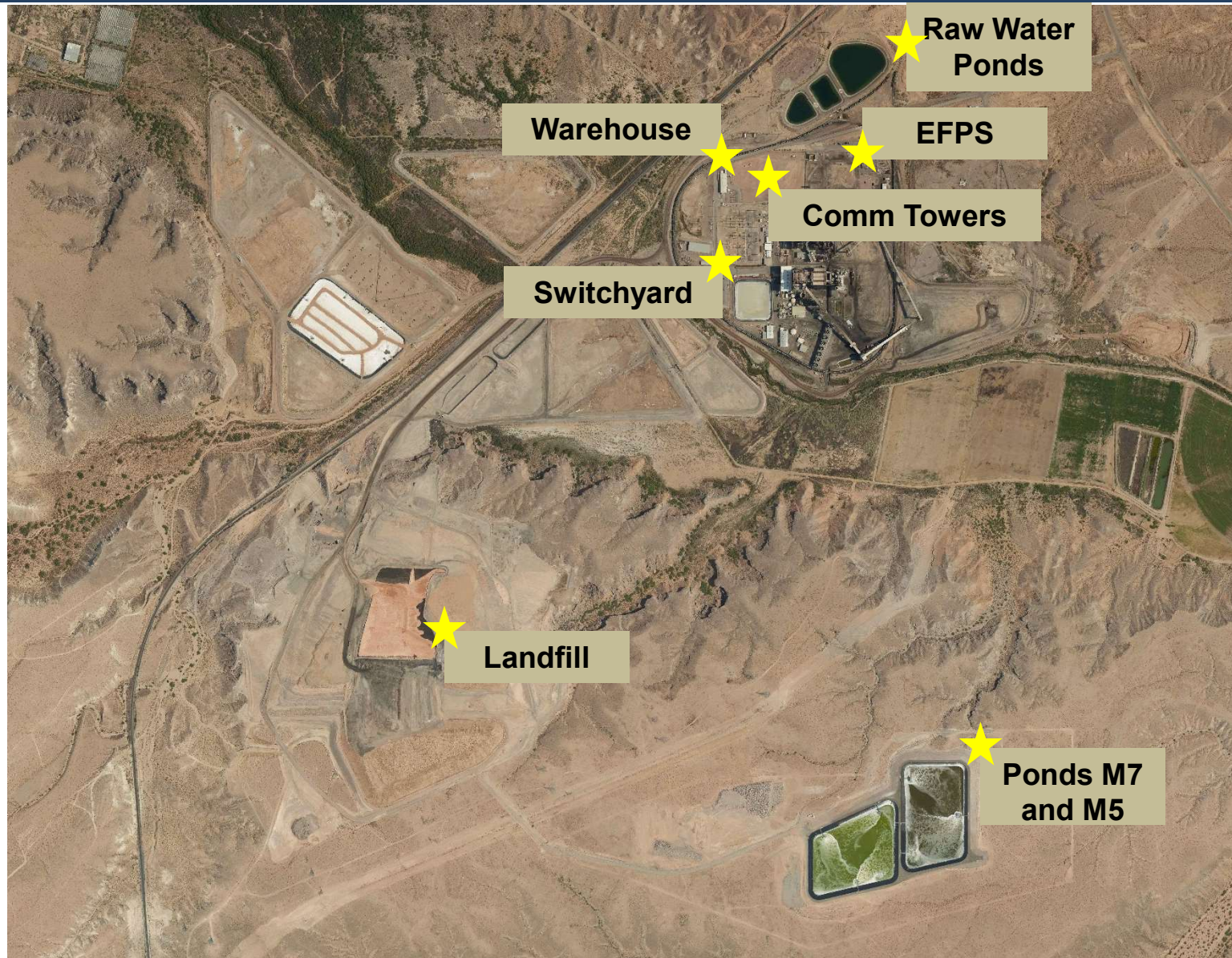
Reid Gardner Demolition Update

Remaining demolition work to be done (thru Aug. 2020)

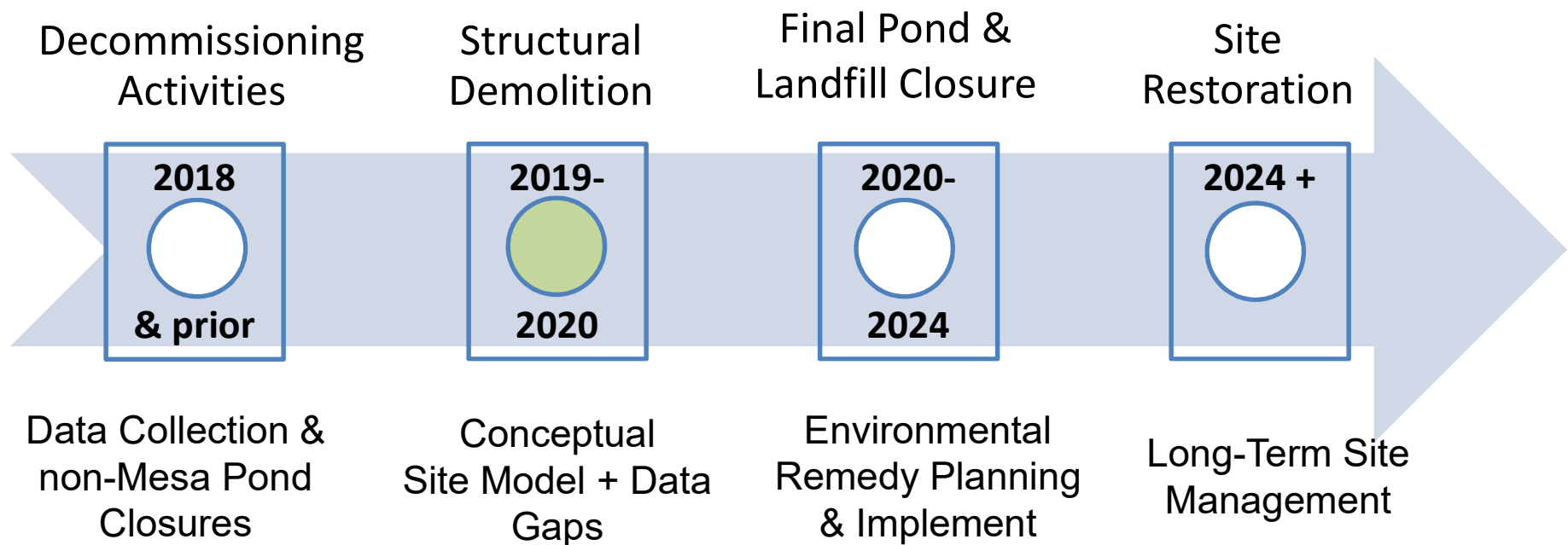
- 4 Remaining Buildings
- Foundation Removals
- Circulating Water Lines
- Coal Unloading Hoppers



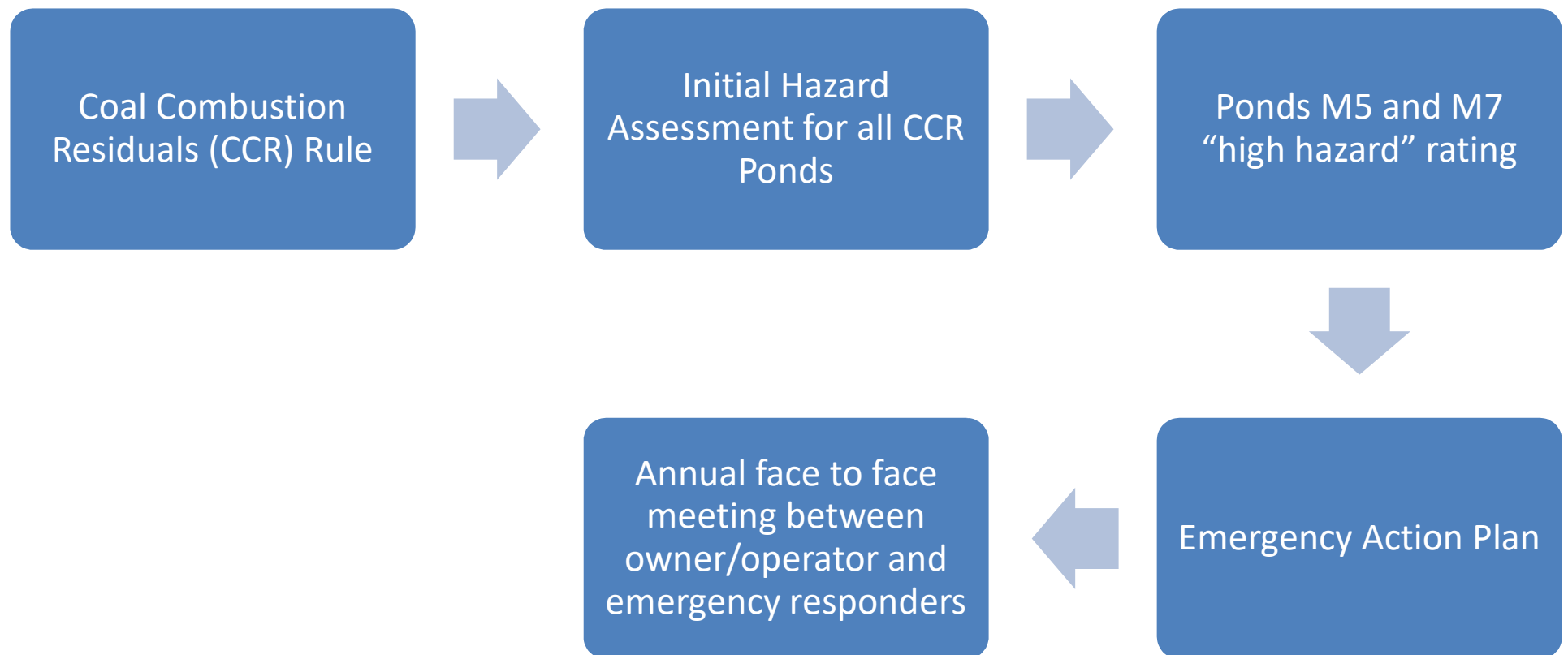
Remaining Facilities After Demolition



Reid Gardner Station Demolition & Remediation



Regulatory Requirement for EAP Meetings



Emergency Action Plan Overview

- 1. Pond Description**
2. Incident Response Process
3. Incident Overview
4. Incident Responsibilities under the EAP

Ponds under the EAP



Ponds M5 and M7

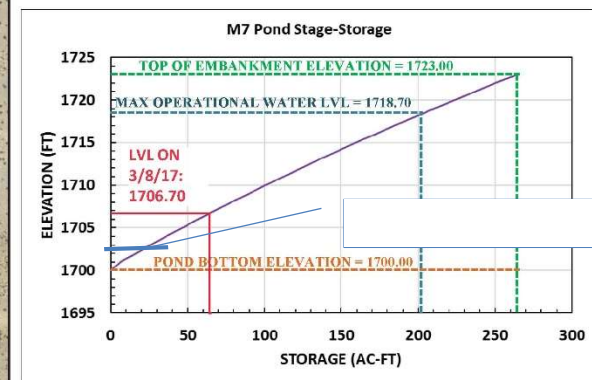
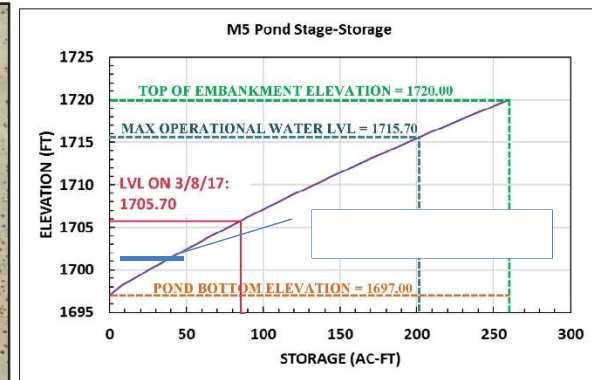


Figure 4-2
 Dam Facilities Map
 Mesa Ponds M5 and M7
 Dam Facilities and Hydraulic Information
 Emergency Action Plan
 Reid Gardner Station
 Moapa, Nevada

Raw Water Ponds

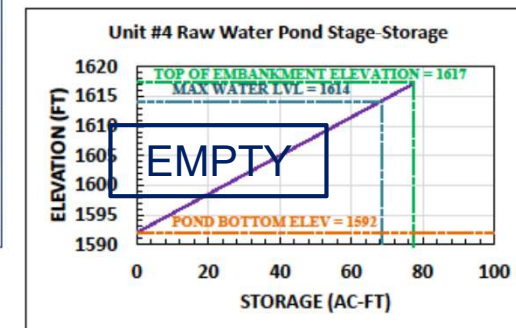
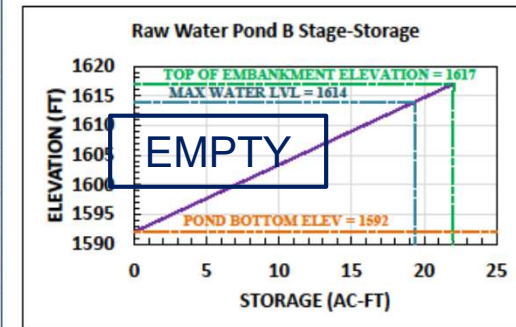
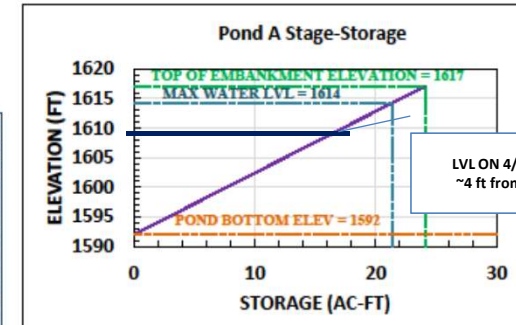
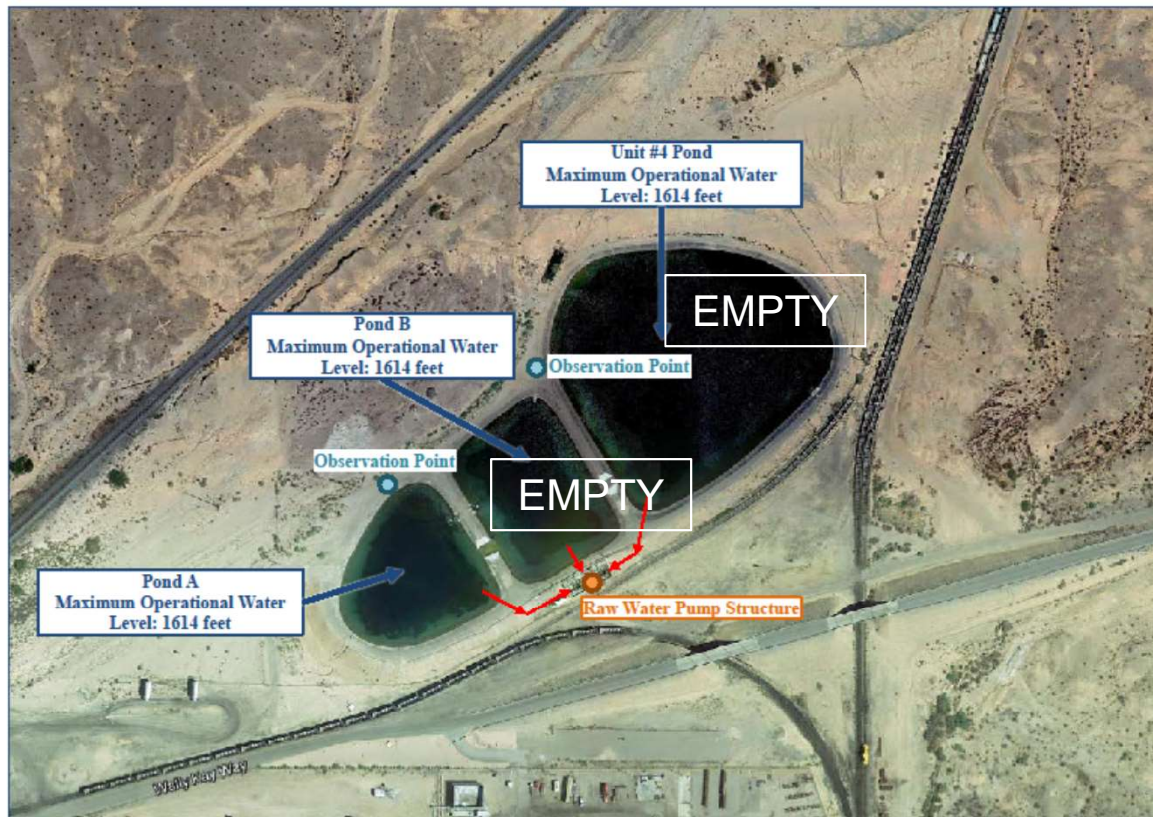
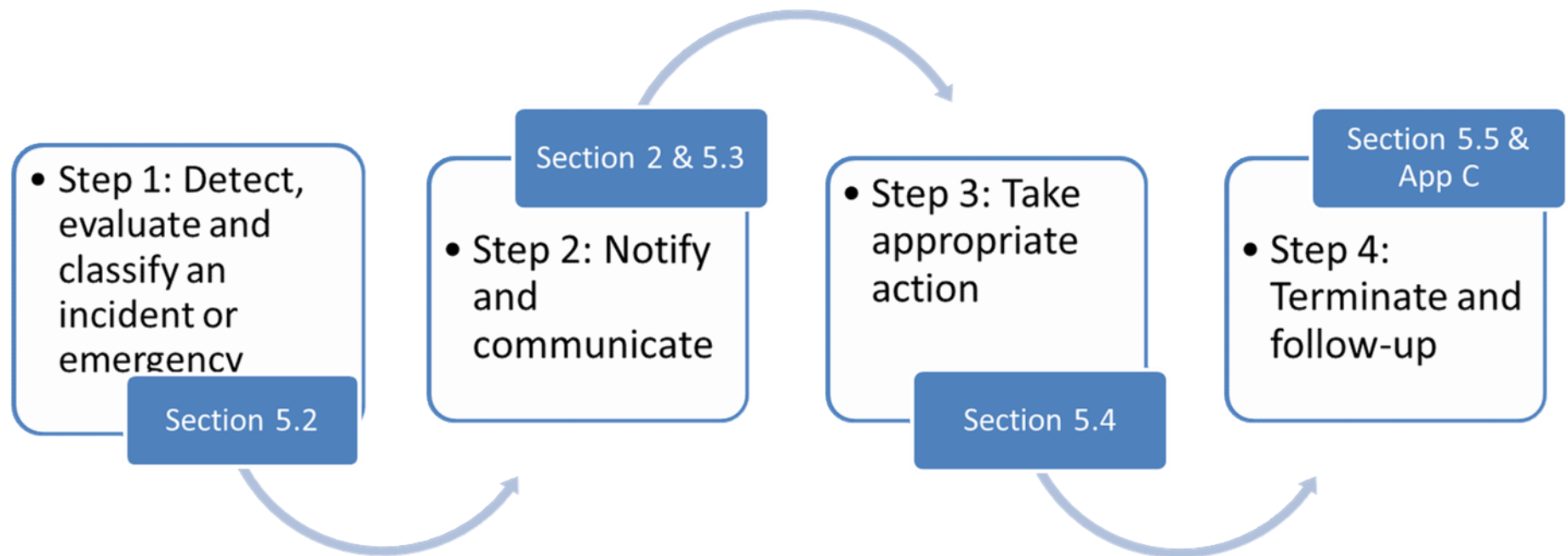


Figure 4-2
Dam Facilities Map
Raw Water Ponds
Dam Facilities and Hydraulic Information
Emergency Action Plan
Reid Gardner Station
Moapa, Nevada

Emergency Action Plan Overview




1. Pond Description
- 2. Incident Response Process**
3. Incident Overview
4. Incident Responsibilities under the EAP



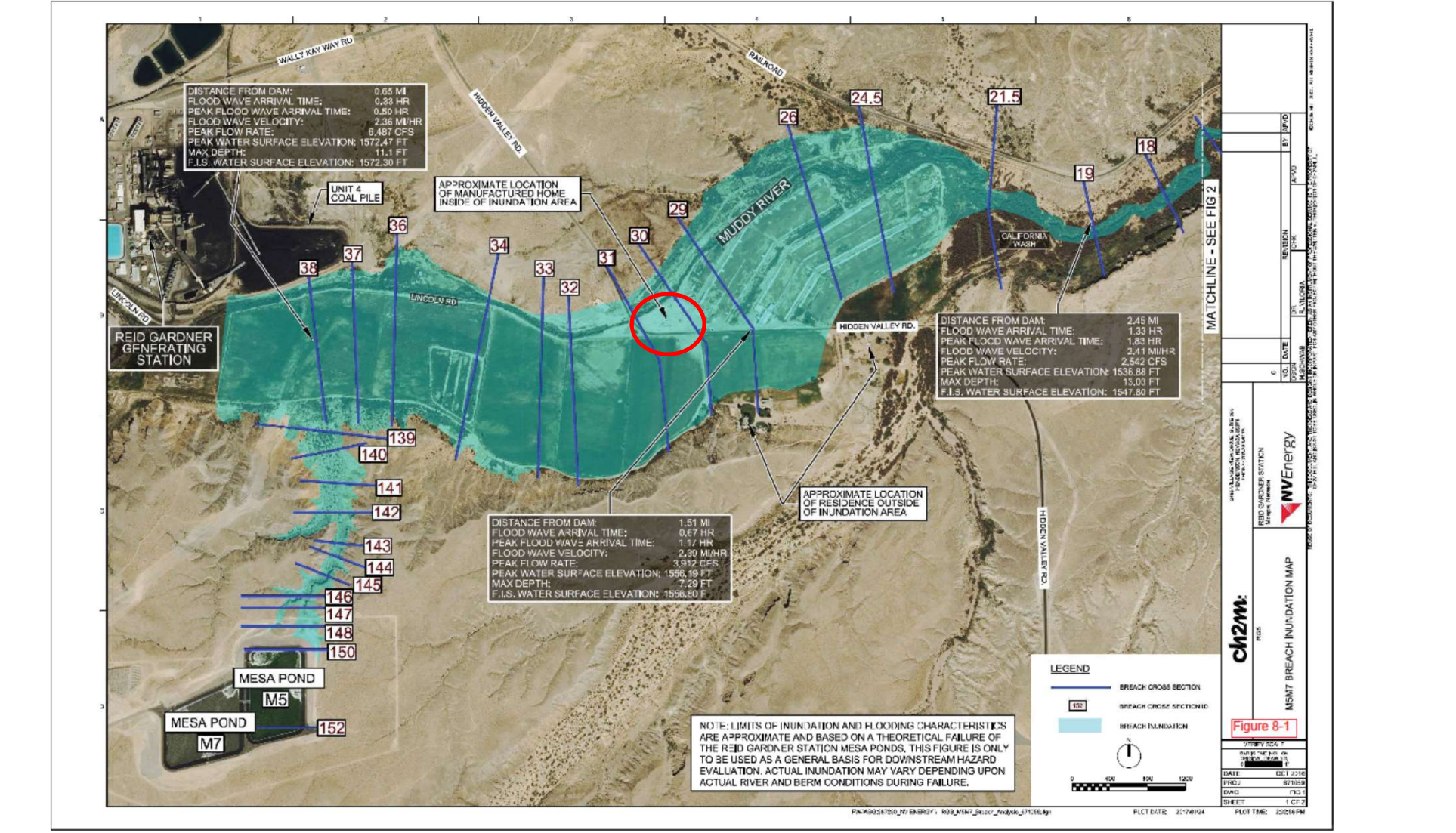
Emergency Action Plan Overview

1. Pond Description
2. Incident Response Process
- 3. Incident Overview**
4. Incident Responsibilities under the EAP

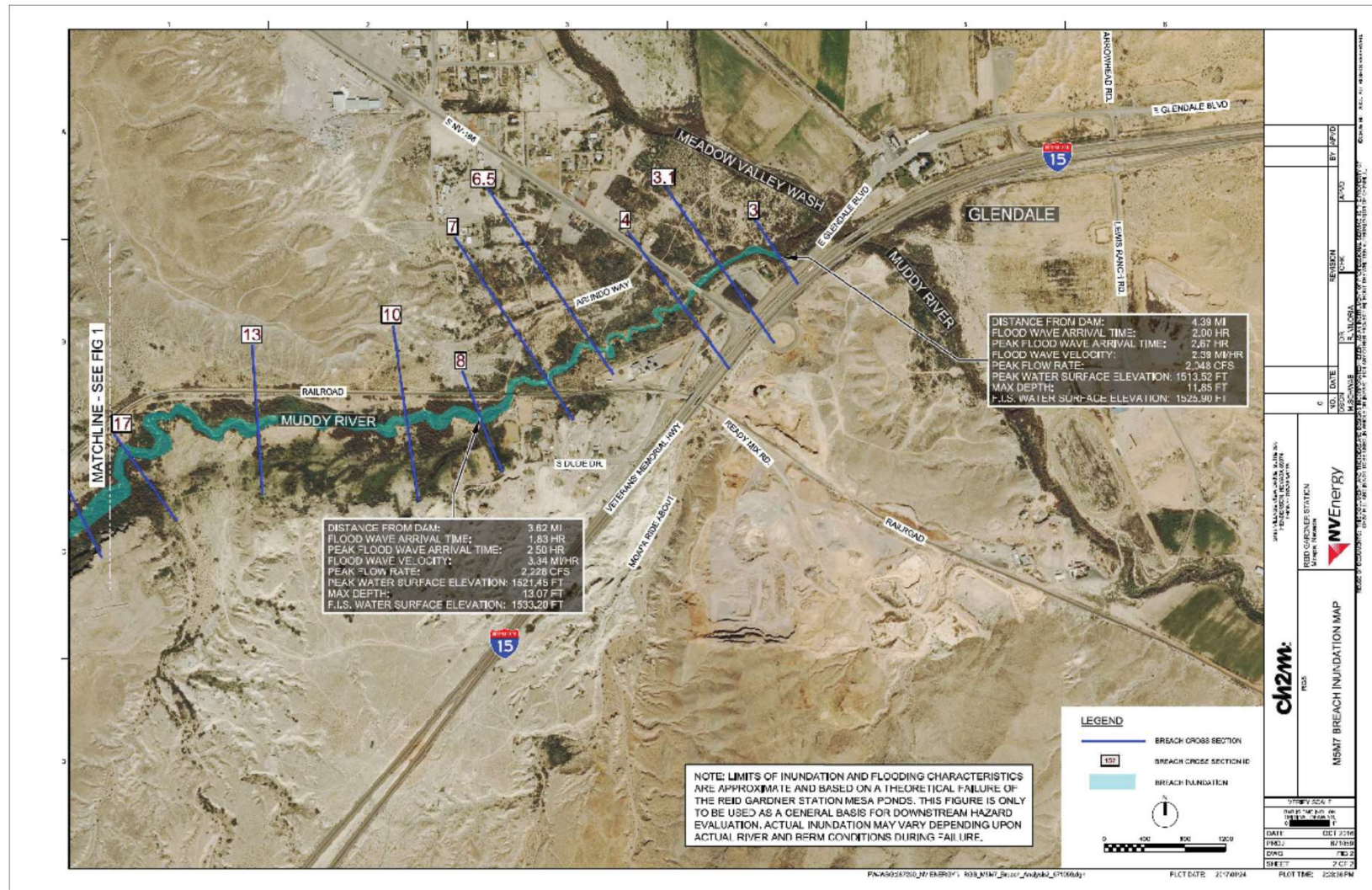
Incident Scenarios

Scenario	Conditions	Response
Non-Failure 	<ul style="list-style-type: none"> • water level > operational level, • minor seepage, cracking, sinkholes 	<ul style="list-style-type: none"> • Engage internal experts for evaluation, monitoring and response
Potential Failure 	<ul style="list-style-type: none"> • Increasing discharge from seepage, cracks, • Water releasing from damaged structures, damaged piping • Verified security threats that if carried out could result in damage to the ponds 	<ul style="list-style-type: none"> • Engage emergency responders for preparation and coordination • Engage dam-safety experts to evaluate actions to prevent failure or reduce impacts
Imminent Failure 	<ul style="list-style-type: none"> • Erosion of crest by large overtopping waves, water level overtopping top of berm • Rapidly progressing seeps, sinkholes, slides of embankment slopes 	<ul style="list-style-type: none"> • immediately initiate evacuations • Make emergency notifications • Engage dam-safety experts to evaluate actions to delay failure or reduce impacts

Pond M5 and M7 Inundation Map



Pond M5 and M7 Inundation Map



“Sunny Day” Dam Breach Analysis Results

36 mins

- time for leading edge of flood wave to reach the private residence where Hidden Valley Rd crosses the Muddy River

4,000 cfs

- Max flow at the private residence

5 ft.

- Max water elevation in dairy fields

1-2 ft.

- Max water elevation at private residence

2 miles

- distance it takes to contain potential flood in the Muddy River banks.

Emergency Actions

Take emergency action

- prevent or delay dam failure
- mitigate impacts if failure cannot be avoided.

Depending on the indicators and potential level of failure, actions may include:

- monitoring berm conditions, control water levels and incoming flows, reinforce/repair berms, placing traffic controls, initiating evacuation, employing methods to divert flow post failure.

Emergency Action Plan Overview

1. Pond Description
2. Incident Response Process
3. Incident Overview
- 4. Incident Responsibilities under the EAP**

Select Roles and Responsibilities

Incident Commander

- Ensures full response process is implemented during an event
- decides when to terminate an event

EAP Coordinator

- assist Incident Commander during emergencies
- provide training
- update documents

Dam Safety Engineer

- consult during emergencies
- conduct annual inspections
- assist with updating EAP

Emergency Management Authorities

- issue public warnings
- perform evacuations
- coordinate outside agency response



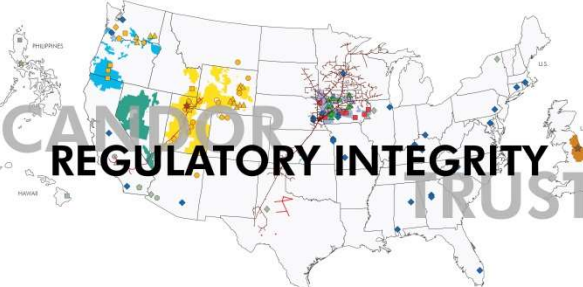
CUSTOMER SERVICE




EMPLOYEE COMMITMENT




ENVIRONMENTAL RESPECT

REGULATORY INTEGRITY



OPERATIONAL EXCELLENCE



BERKSHIRE
FINANCIAL STRENGTH
OWNERSHIP

Questions?

