



NORTH TEXAS INTEGRATED WARNING TEAM (IWT) WORKSHOP

USACE SWF Emergency Management
Date: 03 MAR 2023



US Army Corps
of Engineers





BATTLE RHYTHM FOR A FLOOD EVENT



Initial triggers Based on West Gulf River Forecast Center and NWS weather forecast(Main Driver), as well as USACE lake elevation

USACE Staff (Emergency Management (EM), Water Management (WM), Dam Safety sync (Litmus Test)

State Operation Center briefings

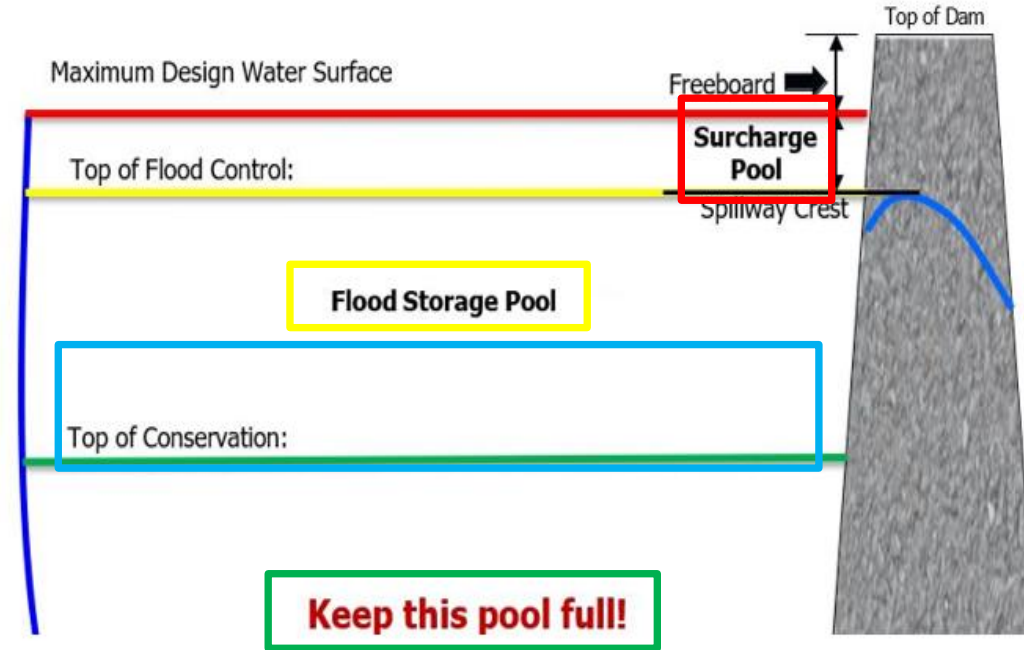
Water Management

- sync up with River Authorities, NWS, TXDOT water districts
- Control manual and monitor river capacities to strategically hold and release water.
- Goal is to store water in flood control projects (dams) to allow additional river capacity during the event

DS will be monitoring dams in flood pool
-(Weekly Surveillance) (Looking for distress)

EM sync up with levee sponsors to engage on local levee status and any assistance needed.

USACE operations project management and lake office will begin closing parks



Flood Categories (in feet)

Major Flood Stage:

Moderate Flood Stage:

Flood Stage:

Action Stage:

Low Stage (in feet):

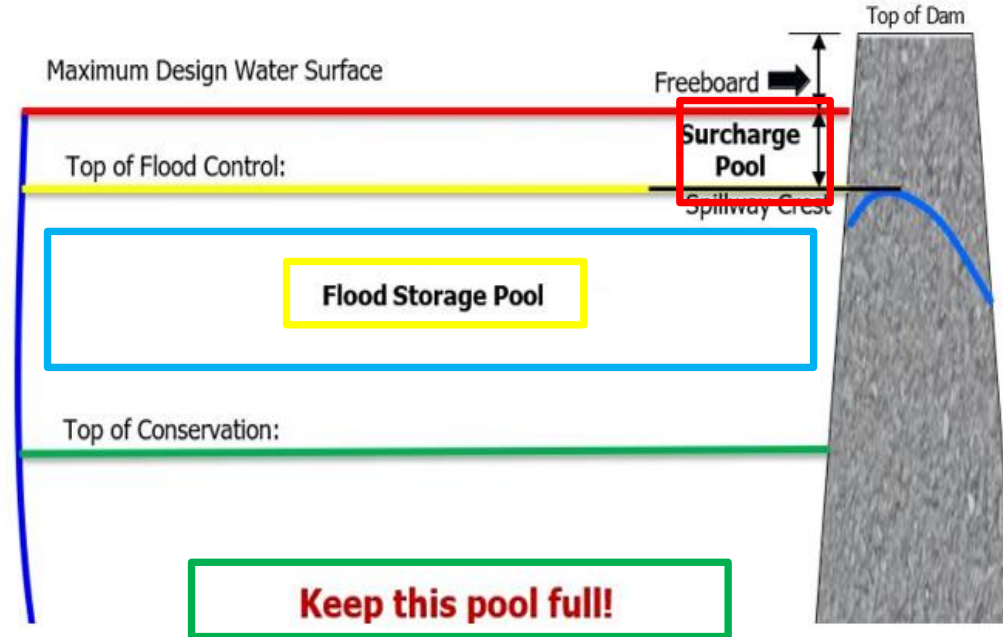


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Next phase of triggers: (increase in Flood Pool) state operation center activation level?, (**Flood stage** to **Moderate** for river stage), with NWS and River Gauge Forecast.

- SWF EOC activate to Level 3 (Limited Activation) minimal staffing to maintain awareness
- EM and Logistics will prep flood fight materials (Sandbag Machine, sandbags, supersacks, poly rolls, etc)
- Response teams (technical assistance reps, Liaison officers and Sandbag Machine team members (standby)
- Dam Safety will increase surveillance to daily based on specific elevation threshold to the project. Looking for any signs of distress
- EM preparing notification messages



Flood Categories (in feet)

Major Flood Stage:

Moderate Flood Stage:

Flood Stage:

Action Stage:

Low Stage (in feet):



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Next phase of triggers : (High Flood Pool/nearing surcharge), **Moderate** to **Major** flood river stage, heavy rain forecasts continues

-SWF EOC activate to Level 2 (Partial Activation) for moderate significant event (12 hour shifts)

-Sync with Texas daily SOC calls with potential situational meetings with Stakeholders (Local, State, Federal)

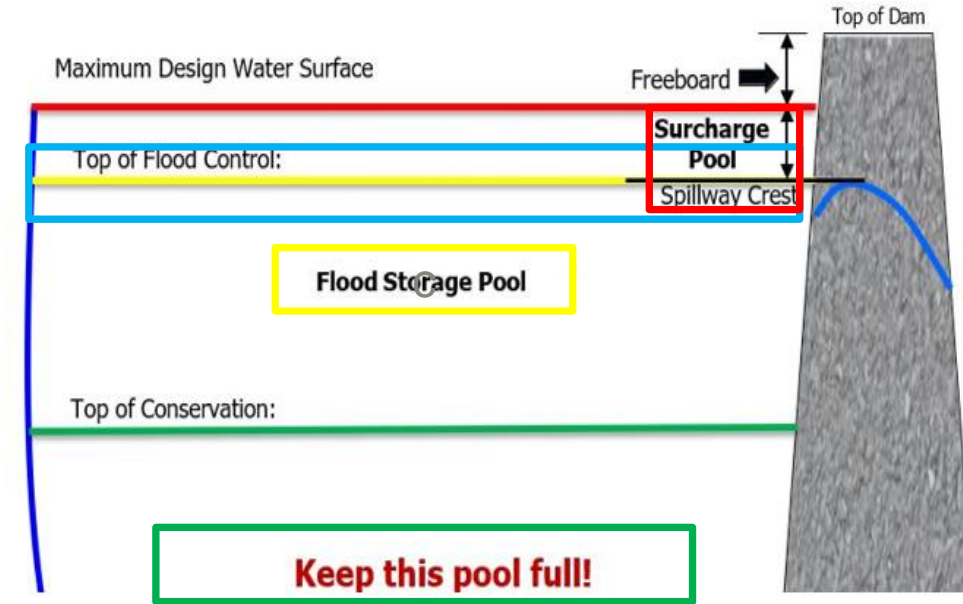
-May deploy USACE Liaison officer to SOC (based on SOC activation level and if requested) to provide direct USACE situation briefings, plug in to state battle rhythm and coordinate any flood fight materials and technical assistance WEBEOC requests (T

-EM and Logistics (deploying flood fight material and resources upon requests

-Dam safety surveillance project hourly, looking for distress

-EM sending out notifications of High flow watches and warnings to stakeholders (Other notifications, Non breach, Potential breach or Breach)

-SWF USACE Emergency Declaration



Flood Categories (in feet)

- Major Flood Stage:
- Moderate Flood Stage:
- Flood Stage:
- Action Stage:
- Low Stage (in feet):

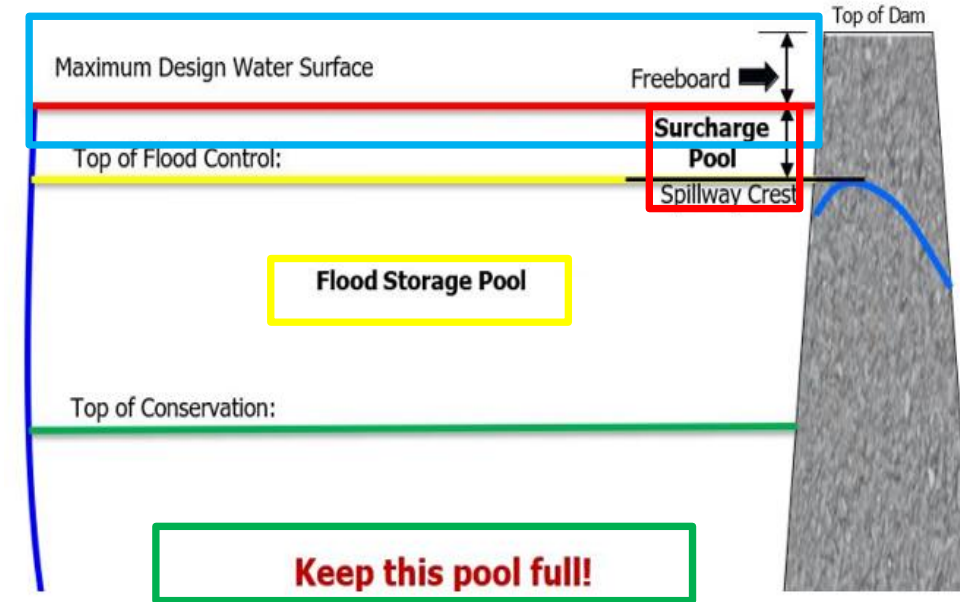


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Next phase of triggers : increase in Surcharge Pool, Major flood river stage river, heavy rain forecasts continue

- SWF EOC activate to Level 1 (Full Activation) for Major/Catastrophic event (24 hour shifts)
- SWF request any additional resources from SWD/HQ or from Rock Island for more flood fight materials
- SWF USACE staff in daily meetings SOC, Stakeholders (Local, State, Federal)
- SWF Liaison officer at SOC (daily sitreps, flood resource coordination, etc)
- High Flow Warning notifications send out as need on significant increase in surcharge



Flood Categories (in feet)

Major Flood Stage:

Moderate Flood Stage:

Flood Stage:

Action Stage:

Low Stage (in feet):



QUESTIONS?



Thank you,

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WATER MANAGEMENT SECTION BATTLE RHYTHM



CENTRAL STANDARD TIME (CST) OR CENTRAL DAYLIGHT TIME (CDT) - as applicable

0000 0100 0200 0300 0400 0500 0600 0700 0800 0900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400

NIGHT SHIFT (0000 - 0830)

DAY SHIFT (0800 - 1630)

SWING SHIFT (1600 - 0030)

MONITOR PROJECT POOL ELEVATIONS AND ON-SITE PRECIP ACCUMULATIONS, ASSESS DOWNSTREAM CONTROL POINT FLOWS AND PRECIP AT DESIGNATED USGS STREAM GAGES, ANALYZE NWS-RIVER FORECAST CENTER'S STREAM GAGE STAGE/FLOW FORECASTS, REVIEW NOAA-NWS QUANTITATIVE PRECIPITATION ESTIMATES, EVALUATE UPDATES TO NOAA-NWS QUANTITATIVE PRECIPITATION FORECASTS, MONITOR NWS-CHAT FOR NOTIFICATIONS OF UPDATED FORECASTS

DATA ENTRY, INDIVIDUAL RESERVOIR AND RIVER BASIN ASSESMENTS AND MORNING REPORT GENERATION

Key WM Flood Fight Operations

- ◆ Increase Communications
 - USACE Internal (Up and Down Chain)
 - EOC
 - Operations Division
 - SWF Executive Office
 - SWD, HQ
 - Federal Government Partners
 - NWS: Weather & Streamflow Forecasts
 - USGS: Stream Gage Flow Verifications
 - State Partners
 - TDEM, DPS
 - Water Districts, River Authorities
 - TxDOT

WM Sect. Brief

CONTACT PROJECT STAFF TO MAKE REQUIRED GATE OPENINGS OR CLOSURES AS SYSTEM CONDITIONS DICTATE

SIT-REP GENERATION AND DESIMINATION

FORECAST PROJECT POOL ELEVATIONS BASED ON LATEST OBSERVED RAINFALL DATA, CURRENT STREAMFLOW DATA, AND PROJECTED GATED /SPILLWAY RELEASES. PUBLISH LATEST FORECASTS TO WEBSITE

CREATE OR UPDATE PROJECT DRAW-DOWN FORECASTS IF APPLICABLE

PARTICIPATE IN BRIEFINGS AND CONFERENCE CALLS AS NEEDED EX: USACE EOC, TDEM, NOAA/NWS, USACE-HQ, CESWF-OPERATIONS DIVISION, ETC...

WORK WITH PROJECT PERSONEL TO UPDATE FACILITY CLOSURE REPORTS AND PUBLISH TO WEBSITE

MAKE SITE VISITS TO OBSERVE AND EVALUATE OPERATION AND FUNCTION OF OUTLET APPURTENANCES AS REQUIRED

Key WM Flood Fight Operations (contd.)

- ◆ Stand-Up 24-7 staffing
 - Three 8.5-hour shifts
 - Multiple Staff per shift as required
- ◆ Realtime Project Monitoring (Hourly Telemetry)
- ◆ Initiation of Daily Reservoir Forecasts
- ◆ Observation of Project Outlet(s) Performance
- ◆ Enhanced Status Reporting
 - Daily Sit-Rep
 - Forecast Dissemination
 - Enhanced Status Reporting